

**UNOmaha**  
University of Nebraska at Omaha



Undergraduate Catalog  
1998-99

<http://www.unomaha.edu/>

# University of Nebraska at Omaha

## 1998-99 Catalog

**CollegeSource**

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# ACADEMIC CALENDAR 1998-99

## FALL SEMESTER 1998

August 1	Priority date for submitting credentials for admission to an undergraduate college for Fall Semester 1998.
August 24	Fall Semester begins at 7:00 a.m.; both day and evening classes.
August 28	Last day until 5:00 p.m. to: add a course to student's schedule; add an "Audit" course; change to "CR/NC" grade in a course in person, at the Registrar's Office. Courses can be dropped until 9:45 p.m. via the BRUNO touchtone system.
September 7	Holiday. University closed.
September 8	Vacation. No classes.
October 16	Last day for filing applications for degrees to be conferred in December, 1998.
November 6	Last day until 5:00 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 (in person at the Registrar's Office, EAB 105).
November 25-27	Vacation. No classes.
November 26-27	Holiday. University closed.
November 30	Classes resume at 7:00 a.m.
December 11	Last day of classes.
December 12-18	Finals.
December 19	Commencement at 9:30 a.m.
Dec. 24-Jan. 3	Holiday. University closed.

## SPRING SEMESTER 1999

January 1	Priority date for submitting credentials for admission to an undergraduate college for Spring semester 1999.
January 11	Spring Semester begins at 7:00 a.m.; both day and evening classes.
January 15	Last day until 5:00 p.m. to: add a course to student's schedule; add an "Audit" course; change to "CR/NC" grade in a course in person at the Registrar's Office. Courses can be dropped until 9:45 p.m. via the BRUNO touchtone system.
March 12	Last day for filing applications for degrees to be conferred in May, 1999.
March 22-26	Spring Vacation. No classes.
March 29	Classes resume at 7:00 a.m.

April 2	Last day until 5:00 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 (in person at the Registrar's Office, EAB 105).
April 30	Last day of classes.
May 1-7	Finals.
May 8	Commencement at 9:30 a.m.

## SUMMER SESSIONS 1999

For priority date information for submitting credentials for admission to an undergraduate college for Summer 1999, please contact Admissions at (402) 554-2393.

May 10-June 25	First Evening Session "A."
May 31	Holiday. University closed.
June -7-July 9	First Day Session "B".
June 28-Aug. 6	Second Evening Session "C."
July 2	Last day for filing applications for degrees to be conferred in August, 1999.
July 5	Holiday. University closed.
July 12-Aug. 13	Second Day Session "D".
August 1	Last day for submitting credentials for admission to an undergraduate college for Fall Semester 1999.
August 14	Commencement at 9:30 a.m.

For BRUNO registration dates and times, please refer to the appropriate printed class schedule or contact the Registrar's Office.

For complete dates and times of orientation, contact the office of New Student Orientation.

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

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**University of Nebraska at Omaha**  
**Undergraduate Catalog 1998-1999**  
Volume LIV, Number 2  
\$1.75

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The University of Nebraska at Omaha  
Undergraduate Catalog is published  
by the Office of University Relations  
University of Nebraska at Omaha  
Omaha, Nebraska 68182-0315

**WORLD WIDE WEB ADDRESS:**  
<http://www.unomaha.edu/>



**Nebraska's Metropolitan University**

A comprehensive, public university, the University of Nebraska at Omaha (UNO) is located in the heart of Nebraska's largest city. Situated on 88.5 acres and surrounded by beautiful parks and residential neighborhoods, the University is easily accessed by three of Omaha's main arteries: Dodge Street, 72nd Street and 60th Street. The new Peter Kiewit Institute of Information Science, Technology and Engineering building will open in August, 1999. The building will be located on a 70-acre parcel of land at 67th and Pacific Streets. Each is connected to the interstate system circling Omaha.

The role and mission of the University of Nebraska at Omaha reflect a distinctively metropolitan emphasis. Accordingly, many of the academic majors, research activities and public service programs respond to its urban/suburban environment. The University also has statewide responsibility for providing programs and services in criminal justice, gerontology, public administration, urban studies and social work.

The University of Nebraska at Omaha, with more than 400 faculty members, offers 95 baccalaureate degree programs. UNO also offers 66 advanced degree programs, including six doctoral programs. The latter include doctoral programs in public administration and criminal justice, a joint doctoral program in educational administration and cooperative doctoral programs in industrial/organizational psychology, developmental psychology, and psychobiology. The joint and cooperative programs are with the University of Nebraska-Lincoln (UNL). Undergraduate programs are offered in the colleges of Arts and Sciences, Business Administration, Continuing Studies, Education, Fine Arts, Information Science and Technology, and Public Affairs and Community Service. The College of Public Affairs and Community Service is administered by the University of Nebraska at Omaha in Omaha and at UNL. Programs offered in the College of Human Services and Family Sciences and the College of Engineering and Technology and course work in the College of Agricultural and Natural Resources and College of Architecture is administered by UNL. Dedicated to the concept of a liberal arts education, the University of Nebraska at Omaha was the first in the University system to require a core curriculum. The General Education Requirement exposes students to the fundamental liberal arts, giving them a depth of knowledge and an appreciation of the complexities of other disciplines. To fulfill the General Education Requirement, students must take courses in English composition, algebra, public speaking, humanities, social sciences, natural sciences and cultural diversity.

The students of the University of Nebraska at Omaha are a diverse group. Although the majority of students come from within a 100-mile radius of Omaha, one-third of the student population represents each state in the nation and 60 countries. The age distribution of UNO students is becoming the national model, with an even representation of students fresh out of high school and of older adults who are beginning or returning to college. Different ethnic backgrounds also are represented on the campus.

The University, true to its role and mission of teaching, has initiated and supplemented programs such as one of the longest-running continuing education programs in the country, administered through the College of Continuing Studies to service the educational needs of adult students since 1931. For the opposite end of the age spectrum, the College of Education works with the Omaha metropolitan secondary and elementary schools to provide classes for credit and instructional programming as a member of the Metropolitan Omaha Educational Consortium (MOEC).

Leadership in economic development for the urban and rural communities has resulted in innovative programs. The Nebraska Business Development Center (NBDC) is a cooperative program of the U.S. Small Business Administration and the University of Nebraska at Omaha. NBDC administers its small business program at regional centers in Scottsbluff, Chadron, North Platte, Kearney, Wayne, Peru, Norfolk, Lincoln and Omaha. UNO also is involved with Applied Information Management (AIM), developed in 1991 by area businesses, postsecondary schools and state government in response to a community need for a more highly skilled work force. The Institute promotes communication and coordination of area resources among business, education and government. Since 1977, the Nebraska Rural Communities Program has matched the talents of graduate students with the practical experience of small business owners to create a partnership for shared learning and growth. For the second year in a row, UNO will work in conjunction with the University of Nebraska at Kearney. During the 1980s, the Strategic Training and Resource Targeting (START) program developed by the University of Nebraska at Omaha's Center for Public Affairs Research and department of public administration, helped communities in Nebraska to define their strengths and weaknesses and develop a strategic plan to improve their local economies.

In all of its programs, UNO works through partnerships with small and large businesses, small and large communities, and students of all ages. Such partnerships establish the University of Nebraska at Omaha as Nebraska's metropolitan university.

**Historical Perspective**

The University of Nebraska at Omaha, founded as the University of Omaha, was designed as a private institution by several community religious leaders. Twenty-six students studied subjects ranging from "Beginner's Latin" to "Modern Social Betterment Movements." The campus grew slowly; but in 1930, Omaha citizens agreed to a tax increase to support the Municipal University of Omaha.

Due to steady growth, the Municipal University of Omaha moved to its present location at 6001 Dodge Street. The College of Arts and Sciences was created to meet the growing demand for graduates of engineering and business programs. Because of an increased number of adults seeking degrees, a School of Adult Education opened in 1938. Such positive changes in the University led to an accreditation from the North Central Association.

While supporting a strong liberal arts program as the core of the university, new academic programs were fostered. Although World War II curtailed some of this



growth, the University had positioned itself for renewal after the war.

A College of Education and a College of Business Administration were created early in the 1950s. The Bootstrap Program, initiated by the Air Force in 1951 and adopted by UNO, encouraged military personnel to finish degrees that had been started before the war. The School of Adult Education became the College of Adult Education. Law enforcement and civil and industrial engineering instituted new degree programs. Also, the Graduate Division achieved college status. The Eugene C. Eppley Library opened in 1954, a gift from hotel owner and philanthropist Eugene C. Eppley. The University became more popular with students and enrollment climbed.

The campus continued to grow throughout the 1960s. A Center for Applied Urban Affairs opened in 1964 and the Milo Bail Student Center opened. Construction on Allwine Hall, named for A. A. Allwine who had donated a farm to the University, began in 1968. All of this growth outstripped the ability of Omaha's citizens to increase their taxes to support the University. The University looked to the State of Nebraska for funding.

On July 1, 1968, the Municipal University of Omaha became part of the University of Nebraska system and was named University of Nebraska at Omaha. State funding provided the means for a rapid expansion of the physical plant while also increasing the number of faculty to staff the many academic programs.

During the 1970s a new library was added on the west end of the campus. Kayser Hall, home of the College of Education, opened in 1971. The Strauss Performing Arts Center and the College of Business Administration building opened in 1973. The physical education facilities were enhanced which included a 50-meter swimming pool; and a central utilities plant provided up-to-date heating and cooling for the University's many buildings.

The University added new academic programs in the 1970s as well. The Executive Master of Business Administration program began in 1975, the only program of its kind in the area. The College of Public Affairs and Community Service was created in 1972. The stage had been set for a near-explosive growth of the University in the 1980s.

This growth included the Durham Science Center and the Henningson Memorial Campanile — a bell tower rising nearly one hundred seventy feet. The campus also expanded downtown when the Peter Kiewit Conference Center opened in 1980. In addition, many classes are offered at several locations throughout the metropolitan area, including Offutt Air Force Base.

Growth continues in the 1990s. The inventively constructed Fine Arts Building opened in 1992. On July 1, 1996, the College of Information Science and Technology (IS&T) was established. The first new college to be formed in more than 20 years, IS&T will provide information technology education to the entire state.

The University of Nebraska at Omaha is a quality University composed of quality facilities, programs and faculty. The caliber of UNO's student body reflects the quality of the campus. An increasing number of graduates

provide leadership in many of the nation's top businesses and organizations.

The University of Nebraska at Omaha is a comprehensive urban university with a proud heritage of accomplishments. This successful history gives promise of an equally rewarding future.

## University of Nebraska at Omaha:

### Role and Mission Statement

#### Mission

The University of Nebraska at Omaha, as part of the University of Nebraska, is a comprehensive university sited in Nebraska's largest metropolitan area. Its distinguished faculty is drawn from the nation's leading graduate institutions. UNO exists for the purpose of providing appropriate educational opportunities, discovering and disseminating knowledge through research and teaching, and offering public service to the citizens of the State, particularly the residents of the Omaha metropolitan area. Through these traditional, interdependent, and mutually-reinforcing functions, the faculty of the University of Nebraska at Omaha enrich the lives of students; advance the frontiers of knowledge; and contribute to the social, cultural, international, and economic development of the community, State, and region.

UNO's mission is accomplished through the faculties of the Colleges of Arts and Sciences, Business Administration, Education, Fine Arts, Information Science and Technology, Public Affairs and Community Service, Continuing Studies, and the University-wide Graduate College.

The University of Nebraska at Omaha is committed to the following broad priorities in fulfilling its mission:

1. undergraduate instructional programs based on a strong liberal arts foundation;
2. graduate programs, research, and creative activity;
3. public service.

### Educational Programs

UNO offers a broad range of bachelor's programs, a diverse array of master's degree programs, two specialist's programs and several doctoral programs. UNO exercises a statewide responsibility in the areas of criminal justice, social work, public administration and gerontology. The campus also plays a key role in public affairs research and small business development in Nebraska. In expanding doctoral study UNO will emphasize areas in which the campus has a statewide responsibility, as well as cooperative programs with UNL and/or UNMC in additional academic areas to address otherwise unmet needs in the Omaha metropolitan area. UNO is committed to broadening education participation for those underrepresented groups who do not yet fully enjoy the promise of higher education and the wellsprings of opportunity that it brings.

### Research and Scholarship

The faculty of the University of Nebraska at Omaha share the obligation of all university faculties to participate in the creation, reorganization and application of

knowledge. Indeed, scholarly research is a *sine qua non* of graduate-level programs. Research and creative activity have been accorded a greater priority at UNO in recent years, and this emphasis will increase as UNO develops further doctoral programs.

#### Public Service

As the only comprehensive public university located in the State's largest metropolitan area, UNO has a special responsibility to use its resources and expertise to provide leadership in solving problems of the community and supporting its social, cultural and economic advancement. UNO's capacity to engage in public service derives from its instructional and research programs and resources; these, in turn, are enhanced by involvement with the community on issues of mutual concern.

#### Summary

Since its inception in 1908, the University of Nebraska at Omaha has forged a continuing partnership with the community. That partnership has focused on providing affordable, accessible instructional programs of high quality that are designed to meet the diverse needs of both traditional and nontraditional students. Through that partnership, UNO has enhanced the social and cultural life of the metropolitan area and State, and it has worked with various organizations and individuals to address community problems and stimulate economic development. Throughout its history, UNO has been firmly anchored to its community, building strong ties with business, education, government, arts and civic organizations. Those linkages will continue to grow and new ones will be formed as the campus anticipates and energetically addresses the changing needs of the metropolitan area, State and region and its growing global participations.

As it approaches the beginning of a new century, the University of Nebraska at Omaha will continue to develop as a pacesetter, comprehensive metropolitan university, committed to a standard of excellence in its teaching, research and public service activities. Working cooperatively with other campuses of the University of Nebraska, UNO will strive to anticipate and respond creatively to the emerging needs of the 1990s and beyond. It will work to promote the economic vitality of the community and the State; it will enhance its international programs and presence; and it will continue to instill in its students a lifelong commitment to learning while preparing them for leadership roles in a constantly changing society.

## Accreditation

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. The University of Nebraska at Omaha is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. The commission can be contacted at 30 North LaSalle St., Suite 2400, Chicago, IL 60602-2504; telephone 1-800-621-7440. UNO also has programs which are accredited or approved by the National Council for Accreditation of Teacher Education, the National Council on Social Work Education, Technology Accreditation Commission/ Accreditation Board for Engineering and 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, 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, the American Chemical Society, the Council on Aviation Administration and the Council for Accreditation of Counseling and Related Educational Programs. Its courses are accepted for purposes of teacher certification by the Nebraska State Department of Education. Course credits from the University of Nebraska at Omaha are accepted by other member colleges and universities of the North Central Association and by member institutions of other regional accrediting agencies.

As part of its ongoing evaluative processes, UNO has instituted a comprehensive program of assessing student academic achievement, with special emphasis on student learning. This program involves a variety of activities, such as capstone courses, special examinations, performances, surveys, exit interviews, etc. All of these are designed to assess student learning, with a view to making changes and improvements as appropriate. The active and committed involvement of each person asked to participate is essential for this important program to achieve its intended purposes. Additional information is available from the Coordinator of Assessment, Office of Academic Affairs, EAB 203.

## Privacy Act

The Family Educational Rights and Privacy Act (FERPA) of 1974 affords students certain rights with respect to their education records. They are:

1. the right to inspect and review the student's education records;

2. the right to request the amendment of the student's education records to ensure that they are not inaccurate, misleading or otherwise in violation of the student's privacy or other rights;
3. the right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent;
4. the right to file with the U.S. Department of Education a complaint concerning alleged failures by the University of Nebraska at Omaha to comply with the requirements of FERPA; and
5. the right to obtain a copy of the University of Nebraska at Omaha's Student Records Policy. A copy of the policy is available at the Registrar's Office, Eppley Administration Building, Room 105. For information regarding the Student Records Policy, please contact the Registrar's Office at (402) 554-2988 or on the Registrar's Office World Wide Web home page at: <http://www.ses.unomaha.edu>.

## Affirmative Action/Policies Prohibiting Discrimination and Sexual Harassment

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 of 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 is committed to maintaining an environment for all students, faculty, staff, and visitors that is fair and responsible - an environment which is based on one's ability and performance. To that end, it is the policy of the University of Nebraska at Omaha that any form of discrimination because of race, color, age, disability, religion, sex (including sexual harassment), national origin, marital status, Vietnam-era veteran status, political affiliation, sexual orientation, or any unlawful reason shall not be tolerated. In keeping with this commitment, the University also will not tolerate discrimination prohibited under this policy against students, faculty, staff and visitors by anyone acting on behalf of the University of Nebraska at Omaha.

Unwelcome sexual advances, requests for sexual favors, and other physical, verbal, or visual conduct based on sex constitute sexual harassment when (1) submission to the conduct is an explicit or implicit term or condition of employment or academic standing, (2) submission to or rejection of the conduct is used as the basis for an employment or academic decision, or (3) the conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating,

hostile, or offensive working/academic environment. This statement is in keeping with federal employment and educational opportunity guidelines.

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, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

Further information on these policies, as well as the Statement on Consensual Relationships and Procedures for Resolution of Complaints can be found on page 50. Students can also contact the Vice Chancellor for Student Services and Enrollment Management, 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 Personnel Services, 205 Eppley Administration Building, 554-2321.

## University Regulations

The University and its various colleges, divisions and departments reserve the right to change the rules controlling admission to, instruction in and graduation from the University or its various divisions. Such regulations are operative whenever University authorities deem necessary and apply not only to prospective students but also to currently enrolled students.

The University also reserves the right to withdraw courses, to reassign instructors and to change tuition and fees at any time. In some cases prerequisites for courses offered at the University are effective even if they are not listed in this catalog. See the current class schedule or your adviser for more information.

*NOTE: Modifications in the academic calendar and program could be necessitated by emergency conditions.*

## Financial Information

Annual financial reports and the annual general operating budget are available to interested persons in the University Library.

## Discontinuance of Program Offerings

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:

1. add or delete courses from its offerings,
2. change times or locations of courses or programs,
3. change academic calendars without notice,
4. cancel any course for insufficient registrations, or
5. revise 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.

## APPLICATION PRIORITY DATE

Freshman applicants should apply during the first semester of the senior year of high school. Transfer students should apply during the semester preceding their intended enrollment.

The Undergraduate application priority dates are:

**August 1 for Fall Semester**

**December 1 for Spring Semester**

**June 1 for most Summer Sessions**

Academic advising may not be available for students applying after the application priority date.

## APPLICATION PROCESS

An Application for Admission may be obtained from the Office of Admissions, 103 Eppley Administration Building, University of Nebraska at Omaha, Omaha, NE 68182.

The applicant must submit a completed application and first-time applicants must pay a non-refundable application fee of \$25.00. The application fee must be by check, money order (not cash), or credit card made payable to UNO. Those applicants who do not enroll within one year must reapply and resubmit the application fee.

All new, incoming students born on or after January 1, 1957 must provide official documentation of two (2) MMR vaccinations (measles, mumps, rubella). Failure to comply with this requirement may result in the withholding of future registrations. For further information, please contact UNO Student Health Services, 554-2374.

All inquiries and correspondence relating to the admission of students should be addressed to:

Office of Admissions

University of Nebraska at Omaha

Omaha, Nebraska 68182-0005

<http://www.ses.unomaha.edu>

All credentials received in connection with applications for admission become the property of UNO. They cannot be duplicated, returned to the applicants, or forwarded to any agency or other college or university. Hand-carried or student submitted transcripts are not acceptable.

The University reserves the right to change existing admissions policies and applicable deadline dates without prior notice.

Prospective students who have reason to believe that a disability of any kind will affect the admissions process should contact the Office of Services to Students with Disabilities, 115 Eppley Administration Building, (402) 554-2896, TDD 554-3799.

## ADMISSION REQUIREMENTS

### Freshman Applicants

The Board of Regents of the University of Nebraska has established minimum admission requirements for first-time freshman students. Prospective students should be aware that individual colleges may require additional credentials or have other requirements for specific programs. It also should be noted that these requirements may not pertain to policies for transfer students, international applicants, readmission and non-degree students.

## Assured Admission

Graduates of an accredited high school or equivalent, must meet the following criteria for assured admission:

### Core Course Requirements

1. English - 4 units\*  
All units must include intensive reading and writing experience. Innovative interdisciplinary courses and courses in speech and journalism may be substituted if they include substantial amounts of reading and writing.
2. Mathematics - 3 units\*  
Must include Algebra I, II and Geometry.
3. Social sciences - 3 units\*  
At least one unit of American and/or world history and one additional unit of history, American government and/or geography; and a third unit of any social science discipline or subject.
4. Natural sciences - 3 units\*  
At least two units selected from biology, chemistry, physics and earth sciences. One of the units must include laboratory instruction.
5. Foreign language - 2 units (same language)\*  
Students who are unable to take two years of one foreign language in high school may still qualify for admission. Such students will be required to take two semesters of foreign language at the University of Nebraska. These students are still required to complete 16 units of academic courses for admission.
6. Additional academic - 1 unit\*  
One unit chosen from any academic discipline.

*\*a unit is equivalent to one school year in a class, grades 9-12*

### Performance requirements

In addition to meeting the above core course requirements, students applying for admission should be:

1. Ranked in the upper one-half of their high school class
2. OR have received an ACT composite score of 20 or higher
3. OR have received an SAT total score of 950 or higher.

### Admission by Review (Special Merit)

Students who do not meet the requirements for Assured Admission will be considered for Admission By Review under the "special merit" clause. All students admitted under Admission By Review will be monitored for academic success until they remove all academic deficiencies. It is anticipated that no more than 25% of the first-time traditional freshman students would be admitted under Admission By Review. Students admitted under "special merit" will be required to make up any core course deficiencies by successfully completing an approved college-level course in each area of deficiency within the first 30 hours attempted at UNO. Attempted means any course in which the student earns a grade of "A", "B", "C", "D", "F", "CR", "NC", "S", "U", "I" or "W" and includes repeat courses.

**Home-Schooled Students**

Students who are home-schooled will be considered for admission under Admission by Review. Home-schooled students should submit official transcripts from any high schools or post-secondary schools attended. High school course work completed through home-study curriculum should be presented on a record showing the scope and sequence of the instructional program designed to lead to basic skills for 9-12 grades as denoted in State Statute 79-1701. Evidence of satisfactory completion of SAT II Tests, Advanced Placement Exams, and/or CLEP Exams may be used to show completion of core course requirements.

Home-schooled students must submit official GED scores and ACT or SAT scores. One of the following may be substituted in lieu of the GED score:

1. An ACT composite of 25+ (or equivalent SAT score)
2. 12 hours of transfer college credit from a regionally accredited post-secondary institution with a GPA of at least 3.00

Each applicant will be reviewed for Assured Admission requirements. Students who are admitted without completing all 16 core course requirements will be required to successfully complete an approved college-level course in each area of deficiency within the first 30 credit hours attempted at UNO.

**General Education Diploma (GED)**

Applicants at least 18 years of age who complete equivalent training such as General Education Diploma (GED) will be considered for admission under Admission by Review. Students who earn a GED in place of high school graduation, who are not applying as a transfer student (with 12 or more semester hours), should submit official high school transcripts reflecting all high school course work completed and official GED scores. Students should also submit official ACT or SAT results.

Each applicant will be reviewed for Assured Admission requirements. Students who are admitted without completing all 16 core course requirements will be required to successfully complete an approved college-level course in each area of deficiency within the first 30 credit hours attempted at UNO.

**Special Talent Students**

Applicants under this category must submit two letters of reference, one from the principal or counselor and the other from another school official, in addition to the application documents previously listed. A representative from the appropriate UNO department (i.e., academic department head, athletic director, special needs counselor, director of Multicultural Affairs) will serve on the Admissions by Review Committee and will be involved in evaluating the evidence of special talent and making a recommendation to the Admissions Office. The admission decision will be based on academic potential and application of special talent in an academic setting. Special talent students will be required to make up core course deficiencies within the first 30 hours attempted at UNO.

**Exceptions to the 1997 Admissions Requirements  
Non-Traditional Freshmen**

Non-traditional freshmen (age 21 years and older) will be exempt from meeting the 1997 admissions standards. Applicants should be graduates of an accredited high school or have a high school equivalency degree (General Education Diploma). Non-traditional freshman applicants are not required to submit ACT/SAT test results unless applying to the College of Engineering and Technology or the College of Information Science and Technology. Documents required for the admission of non-traditional freshman applicants include an official high school transcript or official GED equivalency scores, an application for admission, and the \$25 application fee.

**Former UNO Students**

Former UNO students will be exempt from meeting the 1997 admission standards if not previously admitted under the Fall 1997 admission standards (all prior deficiencies must be completed per their initial admission agreement). Applicants will be readmitted into the university into the selected UNO college for which they are eligible for enrollment. Each UNO college has policies related to which catalog and degree requirements that apply.

**Exemptions**

Applicants who graduated from high school prior to January 1, 1997 will be exempt from meeting the 1997 admission standards. These students will be admitted under the current admissions criteria.

**Transfer Students**

Transfer students who have attempted 12 or more semester hours (excluding grades of "W") who are in good standing at their previous institution(s) will not be required to meet the 1997 admission standards but must meet the admission requirements as set by the college to which they apply.

**Deferred Admissions**

Students who are not admissible under Assured Admission or Admission By Review may be required to obtain additional academic preparation at another postsecondary institution before being eligible for admission to UNO.

**Freshman Applicants - Documents Required**

1. Application for Admission
2. Application Fee of \$25.00 (non-refundable)
3. One (1) official high school transcript or official GED Equivalency Scores
  - One (1) official high school transcript must be sent to the UNO Office of Admissions directly from the high school. Official GED scores must be sent directly from the State Department of Education. If the high school transcript does not verify graduation at the time the application is submitted, a final high school transcript must be sent following graduation. Hand-carried or student submitted transcripts will not be accepted.

## 4. ACT or SAT scores

- Prospective applicants may take either the ACT or the SAT during their junior year or early in their senior year of high school. Freshman applicants no longer in high school may arrange to take the ACT/SAT exam though the UNO Testing Center. Official scores are to be sent to the University of Nebraska at Omaha; the UNO ACT code is 2464.
- Freshman applicants 21 years of age and older are not required to submit ACT/SAT test results unless applying to the College of Engineering and Technology or the College of Information Science and Technology.
- Information on the ACT or SAT may be obtained from high school counselors or from the Testing Center at UNO.

### **Transfer Applicants**

To be eligible for admission, transfer students must be in good standing at the college or university last attended. The Office of Admissions denies admission to any student under suspension who has been out of school less than one calendar year.

Transfer students presenting fewer than 12 attempted semester hours (excluding grades of "W") will be required to meet the freshman admission requirements for assured admission or under any ABR category that applies.

Transfer students who have attempted 12 or more semester hours (excluding grades of "W") who are in good standing at their previous institution(s) will not be required to meet the 1997 admission standards but must meet the admission requirements as set by the college to which they apply. Each UNO college has policies related to which catalog degree requirements that apply.

Transfer students from UNL and UNK who were admitted with deficiencies to UNL or UNK under the Fall 1997 admission standards will be required to complete their deficiencies within the first 30 hours of their enrollment in the University of Nebraska system.

Many of UNO's undergraduate colleges have additional admission requirements. See "Admissions Requirements for Selected Undergraduate Colleges" on the following page.

### **Documents required:**

1. Application for Admission
2. Application Fee of \$25.00 (non-refundable)
3. Official college transcript(s) must be sent directly to the UNO Office of Admissions from the Registrar's Office of each previous college or university attended whether credit was earned or not. Hand-carried or student-submitted transcripts are not acceptable.

### **Awarding of Credits for Advanced Standing**

- Credits submitted only on official transcripts from other colleges or universities will be evaluated for admission to an undergraduate college by the Office of Admissions. Transcripts will become a part of the student's permanent record maintained in the Office of the Registrar. The dean of the UNO

college will determine the manner in which transfer credits will apply toward degree requirements.

- In general, credits and grades earned at other University of Nebraska campuses will be accepted, computed into the student's grade point average, and will become a part of the permanent record from which official transcripts will be made.
- Only courses with a grade of "C" or better will be accepted for transfer from accredited two- and four-year colleges and universities. The College of Human Resources and Family Sciences will accept a grade of "D", excluding courses required by the major department.
- Sixty-four semester credit hours is the maximum allowed for transfer to most undergraduate UNO colleges from accredited two-year colleges. The College of Engineering and Technology and the College of Human Resources and Family Sciences will allow a maximum of 66 semester hours of credit.
- Credits to be transferred with a grade of "C" or better from provisionally accredited colleges will be placed in escrow until such time as 30 semester hours have been successfully completed at UNO.

### **Nebraska System Transfer Students**

1. Students who are enrolled at any of the other University of Nebraska System campuses and wish to make a permanent change of campus to the University of Nebraska at Omaha should complete a Change of Campus form and a University of Nebraska at Omaha application for admission.
2. By completing the forms and following the instructions, the credentials from the previous campus will be transferred to the University of Nebraska at Omaha.

### **Nebraska System Visiting Students**

1. All visiting students from any of the University of Nebraska campuses must present a completed Inter-Campus Application form.
2. The student must have written approval from the home campus adviser and the Student Accounts office.
3. A new Inter-Campus Application form must be submitted to the UNO Office of Admissions each semester a student wishes to enroll as an Inter-Campus student.
4. Students on suspension from another campus are not eligible to enroll.

### **Former UNO Students Not in Attendance at UNO Within the Last Two Years**

1. Readmission Criteria
  - The Admissions Office denies readmission to any student under academic suspension who has been out of school less than one calendar year.
  - Students who have been academically suspended from UNO should contact the Registrar's Office for reinstatement information.

- Many of UNO's undergraduate colleges have additional admission requirements. See "Admissions Requirements for Selected Undergraduate Colleges" on page 14.
- 2. Documents Required
  - Application for Re-Admission (Undergraduate Application)
  - If the student has attended other colleges since last attending UNO, official college transcripts are required.

#### **Non-Degree /Visiting Student Applicants**

1. A visiting student from another institution or a summer session applicant interested in enrolling for personal or professional enrichment may be admitted as a non-degree student.
2. Non-Degree/Visiting Admission Criteria
  - If the student has attended another institution within the last calendar year, a "Statement of Good Standing" or an official transcript from the last college or university attended is required.
  - The Office of Admissions denies admission to any student under academic suspension who has been out of school less than one calendar year.
  - Freshman applicants under 21 years of age may enroll for one semester as a non-degree student. Continued enrollment requires that the applicant meet the freshman admission requirements.
3. The Non-Degree classification is not recommended for certification, recertification or for enrolling in professional Education courses.
4. Students changing from a "Non-Degree" classification to a degree program will be expected to provide additional documentation and meet admission requirements. An application for admission to the degree program must be filed with the Office of Admissions.
5. Non-degree students are not eligible for scholarships or financial aid.

#### **Early Entry Applicants**

1. Upon the recommendation of the high school principal or counselor, currently enrolled high school students may qualify to take college courses concurrently with the high school program by enrolling through the UNO Early Entry Program.
2. Students may apply for the Early Entry Program by completing the Undergraduate Application for Admission. Applications are available from the UNO Office of Admissions or high school counselor. Early Entry applicants must have their application approved by the high school counselor or principal and the parent. A new Early Entry application must be completed each semester the student wishes to be considered for this program.
3. Inquiries regarding the Early Entry program should be directed to the UNO Office of Admissions or the Office of the Dean, College of Arts and Sciences.

#### **Policy for Students for Whom English is Not Their Language of Nurture**

1. Generally, an undergraduate applicant whose native language is not English will be required to present an official TOEFL score of 500. This score must be in the form of an official international TOEFL test or the UNO institutional TOEFL test. Institutional TOEFL scores from institutions other than UNO will not be accepted.

Consideration will be given to TOEFL scores falling within the range of the standard error of measurement, currently as low as 487, if they are validated by either the recommendation of the ILUNO director or assistant director, or the UNO English department placement procedure. Enrollment in the ILUNO program may be required if English language ability is below acceptable standards. Graduate school applicants must present a minimum score of 550.

English majors are required to score 600. Applicants for a master's program in English are also required to score 600.

2. After admission to the University, undergraduate students must take the English Placement Exam before they will be allowed to enroll in English courses. Further, they must enroll in that course or sequence of courses indicated by their placement exam.

The courses which may be required are:

- English 1150 and/or 1160
  - English 1100, 1150 and 1160
  - English 1090, 1100, 1150 and 1160
3. Only naturalized citizens of the United States, refugees and immigrants may request a waiver of the TOEFL requirement. To qualify, applicants must have graduated from an accredited U.S. high school, and show acceptable scores in standard high school English courses and on the English portion of the ACT or SAT. If the waiver is granted, students will then take the English Placement Exam.
  4. Advanced ILUNO students may begin academic classes in combination with concurrent language training, provided that eligibility be limited (a) to those courses designated by individual departments as appropriate, and (b) to those students enrolled in ILUNO 1700, 1800 or 1900 and recommended by the ILUNO academic director or assistant director in consultation with the instructor of record.
  5. Graduate applicants must apply directly to the Graduate department for a waiver of the TOEFL requirement. If recommended, the Graduate department will request the waiver from the Graduate College. Graduate program committees will determine additional language requirements for graduate students.



## International Applicants

1. International students wishing to attend the University of Nebraska at Omaha on non-immigrant student visas should contact the Office of Admissions. An international application with requirement information will be forwarded.
2. International students are required to have an application for admission and all required credentials on file at least 60 days prior to the start of the intended semester of attendance.

## Admission Requirements

### for Selected Undergraduate Colleges

Certain UNO Colleges have minimum Grade Point Average (GPA) and high school units\* requirements for admission to their college.

For specific admission requirements to the Colleges, please consult the degree requirements section which begins on the following pages:

College of Agricultural Sciences and Natural Resources.....	64
College of Architecture.....	67
College of Arts and Sciences.....	71
College of Business Administration.....	99
College of Continuing Studies.....	112
College of Education.....	119
College of Engineering and Technology.....	127
College of Fine Arts.....	150
College of Human Resources and Family Sciences.....	159
College of Information Science and Technology.....	177
College of Public Affairs and Community Service.....	182

*\*A unit is one year of high school course work.*

## Registration Requirements

Prior to the start of classes each session, students must register for courses according to instructions published in the appropriate Class Schedule. To be eligible to register, a new or re-admitted student (one who has not enrolled during the previous two years) must have completed all admissions information. Students will receive a Telephone Registration Worksheet which offers instructions as to how to use the Voice Response Registration system. Prior to registering, students should seek assistance from an academic adviser within his/her college. Some colleges and departments require advising prior to registering. Every student is encouraged to review the requirements for their intended degree objective with an assigned academic adviser. This review should be scheduled in preparation for and prior to each registration.

Students who have outstanding debts or fees owed to the University will not be permitted to register until these obligations have been met. Academically suspended students may not register for additional course work until an application for reinstatement has been filed with their collegiate dean and approved. Due to limited facilities and staff, the University cannot guarantee that all students will be able to enroll for every course they wish in each semester.

## Classification

A student's academic classification is determined by the number of semester hours of academic credit earned.

Academic Classification	Range in Semester Hours
Freshman	0 through 26
Sophomore	27 through 57
Junior	58 through 90
Senior	91 or above

## Contract Graduation

The following plan is available to undergraduate students who desire to establish a contractual degree program:

Prior to the completion of 105 acceptable credit hours, meet with an assigned academic adviser, develop the proposed degree program, and submit it to the Dean of the degree-granting college for review/approval. The Dean will provide the student and the academic adviser a copy of the approved plan. Changes, if needed, follow the same procedure as specified above.

An undergraduate student who completes the officially approved program as filed on record in the office of the dean shall be deemed to have fulfilled the requirements of the appropriate degree.

## University Credit Courses

All credit courses offered by the University may be applied toward any degree or certificate granted, except as stated by each department.

All courses offered for credit, whether scheduled for the regular academic year, the evening classes or summer sessions, are listed by departments. General introductory courses are listed first.

The system of course numbers is arranged to indicate the level of instruction.

The first figure in each number designates the group to which a course belongs:

1000-1990	Courses open primarily to freshmen
2000-2990	Courses open primarily to sophomores
3000-3990	Courses open primarily to juniors
4000-4990	Courses open primarily to seniors
8000	Courses open only to graduate students
9000	Courses open only to graduate students

Courses offered by the University are listed in the "Course Description" section of this catalog. The "Course Description" section is not intended to be an exhaustive list of all courses offered. From time to time courses may be added or dropped from a curriculum. For graduate courses see the Graduate Catalog. All courses listed in this catalog cannot be offered each semester. Some departments indicate in which semester the course is normally offered. While the departments will attempt to follow the guidelines established for periods of course offerings, there is no guarantee that the course will be offered during the semester indicated. Furthermore, students cannot be guaranteed placement in a course offered during a particular semester.

## Late Registration

Registration in any course for credit toward any degree, or any change of registration involving the addition of a course, should be completed by the end of the first week of any semester or after the end of the third day of the summer session. After this time, students will need written approval of the instructor and dean of the student's college to register.

## Dropping a Course

When a student finds it necessary to drop a course, the student should see the adviser and immediately file a "Change of Schedule" form in the Registrar's office. If a student officially drops out of a class after the first week of a semester and prior to the twelfth week of the semester, the student's record will be marked "W" (withdrawn).

**A student may not drop or withdraw from a course with any grade other than "F" after the eleventh week of the semester. This deadline may be waived upon recommendation of the college dean for extenuating circumstances supported by appropriate documentation.**

## University Withdrawal

Students who need to drop all courses for any given semester must obtain a "Withdrawal from all Classes" form from the Registrar's office. Procedures are as follows:

1. obtain the form from the Registrar's Office;
2. report to the Counseling Center for an exit interview; and
3. submit the signed form to the Office of the Registrar.

## GENERAL INFORMATION REGISTRATION AND PROCEDURES

Failure to formally withdraw from the University immediately may affect grades as well as financial considerations where refunds are appropriate. Refunds will be determined according to the official schedule found elsewhere in this catalog and the class schedule.

### Academic Standing Course Credit

Course credit is determined by the number of hours per week a class is in session, with some exceptions such as laboratory, physical education, band and choir. A course scheduled to meet three times per week for a semester merits, therefore, three semester hours credit. No more credit than the amount stated in the catalog is permitted in any course. To receive credit all work must be done under the supervision of a member of the faculty.

### Student Study Load

1. A normal student load is 12 to 17 credit hours.
2. Full-Time  
Undergraduate students must be enrolled for a minimum of 12 credit hours in a fall semester, spring semester, or summer term to be considered a full-time student.  
Half-Time  
Undergraduate students must be enrolled for a minimum of 6 credit hours in a fall semester, spring semester, or summer term to be considered a half-time student.
3. Students shall not carry 18 or more semester hours of work unless they have maintained an average of "B" (3.0) in a regular 15-hour load during the preceding semester. Application for permission to register for 18 hours or more should be made first to the academic adviser and then to the academic dean.
4. Entering freshmen shall be limited to 16 hours except as otherwise required for a specific program, such as engineering or pre-medicine.
5. Audit hours do not apply in counting hours for full time status.

### Academic Amnesty

Each college has established a policy and procedures for students who wish to declare academic amnesty for one or more semesters. For additional information, students should read the "Academic Amnesty" policy for their college in this catalog, or contact their dean's office.

### Grading

Grades are determined by the daily record of the student and the record made on quizzes, mid-semester and semester examinations. The weight attached to each of these factors is determined solely by the instructor of the course.

The grading system is as follows:

Symbol	Definition	Quality Points
A+	superior	4.0
A	superior	4.0
B+	above average	3.5
B	above average	3.0
C+	average	2.5
C	average	2.0
D+	below average, passing	1.5
D	below average, passing	1.0
F	failing	0.
CR	credit	*
NC	no-credit, failing	*
NR	no grade reported	*
S	satisfactory	*
U	unsatisfactory, failing	*
AU	audit	*
I	incomplete	*
IP	course in progress	*
W	withdrew (good standing)	*
R	repeated course	*

(\* — not used in calculating grade point averages)

### Grade Point Averages (GPA)

#### UNO GPA

The GPA included in the student grade reports issued by the Registrar's Office reflects courses taken only at UNO, UNL, UNMC and UNK.

#### Degrees with Honors GPA

Grades awarded in ALL courses taken at ALL colleges and universities attended are included in computing the GPA for determining eligibility for graduation honors.

### Not Reported "NR" Grades

If a Not Reported "NR" grade is reflected on a grade report, the student should immediately report it to the Registrar's Office. A grade of "NR" is not a terminal grade and must be changed to the appropriate letter grade. The Registrar's Office will work with the faculty member who issued the "NR" grade to get the grade changed. If the faculty member is not available, the Registrar's Office will work with the Department and College to correct the grade. When the grade is changed, the Registrar's Office will notify the student of the grade change.

### Credit/No-Credit (CR/NC) Privilege

1. The primary objective of the Credit/No-Credit privilege is to encourage students to attempt courses in areas they would normally avoid because of lack of background. The Credit/No-Credit privilege, therefore, extends the concept of a liberal education and for this reason it will not ordinarily be available within a student's major or minor unless written approval of the Department Chairperson is given.
2. Each college and department has the final authority in determining the extent of its participation in the program. All students should be made aware of the applicability of this program in the college in which they are enrolled.

3. A minimum grade of "C" is normally required to receive credit.

## Rules Governing Credit/No-Credit:

1. A maximum of 24 hours may be taken for university credit on a Credit/No-Credit basis. This privilege may be restricted by each department or college.
2. The department and/or college offering the course will indicate in the class schedule whether the course may be taken on a Credit/No-Credit basis.
3. Waiver of prerequisites for courses taken on a Credit/No-Credit basis shall be determined by the department offering the course.
4. Those students with less than 58 semester hours of academic credit earned may not take more than two courses during a regular semester and not more than one course during a summer session on a Credit/No-Credit basis.
5. Students must indicate their selection of the Credit/No-Credit option at the Registrar's office during the first week of classes.
6. A student may change from a graded basis to a Credit/No-Credit basis no later than the end of the first week of classes but not thereafter. A student may change from a Credit/No-Credit basis to a graded basis prior to the end of the last day for officially withdrawing and/or dropping a course during a semester, but not thereafter.
7. A grade of "Credit" will count as a specified number of hours earned but will not be included in determining a student's cumulative grade point average.
8. A grade of "No-Credit" will be recorded on a student's record but will not be included in determining the cumulative grade point average.
9. Faculty will report "Credit" or "No-Credit" designations for all students enrolled in a given course on that basis. All faculty are responsible for informing students who enroll on a Credit/No Credit basis of their grading standards during the first week of class in a semester.

## Audit Students

A student may audit a regular credit course with the consent of the instructor. An audit student may not participate in recitation, turn in papers, nor take examinations. He/she does not receive academic credit. An audit student may not change to credit registration after the first week of a course. (A credit student may change to audit registration with written permission of the instructor during the first 11 weeks of a semester, or during the first half of the class if it runs longer or shorter than a semester.) Audit registrations may not be processed until the first day of class and must be processed at the Registrar's Office. Physical education activity courses and foreign language courses are not available for audit. The audit fee is set at one-half of the resident tuition rate.

## **Incomplete**

To receive an "incomplete," students must contact their professor prior to the end of the semester, request a grade of incomplete, and make arrangements to complete the work. The rules which govern the issuance of the incomplete are as follows:

1. The grade "I" is used by an instructor at the end of a semester or summer session to designate incomplete work in a course. It is given when a student, due to 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. Incompletes will only be given if the student has already substantially completed the major requirements of the course.
2. Each instructor will judge each situation. The instructor will also indicate by a departmental record, with a copy to the student, how the incomplete is to be removed, and if the instructor is at the University at the time of removal, supervise the makeup work and report the permanent grade.
3. In the event the instructor is not available at the time of the student's application for removal of an incomplete, the department chairperson will supervise the removal of the incomplete and turn in the permanent grade for the student.
4. A student shall have no longer than the end of the next regular semester following receipt of the "I" to remove the incomplete. After that time, the "I" will automatically become an "W", or such other grade specified by the instructor depending on the amount and quality of the course work previously completed. Exceptions to this rule will be permitted if initiated by the student and approved by the instructor, department chair person and Dean. Exceptions to this rule will be made only in response to circumstances over which the student has no control, and these must be detailed.
5. In registering for courses, students receiving one or more "I" grades from the previous semester should take into account the time needed to complete the required work and plan their schedules accordingly.

## **Academic Performance**

A student must maintain a cumulative Grade Point Average (GPA) of 2.0 or above to remain in "good academic standing" in the University. However, the colleges may require a higher grade point average.

For purposes of participation in recognized extracurricular activities, "good academic standing" is defined as a cumulative GPA of at least 1.75 for the first 45 hours attempted and at least 2.0 for 46 or more hours attempted, including all college level courses taken for credit at the University of Nebraska.

## GENERAL INFORMATION REGISTRATION AND PROCEDURES

### Removal of "D" or "F" Grades from Grade Point Average

Students may remove "D" or "F" grades from computation in their Grade Point Average (GPA) by repeating the same course subject to the following conditions:

1. Only grades of "D+", "D", or "F" may be removed from the GPA computation. When a course in which a grade of "C" or higher was attained is repeated, both grades will be averaged in the GPA computation. Courses must be repeated under the same grade type as they were originally taken. For example, letter-graded courses must be repeated for a letter grade and credit/no credit courses must be repeated with the credit/no credit grade method, etc. The Registrar's Office will have the latitude to deviate from this when the grade method for the entire course has changed.
2. If a grade of "D+", "D", or "F" was received upon the first completion of a course it will be removed by any letter grade (A, B, C, D, or F) received upon the second completion of a course. Grades received upon the second or subsequent completion of a course will be removed only if the grade earned later is "C" or higher.
3. Rules 1 and 2 apply to a University of Nebraska at Omaha student who is repeating an equivalent course at the University of Nebraska-Lincoln (UNL), the University of Nebraska at Kearney (UNK), or the University of Nebraska Medical Center (UNMC). Equivalency is determined by the department offering the course at UNO. Students are advised to obtain a written statement of equivalency from the chairperson of the department involved before enrolling.
4. Rules 1 and 2 also apply to a transfer student from UNL, UNK, or UNMC who is repeating a course at UNO that was initially taken at UNL, UNK, or UNMC. Equivalency is determined by the department offering the course at UNO. Students are advised to obtain a written statement of equivalency from the chairperson of the department involved before enrolling.
5. ALL courses and grades of any kind will continue to be a part of the student's permanent record (transcript).
6. This section does not apply to the computation of the GPA for determining eligibility for graduation with honors. All grades awarded are included in computing the GPA for honors graduation. (See the section on degrees with honors under "Graduation.")
7. Recomputation of the GPA will be automatic. The Registrar's Office will automatically identify courses not reported by students as repeats for recomputation of the GPA. Students should direct any questions regarding this policy to the Registrar's Office.

### Academic Probation

A student whose cumulative grade point average is below 2.0 after having attempted six or more semester hours work will be placed on probation. Probationary status will remain in effect as long as the student's cumulative Grade Point Average (GPA) remains below 2.0. No student will be allowed to enroll for any course on a pass/fail or Credit/No Credit basis while on probation. Probation constitutes a period of formal warning that the student is doing unsatisfactory work.

The student is encouraged to use every opportunity during time on probation to seek counsel and guidance from various university agencies which have been established to offer assistance in study and academic planning. For information on such services, the student should consult with the dean of the college in which he/she is enrolled, the University Counseling Center, the Learning Center, faculty advisers and counselors.

### Academic Suspension

Students who are on probation will be suspended by the college at the end of any semester during which their current semester grade point average is lower than 2.0 and the cumulative Grade Point Average (GPA) falls below the following standards:

Hours Attempted	Cumulative GPA
0-12	No Suspension
13-45	1.75
46 or more	2.00

Suspension under these conditions will be automatic, and the student will be notified accordingly. Academic suspension will be for a minimum period of one year; such suspensions may be appealed to the committee responsible for academic standards in the college, school or division in which the student is enrolled. Appeals of academic suspension must be filed in writing in the office of the appropriate dean not later than the close of business on the first day of classes of the semester or first summer term following the imposition of suspension. Students whose academic suspension appeals are denied at their respective college, school or division may elect to appeal to the university Undergraduate Committee on Academic Appeals (UCAA). Appeals of academic suspension must be filed in writing in the office of the chair of the UCAA within 10 days of receiving notification that their appeal was denied at the college, school, or division level. Appropriate appeal forms for the UCAA must be obtained from the UCAA chair.

Appeals properly filed shall delay implementation of the suspension until the appropriate appeals committee has acted. However, if the appeal is denied, the student shall be disenrolled and tuition (but not fees) shall be refunded.

### Reinstatement Following Suspension

Applications for reinstatement of students on academic suspension from the University of Nebraska at Omaha shall be submitted to the Registrar on the form selected by that official. This application must be submitted at least one month prior to the official beginning of the semester or term for which the student is applying (refer to academic calendar for specific dates).

These applications will be referred to the appropriate academic dean or director for approval. The University Committee on Undergraduate Academic Appeals serves as an appeals committee for students concerning decisions made by the respective colleges, schools and divisions regarding academic probation, suspension and reinstatement.

## **Graduation**

### Application for Degrees

Application for all degrees must be filed in the Office of the Registrar early in the semester and not later than the date listed in the University Calendar.

All requirements for graduation must be completed and certification by the appropriate college must be on file in the Office of the Registrar no later than the close of business on the fifteenth working day following the date of commencement for a particular semester. This includes the satisfaction of all grades of "Incomplete".

### Attendance at Commencement

Candidates for degrees who attend the commencement exercise should wear an academic cap and gown. The fee for graduation is \$3.00. Anyone finding it necessary to have a degree conferred in absentia must pay an additional fee of \$2.00.

### Candidacy for a Second Baccalaureate Degree

A student who has met the requirements for a baccalaureate degree at the University of Nebraska at Omaha must complete a minimum of 30 additional semester hours at the University for a different (second) degree. A plan of study for the additional hours, approved by the department head primarily concerned, must be filed in the Office of the Dean of the College offering the degree by the completion of the fifteenth additional hour. Students must consult an academic adviser prior to starting this program. Two baccalaureate degrees may be awarded simultaneously when the student becomes eligible to receive them.

### Outstanding Debts and Fees Owed to the University

Diplomas or official transcripts will not be released for students who have outstanding debts or fees owed to the University.

### Degrees with Honors

The Baccalaureate degrees with honors are awarded as follows:

1. To all graduates whose scholastic average for their entire university career and at UNO is 3.51 or above, but below 3.63, the degree cum laude.
2. To all graduates whose scholastic average for their entire university career and at UNO is 3.63 or above, but below 3.87, the degree magna cum laude.
3. To all graduates whose scholastic average for their entire university career and at UNO is 3.87 or above, the degree summa cum laude.

To qualify for honors, a student must have earned at least 60 semester hours within the University of Nebraska system, 30 hours of which must be completed at the

University of Nebraska at Omaha and in which letter grades of "A," "B," "C," or "D" are received. Grades awarded in all courses taken at all colleges and universities attended are included in computing the Grade Point Average (GPA) for determining eligibility for honors. It should be noted that the GPA included in the student grade reports issued by the Registrar's Office reflects only courses taken at UNO, UNL, UNMC and UNK.

### Baccalaureate Degrees with Honors Extra Muros

These degrees are awarded to transfer students who have not completed the required 60 semester hours of credit within the University of Nebraska system required for cum laude, magna cum laude, or summa cum laude honors.

To be eligible for Honors Extra Muros the transfer students must meet the following standards and requirements:

1. They must:
  - Have a scholastic average for their entire university career of 3.51 or above, but below 3.63, to receive degree cum laude.
  - Have a scholastic average for their entire university career of 3.63 or above, but below 3.87, to receive degree magna cum laude.
  - Have a scholastic average for their entire university career of 3.87 or above, to receive degree summa cum laude.
2. Provided that they:
  - Have a minimum of 24 graded hours from the University of Nebraska at Omaha, and
  - Have a minimum total of 77 hours of graded course credit.

## **General Academic Regulations**

### The Academic Year

Two semesters of approximately 15 weeks each constitute the academic year. The unit of instruction is the semester hour, which signifies one recitation a week throughout the semester, or equivalent.

### Examinations

During the semester, examinations and quizzes are arranged by the faculty. The last week of the semester is designated as Final Examination Week. Students who are on scholarships or who wish to be eligible for activities must make up incomplete grades within two weeks of the last final examination. Unless these are made up, the student cannot be certified as being eligible.

### Dead Week

The last week of regularly scheduled classes during fall and spring semesters is designated as "dead week." Except for makeup examination tests in self-paced courses, post-tests in the English Composition Program or laboratory exams, no major examinations (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.

**Behavior**

Section 5.0 of the By-laws 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.”

**Attendance**

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

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. If a student anticipates absence for an extended period, the student should promptly notify 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 they may provide notice to other instructors.

Should there be cause on the part of the individuals involved to feel that the reasons for absence were not considered with equity, a decision with punitive consequences may be appealed. The appeals procedure is the same as that provided for in each collegial unit for other academic, classroom-related items (grades, cheating, etc.) involving the student submitting the justification for the appeal in writing to the department chair and, if unsatisfactory, to the collegial dean. The final step in the appeals process rests with the student submitting a written statement requesting the consideration of the respective dean's advisory council, indicating the specific nature of the appeal to be considered. The advisory council's recommendation to the respective dean will be the last step for the student, and the dean's decision will constitute the final determination for the University.

The routing of appeals shall be in the department and collegial unit offering the course in which the student is enrolled.

## REGULATIONS FOR DETERMINATION OF RESIDENCY FOR TUITION PURPOSES

Residency requirements are subject to change by the Board of Regents and/or Nebraska State Legislature.

### Preamble

Pursuant to Article VII, Section 10 of the Constitution of the State of Nebraska, and Neb. Rev. Stat., 85-501 and 85-502 (1980 Supp.), the University has been authorized to develop regulations and make determinations regarding Nebraska residency for tuition purposes. These regulations provide the bases upon which University staff shall determine, on a uniform intercampus basis, whether an individual qualifies as a Nebraska resident for tuition purposes.

It should be emphasized that the statutes provide a set of minimum standards which will govern a determination of resident status for tuition purposes only. In some instances, it will be possible that an individual may qualify as a "resident" of Nebraska for one purpose (such as securing a Nebraska driver's license) and still not meet the standards established by the Board of Regents for resident tuition status. Individuals seeking a Nebraska residency determination for tuition purposes should, therefore, carefully study all aspects of the law and these regulations before seeking resident tuition status.

These regulations require that a determination of resident status be made "at the time of each registration." In addition, state law guarantees that once an individual has been enrolled at the University or one of the Nebraska state colleges as a resident student, he or she shall be afforded that privilege during the balance of that and any subsequent enrollments at the University, provided the student is readmitted within a two year time period.

It should be noted that an individual who moves to Nebraska primarily to enroll in an institution of higher education of the state is presumed to be a non-resident for tuition purposes for the duration of his or her attendance at the University.

Individuals seeking to establish resident status for tuition purposes who are subject to the 12 months minimum requirement must have established a home in Nebraska at least 12 months prior to the time at which they request such a determination. In addition, they must also initiate the various other domiciliary contacts which will support their application within a reasonable period of time after they have established their domicile in Nebraska. That is, it will not be sufficient to show only that they have established a home in Nebraska for 12 months. They will also be expected to demonstrate that the supporting contact points, such as a Nebraska driver's license and Nebraska checking or savings accounts, have been held for a reasonable period of time.

Individuals seeking a resident student determination for tuition purposes will be required to sign a notarized affidavit attesting to the truth of their statements. If it is subsequently determined that an individual has falsified such a statement, he or she may be subjected to disciplinary action by the University before the individual will be permitted to continue with his or her studies at the University. Such disciplinary action will be determined on an individual basis, and may

include measures such as disciplinary probation or suspension, expulsion from the University, or a requirement that the individual reimburse the University for the difference between the tuition paid and the non-resident tuition rate.

### Definitions

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

#### Resident Fees

"Resident fees" shall mean the resident tuition rate set by the Board of Regents applicable to the academic program in which an individual intends to enroll.

#### Non-resident Fees

"Non-resident fees" shall mean the non-resident tuition rate set by the Board of Regents applicable to the academic program in which an individual intends to enroll.

#### Legal Age

"Legal age" shall be the age of majority set by Nebraska statute, currently, 19 years of age.

#### Emancipated Minor

"Emancipated minor" shall mean an individual who by virtue of marriage, financial status or for other reasons, has become independent of his or her parents or guardians.

#### Established a Home

The phrase "established a home" shall mean that an individual continuously maintains a place of residence in Nebraska where the individual is habitually present.

#### Legal Residence

"Legal residence" shall mean the place of domicile or permanent abode as distinguished from temporary residence.

#### Dependent

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

### Resident Tuition Categories

An individual will qualify as a resident of the State of Nebraska for tuition purposes at the University of Nebraska if, prior to the commencement of the term for which residency is sought, he or she meets the standards set forth in any one of the following eleven categories:

#### Section A. Legal Age or Emancipated Minor

A person of legal age or an emancipated minor who for a period of 12 months shall have established a home in Nebraska where he or she is habitually present, and shall verify by documentary proof that he or she intends to make Nebraska his or her permanent residence.

1. In addition to documentation of occupancy of a home or residence in Nebraska for the previous period of 12 months, intent to make Nebraska a permanent residence may be demonstrated by factors including, but not limited to, the following:
  - a. a current Nebraska driver's license;
  - b. documentation that the individual is registered to vote in Nebraska;



## GENERAL INFORMATION RESIDENCY POLICY

- c. a current Nebraska automobile registration in the individual's name;
  - d. documentation of individual checking or savings accounts maintained with a Nebraska financial institution;
  - e. documentation of current employment in Nebraska, and withholding of Nebraska income tax;
  - f. copies of the provisions of an individual's most recent state income tax return indicating a Nebraska taxpayer status.
2. An individual who moves to Nebraska primarily to enroll in an institution of higher education of the state is presumed to be a non-resident for tuition purposes for the duration of his or her attendance at the University.
  3. An individual claiming Nebraska resident status under this section will not be granted such a determination if he or she has claimed resident status in any other state within the past 12 months.

### Section B. Dependent Minor

A minor whose parent, parents or guardian have established a home in Nebraska where such parent, parents or guardian are habitually present with the bona fide intention of making Nebraska their permanent place of residence.

1. For the purpose of this section, an individual shall be required to present documentary proof that his or her parent, parents or guardians have established a home in Nebraska. Such proof shall consist of the following:
  - a. documentation that the parent or guardian has established a home in Nebraska;
  - b. documentation that the individual seeking a resident tuition determination is a dependent for federal income tax purposes of the parent or guardian who has established a home in Nebraska; and
  - c. other supporting documents of the parent or guardian's Nebraska residency including, but not limited to, the following factors:
    - a current Nebraska driver's license;
    - documentation that the individual is registered to vote in Nebraska;
    - a current Nebraska automobile registration in the individual's name;
    - documentation of individual checking or savings account maintained with a Nebraska financial institution; or
    - documentation of current employment in Nebraska.
2. For the purposes of this section, an individual, once enrolled as a resident student, whose parent, parents or guardian have previously established a home in Nebraska, as documented through evidence such as that outlined in Section B.1, above, shall continue to be classified as a resident for tuition purposes if the parent, parents or guardian upon whom he or she remains dependent move from the state.
3. There shall be no minimum period of residence for the parent or guardian under this section.

### Section C. Legal Age Dependent

A person of legal age who has established a home in Nebraska and is a dependent for federal income tax purposes of a parent or former legal guardian who has established a home in Nebraska.

1. For the purposes of this section, an individual shall be required to present the following:
  - a. documentation that both he or she and the parent or former guardian have established a home in Nebraska. Such documentation shall be the same as that required under Section B.1; and
  - b. documentation that he or she is, for federal income tax purposes, the dependent of parent or former guardian for the most recent tax year.
2. There shall be no minimum period of residence under this section.

### Section D. Married to a Nebraska Resident

An individual who has married a resident of Nebraska.

1. For the purposes of this section, an individual shall be required to verify that he or she is married to an individual who prior to the marriage had already established a home in Nebraska. Such verification shall consist of:
  - a. a valid marriage license; and
  - b. documentation of his or her spouse's Nebraska resident status, as required in Section A.1

### Section E. Asylee, Refugee or Permanent Resident Alien

An individual who has become a permanent resident alien of the United States or has been granted asylee or refugee status.

1. For the purposes of this section, an individual will be required to present documentation that he or she:
  - a. has been a resident of the State of Nebraska for a period of at least 12 months, verified as required in Section A.1; and
  - b. is a holder of a permanent resident alien, asylee or refugee status.

### Section F. University or State College Staff Member or Dependent/Spouse

An individual who is a staff member or a dependent or spouse of a staff member of the University of Nebraska, one of the Nebraska state colleges, or one of the technical community college areas. For the purposes of this section, an individual will be required to verify that he or she is either: a permanent staff member holding at least a .5 FTE appointment at the University, one of the Nebraska state colleges, or one of the Nebraska community technical college areas; or the spouse or a dependent of such a staff member for federal income tax purposes.

### Section G. Active Duty Military and Dependents

An individual on active duty with the armed services of the United States, and who has been assigned a permanent duty station in Nebraska, or a spouse or dependent of an individual who has been assigned a permanent duty station in Nebraska, or where Nebraska is that individual's home of record.

1. An individual on active duty with the United States armed services will be granted resident tuition status if he or she verifies:
  - a. that they are on active duty with the armed forces; and
  - b. that their permanent duty station is in Nebraska; or
  - c. where Nebraska is that individual's home of record.
2. An individual who is a spouse or a dependent of a person on active duty with the United States armed services will be granted resident tuition status if he or she verifies that he or she is a spouse or a dependent, for federal income tax purposes, of an individual meeting the qualifications outlined in section G.1, above.
3. There shall be no minimum period of residence under this section.

**Section H. Nebraska High School Graduate**

An individual who has established a home in Nebraska and is a graduate of an accredited Nebraska senior high school and was a legal resident of the state at the time of graduation.

1. For the purposes of this section, documentary proof of a Nebraska residence shall consist of:
  - a. documentation that the individual has established a home or residence in Nebraska; and
  - b. evidence such as that outlined in section A.1; and
  - c. an official transcript from an accredited Nebraska senior high school indicating that the individual graduated from that school.
2. There shall be no minimum period of residence for the individual under this section.

**Section I. Former University/State College Resident Student**

An individual who has been enrolled in the University or one of the Nebraska state colleges as a resident student, shall be afforded that privilege during the balance of that and any subsequent enrollments at the University, provided the student reenrolls within two years of the last date of enrollment.

1. For the purposes of this section, documentary proof of a Nebraska residence shall consist of:
  - a. documentation that the individual has established a home or residence in Nebraska; and
  - b. evidence such as that outlined in section A.1; and
  - c. a statement from the University or state college indicating resident classification.
2. There shall be no minimum period of residence for the individual under this section.

**Section J. Native Americans**

Members of Native American tribes that are indigenous to or have historically migrated to or from the State of Nebraska shall be granted the resident tuition rate if they provide documented proof of affiliation with a qualifying tribe. Occupying a home in Nebraska is not required in this section.

**Section K. Recruited or Transferred Employees**

Individuals who, because of their special talents and skills, were recruited to Nebraska for full-time employment in the state, or were transferred to Nebraska by a business entity, and the spouses or dependents of such individuals.

1. For the purposes of this section, proof of Nebraska residence shall consist of:
  - a. documentation that the individual has established a home or residence in Nebraska; and
  - b. evidence such as that outlined in section A.1; and
  - c. documentation of employment status and date of initial employment in Nebraska.
2. There shall be no minimum period of residence for the individual under the section.

**Affidavit**

Individuals requesting resident tuition status shall be required to complete a notarized affidavit outlining the reasons under which they believe that they qualify and attesting to the accuracy of their statements. Completion of a falsified affidavit shall subject the individual to possible University disciplinary action.

**Appeals**

An individual who believes that he or she has been incorrectly denied a resident tuition determination may appeal that decision through channels established by the Chancellor of the campus where the adverse decision was made. The decision by the Chancellor or his or her designee shall be final in any such appeals.

**Severability**

If any section of these regulations or any part of any section shall be declared invalid or unconstitutional, such declaration shall not affect the validity or constitutionality of the remaining portions thereof.

**Non-Residents Who Pay Nebraska Income Tax**

Individuals who reside outside of Nebraska but pay Nebraska income tax, and the spouses or dependents of such individuals, are entitled to tuition credit upon documented evidence of such payment to the State. The tuition credit granted shall equal the amount of Nebraska income tax paid for the immediately preceding calendar year except that the remaining obligation cannot be less than the amount of the resident tuition.

**Policy on Tuition Scholarships for Non-Residents**

Tuition scholarships for an amount up to the difference between resident and non-resident tuition may be awarded to selected students who are non-residents of Nebraska. The number of students receiving tuition scholarships under this competitive program shall be determined at each campus by the Chancellor.

The following students, having met all other requirements for admission, will be eligible for consideration for such tuition scholarships under this program:

Section A

## Undergraduate

1. Entering freshmen who ranked in the upper 25 percent of their high school class, OR who scored 23 or more on the ACT, or 970 or more on the SAT.
2. Transferring students who have a cumulative Grade Point Average (GPA) of 3.00 (out of a maximum of 4.00).
3. Students who enter the program according to the above criteria and continue in good academic standing.
4. Underrepresented minorities or individuals with special talents.

Section B

## Graduate and Professional

1. Entering graduate and professional students who have a cumulative GPA of 3.00 for all previous work attempted at all colleges attended prior to enrollment at the University of Nebraska.
2. Students who enter the program according to the above criterion and continue in good academic standing.
3. Underrepresented minorities or individuals with special talents.

## TUITION, FEES, REFUNDS AND DEPOSITS

Tuition and fees for the Fall and Spring semesters are payable in two installments. The first installment is 50% of the total bill. The second installment will require payment of the remaining balance on the account. Please see the schedule below for approximate billing dates and due dates. Each time a student fails to meet a payment due date, a Late Payment Fee will be assessed to the tuition account. Note: Failure to receive the billing notice will not excuse the student from payment responsibility, nor the late payment penalties.

UNO accepts major credit cards for payment of tuition and fees. When mailing credit card payments, please use the back side of the remittance form on your tuition and fees billing statement. Credit card payments will be accepted only with the cardholder's signature. No credit card payment will be accepted over the telephone, via FAX or E-Mail. UNO also accepts cash, checks and money orders for the payment of tuition and fees.

Tuition and fee payments are to be mailed to the Cashiering/Student Accounts Office, 109 Eppley Administration Building, Omaha, NE 68182. Payments may also be made at the Cashiering/Student Accounts window.

### Fall Semester

- For students who register April through the first week of the semester:  
 Bill Date: end of 1st week of classes  
 Tuition Due: 4th week of classes  
 (18 days after bill date)  
 Amount Due: 50% of total (required deposit)
- Final Bill  
 Bill Date: end of 4th week of classes  
 Tuition Due: 7th week of classes  
 (18 days after bill date)  
 Amount Due: remaining balance

### Spring Semester

- For students who register November through the first week of the semester:  
 Bill Date: end of 1st week of classes  
 Tuition Due: 4th week of classes  
 (18 days after bill date)  
 Amount Due: 50% of total (required deposit)
- Final Bill  
 Bill Date: end of 4th week of classes  
 Tuition Due: 7th week of classes  
 (18 days after bill date)  
 Amount Due: remaining balance

### Summer Sessions

Students will be billed periodically, from mid-April through mid-July for their summer registrations. Tuition and fees will be due and payable in full upon billing.

Students who fail to pay tuition and fees by the due date will be assessed a Late Payment Fee.

Failure to make payment on an account will prohibit registration for future semesters. If an account remains unpaid, it may be forwarded to a collection agency.

Courses which are added or registrations which occur after the final billing due date must be paid in full prior to processing by the Registrar's Office. Students waiting until after the initial 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 schedule fee, whichever is applicable, and the late payment fees.

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 transcripts. Outstanding financial obligations from previous semesters must be paid prior to registration. Failure to do so will prohibit registration for 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.

### Application Fee (Undergraduate)

The application fee is payable at the time the application for admission form is filed. This fee is non-refundable and does not apply toward tuition or any other fee. Residency for the purpose of assessing tuition is determined by the status of the applicant at the time the application for admission is filed. The undergraduate application fee is not applicable toward the graduate application fee and vice versa.

Application Fee .....\$25.00

### Graduate Application Fee (Graduate College)

Application Fee .....\$25.00  
 (\$35.00 after August 1, 1998)  
 Counseling Department Admissions Testing Fee:  
 MMPI-2 .....\$9.00

### Tuition (Per Semester Credit Hour)

*Tuition and fee rates listed are for the 1997/98 academic year. Rates for the 1998/99 academic year will be established by the Board of Regents in June 1998.*

Programs administered by the University of Nebraska at Omaha:

#### Undergraduate

Resident of Nebraska  
 (see residency statute) .....\$71.50  
 Non-Resident .....\$198.25  
 Per Student Credit Hour  
 Off-Campus Program .....\$86.75

#### Graduate

Resident of Nebraska  
 (see residency statute) .....\$89.25  
 Non-Resident .....\$215.00  
 Per Student Credit Hour  
 Off-Campus Program .....\$102.75

Programs administered by UNL and other UNL-administered colleges (including ENGR, HRFS, AGRI and ARCH):

#### Undergraduate

Resident of Nebraska  
 (see residency statute) .....\$78.50  
 Non-Resident .....\$213.25

#### Graduate

Resident of Nebraska  
 (see residency statute) .....\$103.75  
 Non-Resident .....\$256.25

## GENERAL INFORMATION TUITION AND FEES

### 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.

### **MANDATORY FEES (NON-REFUNDABLE)**

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

Part-Time Fee (assessed to students registered for 1-6 credit hours, on-campus courses) .....\$90.00

Full-Time Fee (assessed to students registered for 7 or more credit hours, on-campus courses) .....\$103.25

Students enrolled ONLY in off-campus courses (800 section number) do not pay the UPF Fee and do not have use of fee supported services.

The UPF Fee 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 Student Services and Enrollment Management. Students requesting to receive a Fund A refund will no longer be entitled to the student services supported by Fund A Student Fees.

The Fund B portion of the UPF Fee is designated for services, staff salaries, maintenance of facilities and related expenses, and those additional items designated by the Chancellor. This portion is budgeted separately with emphasis upon continuing support. The Vice Chancellor for Student Services and Enrollment Management 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

Charged once per semester to all students .....\$2.00

#### Student Technology Fee (Implementation planned for Fall, 1998):

Charged per credit hour each semester .....\$5.00

The purpose of this fee is to provide educational information technology resources to UNO students.

#### Late Fees and Penalties (non-refundable):

Change of Schedule Fee .....\$5.00

Students who add or drop classes on or after the first day of the semester will be assessed one \$5.00 Change of Schedule Fee for **each day** schedule changes are made.

Late Registration Fee (day or evening class) .....\$25.00

A Late Registration Fee will be charged to a student registering on or after the first day of the semester.

#### Late Payment Fee

Billing amounts of \$400.00 or less .....\$25.00

Billing amounts over \$400.00 .....\$50.00

Returned Check Charge .....\$15.00

Returned checks must be redeemed in cash or money order. Failure to honor returned checks may result in additional late fees or legal action.

Photo ID Replacement Fee .....\$5.00

#### Laboratory/Special Instructional Fees (Non-refundable)

Students enrolling in the following course sections are advised that laboratory/special instructional fees are mandatory for services and are changed accordingly.

##### Accounting:

2020, 3020, 3050, 4010, 4040, 4060,  
4070, 4090, 8016, 8046, 8066, 8076,  
8096, 8220, 8230, 8250, 8260 .....\$3.00  
3010, 3080 .....\$6.00

##### Architecture:

All courses receive a per credit fee .....\$12.00

##### Biology:

3104 .....\$3.00  
1020, 3100 .....\$5.00  
All other lab courses  
(except 1750, 2740, 2840) .....\$15.00

##### Business Administration:

8050, 8080, 8100, 8120, 8170, 8200,  
8360, 8370, 8380, 8420, 8426, 8480,  
8550, 8566, 8770, 8800 .....\$3.00  
2130, 3100, 3140, 3500, 8030, 8490, 8530,  
8710, 8720, 8730 .....\$6.00

##### Chemistry:

2274 .....\$12.00  
All other lab courses .....\$6.00

##### Communication:

BRCT 2310 .....\$14.00  
BRCT 2370 .....\$6.00  
BRCT 3030, 3320, 3330, 4350, 4450, 8356 .....\$15.00

##### Computer Science

2710 .....\$40.00

##### Economics:

3200, 3250, 3300, 4260, 4450, 4620, 8160,  
8210, 8230, 8266, 8456, 8626, 8930 .....\$3.00  
8300, 8920 .....\$6.00

##### Education:

CORE 2800 .....\$5.00  
COUN 8230 .....\$16.00  
EDUC 2520 .....\$5.00  
SPED 4510, 4520 .....\$5.00  
TED (All labs) .....\$5.00

##### English:

1090/1100 .....\$2.50  
1050 .....\$5.00  
1154, 1164 .....\$4.00

##### Engineering:

CET 1250, 2000, 2020 .....\$15.00  
CET 2300 .....\$20.00  
CIVE (All labs) .....\$15.00  
DDET (All labs) .....\$15.00  
EET (All labs) .....\$10.00  
ELEC 2330 .....\$10.00

EMEC 1110, 1120, 4520, 8520 .....	\$15.00
EMEC 3760, 4600, 4800 .....	\$10.00
GET 2130 .....	\$20.00
IDSG 2500 .....	\$25.00
ISTC 1160, 1180 .....	\$20.00
ISTC 1170, 2110 .....	\$18.00
ISTC 2160 .....	\$17.00
ISTC 2200 .....	\$22.00
ISTC 3230 .....	\$15.00
ISTC 3830 .....	\$19.00
MENG 1300 .....	\$25.00
MENG 3100 .....	\$20.00
METE 3600 .....	\$20.00
Finance and Banking:	
3250, 3650, 3710, 4400 .....	\$3.00
3000, 3400, 3450, 3700, 4150, 4350 .....	\$6.00
Fine Arts:	
History, Survey & Seminar courses .....	\$5.00
Art Labs .....	\$20.00
DART 1050 .....	\$14.00
Foreign Languages:	
All 1000 and 2000 level courses .....	\$6.25
All 2050 courses .....	\$25.00
Geography:	
1030, 1060, 1070 .....	\$5.00
1030 Field Trip .....	\$5.00
4050, 4610, 4630, 8056, 8616, 8636, 8990 ....	\$10.00
3540 .....	\$15.00
Geology:	
1170, 1180, 2754, 2764, 4610, 4950, 8616 ....	\$10.00
3100, 3300, 3454 .....	\$5.00
1170, 1180, 3104, 3310 Fieldtrips .....	\$3.00
Health and Physical Education:	
HED 3030 .....	\$6.00
Backpacking .....	\$44.00
Scuba .....	\$95.00
Industrial Systems:	
3150 .....	\$15.00
Information Systems and Quantitative Analysis:	
3300 .....	\$3.00
1230, 2130, 3100, 3140, 3150, 3210, 3310,	
3320, 3400, 3500, 4110, 4120, 4150, 4200,	
4350, 4370, 8080, 8110, 8210, 8220, 8310,	
8356, 8410, 8420, 8736 .....	\$6.00
Journalism:	
2150, 2160, 3110, 3270, 3500 .....	\$15.00
Law and Society:	
3230, 3240, 3460, 3910, 3920, 4220,	
4460, 4910 .....	\$3.00
Management:	
1280, 3200, 4010, 4150, 4310, 4490 .....	\$3.00
4480 .....	\$6.00
Marketing:	
3380, 4300, 4340, 4420 .....	\$3.00
Mathematics:	
1310, 1320 .....	\$4.50
Music:	
Music 1090, 1100, 1110 .....	\$3.00
Music Equipment & Maintenance .....	\$15.00

## Applied Music:

Mandatory for enrollment in voice and all instruments:

One Credit Hour .....	\$100.00
Two Credit Hours .....	\$200.00
Three Credit Hours .....	\$300.00

## Natural Science:

2010, 2020 .....	\$7.00
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## Nutrition:

2410 .....	\$30.00
3400 .....	\$25.00
2720, 3710, 4500, 4730, 8506, 8736 .....	\$15.00
3700 .....	\$10.00

## Physics:

All labs .....	\$5.00
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## Psychology:

1024, 4280 .....	\$15.00
3234 .....	\$25.00

## Real Estate:

4390 .....	\$3.00
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## Teacher Education:

All labs .....	\$5.00
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## Textiles & Clothing:

1034, 1210, 2060, 3130, 3230, 4030, 4280 ....	\$10.00
2160, 2220, 2250, 3140, 3230, 4160, 4250 ....	\$15.00
3250 .....	\$20.00

## Writer's Workshop:

All labs .....	\$10.00
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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 particular circumstances involved.

## Refund Schedule

Students who drop one or more courses or who completely withdraw will be obligated to the University for that portion of tuition cost based on the refund schedule. Students who completely withdraw are obligated to pay the non-refundable portion of tuition and fees for the course(s) from which they are withdrawing. Refunds are computed from the date application is received by the Registrar, NOT from the date of withdrawal of classes.

See policy titled "Withdrawal from Classes." Only tuition is refunded. Fees are not refundable after the first week of classes.

Students are not relieved from the payment of tuition and fees if they withdraw before a tuition due date, or if payment of tuition and fees has been extended by the Financial Aid Office. Students who have received financial aid are subject to special refund rules as established by the U.S. Department of Education. A financial aid recipient should first contact the Office of Financial Aid prior to any official withdrawal from the university, in order that he or she fully understands the financial implications of withdrawal.

Failure to make payment will prohibit registration for future semesters. If an account remains unpaid, it may be forwarded to a collection agency.

## GENERAL INFORMATION TUITION AND FEES

### Regular Semester

Before the first official day of the semester, 100 percent refunded.

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.

Courses that run less than ten weeks have unique refund schedules. Students considering withdrawal from such a course should check with the Registrar's Office for the applicable refund schedule.

### **Special Service Fees**

Transcripts of Academic Record first copy  
(allow 2-3 weeks for processing) .....\$4.00

Additional copies (same order)  
(allow 2-3 weeks for processing) .....\$2.00

Thesis Binding (per copy) .....Varies  
(check at Registrar's Office)

Cap and Gown Rental  
(to be arranged through the Bookstore) .....TBA

Graduation Fee (if attending ceremony) .....\$3.00

Degree in Absentia .....\$5.00

Late Application for Degree .....\$35.00

### **Teacher Recruitment Fees:**

#### **Mandatory for Registration: Non-refundable**

##### Credential Fee

Graduating Seniors (new files) .....\$25.00

Fee covers establishment of a placement file and seven sets of credentials within the registration year, (Oct. 1 through Sept. 30).

Alumni Re-registrants .....\$45.00

Fee covers update of placement file and seven sets of credentials used within the registration year.

### **Testing Fees:**

#### **Mandatory for Services: Non-refundable**

ACT Assessment (ACT) National .....\$20.00

ACT Assessment (ACT) Residual .....\$25.00

Calculus Readiness Exam (CRT) .....\$5.00

California Achievement Test (CAT) .....\$25.00

Content Mastery Examination for  
Educators (CMEE) .....\$60.00

Credit by Examination, College-Level  
Examination Program (CLEP)\* .....\$43.00

Non-refundable service fee .....\$10.00

Credit by Examination, per course  
(Departmental)\*\* .....\$25.00

Correspondence Tests .....\$10.00

English Placement/Proficiency Exam (EPPE)\*\*\* .....\$7.00

Graduate Record Examination (GRE) .....\$96.00

Law School Admission Test (LSAT)\*\*\*\* .....\$84.00

Mathematics Placement Exam (MPE)\*\*\* .....\$5.00

Medical College Admissions Test (MCAT) .....\$160.00

Miller Analogies Test (MAT) .....\$40.00

Pre-Professional Skills Test (PPST) .....\$75.00

Test of English as a Foreign Language (TOEFL) .....\$55.00

Institutional TOEFL .....\$30.00

\*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.

\*\*\*If both EPPE and MPE exams taken, the total cost will be \$10.00.

\*\*\*\*Additional Fee for LSDAS (See Registration packet)

### **Deposits**

Key (per key with authorization/refundable) .....\$5.00

ROTC Uniform Deposit Refundable

Freshmen and Sophomores .....\$50.00

Juniors and Seniors .....\$100.00

### HPER Lockers

HPER Building locker, lock and towel services are available to students and Campus Recreation Activity Card holders. Rental of a locker is not required. Day use lockers are available and towels may be checked out at the Central Issue Room, HPER 113, at no cost.

Deposit Fee Refundable .....\$7.50

#### Rental Fees:

By semester

Cube Locker .....\$5.00

Half Locker .....\$10.00

Full Locker .....\$15.00

#### Full Calendar Year:

Cube Locker .....\$12.00

Half Locker .....\$24.00

Full Locker .....\$36.00

### Campus Recreation Activity Card for Spouses

Spouses of students who pay UPF Fees may purchase a Campus Recreation Activity Card and use the facilities and programs in the HPER Building. Cost of the card is the same rate as the Campus Recreation portion of UPF Fees.

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**DIVISION OF STUDENT SERVICES AND ENROLLMENT MANAGEMENT**

The Division of Student Services and Enrollment Management contributes to the UNO learning environment through support programs and services which are designed to assist students in defining, clarifying and achieving their educational goals. These programs and services focus on each student's personal, interpersonal, intellectual and physical development.

In conjunction with the faculty, the units listed below serve as a system of learning, reinforcement programs and services that assist students to benefit maximally from their college experiences.

**Career Planning**

The career counselors assist students 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 the Career Center, 111 Eppley Administration Building.

By exploring the many career alternatives in terms of interests, values, needs, abilities and aspirations, individuals will be able to develop career goals consistent with their particular lifestyle. To explore and clarify their personal and unique potential, students may become involved in individual counseling, workshops, testing and test interpretation through the Counseling Center. SIGI+, a computerized comprehensive career information program, is available 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 the Career Center (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.

**The Career Center**

The Career Center, 111 Eppley Administration Building, 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, current job openings, career exploration information, job descriptions, salary surveys, employment trends and job-search techniques are also available. All UNO students can receive personalized assistance in resume preparation and job search strategies.

The Career Center sponsors programs covering numerous career employment topics. 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.

**Student Employment Programs**

Students seeking career-related work experience such as internships and community service during school can gain assistance through Student Employment Programs (SEP), located within the Career Center. On-campus and work-study positions are posted in the office and through the web at <http://cid.unomaha.edu/~career/>.

*Teacher Recruitment*

Teacher education candidates need to prepare and file employment credentials. These files are maintained for candidates for 10 years as long as the candidate's file is active; a candidate's file may be destroyed if there is no activity within a 10 year period. A teacher preparation day is held in both fall and spring semesters for student teachers preparing to enter the job market. A complete listing of local and regional teacher vacancies is available to all teacher candidates.

*Recruiting and Referral Programs*

First-semester seniors and graduate students completing degrees are encouraged to register with the Career Center to use the recruiting and referral services. Two major career fairs are provided each year, open to all students and alumni. Students can also access nationwide listings and campus-wide job data bases to search for employment.

Each semester regional employers visit the campus to conduct interviews. Interested students need to contact the office for specific recruiting dates and sign up activities. In addition, the office refers registered candidates directly to employers for openings. An effort is made to refer all registered candidates for positions; however, employment cannot be guaranteed.

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

**Counseling Center**

Short term 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 with academic, vocational and personal decisions. Students may talk confidentially with a counselor about these personal concerns and issues. The counselor can also provide testing and assessment for students through the UNO Testing Center. Students can further examine educational, personal and career opportunities from the exploration of the information gained through testing 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 can act as a referral agency for students, opening the availability of a large number of university and community professional resources for the student.



Students are encouraged to visit the Counseling Center in 115 Eppley Administration Building. Office hours are 8:00 a.m. to 5:00 p.m., Monday through Friday with evenings by appointment only.

**Services to Students with Disabilities**

A Special Needs Counselor (SNC) in Counseling/University Division is available to provide/coordinate services for students with disabilities, i.e., accessibility, learning support, use of the testing center, counseling, health services, technological equipment, parking. The SSD program at UNO has been established in accordance with University policies regarding the Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act (ADA) of 1990. The SNC serves as the primary contact person for students wishing to discuss eligibility, policies and procedures, services offered and/or personal concerns. To be considered eligible and to obtain services, the student must provide appropriate documentation (i.e., medical, educational) regarding their disability. Faculty are notified in writing of any special classroom accommodations requested by a student through SSD. Consultations with the SNC may be scheduled at any time throughout the year. For further information, please call the SNC at (402) 554-2896, TDD 554-3799, or stop by the Eppley Administration Building, Room 115.

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:

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

Prospective students wishing to receive the information concerning services for students with disabilities should complete the "Special Needs Information" section on the application for admission or contact the SNC.

The 504/ADA Coordinator at UNO is the Vice Chancellor, Student Services and Enrollment Management, 211 Eppley Administration Building; 554-2779.

**Health Services**

Health Services is an acute care unit and is available free of charge to all students who pay UPF fees. Nominal fees may be charged for some laboratory tests. Health Services is located in the Milo Bail Student Center, and is open Monday through Friday from 8:00 a.m. to 5:00 p.m. Physician appointments are available approximately 20 hours per week, including both morning and afternoon appointment times. Treatment for minor illnesses and accidents also is available, with referrals when necessary. Preventative health measures are a primary concern and include health literature, blood-pressure checks, weight measurement 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.

**Student Health Insurance**

All UNO students, both undergraduate and graduate, carrying three or more credit hours have the option of obtaining accident and sickness insurance through a group plan made available by the University with a commercial insurance carrier. Students are encouraged to compare the prices and benefits of the UNO policy with other policies. The UNO policy offers very good benefits at extremely low premiums. Students have the option of paying annually, per semester, or in three installments. For additional information, please contact Health Services, 554-2374.

**Multicultural Affairs**

In support of recruitment and retention of students of color, the Office of Multicultural Affairs administers the following scholarships: The Davis Scholarship, The Isaacson Scholarship, The Multicultural Vantage Program and the Summer Scholars Program. The mission of the Office of Multicultural Affairs, as established in the spring of 1995, is "the recruitment and retention of students of color until they have reached their personal education goals." The Office collects and disseminates information concerning scholarship opportunities in higher education.

In order to improve retention, the Office of Multicultural Affairs drafted a retention model which was initiated during the 1995-1996 school year. The model includes monitoring an "early warning" system which instructors can use to notify the office regarding students' academic progress. The Office of Multicultural Affairs is located in the Eppley Administration Building, room 115, phone 554-2248.

**Learning Center**

The Learning Center assists students in becoming more independent, self-confident and efficient learners. The Center offers a study area, tutorial services, study skills workshops and organizes study groups. Learning Center staff can recommend personal learning skills programs and appropriate materials. A computer lab with Macintosh and IBM compatible computers is available for student use; instructional software in a variety of subjects can be used. Office hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday, and 9:00 a.m. to noon Saturday. The Center is located in 117 Eppley Administration Building; 554-2992, TDD 554-2748.

**Orientation and First Year Programs**

The University of Nebraska at Omaha provides orientation for all new undergraduate students, both entering freshmen and transfer students, taking on-campus classes at UNO. The purpose of Orientation is to acquaint new students with the University's philosophy, programs and student services. During Orientation, new students spend time with UNO student leaders and receive an introduction to UNO campus life.

First Year Programs involves the creation and development of programs that enhance the successful transition of first year students to the University. The Office works with several departments across the University to facilitate and develop such programs.

For additional information contact the Office of Orientation and First Year Programs, 115 Eppley Administration Building; 554-2677.

### **Student Employment Programs**

UNO students seeking off-campus or on-campus, part-time employment should visit Student Employment in the Career Center, 111 Eppley Administration Building. All students receiving work study as part of their financial aid can find job leads through this service.

Employment specialists are available to assist students in finding employment, matching job with career interests where possible. Students also seeking internships and community service or summer jobs should utilize the services. The UNO website for job listings is <http://cid.unomaha.edu/~career/>. Office Hours: Monday-Friday, 8:00 a.m. to 5:00 p.m.; 554-2885.

### **Testing Center**

The University of Nebraska at Omaha Testing Center provides a variety of services to UNO students, faculty and staff. These services extend into the Omaha community and beyond to persons needing testing related assistance.

The types of services include placement exams, national exams, vocational, aptitude, interest inventories and psychological exams, correspondence tests and testing assistance for students with disabilities. The Center also takes special requests and will work with individual needs.

For more information regarding testing services, please contact the University of Nebraska at Omaha Testing Center, Eppley Administration Building 113, Omaha, NE 68182-0299 or call 554-4800, or visit the UNO web page at <http://unomaha.edu> under Services k Testing Center.

### National Exams

The center provides a variety of information and registration materials for many nationally administered exams.

These exams include the Graduate Record Exam (GRE), Medical College Admission Test (MCAT), Pre-Professional Skills Test (PPST), Concept Mastery Examinations for Educators (CMEE), Law School Admissions Test (LSAT), ACT Assessment, Miller Analogies Test (MAT), Test of English as a Foreign Language (TOEFL), and the Proficiency Exam Program (PEP). American Medical College Application Service (AMCAS) materials also are available.

### Placement Exams

Placement exams include the English Placement Proficiency Examination (EPPE), Mathematics Placement Exam (MPE), Calculus Readiness Exam (CRE), and the Computer Science Exam (CSPE).

### Credit by Exam at UNO

Credit by Examination allows students the opportunity to gain academic credit for knowledge they have acquired by self-study or experience. Up to 30 hours of credit toward a bachelor's degree may be earned in most colleges by achieving acceptable scores on examinations.

Two types of credit by examination are available at UNO: the College-Level Examination Program (CLEP)

which offers tests in many subject areas; and UNO's Special Examination Program which involves challenging any course taught at the University by taking a departmental examination. Students must be registered to attempt departmental exams.

The following general provisions apply to Credit by Examination at UNO.

- Credit earned by examination may not constitute any part of the terminal residency requirements (see residency requirements in this catalog).
- Credit will not be granted as substitute credit for college courses which have been failed at university level. Neither will it be granted to raise a grade earned in any course.
- Examinations for credit may not be repeated. Credit by Examination may not be earned in any course taken on an audit basis.

A reasonable fee (see fee schedule in this catalog) will be charged to administer and/or evaluate an examination for credit or placement, and a fee equal to 50 percent of resident tuition will be charged for credit earned. The \$25.00 testing fee for Departmental Exams will be applied to the tuition cost.

Credit earned by examination will be recorded as "CR" on the transcripts, and this credit will not be used in calculating grade point average.

A department giving a student a departmental test for Credit by Examination shall be responsible for reporting the grade to the Testing Center. The time lapse shall not be greater than the semester following the time the examination was given.

Within these parameters, the department or departments concerned retain responsibility in all matters, including:

1. determination of whether or not placement or examination credit should be offered in their areas; (some departments may elect not to administer departmental exams);
2. selection or preparation of examinations to be given for placement or examination credit; and
3. determination of the level of proficiency required for earning placement or examination credit.

### **Advanced Placement (AP)**

The Advanced Placement Program is based on the belief that many students are capable of completing college-level courses while still in high school. With this belief in mind, the College Entrance Examination Board assists high schools in planning such courses and provides examinations for them.

The University of Nebraska at Omaha participates in the Advanced Placement Examination of the College Board and, based upon a student's performance (minimum score of 3), may grant credit toward graduation up to a maximum of 32 hours. Advanced Placement credit so granted is not considered as credit but as a criterion examination administered at the conclusion of a college-level course taught in participating high schools. The maximum combination of CLEP and AP credit at UNO is 54.

The Dean's Office of the College of Arts and Sciences manages the Advanced Placement Program at UNO. For additional information, call 554-2458.

**Project Achieve**

Project Achieve addresses the unique needs of eligible, first generation (neither parent earned a bachelor's degree), low-income, and/or handicapped program participants who are pursuing undergraduate degrees at UNO. The program, funded through a grant from the United States Department of Education, provides additional resources needed to assist eligible students in obtaining academic, financial, and personal support, leading to increased retention and graduation. The participants must have the desire, self-motivation, and commitment to improve their academic abilities and skills through study and participation. The program offers a variety of services including tutoring, counseling, academic advisement, and non-credit seminars and workshops. Project Achieve is located in 117 Eppley Administration Building; 554-3492.

**University Division**

The University Division provides a setting in which students who are in the process of deciding upon an academic major or degree college have the opportunity to enroll in an exploratory program of studies. Students are encouraged and counseled to choose from the broad range of basic courses offered in all of the colleges of the university. Each University Division student is assigned an academic counselor from the professional staff of University Division and is expected to meet with the counselor at least twice each semester.

Requirements:

1. All University Division students are expected to follow an exploratory program of studies that will assist them in fulfilling the general education requirements of the degree-granting colleges of the university.
2. All students entering University Division for the first time are required to enroll in and successfully complete the two-credit hour course, University Seminar (US 1010). This course is designed to help students in gaining more effective study habits, engage in self-exploration, examine career processes and opportunities and become more aware of university programs and colleges.
3. University Division students are required to have taken the English Placement/Proficiency Exam (EPPE) and Mathematics Placement Exam (MPE) by not later than the end of their first semester of enrollment. Students are strongly encouraged to have completed the appropriate English and/or mathematics course(s) by no later than the end of their initial 27 credit hours of enrollment at the university.

4. University Division students are required to repeat general education courses of freshman level should they receive a grade of "D" or below in courses in which a degree college requires all of its students to obtain a "C" or better grade as a minimum for graduation.

Procedures for Transferring **from** University Division:

University Division students who have made their decision concerning an academic major and degree college should transfer to that college as expeditiously as possible.

1. University Division students are required to transfer to the degree-granting college of their choice by no later than the end of the semester in which 36 credit hours are earned. Exceptions to this must be approved in writing by the Director of University Division.
2. A student may not be admitted to, readmitted to or enrolled as a student in University Division after he/she has earned a total of 36 credit hours of college course work.

Procedures for Transferring **to** University Division:

Students from UNO colleges desiring to transfer into University Division must meet the following criteria:

1. Have a cumulative grade point average of no less than 1.75.
2. Have earned no more than 36 credit hours.
3. Obtain the approval of the Director of University Division and Counseling Services.

## **Student Financial Aid**

Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Stafford Loan, University Tuition Grant, state grant, certain scholarships, Federal Perkins Loan, and Federal Work-Study are all forms of financial assistance for which UNO undergraduate students may be considered on the basis of financial "need." In order to apply, a student should submit a Free Application for Federal Student Aid (FAFSA) by March 1 prior to the academic year for which assistance is needed.

### Scholarships

A wide range of scholarship programs at UNO has been established to recognize excellent high school achievement by incoming freshman students and exceptional scholastic performance by upperclass students already in attendance at the University. Scholarship funds have been provided for students by corporations, clubs, community organizations and friends of the University. To be considered for scholarships, a student should submit a UNO Scholarship Application by January 15 prior to the academic year for which assistance is needed.

Awards are based upon factors stipulated by the donors. UNO offers scholarships to the most worthy, promising applicants who meet the qualifications of the particular scholarship programs.

Entering freshman students should have taken the ACT test by the December testing date of their senior year in order to be eligible for scholarship consideration. Transfer students must complete one academic year at the University before scholarship consideration will be offered.

### Regents' Scholarships

The Regents of the University of Nebraska have provided funds for over 50 Regents' Scholarships, offered to entering high school graduates with high academic potential. These scholarships provide for the remission of resident tuition for the freshman year, and are renewable each year upon maintenance of a UNO grade point average of 3.0. Application information concerning these scholarships may be obtained from the high school guidance office. The application deadline is January 15 each year.

### World-Herald Honors Scholarships and Distinguished Scholarships

The University annually awards two Omaha World-Herald Honors Scholarships and five Distinguished Scholarships. These scholarships have a total value over a four-year period of \$14,000 to \$20,000. All seven are awarded through the UNO Distinguished Scholarship Competition, through which academically talented high school seniors are invited to campus each spring to compete in an exam. The application deadline is January 15 each year.

Funds for the World-Herald Scholarships are provided by the Omaha World-Herald Foundation. Funds for the Distinguished Scholarships are provided by the Omaha Scottish Rite of Freemasonry Education Foundation, UNO Alumni Association, Isaacson Trust, Helen Hansen estate, and the Board of Regents of the University of Nebraska.

### University Honors Scholarships

Approximately 40 University Honors Scholarships are available to sophomore, junior and senior students enrolled at UNO. These scholarships are awarded on the basis of academic achievement, and provide for the remission of resident tuition charges.

### Veteran Tuition Waivers

Students who are children or spouses of veterans who died or were totally disabled as a result of service in World War I, World War II, Korea or Vietnam should contact their county Veteran's Assistance Office to determine their eligibility for tuition remission under the laws of the State of Nebraska.

### University Tuition Grants

A limited amount of University Tuition Grant funds are available to UNO students, and are normally awarded on the basis of financial need. The purpose of this assistance is to provide financial aid to students who need help paying their educational expenses. To be considered for this aid, a student must submit the Free Application for Federal Student Aid, preferably by March 1.

### Aviation Scholarships

The Aviation Institute awards two endowed scholarships and 11 other awards annually. Additionally, numerous aviation scholarship opportunities exist. Contact the Aviation Institute, 422 Allwine Hall, 554-3424, for further details.

### NASA Space Grant Scholarships

The Nebraska Space Grant Consortium is funded by the National Aeronautics and Space Administration to provide scholarships to undergraduate students pursuing aviation/space related studies. Awards range from \$500 to \$2,500 depending on option selected. For additional information, contact the NASA Space Grant office in Allwine Hall 422 or phone (402) 554-3772.

### Air Force ROTC College Scholarship Program

Air Force ROTC College Scholarships are available to both male and female cadets enrolled in the AFROTC program. These scholarships provide full tuition, laboratory expenses, incidental fees and an allowance for books and supplies. Scholarship cadets also receive \$100 a month in non-taxable allowances. For complete information on each AFROTC program and these scholarships, contact the Air Force ROTC Office, 554-2318.

### Army ROTC Scholarships and Assistance

Army ROTC Scholarships are available to both male and female students. These scholarships cover full tuition, books and supplies, and \$100 a month for the school year. Enrollment in Military Science is not a prerequisite for scholarship eligibility. Financial assistance is available to all students entering the Advanced Course or Simultaneous Membership Program. For complete information contact the office of Army ROTC, 554-3777.

## Stafford Student Loan

The Federal Stafford Loan Program enables eligible students to borrow funds directly from a bank, credit union or other lender to help pay the expenses of their University education. Students with financial "need" are eligible for a Subsidized Stafford Loan. Students without financial "need" are eligible for an Unsubsidized Stafford Loan. Maximum subsidized Stafford Loan amounts yearly are \$2,625 for freshmen, \$3,500 for sophomores, \$5,500 for juniors, seniors and fifth-year undergraduates, and \$8,500 for graduate students. However, required adjustments frequently reduce the actual amount for which an individual applicant is eligible. The current interest rate is based on a 91 day T-bill + 3.10% capped at 8.25%. For Subsidized Stafford Loans, 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. For Unsubsidized Stafford Loans, interest starts to accrue at the time the loan is disbursed. Submission of the Free Application for Federal Student Aid and a Stafford Loan Request is required.

## PLUS

The Federal PLUS program provides loan assistance to parents of dependent undergraduate students. The Federal PLUS interest rate varies from year to year. PLUS loan applications and information are available from the Office of Scholarships and Financial Aid.

## 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. Application and eligibility information may be obtained from the Office of Financial Aid. Typical loan amounts range from \$50-\$200 with 30-60 days allowed for repayment.

## Tuition Refund/Aid Repayment

Students who receive federal grant or loan assistance and who have dropped classes before the second week of the semester, or who completely withdraw during the semester will have their tuition refunds calculated using one of the refund schedules below:

*Pro Rata Refund Schedule:* (applicable only to students who are attending UNO during their first semester)

14 week semester		16 week semester		17 week semester	
Week	Ref%	Week	Ref%	Week	Ref%
1	100	1	100	1	100
2	80	2	80	2	80
3	70	3	80	3	80
4	70	4	70	4	70
5	60	5	60	5	70
6	50	6	60	6	60
7	50	7	50	7	50
8	40	8	50	8	50
9-14	0	9	40	9	40
		10	30	10	40
		11-16	0	11-17	0

*Federal Refund Schedule:* (applicable to students who do not qualify for the Pro Rata refund)

14 week semester		16 week semester		17 week semester	
Week	Ref%	Week	Ref%	Week	Ref%
1	90	1	90	1	90
2	90	2	90	2	90
3	50	3	50	3	50
4	50	4	50	4	50
5	25	5	25	5	50
6	25	6	25	6	25
7	25	7	25	7	25
8-14	0	8	25	8	25
		9-16	0	9	25
				10-17	0

In most cases, Federal regulations require tuition refunds to be returned to the aid accounts from which the assistance was originally authorized, rather than be returned to the student. An aid recipient **should** contact the Office of Scholarships and Financial Aid prior to withdrawal from the University. Upon request, the Office of Scholarships and Financial Aid will provide written examples of various refund/repayment calculations.

## Aid Repayment

A student who withdraws from the University may also have to repay a portion of the financial aid received which exceeds the sum of the student's tuition/fee liability plus the allowance for reasonable non-institutional expenses incurred during the period prior to withdrawal. The Office of Financial Aid **must** be consulted prior to withdrawal with questions regarding possible aid repayment liability.

## The Goodrich Scholarship Program

The Goodrich Scholarship Program was started in 1972 with funds from the Nebraska State Legislature. It is designed to provide scholarship funds and supportive services for students with substantial financial need.

The overall intent of the Program is to provide a college education for persons who otherwise could not afford it while offering them a broad and meaningful experience in general education. The program reaches out to multicultural students of African, Asian, Latino and Native descent, as well as to students of Euro-American backgrounds. Students in the program display a wide range of academic ability, from those who, in spite of strong motivation, have yet to realize their full academic potential, to those who are already highly skilled and can help create a stimulating learning environment for their fellow students. The Program has a three-pronged approach. It provides:

- financial aid in the form of tuition and fees toward a bachelor's degree;
- a specialized curriculum emphasizing the humanities and the social sciences; and
- a comprehensive program of academic support, counseling and other related student services.

For information about application procedures, see "The Goodrich Scholarship Program" under Degree Requirements for the College of Public Affairs and Community Service.

Standards of Satisfactory Academic Progress

Federal regulations require that a student attending an educational institution maintain satisfactory progress in the degree program he/she is pursuing in order to receive federal financial assistance. The purpose of these regulations 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 students** who apply for financial aid must meet these standards before federal assistance can be authorized. **Entering freshman and transfer students** may receive financial aid for their first and second semesters of UNO course work without meeting these standards.

The standards for continuing and former students will be checked following the completion of each spring semester.

Standards

- A student must successfully complete ("D" grade or higher) at least two-thirds the **total** credit hours for which he/she has registered at UNO. Grades of Failing (F); No-Credit, Failing (NC); Unsatisfactory, Failing (U); Incomplete (I); Withdrew (W and WX); and Audit (AU), are considered **unsuccessful** completion of credit hours.
- A student must be in "good academic standing" at UNO at the completion of the Spring semester. This is defined as having an earned cumulative grade point average of at least 2.0.
- A student pursuing an undergraduate degree program may not receive further financial aid if more than 188 undergraduate credit hours have been attempted. A student pursuing a graduate degree may not receive financial aid if more than 55 hours have been attempted. A student pursuing a doctoral degree may not receive financial aid if more than 110 hours have been attempted.

Reinstatement of Eligibility

Failure to meet any of the standards will cause the student's financial aid record to be "flagged" for review, and the student must submit a written appeal to request that he/she be permitted to continue receiving assistance.

- The appeal must be typed or written clearly, and submitted to the Associate Director of Financial Aid (103 Eppley Administration Building).
- The appeal must provide a full explanation why all standards were not originally met, and how the student will ensure that the standards will be met in the future, should his/her eligibility for continued federal assistance be restored.
- The appeal should explain any special or extenuating circumstances beyond the student's control that may have prevented all standards from originally being met. Supporting documentation from a physician, counselor, academic adviser, or faculty member may be included with the written appeal, but is not required.

The student will be notified by mail whether or not the appeal has been approved. An appeal denied by the Associate Director of Financial Aid may, at the student's request, be forwarded to the Director for review. The Director's decision will be final.

Transfer Students

A graduate student transferring mid-year who wishes to receive financial aid to attend UNO must arrange to have a Financial Aid Transcript sent to the UNO Office of Scholarships and 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 Scholarships and Financial Aid. 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.

### Campus Recreation

By providing a wide variety of recreational activities, Campus Recreation works to enhance the quality of life for the UNO community and to facilitate the physical, social and mental health of the students, faculty and staff at UNO. Through its programs, Campus Recreation also provides educational and employment opportunities for UNO students. Programs offered by Campus Recreation fall into five general categories: informal recreation, intramural sports, club sports, outdoor recreation and aquatic activities.

The informal recreation program, largest in terms of numbers of participants, opens the facilities of the HPER Building to the students of UNO — over 90 hours per week — for unstructured, drop-in recreational use. Four basketball/volleyball/badminton courts, a 50-meter pool, a jogging track, 12 racquetball/handball and two squash courts, a weight room, a fitness room, men's and women's saunas and steam rooms, and much more await the users of the HPER Building. Equipment necessary to participate is available for check-out free of charge at the Central Issue Room. Lockers, locks and towel service also are available. (See page 28)

The HPER Building is accessible to individuals with disabilities. Features of the building include accessible showers, the wheelchair-accessible "Freedom Machine" weight machine, wheel chairs and access to the pool. The Campus Recreation staff is ready to assist individuals with disabilities in developing programs to meet their needs. Contact the Assistant Director of Informal Recreation for more information.

Non-credit instructional programs are provided as a service to the students of UNO to encourage expanding recreational experiences. Course offerings vary each semester. Some of the most popular classes are learn-to-swim, ballroom dancing, aquatic exercises and the Maverick Masters Swim program.

The programs offered work to promote the philosophy of "Something for Everyone," where no one is excluded from participation because of skill level. The only prerequisite is a desire to participate. All currently enrolled students who pay UNO UPF fees are encouraged to participate in one or more of the activities. Spouses, and dependent children ages 18-22, of students may also participate after purchasing a Campus Recreation Activity Card.

As the second largest employer of students on campus, Campus Recreation offers employment opportunities to more than 50 students each semester. Positions include access monitor, office workers, central issue clerks, Outdoor Venture Center clerks, lifeguards, outdoor recreation trip leaders, sports officials, activity, intramural and weight room supervisors and evening building managers.

To get involved, stop by the Campus Recreation Office located in Room 100 Health, Physical Education and Recreation Building (HPER); 554-2539. Program and building information is given out 24 hours/day by phone.

### Intramural Sports

The intramural sports program is designed to match equally skilled organizations and persons in various activities to meet physical as well as recreational needs.

Team, individual, and dual competition will take place in the following divisions: Fraternity, Sorority, Men's Independent, Women's Independent and Co-Recreational. There also are opportunities for individuals with disabilities to actively participate in competitive games of integrated wheelchair basketball, racquetball or tennis. Campus Recreation will provide sport chairs for use to all students, spouses, faculty and alumni participants who participate in wheelchair based activities.

Intramural sports currently include: flag football; 6x6 and sand volleyball; 5x5, 3x3 and wheelchair basketball; indoor soccer; softball; team handball; wrestling; racquetball; golf; tennis; badminton; table tennis; chess; floor hockey; and billiards.

Other events of yearly interest include: 3-point shootouts; slam dunk contest; sports trivia tournament; tug of war; pre-season flag football and 5x5 basketball tournaments; and a swim meet. For more information on how to sign-up, please call intramural sports at 554-3257 (IM Sport Hotline).

Awards for active participation and success should not be the only goal in an intramural program, but such awards do add to the competitive spirit of such an activity. It is with this idea in mind that the intramural office will offer awards to the all-university champions in each sport.

### University of Nebraska Sport Club Association

A sport club is defined as a registered student organization which may provide a program of instruction, recreation and/or competition in a specific sport. Sport clubs assume a variety of types and sizes in order to meet many of the sport needs and interests of students, faculty and staff. Each club establishes its own organizational framework, leadership and performance level. Each sport club is a student organization that is administered by its members. Group efforts by various sport clubs are coordinated through the University Sport Clubs Council. Current active clubs include: fencing; cycling; bowling; men's soccer; martial arts; badminton; and capoeira (Brazilian martial arts). For more information please call 554-2539, or stop by HPER 100.

### Outdoor Venture Center

If the idea of hiking in the back country, canoeing one of the great rivers of the midwest or climbing mountains is appealing, visit the Outdoor Venture Center (OVC). The OVC, located in the HPER Building, sponsors trips and workshops in canoeing, kayaking, cross-country skiing, rock climbing, backpacking, rafting and many other activities, which last from a few hours to week-long adventures. Activities take place locally in Nebraska and in states like Colorado, Wyoming, South Dakota and Texas, just to name a few. Those wishing to plan their own adventure can make use of the OVC's resource materials and equipment rental. For students interested in leading such trips or further refining existing skills, the OVC provides a series of classes in outdoor leadership, basic rescue principles and outdoor emergency care.

### Aquatic Center

The Aquatics Program is truly a program for all ages and skills. Starting with swimming lessons for 3 month old children

to adults, safety and skill development is stressed. Water Exercise classes are offered for those who do not want to swim laps but want to use the water as an exercise medium. For those who just like to swim laps or splash around, the pool is open seven days a week, early in the morning, over the noon hour, as well as in the evening and on weekends for the convenience of the university community. SCUBA and the Masters' swimming programs are designed for the person who likes more of a challenge either on top of, or under the water. All of our programs, whether instructional or recreational, are conducted under the guidance and supervision of highly skilled and qualified instructors.

## Identification Card

Upon your first registration at UNO, you must have your picture taken by the Audio Visual Department for your photo identification card. This card is expected to last five years and should be carried at all times.

Approximately two weeks after the semester has begun, you will be mailed a validation sticker that must be attached to your photo ID to prove current enrollment. Prior to receiving your sticker, your printed class schedule can be used as proof of enrollment.

Your photo ID serves as identification for services in the library, bookstore, HPER building and MBSC. You may be required to show your ID before being served in any of these facilities.

ID cards are not transferable, and use by anyone other than the student to whom the card is issued is subject to disciplinary action. Lost cards may be replaced by contacting the Audio Visual Department in 108 Epley Administration Building. A \$5.00 charge will be made for replacement cards.

## Milo Bail Student Center

The best overview of the Student Center is its mission statement, which states:

"The Student Center is the 'living room' of the campus, a gathering place for the campus community and an integral part of UNO's educational environment. The Student Center is more than just a facility; it is made up of operations, services and programs that enhance the quality of college life and help to retain students at the University.

The Student Center is a laboratory for experiential and developmental learning – providing opportunities for students to learn and practice leadership, citizenship, community service and to provide programs which complement the educational experience.

The Student Center provides opportunities for informal, social, educational and recreational interactions and strives to foster an appreciation for diversity, harmony and school spirit among students, faculty and staff. It is a dynamic environment.

The types of services provided by the Student Center include: bookstore services; food service and catering, campus scheduling; student government, organizations and activities advisement; leadership development and child care services."

The Director of the Milo Bail Student Center is responsible for the regulation of a variety of policies on campus. These policies include "Communication and Solicitation," "Promotional Material and Distribution," "Student Organization Fund Raising," and various campus food policies. Copies of these policies are available in the Student Center Administrative offices.

## Bookstore

Textbooks, supplies and other materials you may need for classes are available in the UNO Bookstore. The Bookstore also carries a variety of stationery, office supplies, souvenir clothing, and gift items. Bookstore purchases may be paid by cash, check, Mastercard, Visa, Discover or American Express.

The Bookstore also operates a small convenience store for your "grab and go" needs while on campus.

## Child Care Center

The University of Nebraska at Omaha Child Care Center (UNOCCC) provides high quality child care and early education service for university families, as well as opportunities for training, research and further knowledge of the care, education and development of young children. Child care is provided for the children (18 months through 12 years of age) of students, faculty, staff and alumni from 6:30 a.m. until 5:30 p.m., Monday through Friday.

## Food Services

Food Services for the UNO campus are located on the second floor of the Milo Bail Student Center. Our dining facility offers a wide variety of menu choices including:

### American Grill:

- Made to order or "fast food" breakfasts
- Healthy Choice® deli meats on sub sandwiches
- "Philly" sandwiches, basket lunches

### The Kiosk Kafe:

- Espresso coffee, fresh baked pastries, rolls and donuts
- TCBY™ yogurt, popcorn, pretzels and other snacks
- Bottled waters, juices and other beverages

### Tomassitos:

- Tomassitos' own pizza
- Homemade lasagna
- Pasta with homemade sauces, meatballs and sausages

### Durango's:

- Specialty burgers, fries and onion rings
- Tacos, enchiladas and taco salads
- Combo meals including beverages

### Soup and Salad Express:

- three soups
- variety of homemade sandwiches

### Garden Greens:

- Mixed greens, pasta salads, fresh fruit and your favorite toppings
- Regular and low-fat dressings and other homemade choices

### Maverick Buffet:

- Endless salad bar and beverage station
- Choice of entree which changes daily



## GENERAL INFORMATION STUDENT PROGRAMS AND ACTIVITIES

UNO Food Services also provides all on-campus catering and all catering at the Peter Kiewit Conference Center.

### Housing Referral Service

The Housing Referral Service, located in the Student Center, has information on a variety of housing options available within the community, including sleeping rooms, roommate information, apartments, houses and domestic exchange.

### Student Organizations and Leadership Development (S.O.L.D.)

The University recognizes the value of a well-rounded college experience as part of a student's development and encourages students to participate in co-curricular activities. Students are encouraged to participate in programs, activities and organizations. Recognized student organizations at UNO include student government, student programming, the student newspaper, fraternities and sororities, professional organizations, honoraries, sports clubs, service organizations, religious organizations, social organizations, recreational activities and intercollegiate athletics. For more information on how to contact these organizations stop by the Student Organizations and Leadership Development Office (S.O.L.D.) in the Milo Bail Student Center.

In order to participate in any recognized co-curricular activity, a student must maintain a cumulative Grade Point Average (GPA) of at least 1.75 for the first 45 attempted hours and at least 2.0 for 46 or more hours attempted, including all college level courses taken at the University of Nebraska. To be eligible to run for or hold an elected or appointed position in any recognized student organization, a student must maintain a minimum GPA of 2.0 and not be on disciplinary probation. In addition to maintaining good academic standing, further determination of eligibility for all student athletes will be made in accordance with regulations as established by the National College Athletic Association.

Professional staff members in the Student Organizations and Leadership Development Office are available to provide information, materials or advice on leadership, organizations or activities and the opportunities available at UNO.

### Governing Bodies

Interfraternity Council; National Pan-Hellenic Council; Panhellenic Council; Student Government.

### Student Government Agencies/Services

American Multicultural Students; Legislative and Public Relations; Network for disABled Students; International Student Services; Women's Resource Center.

### Honor Societies

Alpha Sigma Lambda (Continuing Studies); Alpha Upsilon Alpha (Teaching); Beta Alpha Psi (Accounting); Beta Beta Beta (Biology); Chi Sigma Iota (Counseling); Delta Phi Alpha (German Language); Delta Sigma Pi (Business); Eta Sigma Gamma (Health Professions); Gamma Theta Upsilon (Geography); Golden Key National Honor Society; Kappa Delta Pi (Education); Kappa Kappa Iota (Education); Omicron Delta Kappa (Leadership); Order

of Omega (Greek honorary); Phi Alpha Theta (History); Phi Epsilon Kappa (Physical Education); Pi Delta Phi (French Language); Pi Gamma Mu (Political Science); Psi Chi (Psychology); Sigma Delta Pi (Spanish Language); Sigma Iota Rho (International Studies).

### Social Service Organizations

**Fraternities:** Alpha Phi Alpha; Kappa Alpha Psi; Lambda Chi Alpha; Omega Psi Phi; Phi Beta Sigma; Phi Psi Nu (local); Pi Kappa Alpha; Sigma Phi Epsilon; Theta Chi.

**Sororities:** Alpha Kappa Alpha; Alpha Xi Delta; Chi Omega; Delta Sigma Theta; Sigma Gamma Rho; Sigma Kappa; Zeta Phi Beta; Zeta Tau Alpha.

### Professional Organizations

American Society of Civil Engineers; Association for Computing Machinery; Association for Worksite Health Promotion; Criminal Justice Students Organization; Geological Society; Marketing Club; Minority Association of Pre-Health Students; National Student Speech, Language, and Hearing Association; Pre-Medical Professions Club; Pre-Pharmacy Club; Pre-Physical Therapy/Pre-Occupational Therapy Club; Pre-Veterinary Club; Public Relations Student Society of America; Rho Epsilon (Real Estate); Society for Industrial and Organizational Psychology; Society of Physics Students; Society of Professional Journalists; Student Dietetic Association; Student Education Association; Student Social Work Organization.

### Programming

Student Programming Organization.

### Special Interest Groups

Accounting Club; Afghan Student Association; African American Organization; Alpha Eta Rho; Arnold Air Society; Art History Student Organization; Asian American Cultural Society; Association of Latino American Students; Catholic Campus Ministry; C.H.A.M.P.S. (Child Care); Chapter Summary Bible Study; Chemistry Club; College Republicans; Ecology Now; FAUST (Fine Arts University Student Theatre); GAMMA (Greeks Advocating Mature Management of Alcohol); Gay and Lesbian Organization; Geography Club; Gerontology Association; *Gateway*; Goodrich Student Organization; Honors Program Student Advisory Board; Human Resources Association; InterTribal Student Council; KBUL (Student Radio); Korean Student Association; Maverettes Dance Team; Maverick Cheerleaders; Muslim Student Association; Pen and Sword Society; Student Alcohol Education Organization; Student Council for Exceptional Children; Student Democrats; Student Orientation Leaders Organization; Student Recreation and Leisure Society; Students for Life; United Christian Ministries; Zeta Chi.

### Campus Recreation Sport Clubs

Contact Campus Recreation at 554-2539 for information on Intramural Sports and Sport Clubs.

**Statement of Student Rights and Responsibilities**

The University of Nebraska and its campuses have promulgated various policies, regulations, statements of purpose and operation, while adhering to the principles deemed necessary for functioning as institutions of higher education. The University of Nebraska at Omaha, with the counsel and advice of students, faculty, and staff, have identified and compiled what are thought to be some of the most basic and important policy statements especially as they relate to students.

To create greater awareness among and for convenience to students, a number of basic policies have been compiled into a "Statement of Student Rights and Responsibilities". While most, but not necessarily all, policies pertaining to students' rights and responsibilities are contained herein, students are urged to become familiar with all documents pertinent to the University of Nebraska in general and to UNO in particular.

**SECTION I**

The Board of Regents Bylaws, Chapter 5, contains a series of policies entitled "Responsibilities and Rights of Students." A number of those policies are contained in this section, with the remainder being incorporated into other applicable sections.

A. Statement of Responsibility.

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. (Bylaws, Section 5.0.)

B. Publicity of Rules Affecting Students.

Each major administrative unit shall publicize and keep current all rules, regulations, and policies concerning students, and insure that they are readily available to all students and other interested persons. (Bylaws, Section 5.1.)

C. Admissions Criteria.

The University shall publish the criteria for admission, academic progress, certificates, and degrees for all colleges and schools of the University. Admission to the University and the privileges of University students shall not be denied to any person because of age, sex, race, color, national origin, or religious or political beliefs. (Bylaws, Section 5.2.)

D. Academic Evaluation.

1. Students shall be informed of the requirements, standards, objectives, and evaluation procedures at the beginning of each individual course. Each student shall be given a performance evaluation during the progress of the course if requested.
2. Each college or school shall provide for a faculty-student appeals committee for students who believe that evaluation of their academic progress has been prejudiced or capricious. Such procedure shall provide for changing a student's evaluation upon the committee's finding that an academic

evaluation by a member of the faculty has been improper.

Procedures for appealing evaluation of academic progress are provided by each college or school unit. Generally, but not necessarily conclusively, the procedures are similar to the following:

Students wanting to appeal a grade (evaluation that has been prejudiced or capricious), shall attempt to discuss the matter directly with the instructor. If the student and instructor do not reach a satisfactory agreement, the student may submit an appeal in writing to the chairperson of the department in which the course is offered. If the student and chairperson do not reach a satisfactory agreement, the student may submit an appeal in writing to the Dean of the College in which the course was offered. Normally, the decision made at this level, which would include a hearing by a faculty-student appeals committee, will be final.

3. Each college or school shall provide a mechanism by which students have an opportunity to report their perceptions of courses and the methods by which they are being taught, provided, however, that such mechanism shall protect members of the faculty from capricious and uninformed judgments. (Bylaws, Section 5.3)

E. Student Communications Media.

Student publications and broadcasting stations shall be supervised in a manner such that editorial freedom will be maintained and that the corollary responsibilities will be governed by the canons of ethical journalism. Student publications financed in whole or in part by fees collected from all students at UNO shall be supervised by a Publications Committee. This Committee shall have full responsibility of a publisher and the power of decision on the proper application of the canon of ethical journalism. Students shall comprise a majority of the membership, but the committee shall also include members of the faculty and professional journalists from outside the University. (Bylaws, Section 5.9.)

F. Eligibility for and Participation in Extracurricular Activities.

Each major administrative unit of the University shall permit students to organize and join associations to promote their common interests and shall establish procedures for the official recognition of these organizations for use of campus facilities. Each such recognized student organization shall be required to comply with all applicable federal and state statutes and University regulations. (Bylaws, Section 5.10.)

Co-curricular activities are offered by the University to meet the needs and interests, and to promote the development of special skills, of its student population. To participate as a member in any recognized University organization, a student must be registered (officially and continuously enrolled in at least one credit course, excluding audit hours).

To participate as a member in any recognized

## GENERAL INFORMATION STUDENT RIGHTS AND RESPONSIBILITIES

extracurricular activity, a student must maintain a cumulative grade point average of at least 1.75 for the first 45 hours attempted and at least 2.00 for 46 or more hours attempted, including all college level courses taken at the University of Nebraska. To be eligible to run for or hold an elected or appointed position in the Student Government/UNO, a student must maintain a minimum cumulative grade point average of 2.00 and not be on disciplinary probation. These requirements supersede the membership rules, constitutions, and bylaws of all organizations. It is assumed that sponsors and officers of all organizations shall establish and enforce membership requirements which may be more, but not less, stringent than the foregoing. Under all circumstances, however, University policy prohibits denial of University privileges to students on the basis of race, color, religion, sex, disability, age, national origin, or other factors which, lawfully, cannot be taken into consideration.

### G. Campus Speakers.

The purpose of a speakers program is to advance the general educational purposes of the University by putting before the University community a broad range of ideas in a variety of contexts. The organizations administering speaker programs should make every attempt to provide balance on all subjects.

UNO's procedures will insure the orderly and adequate preparation for the event. However, the control of campus facilities will not be used as a device of censorship. (Bylaws., Section 5.11.)

## SECTION II

### A. Public Information Regarding Students.

In compliance with the federally-enacted Privacy Act and as defined by the Board of Regents, public information regarding students attending UNO shall be the student's name, current address, permanent address, year at the University, and academic major field of study. The names of students mentioned in some kinds of campus security reports concerning accidents and incidents may also be released to the public. Each major administrative unit shall define the kinds of reports and information that may be released to the public. Information contained in personal files of the student is considered confidential and requires written authorization by the student for release to the public. Records with names and personal identification deleted may be available for governmental or University-approved research and analysis. Public information will be released by the Registrar to anyone upon inquiry, unless the student has requested that specific items not be released. The student's request to have public information withheld should be filed at the Office of the Registrar. (Bylaws, Section 5.6.)

An explanation of this Act and its application at UNO is available to all students. Copies may be obtained at the Office of Student Organizations and Leadership Development, the University Information Center, the Registrar's Office, the Orientation Office, or the Office

of the Vice Chancellor for Student Services and Enrollment Management.

### B. Counseling/Medical Records.

Information exchanged with and/or maintained by a professional counselor/psychologist or medical personnel about a student client will remain confidential.

### C. Disciplinary Records.

Information concerning students obtained as a result of counseling or disciplinary actions will not be made available to unauthorized persons within the University or to any person outside the University without the expressed written consent of the student involved except under legal compulsion or where the safety of others is involved. UNO may disclose to an alleged victim of any crime of violence the results of any disciplinary proceeding conducted against the alleged perpetrator of such crime with respect to such crime. The University shall provide for the periodic destruction of noncurrent disciplinary records, upon a student's graduation or after two years from the last date of attendance, unless under suspension or expulsion from the University. (Bylaws, Sections 5.6.1 and 5.7.)

### D. Title IX. How Title IX Affects Your Educational Experience.

1. **Admissions.** Women and men must be given equal opportunities for admission to undergraduate public institutions, graduate, and professional programs. Applicants may not be ranked separately on the basis of sex nor may numerical limitations be applied on the number or preparation of students of either sex who may be admitted.
2. **Athletics.** Women and men must be provided with equal opportunities in intercollegiate, club, or intramural athletics, and access to athletic facilities. Separate teams may be offered for members of each sex where selection for such teams is based upon competitive skill or activity involved is a contact sport. Women and men must have separate shower facilities and sports equipment.
3. **Career and Counseling Services.** Women and men may not be discriminated against on the basis of sex in the counseling and guidance of students. Sex-biased assessment or test materials may not be employed. The Career Center must be assured that employment is made available without sex discrimination and may not list and publicize employment opportunities which discriminate on the basis of sex.
4. **Course Offerings.** Classes must be offered to both women and men on an equal basis and must be open to both sexes. This includes health, physical education, industrial, business, vocational, technical, home economics, music, and continuing education courses. Students may be separated by sex within physical education classes during participation in contact sports.
5. **Financial Aid.** Women and men must be given equal opportunities to receive financial aid, which includes scholarships, grants, loans, and

participation in work/study programs. Sex-restricted scholarships may be offered only as long as the total amount of money offered to both sexes is equal. Reasonable opportunities must be provided for athletic scholarships for members of each sex in proportion to the number of each sex participating in athletics.

6. Health Services. Women and men must have equal access to health services.
  7. Housing. The University may not offer different rules or regulations or other different services or benefits related to housing on the basis of sex.
  8. Student Activities. Women and men may not be subject to separate or different rules of behavior, sanctions, or treatment in academic, extracurricular, and research activities on the basis of sex. Membership requirements for student activities and organizations must be the same for women and men with the exception of social fraternities and sororities. As members of organizations, students must be allowed to participate equally and may not be assigned or denied office or benefits on the basis of sex.
  9. Student Employment. Women and men must be allowed equal opportunities for and access to student employment and subsequent raises and promotions. Benefits for employment must be equally provided, regardless of sex.
  10. Complaint Procedure. Any student having a complaint regarding discrimination is urged to bring the complaint to the attention of the Assistant Vice Chancellor for Student Development Services, 113 Eppley Administration Building, 554-2409.
  11. For Further Information. The following campus offices and services have further information about Title IX: the Office of the Vice Chancellor for Student Services and Enrollment Management, and the Reference Department, University Library. You are welcome to come in to read or obtain copies of available materials.
- E. Policy Regarding Distribution of Printed and Other Materials at the University of Nebraska at Omaha. Students are free to express their beliefs and concerns in a variety of ways. Printed and other materials offered free of charge may be distributed at any location on the campus as long as such distribution does not interfere with normal traffic or functions of the University. Such materials may be distributed by any UNO-affiliated person provided such is accomplished in an orderly manner within the framework of University policies and the law. If specific space for distribution of material is desired, a location may be reserved in a designated area of the Milo Bail Student Center, in accordance with existing policies and procedures governing space reservations. Special care is requested of any and all parties distributing literature to prevent littering of the campus and surrounding areas. Such activity shall be conducted so as not to interfere with the rights of others or the normal activities of the University. Any material offered for sale, solicitation of

donations, or posting on University bulletin boards, must comply with UNO policy concerning these matters. Contact the Director of the Milo Bail Student Center or the Office of the Vice Chancellor for Student Services and Enrollment Management if more specific information is desired.

F. UNO Computing and Data Communications.

The facilities of UNO Computing and Data Communications are available to students, faculty, and staff of this institution for the purpose of instruction, research, and other activities defined by the Chancellor. The computer facilities are University property and their operation is part of University operations. The Student Code of Conduct addresses offenses related to the properties and operation of the University, and, therefore, applies to computer use and facilities as it applies to all other University resources.

**SECTION III**

A. Academic Degree Completion.

The requirements for graduation from a bachelor's degree program shall be those listed in the Catalog effective at the time of matriculation provided continuous enrollment (excluding summer sessions) was maintained. However, the University reserves the right to withdraw and substitute courses, to reassign instructors, and to change the nature of instruction, as authorities deem necessary. In some cases, prerequisites for courses offered at the University are effective even if they are not listed in a given catalog. (See the current schedule of classes or your adviser for details.) A student may meet requirements listed in a subsequent Catalog if written approval is granted by the dean of the college in which the student is enrolled.

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 indefinitely 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 1) add or delete courses from its offerings, 2) change times or locations of courses or programs, 3) change academic calendars without notice, 4) cancel any course for insufficient registrations, or 5) revise 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.

B. Contract Graduation.

Every student is encouraged to review the requirements for the intended degree objective with an assigned academic adviser. This review should be conducted at a scheduled time in preparation for and prior to the enrollment/registration periods. Undergraduate students

desirous of registering a formal agreement as to the requirements for their degree program must employ the following procedure: an agreed-upon matriculation program must be approved in writing and filed in the office of the cognizant collegial dean no later than the semester in which an undergraduate student will complete 105 hours of accepted credit. A copy of the matriculation plan, as approved by the dean's office, shall be provided to the student and the academic adviser. Subsequent changes must be approved by the same process as described above. An undergraduate student who satisfactorily completes the officially-approved program as filed on record in the Office of the Dean shall be deemed to have fulfilled the requirements of the appropriate degree.

### SECTION IV

#### Right to Public Hearing.

It shall be the right of any individual member or group of members of the University (i.e., students, faculty, or administrators) to be granted, upon petition to the appropriate policy making body or office, a public hearing at which the policy indicated by the group of petitioners in their petition shall be discussed. The policy making body or office petitioned shall schedule the hearing for some time convenient to the interested parties if possible, no later than two weeks after the petition is submitted during periods when the University is in session, and shall announce publicly in advance the time and place of the hearing. At the hearing, that body responsible for the policy indicated in the petitions shall clarify said policy, offer the reasons which justify the policy in view of the objections or questions raised about it in the petition, and respond to any additional questions or criticisms of the policy or related policies raised at the hearing by any member of the University. It is expected that before such a petition is submitted, all other normal channels for raising questions about the policy have been exhausted. If, in the view of the policy making body or office to whom the petition is submitted, the petition is merely a form of harassment or adequate answers are available through other normal channels, the petition may be referred to the relevant committee to determine whether the hearing must be held. A decision by the Committee not to hold a public hearing shall be overruled by the submission to that committee of a petition requesting such hearing and signed by at least 100 members of the University community.

### SECTION V

#### A. Peaceful Demonstration

UNO is an academic community founded upon a belief in rational dialogue and mutual respect among its members. The opportunities for communication within the University are many and varied, and the University welcomes suggestions for enlarging or improving them.

The nature of the academic community demands that all members strive to maintain the rational dialogue which is the cornerstone of the University. There is no conceivable issue, be it a question of academic and

administrative policy or of student rights and freedoms, that cannot be approached within the framework of free discussion.

The University also acknowledges the rights of members to express their views by peaceful demonstration. The response of the University to any disruptive behavior which may occur must ultimately depend on the judgement of the officials who are in charge.

Board of Regents policy states that, in cases of disruption of normal University activities, the Chancellor or his/her designee will, in accordance with University policies and procedures, take necessary steps to restore the University to its normal function. The Chancellor or his/her designee may, in the event of refusal to disperse upon request, impose temporary action, including suspension of those persons disrupting the normal function of the University.

The determination as to whether disciplinary action will be initiated for violations of University rules and regulations by students will be made by the Vice Chancellor for Student Services and Enrollment Management.

#### B. Demonstrations.

Members of the academic community, including the guests of the University, have the right of extensive latitude in making their opinions known. It is understood, however, that in exercising this right the rights of others must not be jeopardized. The public explorations and resolution of differing views can be successful only when groups and individuals discuss the issues in forums where the right to disagree and to speak freely and be heard is preserved. Within this context, the University community recognizes peaceful demonstrations as a legitimate means of expressing one's opinion.

The preservation of freedom of speech, and the recognition of the right to peaceful demonstration as part of that freedom, is possible only in an orderly environment in which individuals are not endangered by force or violence, and in which they are free from coercion and interference in the exercise of their rights or in carrying out their legitimate activities.

Consequently, in the specific case of campus demonstrations, the University community may impose behavioral restrictions which are necessary to preserve the orderly functioning of the University and the right of all to be heard. Such restrictions fall into two categories:

#### 1. Prevention of violence or the use of force:

Demonstrations which coerce individuals or which constitute a hazard to the safety of any persons or which threaten destruction of property are not protected by freedom of speech provisions and will not be tolerated. Similarly, a hostile audience will not be allowed to interfere with a peaceful demonstration.

2. Protection from interference with University operations:  
The University community may restrict conduct which interferes with the holding of classes, the carrying forward of University business, properly organized and scheduled University events, or the discharge of responsibility by any University officer, employee or student. Although the mere presence of demonstrators in public areas within buildings does not necessarily constitute interference, demonstrators cannot be allowed physically to obstruct access to University facilities. Noise and boisterous activity is objectionable when it prevents others from exercising their rights and duties. Persons engaging in disruptive action shall be subject to disciplinary measures, including separation from the University, and also to charges of violation of the law.

C. Response to Disruptive Action.

The response of the University to disruptive behavior must ultimately depend on the judgement of the officials who are in charge. However, the following guidelines should be observed:

1. Every effort will be made to end the disruption through reason and persuasion. These efforts shall include a clear indication of the willingness to discuss issues and to make clear the procedures for discussion and arbitration of the issues involved. Discussion of the issues will not be conducted under condition of duress.
2. If the discussion method fails, the individuals involved will be notified that they are in violation of University regulations and they will be asked to cease the activity. In the event the alleged violators do not cease the activity within a reasonable length of time, temporary sanctions, which may include conduct probation and, if necessary, suspension, may be imposed on the scene. However, unless both the student and the University officials agree to a postponement, the University must hold disciplinary hearings within five (5) school days or the temporary sanctions will be dissolved. Such disciplinary hearing shall be held, as far as possible, in accordance with the established disciplinary procedures of the University. No temporary sanction shall be made part of a student's permanent record. If a student is found innocent of the action for which temporary sanctions were imposed, no record of the temporary sanction or of the hearing shall become part of any of the student's files or records, and the student shall be given the opportunity to make up any work which was not completed because of the disciplinary action.
3. If the use of institutional sanctions and discussion methods are not effective in ending the disruptions, or when alleged violators are not members of the University community, extra-institutional methods (including the invoking of police force) may be used. Nonmembers of the University community

- who are engaged in disruptive behavior may be referred to civil authorities for appropriate action.
4. Evidence regarding the activity of nonstudent members of the University community who are alleged to have engaged in disruptive behavior may be referred to their supervisors for appropriate action. The University community abhors the use of force as a method for settling disagreement and will always make exhaustive attempts to deal with issues by rational methods. When, however, such rational efforts prove ineffective or when imminent danger to life or property exists, more forceful methods shall be used to protect the rights and property of members of the community.

### Student Code of Conduct

#### Preamble

University students are both citizens and members of the academic community. As members of the academic community, students are subject to the obligations which accrue to them by virtue of this membership. As members of the larger community of which the University is a part, students are entitled to all the rights and protections enjoyed by other members of that community. By the same token, students are also subject to all civil and criminal laws, the enforcement of which is the responsibility of duly constituted civil authorities.

It should be emphasized that, when a student's violation of the law also adversely affects the University's pursuit of its recognized educational objectives, the University may enforce its own regulations regardless of any civil or criminal proceedings or dispositions. When students violate a University regulation, they are subject to disciplinary action by the University whether or not their conduct violates civil or criminal law. If a person's behavior simultaneously violates a University regulation and the civil law, the University may take disciplinary action independent of that taken by civil authorities. When students violate laws off campus, they may incur penalties described by civil authorities. University discipline will be initiated only in instances of student misconduct which distinctly and adversely affects the University's pursuit of its recognized educational purposes.

#### I. Sanctionable Conduct

The following examples of personal misconduct under this code (not, however, to be deemed exclusive of others) shall result in University disciplinary action:

##### A. Respect for the Protection and Rights of Others

1. Aggressive/Abusive Behavior/Physical or Verbal
  - a. Physically abusing or threatening to physically abuse any person.
  - b. Any act occurring on the University campus which intentionally disturbs the peace and quiet of any person or group of persons.
  - c. Conduct which is unreasonably dangerous to the health or safety of other persons or oneself.
  - d. Verbal behavior that involves an express or implied threat to interfere with an individual's personal safety, academic efforts, employment, or participation in University sponsored extracurricular activities or causes the person to have a reasonable apprehension that such harm is about to occur.
  - e. Disorderly, lewd, indecent or obscene conduct, including the expression of such on University-owned or controlled property or at University sponsored or supervised events.
2. Discrimination/Harassment/Intimidation
  - a. Any form of discrimination because of race, color, age, disability, religion, sex (including sexual harassment), national origin, marital status, Vietnam-era veteran status, political affiliation, sexual orientation, or any unlawful reason. Unwelcome sexual advances, requests for sexual favors, and other physical, verbal, or

visual conduct based on sex constitute sexual harassment when (1) submission to the conduct is an explicit or implicit term or condition of employment or academic standing, (2) submission to or rejection of the conduct is used as the basis for an employment or academic decision, or (3) the conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working/academic environment.

- b. Intentionally and substantially interfering with the freedom of expression of others on University premises or at University sponsored activities.
3. Hazing
 

Any act which endangers the mental or physical health or safety of a student, or which damages or removes public or private property for the purpose of initiation to, admission into, affiliation with, or as a condition for continued membership, in a group or organization.
4. Sexual Imposition/Date Rape
 

Unwelcome sexual advances, requests for sexual favors, obscene phone calls, indecent exposure, sexual assault, or other uninvited behavior of a sexually explicit nature which would be offensive to a reasonable person.
5. Smoking
 

Smoking in any University building or vehicle.
6. Violations by Student Organizations
 

A student organization shall be deemed responsible for acts of misconduct committed by individuals where such acts: are mandated, sponsored, approved, or encouraged by the groups or organization, whether explicitly or implicitly; take place in the context of a tradition, custom, or past practice of the group or organization; or are reasonably foreseeable as a result of an activity carried on by the group or organization. When a group is charged with misconduct, the presiding officer and, if appropriate, other students leaders thereof shall be required to participate in disciplinary proceedings conducted under this Code as representatives of the group. Examples of regulations established for student organizations which may result in the imposition of sanctions against a student organization include, but are not limited to, misappropriation of funds, equipment, etc., improper registration of student organizations, abuse of student election regulations, or failure to abide by University regulations.
- B. Respect for the UNO Community
  1. Alcohol/Drug Abuse
 

The illegal possession, use or distribution of drugs or alcohol by students is a violation of University rules as well as state and federal laws. The Board of Regents of the University has directed officers of the University to cooperate with state and federal agencies in the prevention of drug abuse. In

satisfaction of the mandate and in order to fulfill its obligations under the Drug Free Workplace Act of 1988 and the Drug Free Schools and Communities Act of 1989, the University has formulated standards of conduct for students which prohibit the following acts:

- a. Use, possession, manufacture, distribution or sale of illegal drugs or drug paraphernalia on University premises or while on University business or at University activities, or in University vehicles.
  - b. Unauthorized use, possession, manufacture, distribution, or sale of a controlled substance as defined by the Federal Controlled Substances Act, 21 U.S. C. Sections 801 et seq., or Nebraska Drug Control Laws, Neb. Rev. Stat. Sections 28-401 et seq., on University premises, or while engaged in University business or attending University activities, or in University supplied vehicles.
  - c. Unauthorized use, manufacture, distribution, possession or sale of alcohol on University premises or at University activities, or in University supplied vehicles.
  - d. Storing in a locker, desk, vehicle, or other place on University owned or controlled property any unauthorized controlled substances, drug paraphernalia or alcohol.
  - e. Use of alcohol off University premises that adversely affects student's academic performance or safety or the safety of others.
  - f. Possession, use, manufacture, distribution or sale of illegal drugs off University premises that adversely affects the student's academic performance, safety or the safety of others.
  - g. Violation of state or federal law relating to the unauthorized use, possession, manufacture, distribution or sale of alcohol, controlled substances or drug paraphernalia.
  - h. Manufacturing, distributing, selling, offering for sale, or possessing anabolic steroids (except under the supervision of a physician) or any illegal drug or narcotic including, but not limited to: barbiturates, hallucinogens, amphetamines, cocaine, opium, heroin or marijuana.
2. Attempts and Complicity
    - a. Intentionally filing a false complaint under this code or aiding or abetting any conduct described in this code.
    - b. Abuse of the University judicial system, including but not limited to, failure to obey the summons of a judicial body or University official; falsification, distortion, or misrepresentation of information before a judicial body; disruption or interference with the orderly conduct of judicial proceedings; instituting a judicial proceeding without cause; attempting to discourage an individual's proper participation in or use of the judicial system; attempting to influence the impartiality of a member of a judicial body prior to and/or during the course of the judicial proceeding; failure to comply with sanctions imposed under this code; or influencing or attempting to influence another person to commit an abuse of the judicial system.
  3. Bad Debts/Financial Responsibility
    - a. Fraud in attempting to obtain, or misusing, financial aid.
    - b. Failure to pay a financial obligation owing to the University or to any department, division, or agency thereof. Not only may disciplinary action be taken, but the student will be denied access to grade reports, future registrations, readmission, diplomas, and transcripts.
  4. Computer Related Misconduct
    - a. Unlawful or unauthorized access to or use of computers, computer networks and computer data, programs, materials or information.
    - b. Accessing or attempting to access computing resources or computer-based information without proper authorization.
    - c. Disrupting the intended use of computers or computer networks.
    - d. Damaging or destroying computer equipment or computer-based information.
    - e. Violating copyright laws or license restrictions with respect to the copying or use of computer programs, data, materials or information.
    - f. Unauthorized use of another person's password.
    - g. Unauthorized lending or borrowing an account number.
    - h. Using the computer facilities for purposes other than those for which the account number was issued.
    - i. Storing game programs on allocated disk space or private tape, except when authorized in writing by the Director of Computing and Data Communications.
    - j. Copying, altering, or destroying the files or output of another individual without the express written permission of that individual.
    - k. Intentionally abusing or misusing the computer facilities so as to cause damage, program disturbances or harassment to other persons.
  5. Deception/Falsification/Misrepresentation
    - a. Forging, altering, or otherwise falsifying any University document, any University record or any University instrument of identification, or assisting another in such misconduct.
    - b. Borrowing, lending or improperly possessing any University instrument of identification.
    - c. Submitting false information to any member of the faculty or staff or to any University office.
    - d. Falsely representing oneself as a University employee.
  6. Disruption of University Business
    - a. Leading or inciting others to materially and substantially disrupt scheduled activities at any location on the campus.



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- b. Material and substantial disruption or obstruction of teaching, research, administration, or other University activities, including its public service functions on or off campus, or other authorized activities on the campus.
  - c. Obstruction of ingress to or egress from any University building or facility.
  - d. Unauthorized occupation or use of or entry into any University building or facility including both indoor and outdoor facilities.
7. Endangerment of Individuals or the Safety of Individuals
- a. False fire alarms, bomb threats, fire:
    - 1) setting fire on any University owned or controlled property;
    - 2) setting off a fire alarm for reasons other than actual fire or emergency; or
    - 3) reporting a false fire alarm or bomb threat affecting University owned or controlled property or at a University sponsored event.
  - b. Failure to evacuate.
  - c. Tampering with fire safety equipment, signs or devices.
  - d. Failure to follow safety standards:
    - 1) failure to report a fire or any other dangerous condition when known or recognized on the campus;
    - 2) tampering with elevator controls and/or equipment; or
    - 3) willful failure to follow safety standards.
8. Firearms/Explosives/Weapons  
Possessing, using or selling firearms, fireworks, ammunition, other dangerous weapons (including paint guns, pellet guns, BB guns and knives) or dangerous chemicals on the campus.
9. Gambling  
Gambling activity in violation of the laws of the state of Nebraska or of the United States.
10. Identification/Interference of Duty
- a. Failure to produce either a University identification card or a driver's license upon request.
  - b. Obstructing or failing to comply with the directions of a law enforcement officer, fire fighter, or University official in the performance of duty on the University campus, or at any activity or event sponsored by the University or any recognized student organization.
11. Misuse of Confidential Information  
Unauthorized use or access to information, in whatever form, proprietary to the University or a University official or employee.
12. Traffic Safety  
Serious traffic violations on the campus, including operating any vehicle while intoxicated, speeding, reckless endangerment or reckless driving.
13. Telephone and Related Equipment Abuse  
Charging or causing to be charged any long distance or other toll telephone calls to University telephones without proper authorization.
14. Unauthorized Entry/Use of Facilities
- a. No person may be present in any class, lecture, laboratory period, orientation session, examination, or other curricular instructional session or in any room, office or laboratory without the consent of an authorized University official.
  - b. The reproduction, duplication, manufacture, or possession of any key or unlocking device for use on University facilities or locks without proper authorization.
15. Other  
Violations of any applicable local laws or any laws of the state of Nebraska or of the United States on University owned or controlled property or at University sponsored or supervised events.
- C. Respect for Property
- 1. Theft of, or intentional damage, destruction, or defacement of University property or property of any person while on University owned or controlled property.
  - 2. Receipt or possession of property known to be stolen and/or possession, without permission, of property of the University or of a member of the University community.
- D. Disciplinary Procedures and Sanctions.  
The following procedures are designed to protect students' rights as set forth by the Board of Regents.
- 1. Allegations of student misconduct shall be forwarded in writing to the Office of the Vice Chancellor for Student Services and Enrollment Management. The Vice Chancellor shall investigate the charges and determine the facts applicable thereto. If allegations are found to be invalid by the Vice Chancellor, the charges shall be dismissed, without record in the file of the accused. If facts substantiate the charges, the Vice Chancellor may: 1) seek to resolve the matter via informal, oral remonstrance (no record to be kept); 2) consult medical or other professional attention and refer the matter to appropriate professional officials or agencies, if it seems appropriate; or 3) determine that one of the following formal actions is appropriate:
    - a. Written reprimand. A warning that behavior is inappropriate and continuance of such may lead to further disciplinary action, a copy to be placed in the student's file with a copy to the student.
    - b. Disciplinary probation. A written notice placing student on a probationary status for a specified period of time. The student is subject to restricted privileges as determined by procedures described below. If the student repeats the violation or violates other University policies or regulations, the student shall be subject to further disciplinary action, including possible suspension or expulsion.
    - c. Suspension. Involuntary separation from the University for a prescribed period of time, with

the opportunity to petition the University for readmission. The petition must be submitted, in writing, to the Vice Chancellor for Student Services and Enrollment Management, who shall determine eligibility for and date of (if applicable) readmission.

- d. Expulsion. Involuntary separation from the University for an indefinite period of time, with a possible prescribed date for consideration of readmission.
2. If a decision is made to seek formal sanctions, the Vice Chancellor for Student Services and Enrollment Management shall notify the student, in writing, of the recommended action. If the student does not accept the recommended action, he/she may appeal it to a Hearing Board by submitting a letter, with reasons for the appeal, to the Vice Chancellor for Student Services and Enrollment Management within seven (7) working\* days of the date of the sanction letter from the Vice Chancellor.

The Hearing Board:

- 1) shall consist of four (4) students, two (2) faculty, and one (1) staff member; and
- 2) will select its own chairperson, with all members possessing voting privileges.

The accused:

- 1) shall have, at least ten (10) working days in advance of the hearing, the right to be informed of the specific charges against them and an opportunity to prepare their case;
- 2) shall have the right to hear all evidence against them and to hear and question witnesses; and
- 3) shall have the opportunity to testify and present evidence.

Both parties:

- 1) Shall have the opportunity for advanced inspection of any documents which will be submitted at the hearing;
- 2) Must have an opportunity to review a list of witnesses to be called to testify; and
- 3) Shall have the right to appear with an adviser of their choice, who may be an attorney. The adviser/attorney will not be allowed to address the Board or otherwise participate beyond speaking with the client. Evidence which would not be admissible in a State Court criminal proceeding by reason of the method or manner in which it was acquired shall not be admitted. Questions regarding the admissibility of evidence should be referred to University Legal Counsel.

The Hearing Board shall determine which, if any, of the sanctions should be imposed and submit a written decision, including its finding of the facts, to the Vice Chancellor for Student Services and Enrollment Management, with a copy mailed to the accused. The decision of

the Hearing Board must be based solely upon evidence introduced at the hearing. The decision shall be final unless appealed, by either party, to the Appeals Board, within five (5) days.

A verbatim tape recording of the hearing must be maintained.

The Vice Chancellor or the Hearing Board may, if deemed appropriate, impose limitations on the student's participation in University recognized activities or organizations, including elected or appointed offices which the student may seek or hold at the time of the hearing, or limit University privileges.

3. Either party may appeal, in writing, the decision of the Hearing Board to the Appeals Board within five (5) working days following the date of the letter stating the sanction imposed. The written request, which should be sent to the Vice Chancellor for Student Services and Enrollment Management, must include reasons for an appeal based upon one of the following criteria:

- a. whether or not proper due process as defined in I., D, 2. was provided; and/or
- b. whether or not the sanction imposed was appropriate to the circumstances.

The Appeals Board shall consist of three (3) students, three (3) faculty, and one (1) staff member. No person who served on the Hearing Board may serve on the Appeals Board for the same case.

The Appeals Board shall consider the appeal to determine whether or not it merits a hearing, based on the criteria. If the appeal is judged to be without cause and, thus, no hearing is required, a decision stating such shall be forwarded accordingly to the Vice Chancellor with a copy to the student.

If the Appeals Board determines that one or more of the criteria is applicable, it shall hold a closed hearing to determine the facts. The Appeals Board shall submit a written decision to the Vice Chancellor, with a copy mailed to the student, including which sanctions are to be imposed.

4. The members of both the Hearing Board and the Appeals Board shall be selected by lot by the Vice Chancellor for Academic Affairs or his/her designee from the Adjudicatory Committee. This Committee shall be established by July 1 for each academic year, and shall be composed of the following:
  - a. Fifteen (15) students - appointed by the Chief Administrative Officer of the Student Government Association with the advice and consent of the Student Senate;
  - b. Eleven (11) faculty - appointed by the President and with the consent of the Faculty Senate;
  - c. Seven (7) staff - four (4) appointed by the Staff Advisory Council from employees in the Managerial/Professional and Office/Service

*\*A working day is defined as any day the University is open excluding Saturdays, Sundays and holidays.*

categories; and three (3) appointed by the Chancellor from administrators in the Academic/Administrative category;

- d. If it is not possible to construct a full board, additional persons in the category with insufficient members available to serve may be selected in blocks of three (3) at a time by the same process as stated in 4a-b-c.

Meetings at which cases are heard by either the Hearing Board or the Appeals Board shall be closed, unless a written request for an open hearing is received forty-eight (48) hours in advance of the scheduled hearing time.

5. Any student charged with disciplinary violations has the right to maintain status as a student and to attend classes while the case is pending appeal within the University system unless continued presence constitutes an immediate harm to the student charged, or others, as determined by the Vice Chancellor for Student Services and Enrollment Management or his/her designee.
6. A recognized student organization found guilty of violating University regulations will be subject to University disciplinary action. It should be understood that organizations, as well as individuals in the organizations, are subject to these regulations and corresponding disciplinary action.

## II. Academic Integrity

### A. Policy

The maintenance of academic honesty and integrity is a vital concern of the University community. Any student found guilty of academic dishonesty shall be subject to both academic and disciplinary sanctions. Academic dishonesty includes, but is not limited to, the following:

1. Cheating. Copying or attempting to copy from an academic test or examination of another student; using or attempting to use unauthorized materials, information, notes, study aids or other devices for an academic test, examination or exercise; engaging or attempting to engage the assistance of another individual in misrepresenting the academic performance of a student; or communicating information in an unauthorized manner to another person for an academic test, examination or exercise.
2. Fabrication and falsification. Falsifying or fabricating any information or citation in any academic exercise, work, speech, test or examination. Falsification is the alteration of information, while fabrication is the invention or counterfeiting of information.
3. Plagiarism. Presenting the work of another as one's own (i.e., without proper acknowledgment of the source) and submitting examinations, theses, reports, speeches, drawings, laboratory notes or other academic work in whole or in part as one's own when such work has been prepared by another person or copied from another person.

4. Abuse of academic materials and/or equipment. Destroying, defacing, stealing, or making inaccessible library or other academic resource material.
5. Complicity in academic dishonesty. Helping or attempting to help another student to commit an act of academic dishonesty.
6. Falsifying grade reports. Changing or destroying grades, scores or markings on an examination or in an instructor's records.
7. Misrepresentation to avoid academic work. Misrepresentation by fabricating an otherwise justifiable excuse such as illness, injury, accident, etc., in order to avoid or delay timely submission of academic work or to avoid or delay the taking of a test or examination.
8. Other. Academic units and members of the faculty may prescribe and give students prior notice of additional standards of conduct for academic honesty in a particular course, and violation of any such standard of conduct shall constitute misconduct under Sanctionable Conduct and the University Disciplinary Procedures.

### B. Procedures and Sanctions

Under the By-Laws of the Board of Regents of the University of Nebraska [2.9 and 4.1(i)], the respective colleges have jurisdiction over procedural matters concerning academic dishonesty. Just as the task of inculcating values of academic honesty reside with the faculty, the faculty are entrusted with the discretionary authority to decide how incidents of academic dishonesty are to be resolved. If a faculty member suspects that a student has intentionally violated the principles of academic honesty, the faculty member shall initiate the following procedures, starting at step 1, continuing only as necessary to steps 2 or 3.

1. The faculty member shall request a meeting with each student involved. At the meeting, the faculty member should:
  - a. Attempt to ascertain the facts pertinent to the incident;
  - b. Explain to the student the basis for the suspicion of academic dishonesty; and
  - c. Give the student an opportunity to explain the matter satisfactorily.

If the student offers an unsatisfactory explanation, the faculty member describes what the penalty is for the offense, and explains the student's rights to mediation, as described in step 2, and appeal as described in steps 3 and 4. Any penalty imposed by the faculty member, such as retaking the test or rewriting the paper, or failure for the work or failure for the course, is limited to the course. If the student admits guilt and accepts the penalty, the faculty member may consider the case closed but will keep a confidential record of the action and retain pertinent materials until the end of the next regular semester following the student's receipt of the grade. A penalty of "F" for the course must be reported to the department chair and to the

registrar. It is recommended that a faculty member who imposes a penalty of a grade other than "F" in the course for academic dishonesty report the case to the department chair and to the Vice Chancellor for Student Services and Enrollment Management. If a faculty member reports any action taken to a department chair, a dean, the registrar, or the Vice Chancellor for Student Services and Enrollment Management, the faculty member shall inform the student.

2. If the faculty member and student cannot reach agreement, they may request the departmental chair to serve as a confidential mediator, exploring the student's intentions, the gravity of the suspected offense, and the appropriateness of the penalty. If the dispute is satisfactorily settled among the three parties, a record of the settlement provisions shall be retained by the chair. If either the chair or the faculty member chooses to report any action taken to a dean or vice chancellor, the student will be so informed and the report will be recorded as part of the settlement.
3. If the dispute cannot be mediated, or either the faculty member or the student did not wish the departmental chair to mediate, either party may request the dean of the college convene at the collegial level an appropriate standing committee with student representation or impanel a committee with student representation. For undergraduates, the collegial committee will be drawn from the instructor's college; for graduate students, the committee will be the one described in the "General Appeal Procedures for Academic Matters" listed in the UNO Graduate Catalog. The collegial committee will function with the procedural guarantees established under the By-laws of the Board of Regents of the University of Nebraska (5.4) and the university's disciplinary procedures and sanctions. If the committee finds the student not guilty, the faculty member will award a grade for the student's work and course without prejudice, and all records related to the incident will be destroyed in the absence of an appeal. If the committee finds the student guilty, it will uphold the faculty member's proposed penalty and may impose a more severe sanction, as enumerated in the UNO Student Code of Conduct. The dean will:
  - a. Convey the committees' decision to the Vice Chancellor for Student Services and Enrollment Management;
  - b. Retain the evidence and records of the dispute in accordance with the Board of Regents' and UNO's policy on the retention of disciplinary records;
  - c. Inform the student and faculty member of the committee's decision; and
  - d. Inform both parties of the right to appeal.

- e. In the case of undergraduates either party may appeal the decision to the University Appeals Board, which will consider only 1) whether the right to due process has been violated, and 2) whether the sanction imposed by the collegial committee is appropriate for the offense. In the case of graduate students, the general appeal procedures for academic matters in the UNO Graduate Catalog will be followed.

## UNO Discrimination and Sexual Harassment Policy

At its meeting on October 15, 1993, the Board of Regents adopted the following policies regarding Prohibited Discrimination and Sexual Harassment.

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 (University of Nebraska Policy Manual, RP 5.1.1, BRUN Minutes, 54, p. 145, May 12, 1989).

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 of performance of duties and conduct in regard to their employment in accord with University policies and rules and applicable law (University of Nebraska Policy Manual, RP 3.1.1, BRUN Minutes, 54, p. 145, May 12, 1989).

The University of Nebraska at Omaha is committed to maintaining an environment for all students, faculty, staff, and visitors that is fair and responsible - an environment which is based on one's ability and performance. To that end, it is the policy of the University of Nebraska at Omaha that any form of discrimination because of race, color, age, disability, religion, sex (including sexual harassment), national origin, marital status, Vietnam-era veteran status, political affiliation, sexual orientation or any unlawful reason shall not be tolerated. In keeping with this commitment, the University also will not tolerate discrimination prohibited under this policy against students, faculty, staff, and visitors by anyone acting on behalf of the University of Nebraska at Omaha.

### Statement on Sexual Harassment

Unwelcome sexual advances, requests for sexual favors and other physical, verbal, or visual conduct based on sex constitute sexual harassment when (1) submission to the conduct is an explicit or implicit term or condition of employment or academic standing, (2) submission to or rejection of the conduct is used as the basis for an employment or academic decision, or (3) the conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive working/academic environment. This statement is in keeping with federal employment and educational opportunity guidelines.

### Statement on Consensual Relationships

Although the University of Nebraska at Omaha does not prohibit romantic or sexual relationships between employees, it does discourage such consensual relationships between faculty and student or supervisor and employee.

All faculty, supervisors and other employees should understand that there are substantial risks in even an apparently consensual relationship where a power differential exists. That is, one of the parties is likely to have influence over the other's assignments, grades or

terms of employment. The inherent power differential between the parties may compromise freedom of choice.

The University of Nebraska at Omaha reaffirms the generally accepted ethical principle that situations in which one makes official evaluations of "intimates" should be avoided. If a close relationship with emotional ties develops, the faculty member or supervisor bears a special burden of accountability. That individual is advised to make suitable arrangements for the objective evaluation, for example, of the student, employee or the prospective student or employee.

### Procedures for Resolution of Complaints

Information on the University of Nebraska at Omaha's policy on prohibited discrimination and procedures for resolution of complaints is available in any one of a number of campus offices. Those offices include the Student Government Office, University Division Office, Campus Recreation, Women's Resource Center, Deans' Offices, the Library, the Information Center, Office of Multicultural Affairs, the Personnel Services Office, the Chancellor's Office, Student Development Services, Academic Affairs, University Relations, Educational and Student Services, Counseling Center, and Student Organizations and Leadership Development.

The University of Nebraska at Omaha recognizes that the selection of instructional materials or teaching techniques involves highly creative, inventive and possibly unique approaches to communication, within the context of academic freedom. As a general rule, academic freedom in this context means that a faculty member has a professional obligation to respect the dignity of others, as well as the right of others to be free from fear, violence or personal abuse.

All University of Nebraska at Omaha employees and students are responsible for helping to assure that the University avoids discrimination prohibited under its policy statement. If anyone thinks he or she has experienced or witnessed such prohibited discrimination, he or she should immediately notify the Assistant to the Chancellor for Diversity and Equal Opportunity in the Chancellor's Office. The University of Nebraska at Omaha forbids retaliation against anyone who in good faith has reported prohibited discrimination. However, accusations of prohibited discrimination are of utmost seriousness and should never be made casually and without cause. This policy shall not be used to bring frivolous or malicious charges against administrators, faculty, staff, students or visitors.

The University of Nebraska at Omaha's policy is to investigate all such complaints thoroughly and promptly. To the fullest extent practicable, the University of Nebraska at Omaha will keep complaints and the terms of their resolution confidential. If an investigation confirms that prohibited discrimination has occurred, the University of Nebraska at Omaha will take corrective action, including such discipline up to and including termination of employment or academic suspension as is appropriate.

The purpose of these procedures is to provide a prompt and efficient means to investigate and resolve prohibited discrimination complaints from students, faculty, administrators, staff and visitors to campus including

applicants, clients, vendors and contractors. The administration of these procedures will be coordinated by the Assistant to the Chancellor for Diversity and Equal Opportunity and the AA/EO Review Board which report directly to the Chancellor.

Complainants who request a review in accordance with these procedures may expect a fair hearing without fear of harassment or retaliation. Any retaliatory action taken by any person against any other person as a result of that individual's seeking redress under these procedures, cooperating in an investigation, or otherwise participating in any proceeding under these procedures is prohibited and shall be regarded as a separate and distinct grievable matter under these procedures.

Information on the UNO Prohibited Discrimination Policy and Procedures for Resolution of Complaints shall be available from any one of a number of campus offices. These offices shall include the Student Government Office, University Division Office, Campus Recreation, Chancellor's Office, Women's Resource Center, Dean's Offices, the Library, the Information Center, Office of Multicultural Affairs, Personnel Services, Student Development Services, Academic Affairs, University Relations, Student Services and Enrollment Management, Counseling Center, and Student Organizations and Leadership Office.

These grievance procedures are internal to the University. An aggrieved party also has the right to file a complaint with an appropriate state or federal agency or to file a suit in a court of competent jurisdiction. All individuals are encouraged to resolve issues internally prior to resorting to external procedures.

Time limitations utilized in these internal procedures have been set to ensure the rights of the aggrieved party to access external procedures. However, constraints of individual schedules occasionally may necessitate some reasonable accommodation of time limits. Such time limit extensions shall not give rise to grievances under any other internal procedures.

## I. Informal Procedures

- A. The complainant is encouraged first to discuss the grievance and attempt resolution of it with the respondent within 20 working\* days after the act or condition upon which the grievance is based came to the attention of the complainant, or at any time if the act or condition being grieved is of a continuing nature. If the complainant believes this procedure is unworkable because his/her employment or academic status, personal safety, or integrity might be jeopardized, he or she may file the complaint with the Assistant to the Chancellor for Diversity and Equal Opportunity. Informal complaints and responses do not need to be written and may be made orally.
- B. Where a supervisory relationship exists, complainants may discuss and attempt resolution of the grievance with their supervisor, whether faculty, staff, administrator or student worker. If the supervisor is involved in any way with the

complainant's difficulty and, thus, the complainant thinks this step is unworkable, the complainant should take the complaint to the Assistant to the Chancellor for Diversity and Equal Opportunity.

- C. The Assistant to the Chancellor for Diversity and Equal Opportunity will record the date of filing of each complaint and will attempt informal resolution of the complaint with the people involved. This resolution will be conducted in concert with the appropriate AA/EO Review Board member for the respondent, if the complainant and respondent have different status.
  - D. Informal complaint resolution procedure normally should be concluded within twenty (20) working days of the initial oral filing.
  - E. If the informal resolution is not achieved, the complainant may file a formal complaint with the Assistant to the Chancellor for Diversity and Equal Opportunity within ten (10) working days of the receipt of a written statement from the Assistant to the Chancellor for Diversity and Equal Opportunity informing the complainant of the results of the informal resolution procedures. This statement is to be sent by certified mail to the permanent addresses of the complainant and the respondent.
- ## II. Formal Resolution Procedures
- A. Step One
    1. If the grievance is not resolved through the informal procedures, the complainant may file a formal grievance statement with the Assistant to the Chancellor for Diversity and Equal Opportunity. The complaint shall be in writing and shall include a full description of the conditions, events, or circumstances upon which the grievance is based and shall indicate the redress sought. The Assistant to the Chancellor for Diversity and Equal Opportunity shall transmit the formal complaint to one of the following offices based on the status of the respondent in each case.
      - a. Student Respondents - Student Development Services
      - b. Staff Respondents - Personnel Services
      - c. Faculty Respondents - Academic Affairs
      - d. Administrator Respondents - Chancellor's Office

During the formal resolution procedures, complainants and respondents may seek assistance from a friend, colleague, or an attorney at his/her own expense. Friends, colleagues, and attorneys may attend any hearings in an advisory capacity only. Nothing in the foregoing paragraph shall preclude section 6.8 of the Bylaws of the Board of Regents of the University of Nebraska (June 13, 1992).
    2. Formal Procedures for Student Respondents
 Formal complaints of discrimination will be resolved through the following procedures:

*\*A working day is defined as any day the University is open excluding Saturdays, Sundays and holidays.*

- a. On receipt of the written grievance statement, the Assistant Vice Chancellor for Student Development Services shall transmit a copy of the statement to the chairperson of the hearing panel.
  - b. An administrative Hearing Panel shall be appointed annually by the Vice Chancellor for Student Services and Enrollment Management consisting of one student, two faculty members, and two staff members. The Panel shall be appointed from two nominations submitted by Student Government, four from Faculty Senate, and four from the Staff Advisory Council, respectively.
  - c. A copy of the written complaint shall be sent to the respondent and to the Hearing Panel members by the Assistant Vice Chancellor.
  - d. The Hearing Panel will be convened within ten (10) working days after receipt of the formal complaint by the Assistant Vice Chancellor.
  - e. The Panel shall select a Chair, for a one-year term, who shall be responsible for scheduling meetings, arranging for the hearing to be tape-recorded and for preparing a written statement of the Committee's findings. Records shall be maintained for three years by the Assistant Vice Chancellor.
  - f. The Panel shall hear testimony, in confidence, from the complainant, the respondent and such other parties as the Panel may deem essential to reaching a decision on the validity of the accusation. The Hearing Panel will make the tapes available to both the complainant and the respondent to hear, in the Assistant Vice Chancellor's office, upon their request. Appearance of legal counsel or other forms of representation will not be permitted during this administrative hearing. The Hearing Panel will have thirty (30) working days in which to hear testimony.
  - g. Within fifteen (15) working days after the conclusion of the hearing, the Panel shall submit a written decision on the validity of the accusation to the Assistant Vice Chancellor, the complainant and the respondent.
  - h. If, and only if, the Panel finds that the accusation is valid, the Assistant Vice Chancellor will forward a copy of the Panel report, together with a copy of the original charge, to the Vice Chancellor or Student Services and Enrollment Management for disposition.
  - i. The Vice Chancellor's disposition shall be rendered within fifteen (15) working days after the receipt of the Panel's findings.
  - j. The Vice Chancellor will notify the Assistant to the Chancellor for Diversity and Equal Opportunity, the Hearing Panel, the respondent, the complainant and the Assistant Vice Chancellor of the action taken.
  - k. All time limitations contained within these procedures presume that the principal parties involved in the grievance (the complainant, the respondent, and the hearing panel members) are available to hear the grievance. In the event that sick leave, vacation leave or other personal leave should interfere with the time constraints contained herein, additional time may be taken at the discretion of the Assistant Vice Chancellor in order to accommodate reasonably the parties involved.
3. Formal Procedures for Staff Respondents
    - a. On receipt of the written grievance statement, Assistant to the Chancellor for Diversity and Equal Opportunity shall transmit a copy of the statement, along with all supporting documentation, to the chairperson of the hearing panel (see below). The Assistant to the Chancellor for Diversity and Equal Opportunity shall serve in an advisory capacity only and shall assist the hearing panel in scheduling meetings, providing copies of University policies and procedures or EEO guidelines and regulations, etc.
    - b. An administrative Hearing Panel shall be appointed annually by the Chancellor consisting of four employees of the University and one student (each year shall commence on July 1 and end on June 30). The first person chosen shall serve as Chairperson for the Panel and all grievances. The Chairperson shall then make recommendations to the Chancellor for the remaining members. The appointment of members shall have an objective of achieving a hearing panel of a diverse composition. All managerial/professional staff, all office/service staff, and such academic/administrative staff and other academic staff for whom access to established academic grievance procedures is not available are eligible to serve on the panel. They must, however, be full-time (1.00 FTE) employees of the University with an anticipated employment period of at least six months. Nominations to fill vacancies on the panel shall be brought to the Chancellor by the

Chairperson, and replacements shall be appointed by the Chancellor.

The hearing panel shall adopt such rules as are necessary for the orderly functioning of the panel. Representatives of all University departments will provide the hearing panel with whatever information is needed to render an appropriate decision or recommendation. Information obtained by the panel will be held in confidence in accordance with University policies.

- c. The Chairperson of the panel shall investigate the grievance in its entirety and shall conduct an impartial hearing on the grievance. The hearing shall be taped (audio only), and the complainant and respondent may request copies at each individual's expense.
- d. Upon completion of the investigation, the panel shall prepare a written report to the Director of Personnel Services which shall include the following:
  - 1) The specific prohibited discrimination policy violation(s) alleged by the complainant;
  - 2) Findings of fact relating to the allegation(s);
  - 3) The panel's conclusions regarding whether the respondent violated the prohibited discrimination policy;
  - 4) The panel's recommendations for action.
  - 5) If the panel determines that the respondent has violated the University prohibited discrimination policy, sanctions reflecting the severity of the violation must be recommended. These sanctions may be selected from, but are not limited to, the following list:
    - a) letter of reprimand,
    - b) disciplinary probation,
    - c) suspension without pay,
    - d) denial of salary increase,
    - e) salary reduction with demotion,
    - f) termination of employment.
  - 6) Copies of the report shall be submitted to the principal parties.
- e. The panel shall submit a recommendation to the Director of Personnel Services within fifteen (15) working days of the hearing.
- f. The disposition of the Director of Personnel Services shall be rendered within fifteen (15) working days of receipt of the findings and recommendations from the hearing panel. The Director shall notify the principal parties in writing of the action to be taken.

**Time Limitations:**

All time limitations contained within these procedures presume that the principal parties involved in the grievance (the complainant, the

respondent and the hearing panel members) are available to hear the grievance. In the event that sick leave, vacation leave or other personal leave should interfere with the time constraints contained herein, additional time may be taken at the discretion of the Director in order to accommodate reasonably the parties involved.

4. Formal Procedures for Faculty Respondents
  - a. Within five working days of receiving the formal written complaint, the Academic Affairs Affirmative Action Officer shall transmit the complaint to the Faculty Senate Professional Conduct Committee. The Formal Rules and Procedures of this committee will be followed.
  - b. If the committee determines that the respondent has violated the University prohibited discrimination policy, sanctions reflecting the severity of the violation shall be considered. These sanctions which may not violate the faculty collective bargaining agreement may be selected from, but are not limited to, the following list:
    - 1) letter of reprimand,
    - 2) denial of salary increase,
    - 3) termination of employment.
  - c. The Chancellor or designee shall render a decision within fifteen (15) working days of receipt of the recommendation from the committee and inform both the complainant and respondent in writing. If the determination of the Chancellor or designee is to terminate a faculty member's continuous appointment, procedures outlined in the collective bargaining agreement shall be followed.
5. Formal Procedures for Administrator Respondents
  - a. Within ten (10) working days of receipt of the formal written response, the Chancellor or designee shall select a hearing panel. The method of panel selection shall be the same as that utilized for Staff Respondents. The timelines and procedures for conducting the hearing also shall be the same.
  - b. If the panel determines that the respondent has violated the University prohibited discrimination policy, sanctions reflecting the severity of the violation shall be considered. These sanctions may be selected from, but not limited to, the following list:
    - 1) letter of reprimand,
    - 2) suspension without pay,
    - 3) denial of salary increase,
    - 4) salary reduction with demotion,
    - 5) termination of employment.



- c. The hearing panel shall submit a recommendation to the Chancellor or designee within fifteen (15) working days of the hearing.
- d. The Chancellor or designee shall render a decision within fifteen (15) working days of receipt of the recommendation of the hearing panel and inform both the complainant and respondent in writing.

**Time Limitations:**

All time limitations contained within these procedures presume that the principal parties involved in the grievance (the complainant, the respondent, the hearing panel members and the Chancellor or designee) are available to hear the grievance. In the event that sick leave, vacation leave, or other personal leave should interfere with the time constraints contained herein, additional time may be taken at the discretion of the Chancellor or designee in order to accommodate reasonably the parties involved.

**B. Step Two - Appeal of Step One Decision**

- 1. The complainant or respondent may file an appeal of the step one decision within ten (10) working days of the filing date of the step one decision.
- 2. This appeal shall be in writing and shall clearly indicate reasons for objections to the step one decision.
- 3. The office with which this appeal may be filed will depend upon the status of the party filing the appeal.
  - a. Students - Chancellor or designee
  - b. Staff - Chancellor or designee
  - c. Faculty - Chancellor or designee
  - d. Administrators - President or designee
  - e. Visitors - Chancellor or designee
- 4. The Chancellor/President or designee will review the written appeal and all other relevant materials.
- 5. The Chancellor/President or designee will render a decision within thirty (30) working days of the filing of the appeal. The decision will be final and not grievable under any other internal procedure other than that of the faculty collective bargaining agreement.

**Information Center**

The Information Center, located on the first floor of the Eppley Administration Building, provides general information and referrals to appropriate University Offices. Office hours are 7:30 a.m. to 7:30 p.m. Monday through Thursday, and 7:30 a.m. to 5:00 p.m. on Friday. The general information number is 554-2800; after hours and on weekends and holidays a recorded message regarding campus activities and events will be heard.

Student information telephones are located in each major building on campus for contacting Campus Security or placing other on-campus calls.

Free notary service is available for students and staff during normal business hours.

Persons outside the Omaha local calling area can reach the University of Nebraska at Omaha Information Operator during office hours from Nebraska and Iowa by calling 1-800-858-8648.

**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 more than 760,000 volumes; over 3,000 journal and newspaper subscriptions; 460,000 government documents; 1,800,000 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 maintains collections of federal and Nebraska state publications. Nearly all of the Library's collection is on open shelves and is arranged according to the Library of Congress classifications system. Most of the Library's holdings are accessible through an online catalog, GENISYS (General Information System). GENISYS is available on computers in the library and from remote locations via telnet, the World Wide Web, or by modem.

UNO students, faculty and staff may check out library materials with their UNO ID card at any of the four University of Nebraska campuses. A reciprocal borrowing agreement also allows anyone with a UNO ID to check out materials from over 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 reference librarian serves as liaison to one or more departments in his/her area of subject expertise. The librarians teach sections of NEW START and the University Division courses pertaining to the use of library materials. The Reference Department also provides on-line data base searching of over 200 data bases on a cost recovery basis as well as free access to many databases on CD-ROM and through the Internet. Assistance is available for government documents, archives and special collections, 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 also maintains a World Wide Web home page at <http://revelation.unomaha.edu/> which provides current information about the Library and links to information sources.

The University Library is open 97 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 (C&DC)**

There are no user fees charged to students by the Office of Computing and Data Communications for computer access, training, support and services.

The C&DC is responsible for managing all facets of academic and administrative computing and data communications on the campus. The staff consists of 24 full-time employees and 45 part-time student employees. Main offices are located in 110 Eppley Administration Building (EAB), phone 554-2468. Computer Operations is in 008 EAB, phone 554-3500 and is open 24 hours per day all year long.

C&DC offers a full range of automated data processing services to students, faculty and staff. Administrative Computing has the responsibility for the development and/or maintenance of systems which are uniquely applicable to the UNO campus and are not common to other campuses. Current systems of this type include the UNO Student Information System (SIS), the Business and Finance Intra-Campus Billing System and the Library Serials System.

The Student Information System (SIS) resides on an IBM 9121 model 480 computer system located in Lincoln, Nebraska. The remaining Administrative systems reside on a DEC MicroVax 3100 located at UNO.

The academic computing capability centers around five major systems; three DEC Station 5000 computers running ULTRIX (used for information services), three DEC Stations 5000, running OSF/1 (used for research), and one DEC Station running the VMS operation system which is used for instruction.

The Math/Computer Science Department has a multi-processor computer running the UNIX operating system which is used primarily for instruction/research in systems design and systems management. The Department of Geography/Geology has a sizable array of sophisticated computing equipment; some used for satellite imagery processing for earth science research projects. The Physics Department has a Silicon Graphics Super Computer dedicated to research and instruction.

Four open access/general purpose microcomputer labs are available to students and faculty seven days a week. These labs are equipped with IBM compatible and Macintosh microcomputers, high speed printers, laser printers and dot-matrix printers. Consultants are available for student assistance in the Durham Science Center and College of Business Labs.

An additional eighteen microcomputer labs (located in and operated by the colleges and departments) are dedicated to specific and unique instructional/research requirements.

Sixty-eight dial-up telephone lines are available for off-campus access to the computers and to the Internet. Most computers are connected through the Ethernet data communications network. Ethernet also is used to connect to UNL, UNMC and UNK computers as well as computers in other Nebraska public and private educational institutions (K-12, Boys Town and other universities). Other networking technologies include Novell and IBM's Token Ring.

The Training Center offers a number of computer courses at no cost to students, faculty and staff. The Center publishes over thirty handouts and study guides on computer hardware, software and techniques.

Telephone assistance is provided for students, faculty and staff by the Help Desk located in 005 Eppley Administration Building, phone number 554-3282 (DATA).

Policies and procedures pertaining to the use of computer and information systems on the UNO campus can be found on UNO's web site at <http://www.unomaha.edu>.

### **University Relations**

University Relations is responsible for the development and continuity of the University's image through the print media (periodicals, publications, etc.), electronic media (radio, television, slide shows, videotapes, etc.), special events and community service projects. The Office plans and implements these projects for both internal and external audiences. In addition, University Relations coordinates the University's news media policy and contacts, writing and disseminating news releases and answering media inquiries.

Located in 202 Eppley Administration Building, the University Relations staff can assist in the planning and execution of promotional print and broadcast materials, special events and advertising.

Assistance for students in planning and producing print and broadcast materials also is available.

### **Printing and Duplicating Services**

The University Printing and Duplicating department provides a wide range of services which are available to all members of the University community. Currently enrolled students may order university-related work through this department on a cash basis. Printing and Duplicating provides desktop publishing, printing, quick copy and bindery services. Information regarding the cost and delivery of these services may be obtained at:

Printing and Duplicating Services,

104 Eppley Administration Building, 554-2330

Hours: Monday- Friday 8:00 a.m. to 5:00 p.m.

Duplicating Services (Copy Center),

106 Eppley Administration Building, 554-3061

Hours: Monday - Thursday 6:30 a.m. to 7:30 p.m.  
and Friday 6:30 a.m. to 5:00 p.m.

Duplicating Services (Satellite Copy Center)

Fine Arts Building 019, 554-3680

Hours: Monday - Friday, 8:15 a.m. to 4:45 p.m.

### **Audio Visual Services**

The Audio Visual Department provides a wide range of services which are available to faculty/staff and students.

Audio Visual provides photographic and graphic arts services such as photographic reproduction, overhead transparencies, charts, graphs, posters, passport photos, student I.D. cards, portrait photography, computer-generated slides, artwork and picture framing.

The Equipment and Media Services section of AV provides overheads, opaques, videocassette recorders, televisions, slide projectors, camcorders, screens and tape recorders for student use. Also available are films and video tapes for in class use.

Students are encouraged to visit with the AV staff concerning video productions for class projects. VHS video production, studio facilities, editing capabilities and video/audio dubbing services are available to students for classroom projects. Some of these services are provided on a cost basis.

Multimedia services provides technical assistance for the high tech classrooms.

Students needing technical assistance with class projects should visit the Audio Visual Department in the 108 Eppley Administration Building or call AV at 554-2215.

### **Environmental Health and Safety**

It is the goal of the University to provide a safe, healthful environment in which to work and study. In order to achieve this goal, Environmental Health and Safety provides a number of training programs and consultation services for students, faculty and staff. Programs directed by Environmental Health and Safety include: employee safety training, hazardous waste management, emergency preparedness, fire protection and accident investigations.

Material Safety Data Sheets and other information related to the safe handling and disposal of chemicals can be obtained from Environmental Health and Safety. Students can help maintain a safe environment at UNO by reporting unsafe conditions on campus. Environmental Health and Safety is located in 100 Eppley Administration Building, 554-3596.

### **University Television**

UNO Television provides television production, program distribution and educational services to a diverse group of users on a local, regional and national level. We operate the Omaha Production Center of the Nebraska ETV Network. Instructional, educational and public affairs programs are produced by UNO Television for broadcast on KYNE TV, Channel 26. The department provides unique educational opportunities to students through training and employment in a professional environment. UNO Television is located in the Engineering Building.

### **KVNO FM 90.7**

KVNO 90.7 FM is a public radio station licensed to the University of Nebraska Board of Regents. KVNO serves the University and community through quality programming that enlightens, entertains and informs. The format is primarily classical music, with some jazz and other specialty programs featured on weekends. The

station provides unique educational opportunities to students through training and employment in a professional environment. KVNO is committed to involving an increasing number of listeners, to advancing the excellence and growth of the arts, and to assuming a national leadership role in public broadcasting. KVNO facilities are located in the Engineering Building.

**Campus Security Department**

Campus Security, located in the Eppley Administration Building, room 100, provides service to the University community 24-hours a day. The number to call for information about any of its services is 554-2648.

The duties and responsibilities of the Campus Security Department are: to protect life and property; provide building and grounds patrol; enforce Traffic and Parking Rules & Regulations; enforce University regulations; control the University key system; and provide general safety for all persons on campus.

**Parking & Traffic**

All vehicles parked on the UNO campus must display a valid parking permit. To obtain a permit, present your UNO identification card or proof of class registration at the Campus Security Office, EAB 100.

The "Parking & Traffic Rules and Regulations" booklet offers information on the fee schedule, parking lot designations and general information on traffic and safety.

All accidents should be reported to Campus Security immediately.

**University Building Keys**

Campus Security is responsible for the control of the University key system. Eligible University employees should make requests for University keys through their department chairperson to Campus Security.

**Security**

Buildings are patrolled 24 hours daily. Anyone found in a UNO building after established closing hours, without a UNO identification card, will be asked to leave. Report items stolen or damaged to the Campus Security Department.

**Lost and Found**

Campus Security maintains the lost and found system.

**Services**

The Campus Security Department provides assistance to motorists 24 hours daily, to jump-start your vehicle, open a locked vehicle, and change a tire in certain situations, for vehicles on campus only.

**Personal Escorts**

Escort persons at their request while on campus.

**Personal Safety Checks**

Individuals who may be working alone, outside normal working hours are encouraged to contact Campus Security. Security officers will periodically check on your safety while you are here.

**Operation I.D.**

Your stereo tape-deck, C.B. radio or other personal belongings may be engraved to aid in finding lost or stolen property. Stop by the Campus Security Office and check out an engraver and instructions to engrave your property.

**Fingerprints**

The Campus Security Department provides a fingerprinting service for individuals who require finger prints for job applications, immigration and military needs. This service also applies for children of students, staff, faculty and alumni. It is strictly for the benefit of the parents should a child ever be missing; no record will be maintained by Campus Security. Contact Campus Security for times of service or an appointment.

For ON-CAMPUS EMERGENCIES dial ext. 4-2911.
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### Graduate Studies

Graduate Studies provides opportunities for more advanced education than the undergraduate work upon which all graduate programs are founded.

Opportunities for advanced study and independent investigation are provided in a number of fields of learning to properly admitted students to do any of the following:

1. To work toward these degrees: Doctor of Philosophy, Doctor of Education, Master of Arts, Master of Arts for Teachers of Mathematics, Master of Science, Master of Business Administration, Master of Music, Master of Accounting, Master of Public Administration, Master of Social Work, and Specialist in Education.
2. To earn graduate credit for the issuance or renewal of certificates for teachers, administrators and educational psychologists.
3. To provide for scholarly and professional advancement.

The Graduate College promotes the spirit of free investigation of the various disciplines and, at the same time, serves to unite the various branches of the University in advancing human knowledge and providing intelligent, capable leadership for society. The Graduate Faculty offer graduate courses, workshops, institutes, seminars, research and special problems courses, and the supervision of theses or special projects.

A student desiring admission to graduate studies must have earned a bachelor's degree. An application must be submitted to the Office of Admissions, together with official transcripts of all college work, undergraduate and graduate. The transcripts and other required credentials are then evaluated by the department/school in which the student wishes to do graduate work.

The Dean for Graduate Studies and Research makes the final admission decision and each applicant is notified by mail of acceptance or denial of the application.

Seniors at an accredited institution, including campuses of the University of Nebraska system, who have obtained in advance the approval of the appropriate campus Dean for Graduate Studies and Research may receive up to twelve (12) hours of graduate credit taken at the 8--5 or 8--6 level (but not at the 8--0 level) taken at any campus of the University of Nebraska System 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 their bachelor's degrees.

### UNO Alumni Association

The University of Nebraska at Omaha Alumni Association is a non-profit organization of more than 50,000 men and women throughout the world. Membership in the organization is automatic upon graduation from the University.

Governed by a 27-member board of directors and operated independently of the University, the association is the primary fund-raising organization for UNO alumni. The UNO Alumni Association staff maintains current addresses of all its members, coordinates alumni activities and prepares the organization's publications and fund-raising programs.

All Alumni receive free the association's *UNO Alum*, a magazine mailed four times a year. Alumni also are invited to association events, such as Round Tables with area business, political and social leaders; Homecoming; the Chancellor's Scholarship Swing; and reunions.

The association owns and operates the William H. Thompson Alumni Center, a popular gathering place available to rent for weddings and receptions, business meetings, parties, and other events. The Alumni Center is located on the northwest corner of the campus.

Members who contribute to the association's UNO Alumni Fund receive a validated UNO Alumni Card, which is good for various discounts and benefits. These include: access to University Library check-out privileges; discounts at the UNO Bookstore and Durham Science Center Shop; registration in the UNO Child Care Center; reduced tuition at the UNO Aviation Institute, and discounts on rental fees at the William H. Thompson Alumni Center. Donors of \$25 or more receive a free UNO calendar, while Century Club donors of \$100 or more qualify for various mementos.

### OFFICE OF INTERNATIONAL STUDIES AND PROGRAMS

The Office of International Studies and Programs (IS&P) was established in 1973 to provide for the encouragement, development, and coordination of the University's rapidly growing international dimensions. Current programs under this office include:

#### International Studies Major

The International Studies major provides an interdisciplinary foundation for professional careers in international business and commerce, secondary school teaching, and government service. An increasingly popular option is the specialization in International Management and Business. For additional information, please see page 76; or contact Dean Thomas E. Gouttierre by calling (402) 554-2376, by writing to him at Arts & Sciences Hall 238, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax (402) 554-3681.

#### Community Outreach Program

IS&P occupies a very visible community profile, primarily through its outreach/global education efforts and international student/participant activities. IS&P maintains a speakers' bureau for international issues and events; the state of world affairs ensures a constant stream of requests from service clubs, elementary and secondary schools, community organizations, industry, etc. for UNO staff, faculty and international participants to serve as informed presenters at their meetings.

International student groups are hosted by Nebraska rural communities for weekends under the innovative Nebraska Neighbors Program. International participants serve as ambassadors for UNO through representational efforts arranged by IS&P in local schools and service. The community reciprocates through the hosting and hospitality programs of the Friends of International Students and Scholars (FISS) and other less formal means. For further information, please contact Merry Ellen Turner by telephoning (402) 554-2293, writing to her at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax (402) 554-2949.

#### The Center for Afghanistan Studies

The Center for Afghanistan Studies serves as the only institutional base in the United States specifically and exclusively concerned with Afghan affairs. As such, it has unique resources to function in the following areas: research concerning Afghan culture and education; collecting, classifying and writing of materials on Afghanistan; disseminating information on Afghanistan to other institutions; providing language and cross-cultural training; publishing the Afghanistan Studies Journal; language translations; and providing consultation and expert advice on matters related to Afghanistan.

The Center assisted in establishing the Arthur Paul Afghanistan Collection at the University Library. This collection is what many consider to be the finest collection of Afghan primary and secondary materials in North America.

The Center serves as the base for Afghan educational projects with funding from the United States Department of State and other donors. For additional information, contact Esmael Burhan by telephoning (402) 554-2376, by writing to him at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax (402) 554-3681.

#### Intensive Language Program

The Intensive Language Program (ILUNO) offers instruction in English as a Second Language to international students who plan to pursue academic degrees in the United States. This pre-academic program provides 25 hours of instruction per week over six eight-week sessions scheduled throughout the year. Classes are offered at six levels of proficiency, with emphasis on the development of writing, listening, pronunciation, reading and communication skills. Students with TOEFL scores of 460 or higher may take university course work along with English as a Second Language classes. For further information, please contact Merry Ellen Turner by telephoning (402) 554-2293, by writing to her at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-2949.

#### UNO Study Abroad

UNO Study Abroad (UNOSA) offers a variety of information on study, work and travel abroad opportunities to interested students. UNOSA assists students in choosing a study abroad program, identifying sources of financial aid and obtaining visas and passports. For further information, please contact Raheem Yaseer by telephoning (402) 554-2293, by writing to him at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-3681.

#### Nebraska Semester Abroad

The Nebraska Semester Abroad offers UNO students the opportunity to study and live in Europe. Facilities for the program are located at Palacky University in the Czech Republic and Aristotle University in Greece.

Students stay in dormitories within walking distance of libraries, historical sites, parks and outdoor cafes frequented by the large student population of the cities. English is the language of instruction and can also be understood by many of the local people. Students can practice other foreign languages and sightsee on weekend trips or an extended summer visit to other European cities, easily accessible via a Eurail pass.

Students may earn 12 or more credit hours for the three-month program, which is conducted from mid-March through the end of May. UNO financial aid may be applied toward the cost of the program. For further information, please contact Raheem Yaseer by telephoning (402) 554-2293, by writing to him at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-3681.

#### Faculty and Student Exchange Programs

Faculty and student exchanges with sister universities in China, Japan, the Philippines, Austria, the Czech Republic, Russia, Romania, Germany, Tajikistan and other countries are important components of UNO's commitment

to global education. For further information, please contact Raheem Yaseer by telephoning (402) 554-2293, by writing to him at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-3681.

## **Foreign Student Advising**

IS&P has responsibility for the full range of advising for all UNO international participants and students. The student support services provided include orientation; airport pickup; housing assistance; immigration advising; issuing of visa and admissions documents; planning and conducting crosscultural activities; pre-academic advising; serving as liaison with volunteer community support groups; crisis counseling; and medical and health insurance resources advisement; among other services. For further information, please contact Merry Ellen Turner by telephoning (402) 554-2293, by writing to her at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-2949.

## **The Bethsaida Excavations Project**

This project was formed in 1991 to excavate the lost biblical city of Bethsaida, Israel. UNO, the lead institution of a worldwide consortium of universities involved in this project, holds a license from the Antiquities Authority of Israel to uncover the secrets of Bethsaida. At UNO, this project involves the departments of philosophy/religion, geography/geology and International Studies and Programs. Annually, faculty, staff and hundreds of students from the consortium institutions work at the site. The discoveries and their impact have been presented and analyzed in scholarly journals and have obtained substantial coverage worldwide in the mass media. The Bethsaida Excavations Project has helped to establish UNO as a leader in biblical archaeology. For further information, please contact Dean Thomas E. Gouttierre by telephoning (402) 554-2376, by writing to him at Arts & Sciences Hall 238, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-3681.

## **Program for International Professional Development**

The Program for International Professional Development (IPD) was established in 1989 and offers training for domestic and international clients. Addressing a wide range of cultural, linguistic and professional topics, IPD helps individuals and organizations increase the success of their global activities.

Participants from abroad and from the United States can study such topics as international business and communication; English for business; intercultural skills; regional cultural practices; and using English with non-native speakers. For further information, please contact Merry Ellen Turner by telephoning (402) 554-2293, by writing to her at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-2949.

## **Japanese Studies Exchange Program**

Through an agreement with the Ueno College System (UCS) in Hiroshima, Japan, UNO is able to expand its course offerings in areas related to Japanese language and culture. The agreement also provides study abroad opportunities on the UNO campus for students from UCS.

UCS students spend 12 months at UNO studying English as a Second Language and participating in a cultural orientation program. At the same time, a UCS faculty member offers classes for UNO students in Japanese language and culture. For further information, please contact Merry Ellen Turner by telephoning (402) 554-2293, by writing to her at Arts & Sciences Hall 241, via e-mail at [world@unomaha.edu](mailto:world@unomaha.edu), or via fax at (402) 554-2949.

## **Third World Studies Conference**

This annual gathering of scholars from around the world and across the United States meets early each October in Omaha to discuss issues concerning the nations of the Third World. For further information, please contact Mary Macchietto at (402) 595-2355 or by writing to her at the Peter Kiewit Conference Center.

## **European Studies Conference**

This academic conference convenes in Omaha each October to provide a forum for scholars from around the world and across the United States to present and discuss issues concerning European Studies. For further information, please call Mary Macchietto at (402) 595-2355 or write to her at the Peter Kiewit Conference Center, or via e-mail at [mary-m@ccs.unomaha.edu](mailto:mary-m@ccs.unomaha.edu).





## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

To ensure that each graduate of UNO possesses certain academic skills, experiences the breadth of a liberal education, and develops an appreciation for the cultural diversity that exists in the nation and the world, the faculties of the several colleges have adopted the University general education requirements indicated here. These requirements became effective with the beginning of the fall semester of 1990. They apply to all students who enter, re-enter, or transfer to UNO as of that semester or subsequently. These requirements, however, are not applicable to students in the UNL-administered Colleges of Agricultural Sciences and Natural Resources, Architecture, Human Resources and Family Sciences, and Engineering and Technology.

Since colleges have the authority to prescribe additional requirements in the following areas, students should work closely with their advisers in selecting courses to meet all applicable degree requirements.

### Fundamental Academic Skills Total 15 Hours

English and Writing—nine hours, to include:

English, six hours, including English 1160 or equivalent

*(Students can "test out" of this University requirement; however, some colleges/departments require six hours of course work in English as part of their requirements.)*

One additional three-hour writing course relevant to the student's college/major.

Mathematics 1310 or equivalent—three hours.

*(Students can "test out" of this University requirement; however, some colleges/departments may require that a more advanced mathematics course be completed.)*

Public Speaking—three hours

May be satisfied by Speech 1110, 1120, 3120, 3130, or 3140.

### Distribution Requirements Total 30 Hours

Natural and Physical Sciences—minimum eight hours, including one laboratory course.

Humanities and Fine Arts—minimum eight hours

Social and Behavioral Sciences—minimum eight hours

### Cultural Diversity Total Six Hours

U.S. racial or Hispanic minority groups—minimum three hours

The remaining three hours of this requirement can be satisfied with another three hours in minority studies, course work in women's studies, or course work with an international or foreign focus. The cultural diversity requirement may be satisfied in whole or in part by course work in the major, course work taken to fulfill the University distribution requirement or by electives.

# DEGREE REQUIREMENTS AGRICULTURAL SCIENCES AND NATURAL RESOURCES

## GENERAL INFORMATION

The University of Nebraska at Omaha (UNO) cooperates with the College of Agricultural Sciences and Natural Resources (CASNR) at the University of Nebraska-Lincoln (UNL) in providing four-semester pre-agricultural sciences, pre-natural resources, pre-food science and technology, and pre-horticulture transfer programs.

A student enrolled in these programs may transfer all satisfactorily completed academic credits identified in the suggested program of study, and enter CASNR to study toward a major leading to a Bachelor of Science Degree in agricultural sciences or Bachelor of Science Degree in natural resources. The total program would require a minimum of four years or eight semesters (16 credit hours/semester or 128 credit hours).

UNL CASNR faculty teach horticulture and food science and technology courses at UNO to assist an urban population in better understanding the food processing, horticulture, and landscape horticulture industries. For further information on these classes, see "Course Descriptions" on page 195 in this catalog.

## PREPROFESSIONAL PROGRAMS

### Pre-Agricultural Sciences Program

Students who successfully complete this program may enter the College of Agricultural Sciences and Natural Resources to study in a major of their choice that leads to a Bachelor of Science degree in agricultural sciences. Majors for four-year programs include agribusiness, agricultural economics, agricultural education, agricultural journalism, agronomy, animal science, biochemistry, crop protection, diversified agricultural studies, mechanized systems management, veterinary science and veterinary technologist.

The following suggested program of study fulfills the minimum requirements for the first four semesters of any agricultural sciences major.

#### First Year

##### First Semester

Academic & Career Orientation 1010*	1
BIOL 1450 Biology I	5
ENGL 1160 English Composition	3
MATH 1320 Precalculus Algebra**	3
History Elective	3
Semester Total	15

##### Second Semester

CHEM 1180 General Chemistry I	3
CHEM 1184 General Chemistry I Lab	1
MATH 1330 Trigonometry	3
SPCH 1110 Public Speaking Fundamentals	3
Emphasis Electives***	3-5
Sociology Elective	3
Semester Total	16-18

#### Second Year

##### First Semester

ECON 2200 Principles of Economics (Micro)	3
PHYS 1110 General Physics	4
PHYS 1154 General Physics Lab I	1
Emphasis Electives***	4-5
Literature Elective	3
Semester Total	15-16

##### Second Semester

ECON 2220 Principles of Economics (Macro)****	3
ENGL 2400 Advanced Composition	3
OR SPCH 3130 Speech-Communication in Business and the Professions	
MATH 1530 Intro to Applied Probability and Statistics	3-5
OR MATH 1930 Calculus for Managerial Students	
OR MATH 1950 Calculus I	
Emphasis Electives***	4
Art Elective	3
Semester Total	16-18

TOTAL HOURS .....62-67

\*Students are encouraged to take "Academic and Career Orientation" (US 1010) for a UNL CASNR elective.

\*\*MATH 1320. Hours earned in MATH 1320 will not count toward the mathematics requirements for UNL CASNR. Students are encouraged to use MATH 1320 as a free elective for their UNL CASNR program of study if they have an algebra deficiency. Students should complete their mathematics sequence at UNO. Since certain majors require calculus, the student is encouraged to review the UNL Undergraduate Bulletin for requirements in specific majors of interest.

\*\*\*EMPHASIS ELECTIVES. Students in the Pre-Agricultural Sciences Program may select from a variety of majors. Some emphasize the social sciences while others emphasize the physical and biological sciences in the first two years. The student is encouraged to review the UNL Undergraduate Bulletin to identify the appropriate "Emphasis Elective" for their majors of interest.

\*\*\*\*ECONOMICS. Two semesters of economics (macro and micro) are not required in all agricultural sciences majors. For majors that require only one semester of economics, the second course will count as a social science elective.

### Pre-Natural Resources Program

A student who successfully completes this program may enter the College of Agricultural Sciences and Natural Resources (CASNR) to study for a Bachelor of Science degree in natural resources. Majors for four-year programs in natural resources include fisheries and wildlife, natural resource and environmental economics, range science, soil science, water science and environmental studies.

The following suggested program of study fulfills the minimum requirements for the first four semesters of any natural resources major.

#### First Year

##### First Semester\*

BIOL 1450 Biology I	5
ENGL 1150 English Composition	3
GEOG 1030 Intro to Earth and Environ. Science	5
MATH 1320 Precalculus Algebra**	3
Semester Total	16

# DEGREE REQUIREMENTS

## AGRICULTURAL SCIENCES AND NATURAL RESOURCES

65

### Second Semester

BIOL 1750 Biology II .....	4-5
<b>OR</b> BIOL 2140 Genetics .....	
ENGL 1160 English Composition .....	3
MATH 1330 Trigonometry .....	3
SPCH 1110 Public Speaking Fundamentals .....	3
Art or Literature Elective .....	3
Semester Total .....	16-17

### Second Year

#### First Semester

BIOL 1330 Environmental Biology .....	3
CHEM 1180 General Chemistry I .....	3
CHEM 1184 General Chemistry I Lab .....	1
ECON 2200 Principles of Economics (Micro) .....	3
MATH 1530 Intro to Applied Probability and Statistics .....	3
History Elective .....	3
Semester Total .....	16

#### Second Semester

CHEM 1190 General Chemistry II .....	3
CHEM 1194 General Chemistry II Lab .....	1
GEOL 1170 Intro to Physical Geology .....	4
PHYS 1110 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
Sociology Elective .....	3
Semester Total .....	16

TOTAL HOURS .....64-65

*\*Students are encouraged to take "Academic and Career Orientation" (US 1010) for a UNL CASNR elective.*

*\*\*MATH 1320. Hours earned in MATH 1320 will not count toward the mathematics requirements for UNL CASNR. Students are encouraged to use MATH 1320 as a free elective for their UNL CASNR program of study if they have an algebra deficiency. Students should complete their mathematics sequence at UNO. Since certain majors require calculus, the student is encouraged to review the UNL Undergraduate Bulletin for requirements in specific majors of interest.*

### Pre-Food Science & Technology Program

Food science and technology majors find career opportunities with food processing firms, government agencies, and educational institutions. Types of positions available to food science and technology graduates include new product development, quality assurance, food plant management, food research, food marketing and sales, food inspection, education, and extension. The major curriculum includes a balance of courses in food science, biological sciences, physical sciences, mathematics, social sciences and humanities. Food science courses include food processing, food engineering, food analysis, food chemistry, food microbiology, nutrition and quality assurance. Five options are offered: science, technology, business, food service/nutrition, and international. Students may participate in an internship program that provides summer employment in the food industry.

The following list of courses are recommended for the first four semesters of a food science and technology transfer program.

### Food Science and Technology

FSCI 1310 Science of Food .....	3
Total .....	3

### Biology

BIOL 1020 Principles of Biology .....	5
BIOL 4640 Microbial Physiology .....	4
BIOL 1450 Biology I <b>OR</b> BIOL 1950 Biology II .....	5
Total .....	14

### Chemistry

CHEM 1180 General Chemistry I .....	3
CHEM 1184 General Chemistry I Lab .....	1
CHEM 1190 General Chemistry II .....	3
CHEM 1194 General Chemistry II Lab .....	1
CHEM 2210 Fundamentals of Organic Chemistry .....	4
CHEM 2214 Fundamentals of Organic Chemistry Lab .....	1
Total .....	13

### Economics

ECON 2200 Principles of Economics (Micro) .....	3
Total .....	3

### English Composition

ENGL 1160 English Composition .....	3
Total .....	3

### Mathematics

MATH 1320 Precalculus Algebra* .....	3
MATH 1330 Trigonometry .....	3
MATH 1530 Intro to Applied Probability and Statistics .....	3
MATH 1930 Calculus for Managerial Students** .....	3
<b>OR</b> MATH 1950 Calculus I .....	5
Total .....	9-11

### Physics

PHYS 1110 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
Total .....	5

### Speech Communications

SPCH 1110 Public Speaking Fundamentals .....	3
Total .....	3

Art Elective .....3

History Elective .....3

Literature Elective .....3

Sociology Elective .....3

### Additional Electives

    Required or Recommended Courses.....4

TOTAL HOURS .....69-71

*\*MATH 1320. Hours earned in MATH 1320 will not count toward the mathematics requirements for UNL CASNR. Students are encouraged to use MATH 1320 as a free elective for their UNL CASNR program of study if they have an algebra deficiency. Students should complete their mathematics sequence at UNO. Since certain majors require calculus, the student is encouraged to review the UNL Undergraduate Bulletin for requirements in specific majors of interest.*

*\*\* See adviser.*

## DEGREE REQUIREMENTS AGRICULTURAL SCIENCES AND NATURAL RESOURCES

### Pre-Horticulture Program

Horticulture majors find exciting career opportunities as managers or owners of horticultural businesses in retail or wholesale nurseries, floral shops and greenhouses, landscape contracting businesses, fruit and vegetable enterprises and in golf courses and sportsturf management. Graduates in horticulture may also enter the horticulture industry in horticultural journalism, extension, teaching and research. The major curriculum allows for specialization in business, science, production, communications, landscape design and turf management options, and includes a balance of courses in horticulture, biological and physical sciences, social sciences and humanities. Students may participate in an internship program that provides employment in various horticultural enterprises.

The following list of courses are recommended for the first four semesters of a horticulture transfer program.

#### First Year

##### First Semester\*

ART 1210 Two Dimensional Design	
<b>OR</b> TXCD 1210 Design Essentials .....	3
(Landscape design option required)	
BIOL 1450 Biology I .....	5
ENGL 1150 English Composition .....	3
HORT 1300 Introduction to Horticulture .....	4
MATH 1320 Pre-Calculus Algebra** .....	3
Semester Total.....	15-18

##### Second Semester

BIOL 1750 Biology II <b>OR</b> BIOL 2140 Genetics .....	4-5
CHEM 1180 General Chemistry I .....	3
CHEM 1184 General Chemistry I Lab .....	1
HORT 2210 Plant Propagation.....	3
MATH 1330 Trigonometry	
(Landscape design option required) .....	3
<b>OR</b> MATH 1530 Intro. Statistics (all options)	
<b>OR</b> PHIL 2010 Logic (all options)	
ARCH 1200 Arch. Graphics	
(Landscape design option required) .....	3
<b>OR</b> SPCH 1110 Public Speaking Fundamentals	
(all other options)	
Semester Total.....	17-18

#### Second Year

##### First Semester

SPCH 1110 Public Speaking Fundamentals	
(Landscape design option) .....	3-4
<b>OR</b> BIOL 2140 Genetics (required for all other options; can be used for a landscape design option elective)	
HORT 2000 Landscape/Environmental Appreciation.....	3
HORT 2120 Landscape Plants I.....	3
PHYS 1110 General Physics .....	4
PHYS 1154 General Physics Lab I (not required for landscape design option).....	1
Literature Elective.....	3
<b>OR</b> additional math course (if MATH 1320 taken First Year/First Semester)	
Semester Total.....	17-18

##### Second Semester

ECON 2200 Principles of Economics (Micro).....	3
HORT 2130 Landscape Plants II.....	3
HORT 2660 Intro to Landscape Design .....	3-4
(Landscape design option required)	
<b>OR</b> SPCH 3130 Speech/Comm. in Bus./Prof.	
(all other options)	
<b>OR</b> History Elective	
Art Elective .....	3
Sociology Elective .....	3
Semester Total.....	15-16

#### Total Hours

Landscape design option .....	69
Other options.....	66

*\*Students are encouraged to take "Academic and Career Orientation" (US 1010) for a UNL CASNR elective.*

*\*\*MATH 1320. Hours earned in MATH 1320 will not count toward the mathematics requirements for UNL CASNR. Students are encouraged to use MATH 1320 as a free elective for their UNL CASNR program of study if they have an algebra deficiency. Students should complete their mathematics sequence at UNO. Since certain majors require calculus, the student is encouraged to review the UNL Undergraduate Bulletin for requirements in specific majors of interest.*

#### For more information...

contact Assistant Professor Steven Rodie, Pre-Horticulture Program, University of Nebraska at Omaha (402/554-3752); and/or contact the Dean's Office, CASNR, University of Nebraska-Lincoln (1/800/742-8800; ext. 2541).

## DEGREE REQUIREMENTS ARCHITECTURE, INTERIOR DESIGN, AND COMMUNITY AND REGIONAL PLANNING

### GENERAL INFORMATION

The College of Architecture at the University of Nebraska-Lincoln offers pre-professional programs, as well as graduate professional programs, through a number of courses at the University of Nebraska at Omaha. Students interested in a comprehensive description of the College's programs should refer to the undergraduate and graduate bulletins of the University of Nebraska-Lincoln.

Only the first two years of study can be completed at UNO. Transfer and third year admissions assistance is provided to help in the transition to UNL where they complete their studies.

The College of Architecture consists of two academic departments: the department of architecture and the department of community and regional planning. The department of architecture has two options, architecture and interior design.

The architecture option includes the two-year pre-architecture program, the subsequent two-year architecture program leading to the Bachelor of Science in architectural studies. The department of architecture also offers the professional Master of Architecture program and a post-professional master's degree. The professional Master of Architecture degree is accredited by the National Architectural Accreditation Board (NAAB). After successfully completing the prescribed pre-architecture program, students may apply for admission to the third year of study in the professional program of the department of architecture at UNL.

The interior design option in the department of architecture includes the two-year pre-interior design program and the subsequent two-year interior design program leading to the Bachelor of Science in architectural studies. This interior design program of study is accredited by the Foundation for Interior Design Education and Research (FIDER). After completing the prescribed pre-interior design program, students may apply for admission to the third year of study in the department of architecture at UNL.

**The University of Nebraska at Omaha cooperates with the College of Architecture at UNL by providing a four-semester pre-professional transfer program in pre-interior design and a four-semester pre-professional transfer program in pre-architecture.**

The department of community and regional planning offers the two-year professional Master of Community and Regional Planning degree which is accredited by the Planning Accreditation Board (PAB). A limited number of courses are available at UNO, all of which will apply toward the MCRP degree at UNL.

### ADMISSION AND ACADEMIC POLICIES

#### General Requirements

The College of Architecture and its various departments and programs reserve the right to change the rules governing admission to, instruction in and graduation from the College or its various departments and programs.

In addition to the UNO admission requirements, the College of Architecture has established supplemental admission requirements for undergraduate students. In addition to the specific requirements for interior design and architecture, the College has established the following general College requirements for undergraduate students.

New freshmen students must:

- graduate in the upper quartile of their high school class, **or**
- have an Enhanced ACT composite score of 22, **or**
- have a combined Enhanced SAT verbal and math total of at least 1030.

New foreign freshmen students must:

- meet UNO entrance requirements for new foreign freshmen students, **and**
- have an English proficiency test score of at least 80 or a minimum TOEFL score of 550.

New transfer students must:

- have a minimum 2.6 cumulative GPA and be in good academic standing.

*NOTE: New transfer students must comply with new freshman student entrance requirements for ACT, SAT or high school quartile rather than cumulative grade point average if they have completed less than 12 credit hours of college study.*

Students transferring from UNK and UNL are included in this new transfer student category.

New foreign transfer students must:

- meet UNO entrance requirements for foreign transfer students, **and**
- have an English proficiency test score of at least 80 or a minimum TOEFL score of 550
- have a minimum 2.6 GPA and be in good academic standing.

Students who transfer into the College of Architecture from other colleges at UNO must:

- have a minimum 2.6 GPA and be in good scholastic standing.

Students who apply for readmission into the college of Architecture must:

- have a minimum of 2.6 cumulative GPA and be in good scholastic standing.

### PRE-INTERIOR DESIGN ADMISSION REQUIREMENTS

Prospective students interested in the interior design option are eligible for admission to the pre-interior design program if their high school records meet the following standards:

- Four units in mathematics consisting of Algebra I, II, geometry and one additional unit that builds on a knowledge of algebra.
- Four units of English, consisting of intensive reading and writing.
- Three units of social sciences consisting of one unit of American and/or world history and one additional unit of history, American government and/or geography.
- Three units of natural sciences consisting of two units from biology, chemistry, physics and earth sciences. One of the units must include a laboratory.
- Two units of foreign language.

## PRE-ARCHITECTURE ADMISSION REQUIREMENTS

Prospective students interested in the architecture option are eligible for admission to the pre-architecture program if their high school records meet the following standards:

- Four units in mathematics consisting of Algebra I, II, geometry, one-half unit of trigonometry, and one additional unit that builds on a knowledge of algebra or precalculus.
- Four units of English, consisting of intensive reading and writing.
- Three units of social sciences consisting of one unit of American and/or world history and one additional unit of history, American government and/or geography.
- Three units of natural sciences consisting of two units from biology, chemistry, physics and earth sciences. One of the units must include a laboratory
- Two units of foreign language.

**Students with more than three pre-college deficiencies will not be admitted to the College of Architecture.**

## Scholastic Standards for Pre-Architecture and Pre-Interior Design Students

The following scholastic standards have been established for students in the pre-architecture and pre-interior design programs:

- First year pre-architecture and pre-interior design students who receive a semester grade point average of less than 2.0 or with a cumulative GPA below 2.0 will be placed on academic probation. The student will remain on probation until a semester is completed with **both** a semester and cumulative GPA at or above 2.0 or until the student is academically dismissed. After two consecutive semesters on academic probation, pre-architecture and pre-interior design students will be transferred out of the College of Architecture.
- Second year pre-architecture and pre-interior design students who receive a semester grade point average of less than 2.6 or with a cumulative GPA below 2.6 will be placed on academic probation. The student will remain on probation until a semester is completed with **both** a semester and cumulative GPA at or above 2.6. After two consecutive semesters on academic probation, pre-architecture and pre-interior design students will be transferred out of the College of Architecture.
- Pre-architecture and pre-interior design students who are placed on academic probation will not be allowed to take any new architecture and/or interior design courses without the permission of the department chairperson. However, students may retake architecture and interior design courses in which they received a "D" or "F". Students may take any one architecture or interior design course a maximum of three times. Students who register for new architecture and interior design courses while on probation will be administratively dropped from those courses.

## PRE-PROFESSIONAL PROGRAMS

### Pre-Interior Design Program

This four-semester pre-professional program is for the student interested in becoming a professional interior designer. The professional interior designer is a person qualified by education, experience and examination to:

- identify, research and creatively solve problems pertaining to the function and quality of the interior environment;
- perform services relative to interior spaces, including programming, design analysis, space planning and aesthetics, using specialized knowledge of interior construction, building systems and components, building codes, equipment, materials and furnishings; and
- prepare all drawings and documents relative to the design of interior spaces in order to enhance and protect the health, safety and welfare of the public.

A minimum of 64 semester hours and the completion of the pre-interior design program is required for admission to the UNL department of architecture. Preparations for the interior design option leading to the Bachelor of Science in architectural studies degree program can best be achieved by completing the following UNO courses as a pre-interior design student enrolled in the College of Architecture.

### First Year

#### First Semester

ARCH/ID 1060 .....	3
ARCH 1200 .....	3
ENGL 1150 .....	3
Art History 2050 .....	3
Humanities/social science elective* .....	3
Open elective* .....	1
Semester Total .....	16

#### Second Semester

ART 1100 .....	3
ENGL 1160 .....	3
Art History 2060 .....	3
MATH 1530 .....	3
Humanities/social sciences elective* .....	3
Open elective* .....	2
Semester Total .....	17

*\*See Architecture College adviser to coordinate University of Nebraska-Lincoln Integrative Studies/Essential Studies Comprehensive Education Program Requirements. First year students select from the following partial list: Anthropology 1050, Geography 1020, Philosophy 1010, Philosophy 1210, Political Science 1100, Psychology 1010, Sociology 1010. Second year students see Architecture College adviser.*

### Second Year

#### First Semester

ARCH 2100 .....	3
ARCH 2200 .....	2
ARCH 2400 .....	3
SPCH 1110 .....	3
Humanities/social science elective* .....	3
Computer Elective (ARCH 2230) .....	3
Semester Total .....	17

## Second Semester

ARCH 2110 .....	3
ARCH 2210 .....	2
Natural science elective .....	4
TXCD 2060 .....	3
Humanities/social science elective* .....	3
Semester Total .....	15

Upon successful completion of two years of the pre-professional pre-interior design studies and admission to the department of architecture, students may apply for admission to the third year of study in the department of architecture and transfer to the UNL campus at the end of their second year.

## Pre-Architecture Program

This two-semester pre-professional transfer program is for the student interested in becoming a professional architect. The primary responsibility of the architectural profession is the design of efficient and emotionally satisfying environments for human occupation and use. Architects, therefore, must be able to analyze the functional and psychological needs of the people who will utilize their creations and then effectively synthesize the complex structural, mechanical and aesthetic components that form their buildings.

The study of architecture at UNO is limited to the four-semester pre-architecture program because of the highly structured nature of the professional program in architecture at the UNL campus. Most of the required courses for the third through sixth years of the professional program are not available at the UNO campus. For this reason, students wishing to pursue the Professional Program in Architecture must apply for admission to the third year of study in the department of architecture and transfer to the UNL campus at the end of their second year.

A minimum of 64 semester hours and the completion of the pre-architecture program is required for admission to the UNL department of architecture.

## First Year

### First Semester

ARCH/ID 1060 .....	3
ARCH 1200 .....	3
ENGL 1150 .....	3
PHYS 1050 .....	4
Humanities/social science elective* .....	3
Open elective* .....	1
Semester Total .....	17

### Second Semester

ART 1100 .....	3
ENGL 1160 .....	3
MATH 1950 .....	5
Humanities/social science elective* .....	3
Open elective* .....	2
Semester Total .....	16

*\*See Architecture College adviser to coordinate University of Nebraska-Lincoln Integrative Studies/Essential Studies Comprehensive Education Program Requirements. First year students select from the following partial list: Anthropology 1050, Geography 1020, Philosophy 1010, Philosophy 1210, Political Science 1100, Psychology 1010, Sociology 1010. Second year students see Architecture College adviser.*

## Second Year

### First Semester

ARCH 2100 .....	3
ARCH 2200 .....	2
ARCH 2400 .....	3
GET 2120 .....	3
Humanities/social science elective* .....	3
Semester Total .....	14

### Second Semester

ARCH 2110 .....	3
ARCH 2210 .....	2
Computer elective (ARCH 2230) .....	3
GET 2130 .....	3
Speech 1110 .....	3
Open elective* .....	3
Semester Total .....	17

## **Eligibility for College of Architecture Courses**

ARCH/ID 1060 is open to all university students. All other architecture courses are open only to pre-architecture and pre-interior design majors. Students must follow the prerequisites listed in the architecture course descriptions.

For more information on pre-architecture and pre-interior design, contact the College of Architecture Dean's Office at (402) 472-4065.

## **English Courses**

It is of vital importance that architects and interior designers be able to express themselves clearly and concisely. As a matter of routine, architects and interior designers are called upon to prepare reports, papers or specifications in which clarity and precision are essential. For this reason a student in the College of Architecture must demonstrate an acceptable skill in the use of effective English in daily oral and written work.

English as a Second Language 1090 and English as a Second Language 1100 may not be used to satisfy the freshman English composition requirement.

## **Math Courses**

College algebra, college trigonometry and basic math courses cannot be applied to the bachelor of science in architecture studies degree for math requirements or open elective credit.

## **Military Science, Naval Science, Aerospace Studies and/or Physical Education**

A maximum combination of military science, naval science, aerospace studies and/or physical education totaling six credit hours can be applied toward the bachelor of science in architectural studies degree as open elective credit.

## **Pass/No Pass Policy**

A student may apply a maximum of 12 pass/no pass credit hours to the bachelor of science in architecture studies degree, however, pass/no pass credit shall not be allowed to fulfill the major supporting courses in English composition, art, art history, natural science, computer courses, speech, physics, or math. Pass/no pass credit cannot be used to fulfill the professional elective requirements in architecture or interior design.



No student shall enroll in more than six pass/no pass credit hours during any one semester.

**Incompletes**

College of Architecture students will be allowed a maximum of two weeks to remove incompletes from courses that are prerequisites to classes in which they are currently enrolled.

**Course Substitutions**

Students wishing to modify their course requirements or elective requirements must petition the Professional Program Committee of the UNL department of architecture by completing a substitution form. Substitution forms, obtained from the college adviser, must be reviewed by the college adviser before being submitted to the Professional Program Committee. Students are advised to have substitutions approved by the Professional Program Committee **before** enrolling in a substitute course.

**COMMUNITY AND REGIONAL PLANNING**

The College of Architecture, through its department of community and regional planning, offers a number of undergraduate courses at UNO to serve the area's professional planners, governmental officials, interested citizens and students in related programs. These are evening courses intended primarily for people who wish to pursue their studies while employed full time. These courses are not part of an undergraduate degree program.

The department does offer a Master's of Community and Regional Planning (MCRP) degree at UNL. Some graduate courses may be taken at UNO as partial completion of these degree requirements. Please refer to the graduate catalog for more information.

Planning is an interdisciplinary problem-solving profession that influences a broad range of future-oriented decision making. Planners work with individuals, groups and organizations to formulate plans, policies and strategies through which desired change can be achieved. Planners utilize a wide variety of methods and techniques to identify problems and needs and to formulate plans of action that effectively address those needs. Planners often need to accommodate differing viewpoints in the process of formulating desirable and compatible plan and policy recommendations.

**For more information...**

contact the department of community and regional planning, University of Nebraska-Lincoln, at (402) 472-9280.

**Web site...**

Visit the UN-L College of Architecture Student Guide on the web for information on program flow charts, third year portfolio requirements, UN-L College of Architecture computer policy, and UN-L College of Architecture student organizations at <http://www.unl.edu/archcoll/index.html>.

**GENERAL INFORMATION**

The College of Arts and Sciences offers work toward the degrees of Bachelor of Arts and Bachelor of Science, as well as pre-professional programs for students planning to enter such fields as medicine and law. The College is organized into 15 departments grouped under three large subject-matter divisions: humanities, social sciences, and natural sciences.

Freshman and sophomore courses in the college carry numbers between 1000 and 2999; these are sometimes called "lower division" courses. They address general education with emphasis on breadth rather than depth. Subjects required or recommended for freshmen and sophomores include English, foreign languages, world civilizations, oral communication, mathematics, and basic courses in each of the three subject-matter divisions. A somewhat less flexible program is prescribed for some professional and pre-professional students.

Courses in the last two years of the liberal arts program are numbered 3000 through 4999, and are sometimes called "upper division" courses. While essentially a continuation of the lower division work, the last two years in the college provide for specialization in one or two subject areas. At present, academic majors are available in the following fields: biology, biotechnology, black studies, broadcasting, chemistry, computer science, economics, environmental studies, engineering physics, English, French, general science, geography, geology, German, history, interdisciplinary studies, international studies, journalism, mathematics, philosophy, physics, political science, psychology, religion, sociology, Spanish and speech.

The pre-professional programs of study are determined largely by the requirements of the graduate or professional schools which students intend to enter. If arranged carefully, they provide a sufficient variety of courses so that their objectives are virtually the same as those of the four-year course leading to the B.A. or B.S. degrees. These programs are not academic majors and a student seeking a degree must complete the requirements of a major as well.

**ADMISSION TO THE COLLEGE**

All students who have not yet earned any college credit and who are eligible to enter the university are accepted for admission to the college. However, admission of transfer students or students who have previously been enrolled at UNO is evaluated on an individual basis. A 2.0 grade point average in previous course work is required.

**REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE**

The requirements specified below became effective the fall semester of 1990. All students entering the university during or after this semester are subject to the requirements below. Students entering prior to this time are subject to those requirements in effect at the time of their initial admission, as long as they have maintained continuous enrollment. If there is any doubt as to which graduation requirements apply, consult the Office of the Dean.

**Senior Check**

After students reach 91 hours of course work completed, they must have their schedules checked in the Dean's Office each semester until graduation. Assuming satisfactory completion of all approved courses, this process will assure the student's graduation date. Should this procedure not be followed, responsibility for meeting graduation requirements falls on the student; if errors are made they can prevent graduation at the anticipated date.

**Total Hours**

Candidates must present a minimum of 125 hours of college credit.

**Quality of Work**

Candidates for the degree must attain an average grade of at least "C" in all college work, including work transferred from other institutions. They must earn a grade of at least "C" in all departmental courses presented in satisfaction of a major and/or minor, and in all courses presented in satisfaction of the "enhancement of fundamental competencies" requirement and the "general understanding" requirement. Each candidate must earn an average grade of at least "C" for the 12 hours of course work presented in each of the three distribution requirement areas (humanities, social sciences, and natural sciences). To qualify for a grade of "CR" in any course in the College of Arts and Sciences, a student must qualify for a grade of at least "C" in that course. All grades reported by the faculty to the registrar become part of the students' permanent records, and are included in the computation of their grade point averages even though some of these grades may be for work done in excess of the 125 hours required for graduation. The only exception to this rule is provided in the section of these requirements entitled "Amnesty Clause."

**Residence**

Thirty of the last 36 hours required for the degree must be registered for and carried at the University of Nebraska at Omaha.

**Enhancement of Fundamental Competencies  
English and Writing**

The requirement in English is a minimum of six credit hours in courses to be determined by the department of English, plus an additional three-hour writing course approved as relevant to the student's major. All incoming freshmen, and transfer students who have not completed their English composition courses with a grade of "C" or better at other accredited institutions, must take the English Placement Examination. This test is designed to indicate specific needs the student may have in English composition.

**Oral Communication**

Each student must complete three credit hours in one of the following courses: Speech 1110, 1120, 3120, 3130 or 3140. The course that is used to satisfy this requirement may not be used to satisfy a distribution requirement in humanities.

**Mathematics**

Each student must complete three credit hours in mathematics other than Mathematics 1430, 1530 and 2000.

## General Understanding

### History

Each student must complete a six-hour, two-semester 1000-level sequence of courses in world civilizations.

Transfer students who have taken two semesters of Western Civilization may count three hours toward the World Civilizations requirement and then take three hours (usually History 1000) to complete their World Civilizations requirement, or they may take one of the following: History 2470, 2480, 2710, 2810, 2820, 2900, 2920.

### Foreign Languages

The candidate must present two years (16 credit hours) of college work in one foreign language or the equivalent thereof, as determined by the department of foreign languages. An acceptable equivalent may consist of:

- two years of foreign language in high school, plus four semesters of college work in the same language (courses 1110, 1120, 2110, and 2120);
- three years of foreign language in high school, plus three semesters of college work in the same language (courses 1120, 2110 and 2120);
- four years of work in the same foreign language in high school; or
- for unusual circumstances, please see the department of foreign languages.

A student fulfilling the foreign language requirement through a combination of high school and college work must complete the chosen language through the fourth semester college course. A student may, however, request permission to satisfy the requirement by passing a standardized proficiency test at the fourth semester college level. Circumstances under which such permission might be given include experience abroad, foreign language spoken in the home, and private study or tutoring.

The department of foreign languages will grant retroactive credit in French, German, or Spanish 1110, 1120, 2110, or 2120 subject to the following conditions:

- a student who completes any French, German, or Spanish course in the 1110-2120 sequence with a grade of "C" or better at UNO without having completed the previous courses may be granted credit for those previous courses;
- a student who completes a 3000-level course in French, German, or Spanish with a grade of "C" or better at UNO without having completed the 1110-2120 sequence may be granted credit for any of the courses 1110, 1120, 2110, and 2120 for which credit has not already been earned.

After successful completion of the advanced course, students should apply for retroactive credit to the department of foreign languages; an official grade report will be required.

Students for whom English is not their language of nurture may use their language of nurture to satisfy the foreign language requirement of the College of Arts and Sciences. Application should be made to the department of foreign languages for permission to so satisfy the requirement.

## Requirements for Early Completion

The requirements in English, oral communication, mathematics and history must be completed by the end of the semester in which a student successfully completes 60 hours of course work; students who fail to meet this stipulation will not be permitted to defer their enrollment in those courses needed to fill the requirement.

### **Cultural Diversity**

All colleges require six hours of course work designed to enhance knowledge of cultural diversity. An approved three-hour course in United States racial or Hispanic minority groups must be completed by all students. This part of the requirement may be satisfied by course work in the major, by courses taken to fulfill distribution requirements, or by electives. The second three hours of the cultural diversity requirement will normally be met by completion of a World Civilizations course. However, it might also be met by approved courses in women's studies, courses with an international focus, or by another course dealing with U.S. minority groups.

### **Distribution Requirements**

The distribution requirements of the college are designed to ensure that all students complete a broad variety of courses in the humanities, social sciences and natural sciences. Students may apply up to four credit hours of course work from their departmental major toward satisfaction of the appropriate distribution requirement. Appropriate courses may be used to satisfy both cultural diversity and distribution requirements. No course used to satisfy an "enhancement of fundamental competencies" requirement or a "general understanding" requirement may be applied toward a distribution requirement.

### Humanities

A student must complete four approved humanities courses of at least three credit hours each. Three courses must be chosen from three of the nine categories listed below. The fourth course may be from a fourth category or a 3000 or 4000 level course in a category already used.

- black studies
- communication: broadcasting, journalism or speech
- English
- fine arts: art, dramatic arts or music
- foreign languages
- Goodrich Program
- humanities\*
- philosophy or religion
- women's studies

*\*A student needs only three courses chosen from two categories if two of those courses are Humanities 1010 and 1020 or Humanities 2100 and 2200.*

### Social Sciences

A student must complete four approved social science courses of at least three credit hours each. Three courses must be chosen from three of the eleven categories listed below. The fourth course may be from a fourth category or a 3000 or 4000 level course in a category already used.

- black studies
- economics

- geography (except for physical geography)
- Goodrich Program
- history
- international studies
- political science
- psychology
- social sciences
- sociology or anthropology
- women's studies

## Natural Sciences

A student must complete at least 11 credit hours of approved course work which includes one laboratory course of at least four credit hours from each of the two categories below. The additional approved course work to complete the requirement may come from a third department, including biology, chemistry, computer science, food science, geography/geology, horticulture, mathematics, and physics; or from courses at the 2000 level or higher in a department already used.

- biology, physical geography, geology, or natural science
- chemistry, physics or natural science

## **Approved Courses in Humanities**

Black Studies: 1050, 1100, 1260, 2260, 2350, 2360, 2510, 2730, 2830, 3750, 3850, 3920, 3950, 3980, (when appropriate), 4000, 4260, 4500, 4700, 4900, (when appropriate)

Communication: Broadcasting 2310, 4310, 4340, 4350, 4380, 4980; Journalism 1500, 4010, 4220, 4400, 4410, 4420, 4430, 4500, 4900, 4910, 4980; Speech 1710, 2010, 2410, 3150, 3160, 3520, 3600, 3700, 3750, 4110, 4140, 4170, 4510, 4520, 4530, 4540, 4550, 4980;

English: all courses **except** 1050, 1090, 1100, 1150, 1154, 1160, 1164, 2000 (writing topic), 2160, 2400, 2430, 3000 (writing topic), 3980, (writing topic), 4940 (writing topic), 4990;

Foreign Languages: all courses;

Goodrich: 1110;

Humanities: all courses;

Philosophy: all courses;

Religion: all courses;

Art: 1010, 2040, 2050, 2060, 2080, 3150, 3260, 3270, 3350, 3400, 4450, 4500, 4550, 4600, 4650, 4670, 4700, 4750, 4850, 4900;

Dramatic Arts: 1010, 1050, 1070, 1080, 1090, 2810, 2820, 3510, 4090, 4710, 4720, 4730, 4830;

Music: 1070, 1080, 1090, 1100, 2550, 2560, 2570, 4530;

Women's Studies: 2020;

Writer's Workshop: 1010.

## **Approved Courses in Social Sciences**

Anthropology: all courses;

Black Studies: 1000, 1220, 1340, 1400, 1950, 2000, 2120, 2130, 2210, 2410, 2420, 2900, 3000, 3030, 3120, 3140, 3200, 3220, 3500, 3650, 3980 (when appropriate), 3990, 4090, 4900 (when appropriate);

Economics: all courses;

Geography: 1000, 1020, 2500, 3000, 3030, 3060, 3070, 3080, 3130, 3230, 3240, 3330, 3930, 4010, 4020, 4120, 4140, 4160, 4230, 4530, 4600, 4800, 4900;

Goodrich: 2110;

Gerontology: 2000;

History: all courses except 1000 and 1010;

Horticulture: 2000;

International Studies: 2130, 2140;

Political Science: all courses;

Psychology: all courses;

Social Sciences: 2000, 2100;

Sociology: all courses except 2130;

Women's Studies: 2010.

## **Approved courses in Natural Sciences**

Anthropology: 3910;

Biology: all courses except 1000, 1010, 1030;

Chemistry: all courses;

Mathematics: all courses except 1430, 1530, 1600, 2000;

Computer Science: all courses except 1000, 1500;

Geology: all courses;

Geography: 1030, 1060, 1070, 2620, 3510, 3530, 3540, 3550, 4030, 4050, 4100, 4250, 4260, 4320, 4610, 4630;

Physics: all courses;

Natural Sciences: 2010, 2020;

Horticulture: 1300, 2120, 2210;

Food Science: 1310.

## Writing Courses

Students should contact their departments for the approved advanced writing course for their majors. Approved courses include Biology 3150; NSCI 2500, 3354, 3930, 4960; Journalism 2150, 3220, 3400, 4220; English 2400, 2430, 3980, 4700; Geology 4950; History 3930; Foreign Languages: French 4040, German 4040, Spanish 4040; Philosophy 3130; Psychology 2140 with one of the lab courses (3014, 3214, 3234, 4280); Political Science 4950; Religion 2150; Sociology 4900. English 1160 (or proficiency) is a prerequisite for these courses.

## Cultural Diversity Courses

### *United States Racial or Hispanic Minority*

These include Anthropology 3220, 4220; Black Studies 1000, 1100, 1220, 1260, 1400, 1950, 2000, 2210, 2260, 2350, 2360, 2410, 2420, 2510, 2730, 2830, 3000, 3120, 3200, 3220, 3650, 3850, 3920, 3950, 4090, 4500; English 2230, 2260, 2350, 2360, 2470, 3100, 4180; History 4400; Religion 3020; Humanities 1100, 1200; Music 4090; Political Science 3100, 3120; Spanish 4180; Sociology 3900; 4230.

### *Gender*

These include Black Studies 1950; English 4250, 4860; History 3580, 4060; Humanities 2020; Political Science 3130; Religion 3250; Sociology 4300; Spanish 4160; Women's Studies 2010, 2020.

### *Foreign Focus*

These include Anthropology 3210, 3260; Black Studies 1050, 1340, 2120, 2130, 2900, 3030, 3140, 3500, 4700; French 4200; Geography 1020, 3030, 3060, 3070, 3080, 3090, 3230, 3240; History 1000, 1010, 1050, 2190, 2470, 2480, 2510, 2520, 2560, 2580, 2610, 2620, 2660, 2710, 2720, 2810, 2820, 2900, 2920, 3530, 3640, 3710, 4560, 4610, 4780; Journalism 4430; Philosophy 2110; Political Science 2500, 2560, 3220, 3500, 3560, 3580, 3640, 3660, 3680, 4200, 4210, 4280, 4360, 4370, 4500, 4520; Religion 1010, 2150, 2160, 2190, 3010, 3050, 3060, 3120, 3150, 3170, 3200, 4020, 4150; Sociology 2190; Speech 4530.

## Major Field

Each candidate for the Bachelor of Arts degree must present a major including at least 18 credit hours of upper division work, i.e., 3000 and/or 4000-level courses, designated as appropriate by the faculty in one of the following fields: biology, black studies, broadcasting, chemistry, computer science, economics, English, French, general science, geography, geology, German, history, interdisciplinary studies, international studies, journalism, mathematical sciences, philosophy, physics, political science, psychology, religion, sociology, Spanish and speech. A candidate meeting the requirements in each of two fields may present a double major in these fields.

## Minor Field

Although not required for graduation, a student may elect a minor in addition to the major. The minor must contain at least 12 hours of upper division work. See the respective departments for details. Minors are offered in the following fields: anthropology, black studies, chemistry, Chicano/a-Latino/a studies, computer science, English, environmental studies, foreign languages, geography, geology, history, mathematics, Native American studies, philosophy, physics, political science, psychology, religion, sociology, speech and women's studies.

## Maximum Hour Limits

No candidate may count more than 45 credits in any one discipline in which a major is offered, toward the minimum 125 credits required for the Bachelor of Arts or Bachelor of Science degrees.

## Other Limitations on Credit Granted; Nine-Hour Rule

Courses in other colleges of the university not specifically approved by the Arts and Sciences faculty are not accepted as part of a degree program except as provided under the "nine-hour rule" and other circumstances listed below. The "nine-hour rule" states that, in general, an Arts and Sciences student may apply toward the degree a total of up to nine credit hours in approved courses offered outside of the College of Arts and Sciences (or an equivalent college in another institution). The only exceptions to this limitation are the following:

- All credits in aerospace studies and military science departments.
- A maximum of four out of 125 credits in physical education activity courses.
- Completion of the sequence of courses in the College of Education required for the Nebraska Secondary School Certificate.
- Honors Colloquia.
- Courses necessary for a second major, minor or teaching field, provided the student also completes a major in the College of Arts and Sciences.
- Courses a department chairperson may wish to recommend for inclusion in an Arts and Sciences major or cognate area (e.g. business for an economics major).
- All economics courses.
- All fine arts courses.
- Goodrich courses.
- All computer science courses.

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE

The Bachelor of Science degree provides greater opportunity for concentrated and specialized study in a particular field, generally in the natural or social sciences. The requirements for the Bachelor of Science degree are the same as those for the Bachelor of Arts degree except as follows:

## Major Field

Each degree candidate must present a major including at least 18 credit-hours of upper division work (3000 or 4000-level) designated as appropriate by the faculty in one of the following fields: biology, biotechnology, broadcasting, chemistry, computer science, economics, engineering physics, environmental studies, geography, geology, history, interdisciplinary studies, journalism, mathematical sciences, physics, political science, psychology and speech communication.

## Foreign Language

The inclusion of a foreign language is at departmental option. A B.S. candidate who presents two years of college work (16 hours) in one foreign language in order to fulfill a departmental requirement may apply six hours of that language credit to the humanities distribution requirement. The applied six hours must be from language courses 2110, 2120 or above. Currently chemistry and psychology require foreign language for a B.S. degree.

## Cognate Courses

Each department or program shall designate a minimum of 15 credit hours from cognate fields outside the student's major department. These courses must support the student's work within the major. Each department shall determine criteria and procedures for the selection of courses for each student; these criteria and procedures shall be approved by the Educational Policy Committee of the College.

## OTHER INFORMATION

### Grade Appeals

If a student believes that a grade has been assigned erroneously, the instructor of the course should be contacted immediately. If the problem cannot be resolved with the instructor, and if the student believes that the instructor's grading reflected prejudice or capriciousness, then he/she should contact the chairperson of the department in which the course was taught. If a solution satisfactory to both student and instructor cannot be reached at the department level, either one may petition the Educational Policy Committee of the College of Arts and Sciences for a final hearing. Such a petition must be made in writing. It must state explicitly the basis for the appeal and must include supporting data. Appeals to the college committee must be filed no later than the end of the next regular semester following receipt of the grade. All course materials relevant to student evaluation must be retained by the faculty member for this time period or returned to the students; students are responsible for custody of any materials returned to them.

The chairperson of the department in which the student wishes to file the grade appeal should be contacted for additional information.

### Honors Program

The Arts and Sciences General Honors Program provides highly motivated students an exceptional educational opportunity, enabling them to challenge and expand their intellectual capacities through a special program of multidisciplinary seminars, close working relationships with distinguished faculty, and participation at an academic level not generally possible in the usual curricular offerings. Students in good standing may be considered for admission to Arts and Sciences General Honors Program. For further information contact the Arts and Sciences Office.

### Dean's List

Students may earn a position on the Dean's List by fulfilling the following criteria:

1. The student must earn a GPA of 3.5 or better for courses taken at UNO during the semester provided 12 or more semester hours were completed.
2. The part-time student must earn a GPA of 3.5 or better for courses taken at UNO on a continuous part-time basis. These students may be placed on the Dean's List when they complete course work in 12 semester hour blocks at UNO, i.e., 12, 24, 36, 48, etc. Continuous part-time basis is defined as taking one or more courses totaling 1-11 semester hours during each fall and spring semester each academic year.

## Academic Amnesty

Students, after 24 consecutive credit hours of successful work at UNO, UNL or UNK (with at least a 2.5 grade point average), may petition the Educational Policy Committee to have either or both of their first two semesters' grades removed from their cumulative grade point average. No other semesters may be considered. With concurrence of the committee, those courses in which a minimum grade of "C" is earned may continue to count as hours toward graduation. This petition is subject to the following stipulations:

- The student shall be at least four years removed from the semester or year to be deleted.
- The student is responsible for initiation of the petition.
- This petition must come through the student's counselor or academic adviser to the Dean of the college.
- The student has to complete at least 24 semester hours of successful work at any of the University of Nebraska system universities (UNO, UNL and UNK) for the period in which amnesty is being requested. The grade average for all courses taken since the amnesty period at the University of Nebraska system (UNO, UNL and UNK) shall be at least a 2.5.
- The period of time considered for amnesty is the **first two semesters of college work which are included in the UNO GPA.**
- Only the first two semesters can be used for academic amnesty – and those first two semesters must have been taken at the University of Nebraska (UNO, UNL or UNK).
- The Arts and Sciences Dean's Office will make the calculations based on college rules and simply list amnesty cases as a report item on the Educational Policy Committee agenda unless there is some reason for the committee to examine a case more closely.
- Individuals who apply under this rule may not be considered for degrees with honors at graduation.
- There shall be no physical obliteration of any part of the student's record.

Therefore, students may petition to have grades from courses in either or both semesters of their University of Nebraska freshman year removed from their cumulative grade point averages, but may count courses in which they earn at least a "C" toward graduation requirements. Academic amnesty is not allowed after a student has graduated.

## PROGRAM REQUIREMENTS BACHELOR OF ARTS OR BACHELOR OF SCIENCE WITH THE SECONDARY TEACHING CERTIFICATE

Students who plan to teach can meet the requirements for the degree of Bachelor of Arts or Bachelor of Science as well as the requirements for the Secondary Teaching Certificate. Students in the College of Arts and Sciences who are considering the possibility of teaching careers should consult the Dean's Office.

# DEGREE REQUIREMENTS ARTS AND SCIENCES

## PRE-PROFESSIONAL PROGRAMS

### Pre-Chiropractic Curriculum

Following is a recommended course of study for students planning to enter a chiropractic college.

A minimum of 60 credit hours are required of which the following preprofessional credits must be earned with a grade of "C" or above:

#### Biological Sciences .....8 credit hours minimum

BIOL 1450	Biology I
BIOL 1750	Biology II
AND/OR	
BIOL 2740	Human Physiology and Anatomy I (fall, summer)
BIOL 2840	Human Physiology and Anatomy II (spring, summer)

#### Chemistry\* .....15 credit hours minimum

CHEM 1180-1184	General Chemistry I and Lab
CHEM 1190-1194	General Chemistry II and Lab
CHEM 2250	Organic Chemistry I
CHEM 2260-2274	Organic Chemistry II and Lab

#### Physics .....10 credit hours minimum

PHYS 1110-1154	General Physics and Lab
PHYS 1120-1164	General Physics and Lab
OR	
PHYS 2110-1154	General Physics Calculus Level and Lab
PHYS 2120-1164	General Physics Calculus Level and Lab

#### Mathematics\*\* .....3 credit hours minimum

MATH 1310	Intermediate Algebra
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#### English\*\* .....6 credit hours minimum

ENGL 1150	English Composition
ENGL 1160	English Composition

#### Psychology .....3 credit hours minimum

PSYC 1010	Introduction to Psychology I
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#### Social Sciences and Humanities .....18 credit hours minimum

Recommended:	
HIST 1000	World Civilizations I
HIST 1010	World Civilizations II
SPCH 1110	Public Speaking Fundamentals

\*MATH 1310 or equivalent is a prerequisite for CHEM 1180-1184.

\*\*Math and English placement determined by examination.

### Pre-Law Curriculum

Students who are preparing to attend a law school should anticipate at least three years of college work, although most law schools require the Bachelor of Arts, or similar degree, for admission.

No program of prescribed studies is outlined for pre-law students. Rather, and in keeping with the suggestions of the Committee on Pre-Legal Education of the Association of American Law Schools, the academic program of each student is arranged in the way which will best assure the development of those basic skills and insights needed for the study of law. Copies of the summary statement of the Association of American Law Schools may be obtained

from the Pre-law Adviser. The pre-law program must include at least 15 hours of English.

No particular undergraduate major is required for pre-law studies. Students should consult department counselors about recommendations and requirements in their selected major area. Pre-law students planning to enter law school during the following academic year should obtain applications for the Law School Admissions Test and the Law School Data Assembly Service from 113 Eppley Administration Building by the February test date.

### Pre-Dental Curriculum

A minimum of 90 credit hours and completion of the required pre-dental courses are necessary to make application to the College of Dentistry. A maximum of four credit hours in physical education or military science may be used toward the requirements. A student should maintain a grade point average of B or better.

Students must choose a major and follow the requirements for that major while completing the necessary pre-dentistry courses. The undergraduate program must include courses from the following list.

#### Biological Sciences .....10 credit hours minimum

BIOL 1450	Biology I
BIOL 1750	Biology II
Recommended Electives:	
BIOL 2140	Genetics
BIOL 2440	Microbiology
BIOL 3020	Molecular Biology of the Cell
BIOL 4950	Vertebrate Embryology and Anatomy

#### Chemistry\* .....16 credit hours minimum

CHEM 1180-1184	General Chemistry I and Lab
CHEM 1190-1194	General Chemistry II and Lab
CHEM 2250	Organic Chemistry I
CHEM 2260-2274	Organic Chemistry II and Lab
CHEM 3650-3654	Fundamentals of Biochemistry and Lab (Recommended)

#### Physics .....10 credit hours

PHYS 1110-1154	General Physics and Lab
PHYS 1120-1164	General Physics and Lab
OR	
PHYS 2110-1154	General Physics and Lab
PHYS 2120-1164	General Physics and Lab

#### English Composition\*\* .....6 credit hours

ENGL 1150	English Composition
ENGL 1160	English Composition

#### Speech Communication .....3 credit hours

SPCH 1110	Public Speaking Fundamentals
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#### History .....6 credit hours

HIST 1000	World Civilizations I
HIST 1010	World Civilizations II

#### Mathematics .....3 credit hours

MATH 1310	Intermediate Algebra
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<u>Statistics</u> .....	3 credit hours
PSYC 2130	Statistics for the Behavior Sciences
SOC 2130	Basic Statistics
STAT 3000	Statistical Methods

## Humanities and Social Sciences

Students should complete the distribution requirements in humanities and social sciences in this catalog. Suggested courses include SPCH 2010, PSYC 1010, SOC 1010, PHIL 1210, ANTH 1050, ECON 2200, 2220, as well as courses in English literature and political science. Business electives such as Introduction to Business (BSAD 1500), business law and accounting would also be helpful.

*\*MATH 1310 is a prerequisite for chemistry. Students with an inadequate chemistry background should register for the CHEM 1140/1144, 1180, 1190 sequence.*

*\*\*Electives may be substituted if proficiency is established by examination.*

## Pre-Dental Hygiene Curriculum

The University of Nebraska at Omaha cooperates with the University of Nebraska Medical Center College of Dentistry at Lincoln by offering the non-professional courses which satisfy needed college hours for the Baccalaureate program. Adviser: Dean's Office.

Applicants must have successfully completed the necessary course work which should also include a twelve credit hour concentration in an area of interest. Applications should be submitted by December 1. Applicants should have a minimum grade point average of 2.5 on a 4.0 grading scale.

### Science content requirements:

<u>Biology (and labs)</u> .....	8 credit hours minimum
BIOL 1020	Principles of Biology
BIOL 2440	Microbiology

<u>Anatomy and Physiology</u> .....	8 credit hours minimum
BIOL 2740	Human Physiology and Anatomy I (fall/summer)
BIOL 2840	Human Physiology and Anatomy II (spring/summer)

<u>Chemistry (and labs)</u> .....	8 credit hours minimum
CHEM 1180-1184	General Chemistry I and Lab
CHEM 1190-1194	General Chemistry II and Lab
or	
CHEM 1140-1144	Fundamentals of College Chemistry and Lab
CHEM 2210-2214	Fundamentals of Organic Chemistry and Lab

Math 1310 is a prerequisite for chemistry.

<u>Mathematics</u> .....	3 credit hours minimum
MATH 1310	Intermediate Algebra

### General Education Requirements:

<u>English Composition:</u> .....	6 credit hours minimum
ENGL 1150	English Composition
ENGL 1160	English Composition

<u>Speech Communication</u> .....	3 credit hours minimum
SPCH 1110	Public Speaking Fundamentals

<u>Nutrition</u> .....	3 credit hours minimum
NUTR 1510	Intro to Nutrition

<u>Psychology and Sociology</u> .....	3 credit hours
PSYC 1010	Intro to Psychology
SOC 1010	Intro to Sociology

## Electives

Elective courses to complete the required 60 credits may be chosen from the humanities (English literature, philosophy, art history, music history, theater arts), the social sciences (psychology, sociology, anthropology, economics, political science, history, geography), business education, computer science, mathematics, or the basic sciences (anatomy, botany, chemistry, biochemistry, nutrition, physics, physiology, and zoology). At least twelve credit hours must be concentrated in an area of interest. Six hours are required in the humanities; three hours are required in the social sciences.

For more information on courses at UNO call the Arts and Sciences Dean's Office at 554-2458. For more information about UNMC College of Dentistry call 472-1433.

## Pre-Medical Technology Curriculum

The University of Nebraska at Omaha cooperates with the Division of Medical Technology at the University of Nebraska Medical Center in providing a pre-medical technology curriculum. Admission to the senior year of the medical technology program requires the applicant to successfully complete at least 90 semester hours. Students who have completed at least 60 credit hours should submit an application by November 1 to be considered for the class beginning the following summer.

Clinical positions are available at the three participating programs of Medical Technology (Bishop Clarkson Memorial Hospital, Nebraska Methodist Hospital and University of Nebraska Hospital). Students are selected to fill the positions on a competitive basis. Past experience has shown that students should have maintained an overall grade point average of at least 2.5 and a science grade point average of at least 2.5 in order to be competitive for selection for one of the positions in the program.

<u>Biological Sciences</u> .....	16 credit hours minimum
Must include microbiology, genetics and immunology.	

BIOL 1010	Intro to Medical Technology (fall)
BIOL 1020	Principles of Biology
BIOL 2440	Microbiology
BIOL 2740	Human Physiology and Anatomy I (fall, summer)
BIOL 2840	Human Physiology and Anatomy II (spring, summer)
BIOL 2140	Genetics
BIOL 3240	Immunology (fall)
BIOL 3830	Biology of Pathogenic Microorganisms (spring)
MEDT 302*	Intro to Hematology (spring)



# DEGREE REQUIREMENTS ARTS AND SCIENCES

## Chemistry\*\* .....16 credit hours minimum

Must include:

CHEM 1180-1184 General Chemistry I and Lab  
CHEM 1190-1194 General Chemistry II and Lab  
CHEM 2210-2214 Organic Chemistry and Lab  
CHEM 3650-3654 Fundamentals of Biochemistry and Lab

## Mathematics .....3 credit hours

One semester minimum, additional recommended  
MATH 1310 Intermediate Algebra

## English Composition .....6 credit hours

ENGL 1150 English Composition  
ENGL 1160 English Composition

## Speech Communication .....3 credit hours

SPCH 1110 Public Speaking Fundamentals

## History .....6 credit hours

HIST 1000 World Civilizations I  
HIST 1010 World Civilizations II

## Computer Science .....3 credit hours

CSCI 1000 Computer Literacy with Applications

## Recommended Electives

Students should select electives to achieve a total of 90 semester hours including a broad general educational background. Strongly recommended subjects include: statistics, molecular biology, critical thinking, psychology, plus any additional biology, chemistry and physics.

\*Register intercampus for this UNMC course during the spring semester of the junior year.

\*\*Students with an inadequate chemistry background may want to register for the CHEM 1140-1144, 1180, 1190 sequence. MATH 1310-1314 (or equivalent) is a prerequisite for chemistry. CHEM 2250 and 2260-2274 may be substituted for CHEM 2210-2214 and 3650-3654.

## Pre-Medicine Curriculum

Pre-medical students must secure a minimum of 90 credit hours of college credit before making application to most medical colleges. Medical colleges ordinarily give preference to students who have received a baccalaureate degree. Specific requirements may vary among medical colleges but, in general, the pre-medical program must include courses from the following list. Students should choose a major and follow the requirements for that major while completing the necessary pre-medical courses. Unless biology is chosen as a major, courses which will be encountered in the medical college should be avoided.

### Suggested pre-medicine program:

## Biological Sciences .....12 credit hours minimum

Suggested Courses:

BIOL 1450 Biology I  
BIOL 1750 Biology II  
BIOL 2140 Genetics

## Chemistry\* .....16 credit hours minimum

CHEM 1180-1184 General Chemistry I and Lab  
CHEM 1190-1194 General Chemistry II and Lab  
CHEM 2250 Organic Chemistry I  
CHEM 2260-2274 Organic Chemistry II and Lab

## Physics\*\* .....10 credit hours

PHYS 1110-1154 General Physics and Lab  
PHYS 1120-1164 General Physics and Lab  
OR  
PHYS 2110-1154 General Physics  
Calculus Level and Lab  
PHYS 2120-1164 General Physics  
Calculus Level and Lab

## Mathematics\*\*\* .....3 credit hours

MATH 1310 Intermediate Algebra

## Statistics\*\*\* .....3 credit hours

PSYC 2130 Stats for the Behavioral Sciences  
SOC 2130 Basic Statistics  
STAT 3000 Statistical Methods

## English Composition\*\*\*\* .....6 credit hours

ENGL 1150 English Composition  
ENGL 1160 English Composition

## Speech Communication .....3 credit hours

SPCH 1110 Public Speaking Fundamentals

## History .....6 credit hours

HIST 1000 World Civilizations I  
HIST 1010 World Civilizations II

\*MATH 1310 is a prerequisite for chemistry. Students with an inadequate chemistry background may want to register for the CHEM 1140-1144, 1180, 1190 sequence.

\*\*Students with a calculus background should take General Physics-Calculus Level (PHYS 2110, 2120).

\*\*\*Mathematics requirements vary from one medical school to another. The student should contact the appropriate schools in order to make certain these requirements are fulfilled. In general, mathematics through calculus I is preferred. An alternative course of study would include algebra, trigonometry, statistics and computer science courses.

\*\*\*\*Electives may be substituted if proficiency is established by examination.

## Pre-Nursing Curriculum

All Bachelor of Science in Nursing programs require the following courses. For information about these courses, contact the advisers in the Dean's Office, 554-2458.

## English Composition .....6 credit hours

ENGL 1150 English Composition  
ENGL 1160 English Composition  
ENGL 2400 Advanced Composition

## Psychology .....3 credit hours

PSYC 1010 Intro to Psychology

## Sociology .....3 credit hours

SOC 1010 Intro to Sociology

## Human Development and the Family .....3 credit hours

PSYC 2500 Life Span Psychology  
OR  
FMCS 1600 Human Development and the Family

## Anatomy and Physiology .....8 credit hours

BIOL 2740 Human Physiology and Anatomy I (fall/summer)  
BIOL 2840 Human Physiology and Anatomy II (spring/summer)

<u>Chemistry</u> .....	3-5 credit hours
CHEM 1140-1144	Fundamentals of College Chemistry and Lab (Prereq: MATH 1310)
<u>Mathematics</u> .....	3 credit hours
MATH 1310	Intermediate Algebra
<u>Nutrition</u> .....	3 credit hours
NUTR 1510	Intro to Nutrition
<u>Ethics</u> .....	3 credit hours
PHIL 2030	Intro to Ethics
<u>Microbiology</u> .....	4 credit hours
BIOL 2440	Biol. of Microorganisms
<u>Statistics</u> .....	3 credit hours
(Prereq: MATH 1310)	
SOC 2130	Basic Statistics
PSYC 2130	Stats for Behavioral Sciences

## Other Requirements

Other non-nursing courses are required in addition to the above requirements. Contact the advisers in the Dean's office or the school of choice for information about specific additional requirements and application deadlines.

For more information about the UNMC College of Nursing call 559-4115. For more information about Methodist College of Nursing call 390-4879.

## **Pre-Occupational Therapy Curriculum**

The following curriculum satisfies Creighton University's Occupational Therapy program needs. See specific catalogs for other programs. Adviser: Dean's Office.

<u>Biology</u> .....	12 credit hours
Must include at least one semester of Anatomy or Anatomy/Physiology.	
BIOL 1450	Biology I
BIOL 1750	Biology II
BIOL 2740	Human Physiology and Anatomy I ( <i>fall, summer</i> )

<u>Chemistry</u> .....	5 credit hours
CHEM 1140-1144	Fundamentals of College Chemistry and Lab

<u>Mathematics</u> .....	3 or more hours
MATH 1310	Intermediate Algebra

<u>Statistics</u> .....	3 credit hours
PSYC 2130	Statistics for the Behavior Sciences
SOC 2130	Basic Statistics
STAT 3000	Statistical Methods

<u>English Composition</u> .....	6 credit hours
ENGL 1150	English Composition
ENGL 1160	English Composition
English electives may be substituted if proficiency is established by examination.	

<u>Speech Communication</u> .....	3 credit hours
SPCH 1110	Public Speaking Fundamentals

<u>Art</u> .....	3 credit hours
ART 1100	Drawing or any hands-on art course, not appreciation or history

<u>Philosophy</u> .....	3 credit hours
PHIL 1010	Introduction to Philosophy
PHIL 1210	Critical Reasoning
PHIL 2010	Logic

<u>Sociology</u> .....	3 credit hours
SOC 1010	Intro Sociology

<u>Psychology</u> .....	9 credit hours
PSYC 1010	Intro Psychology
PSYC 2500	Life Span Psychology
PSYC 4440	Abnormal Psychology

<u>Electives</u> .....	15 credit hours
HIST 1000	World Civilizations I
HIST 1010	World Civilizations II

Other electives may be selected to meet the students' interest in themselves and others.

The total credit hours needed is 60. Completion of the prerequisites does not guarantee acceptance to the program. For more information on courses at UNO call the Arts and Sciences Dean's Office at 554-2458. For more information on Creighton's Occupational Therapy program call 280-2662.

## **Pre-Optometry Curriculum**

The University of Nebraska has contractual agreements with Ohio State University and Indiana University and a contract with the University of Houston through the American Optometric Foundation to provide optometric education for Nebraska residents. Each of these schools will allow up to five Nebraska residents to enroll in competition with students from the respective areas. The student is expected to take six hours of humanities and six hours of social sciences as well as the courses listed below. The typical student has three to four years of college-level work before admission. The third and fourth years are typically spent fulfilling the requirements for an undergraduate major. Adviser: Dr. James Fawcett.

## First Year

### *First Semester*

ENGL 1150 .....	3
CHEM 1180, 1184* .....	4
PHYS 1110, 1154 .....	5
PSYC 1010 .....	3
Semester Total .....	15

### *Second Semester*

MATH 1320 .....	3
CHEM 1190, 1194 .....	4
PHYS 1120, 1164 .....	5
ENGL 1160 .....	3
Semester Total .....	15

# DEGREE REQUIREMENTS ARTS AND SCIENCES

## Second Year

### First Semester

BIOL 1450 (Biology I)	5
CHEM 2250	3
MATH 1330	3
HIST 1000	3
Semester Total	14

### Second Semester

BIOL 1750 (Biology II)	5
CHEM 2260, 2274	5
MATH 1950	5
Humanities or social science elective	3
Semester Total	18

\*MATH 1310 is a prerequisite for chemistry.

## Pre-Pharmacy Curriculum

Students interested in a career in community, hospital or industrial pharmacy can attend UNO for the required 60 semester hours (minimum) of pre-pharmacy experience prior to entrance to an accredited College of Pharmacy. Although the admission prerequisites vary among the colleges of pharmacy, the recommended prerequisite program for admission to the first professional year at the University of Nebraska College of Pharmacy is as follows. For more information about the UNMC College of Pharmacy, call 559-4334. Adviser: Dr. E. Kemnitz.

### Biological Sciences .....8 credit hours minimum

BIOL 1450	Biology I
BIOL 1750	Biology II

### Chemistry\* .....16 credit hours minimum

CHEM 1180-1184	General Chemistry I and Lab
CHEM 1190-1194	General Chemistry II and Lab
CHEM 2250	Organic Chemistry I
CHEM 2260-2274	Organic Chemistry II and Lab

### Oral and Written Communication\*\* .....6 credit hours

ENGL 1150	English Composition
ENGL 1160	English Composition
ENGL 2400**	Advanced Composition
ENGL 3980**	Technical Writing
OR	
SPCH 1110	Public Speaking Fundamentals

\*\*Should be taken if proficiency is established for English 1150 or 1160.

### Analytical Sciences .....9 credit hours minimum

#### Calculus .....3 credit hours minimum

MATH 1930	Calculus for the Managerial/Life and Social Sciences
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OR

MATH 1950	Calculus I
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#### Statistics .....3 credit hours minimum

PSYC 2130	Statistics for the Behavioral Sciences
SOC 2130	Basic Statistics
STAT 3000	Statistical Methods

Choose **at least one** additional course from the following: .....3 credit hours minimum

Physics 1110/1154  
Chemistry 2400/2404

### Administrative Sciences .....6 credit hours minimum

ACCT 2010	Principles of Accounting (3 credit hours minimum)
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Economics 2200 or 2220

### Behavior and Social Sciences ...6 credit hours minimum

PSYC 1010	Introduction to Psychology
SOC 1010	Introduction to Sociology
SOC 2000	Introduction to Gerontology

### Electives

Choose at least two courses from the humanities/social sciences in areas such as history, philosophy, literature, foreign languages, political science, ethics and fine arts.

\*MATH 1310 is a prerequisite for chemistry. Students with an inadequate chemistry background may want to register for the CHEM 1140-1144, 1180, 1190 sequence.

\*\*At least 3 semester hours must be in English composition.

## Pre-Physical Therapy Curriculum

The University of Nebraska at Omaha cooperates with the Division of Physical Therapy in the School of Allied Health Professions at the University of Nebraska Medical Center in Omaha in offering courses and a pre-physical therapy curriculum which satisfies needed college hours for admission into the physical therapy program. A "B" average in required courses is necessary for acceptance at the Medical Center. Adviser: Dean's Office.

The UNMC Physical Therapy Program requires that students complete a minimum of 64 credit hours before beginning the three-year professional phase at UNMC.

### Biological Sciences .....8 credit hours minimum lecture/lab courses

BIOL 1020	Principles of Biology
BIOL 2140	Genetics
BIOL 2440	Microbiology
BIOL 1450	Biology I
BIOL 1750	Biology II

### Human Anatomy and Physiology .....8 credit hours minimum

BIOL 2740	Human Physiology and Anatomy I
BIOL 2840	Human Physiology and Anatomy II

### Chemistry .....8 credit hours minimum lecture/lab

CHEM 1180-1184	General Chemistry I and Lab
CHEM 1190-1194	General Chemistry II and Lab

\*MATH 1310 is a prerequisite for chemistry.

### Physics .....8 to 10 credit hours minimum lecture/lab

PHYS 1110-1154	General Physics and Lab
PHYS 1120-1164	General Physics and Lab

### English Composition .....6 credit hours

ENGL 1150*	English Composition
ENGL 1160	English Composition

\*ENGL 2400 is to be taken if proficiency is established for 1150.

### Mathematics .....3 credit hours minimum

MATH 1330	Trigonometry
OR	
MATH 1930	Calculus for the Managerial, Life and Social Sciences

Psychology .....9 credit hours minimum  
 PSYC 1010 Intro Psychology  
 PSYC 4440 Abnormal Psychology  
 Elective suggested:  
 PSYC 2500 Life Span Psychology

History .....6 credit hours minimum  
 HIST 1000 World Civilizations I  
 HIST 1010 World Civilizations II

Speech .....3 credit hours minimum  
 SPCH 1110 Public Speaking Fundamentals

## Electives

Students are urged to select electives from the humanities and social sciences. Additionally, electives might include an introductory computer course or advanced course work in the aforementioned requirements, i.e., genetics, exercise science or social science.

For more information on courses at UNO, call the Arts and Sciences Dean's Office at 554-2458. For more information on the UNMC Physical Therapy Program call 559-4259.

## **Pre-Physician Assistant Curriculum**

The University of Nebraska at Omaha cooperates with the University of Nebraska School of Allied Health Professions at the University of Nebraska Medical Center in offering the pre-physician assistant curriculum which satisfies needed college hours for the Master of Physician Assistant Studies degree. Adviser: Dr. D. Sullivan.

Applicants must have successfully completed a minimum of 90 semester hours of academic courses and should have a minimum grade point average of 2.5 with a minimum grade of "C" in the following required courses. A personal interview is required before final acceptance.

The following is a suggested course of study for UNO students.

English Composition .....6 credit hours  
 ENGL 1150 English Composition  
 ENGL 1160 English Composition  
 Electives may be substituted if proficiency is established by examination.

History .....6 credit hours  
 HIST 1000 World Civilizations I  
 HIST 1010 World Civilizations II

Speech Communication .....3 credit hours  
 SPCH 1110 Public Speaking Fundamentals

Mathematics .....3 credit hours  
 MATH 1310 Intermediate Algebra

Statistics .....3 credit hours  
 PSYC 2130 Statistics for the Behavioral Sciences  
 SOC 2130 Basic Statistics  
 STAT 3000 Statistical Methods

Biological Sciences .....16 credit hours minimum  
 Must include human physiology, human anatomy, and microbiology; immunology strongly recommended.

BIOL 1450 Biology I  
 BIOL 1750 Biology II  
 BIOL 2440 Microbiology  
 BIOL 2740 Human Physiology and Anatomy I (fall/summer)  
 BIOL 2840 Human Physiology and Anatomy II (spring/summer)

Psychology .....9 credit hours  
 PSYC 1010 Introduction to Psychology  
 PSYC 4440 Abnormal Psychology  
 Strongly recommended:  
 PSYC 2500 Life Span Psychology  
 PSYC 3230 Physiological Psychology  
 PSYC 3520 Child Psychology  
 PSYC 3540 Adolescent Psychology

Chemistry .....16 credit hours minimum  
 CHEM 1140-1144 Fundamentals of College Chemistry and Lab  
 CHEM 2210-2214 Fundamentals of Organic Chemistry and Lab  
 CHEM 3650-3654 Fundamentals of Biochemistry and Lab

**Plus** approved chemistry elective.

## Electives

Electives should be chosen from the humanities or social sciences in areas such as psychology, sociology, critical reasoning and statistics.

For more information on the Physician Assistant program at UNMC, call 559-7954.

## **Pre-Radiation Science Technology**

The University of Nebraska at Omaha cooperates with the University of Nebraska Medical Center School of Allied Health Professions in providing prerequisite courses for programs in nuclear medicine technology, radiography, radiation therapy technology and diagnostic medical sonography.

The following courses are required for a B.S. degree. No grades lower than "C" will transfer to UNMC for credit. Adviser: Dean's office.

English Composition .....6  
 ENGL 1150 English Composition  
 ENGL 1160 English Composition  
 English electives may be substituted if proficiency is established by examination.

Mathematics .....3  
 MATH 1310 Intermediate Algebra or higher required

## DEGREE REQUIREMENTS ARTS AND SCIENCES

### Basic Sciences.....8-15

Recommended and/or required courses:

BIOL 1020	Principles of Biology
CHEM 1140/1144	Fundamentals of College Chemistry and Lab (Required for Nuclear Medicine Technology)
PHYS 1050/1054	Introduction to Physics and Lab (Highly recommended for Radiography, Radiation Therapy Technology, Diagnostic Medical Sonography. Required for Nuclear Medicine Technology.)

### Humanities or Social Sciences.....6

Psychology and Sociology recommended

### Electives.....3-5

(May include one of the previously listed Basic Sciences.)

Please call the individual programs for further information or the Dean's Office (554-2458) about UNO courses.

Radiography 559-6954  
Nuclear Medicine Technology 559-7224  
Radiation Therapy Technology 559-7601  
Diagnostic Medical Sonography 559-6339

### **Pre-Respiratory Care Curriculum**

Courses listed below are to be taken at UNO as part of the Associate of Science degree in respiratory care at Methodist College of Nursing and Allied Health. Students should contact Methodist College of Nursing and Allied Health at 390-4913 about admission into their program.

### English Composition .....3 hours

ENGL 1150	English Composition
ENGL 1160	English Composition

### Psychology.....3 hours

PSYC 1010	Intro Psychology
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### Mathematics and Computer Science .....6 hours

MATH 1310	Intermediate Algebra
CSCI 1500	Computer Literacy with Programming

### Chemistry .....4 hours

CHEM 1140/1144	Fundamentals of College Chemistry and Lab
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### Physics.....4 hours

PHYS 1050/1054	Intro Physics and Lab
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### Biology .....8 hours

BIOL 2440*	Biology of Microorganisms
BIOL 2740	Human Physiology and Anatomy

\*BIOL 1020 is a prerequisite for BIOL 2440.

### Social Sciences and Humanities.....6 hours

HIST 1000	World Civilizations I
HIST 1010	World Civilizations II
SPCH 1110	Public Speaking Fundamentals

Students interested in Immanuel School of Respiratory Therapy should contact them at 572-2312. In addition to courses listed, Immanuel requires one semester of biology and recommends a second semester of anatomy/physiology, and a second semester of chemistry and computer science.

### **Pre-Technical Sciences**

Students who have not met the high school prerequisites for entrance into the Engineering College may be admitted into the pre-technical sciences program in the College of Arts and Sciences. High school prerequisites needed for entrance into the College of Engineering are three and one-half years of math (including one year of geometry and at least one-half year of trigonometry), one year of chemistry, one year of physics and an ACT score of 23 or higher in the engineering section. Students lacking the math prerequisites should take the Math Placement Exam to determine which math course to take. Students lacking the high school chemistry courses should take Chemistry 1140-1144. Students lacking one year of physics should enroll in Physics 1050. If the student's ACT score is below 23 in the engineering section of the exam, a 2.5 or better GPA will be required in all pre-technical courses.

The remainder of the class schedule may include Speech 1110 and courses from the humanities and social sciences electives listed on page 123-124 of this catalog. Adviser: Dean's Office.

### **Pre-Veterinary Medicine Curriculum**

Pre-veterinary students are strongly encouraged to select a major and pursue a degree in an academic specialty of special interest. Most colleges of veterinary medicine in the U.S. require applicants to complete 60-70 credit-hours of undergraduate course work. Applicants who complete a four-year college degree are generally given preference. Many schools require admission test results; the specific test varies from school to school, some require the GRE, others the MCAT. A contract between Nebraska and Kansas State University supports veterinary training for residents of Nebraska. Advisers: Dean's Office and Dr. William deGraw in the biology department.

The following courses or their equivalents meet the specific requirements for most veterinary schools in the Midwest and must be taken regardless of major chosen:

### English Composition .....6 credit hours

To be selected from English 1150, 1160, 2400, 2430, 3980 (technical writing).

### Chemistry .....23 credit hours

1180, 1184, 1190, 1194, 2250, 2260, 2274, 3650 and 3654.

### Physics .....10 credit hours

1110, 1154, 1120 and 1164.

### Biology .....22 credit hours

1450, 1750, 2140, 2440 or 4640, and 4950.

### **BIOLOGY**

A Bachelor of Arts degree in biology consists of 36-45 hours of biology courses of which 18 hours must be 3000-4000-level courses. The required courses are biology 1450

and 1750. The remaining elective hours in biology must be scheduled and approved by the department advisers. Also required are either Chemistry 1140-1144, 2210-2214, 3650-3654, or 1180-1184, 1190-1194, 2250, 2260, 2274; and Physics 1050-1054, or 1110-1154, 1120-1164, or 2110-1154, 2120-1164. One laboratory course in geology or physical geography and one approved course in calculus, statistics, or computer science are strongly recommended in addition to the college mathematics or computer science fundamental competency requirement.

A Bachelor of Science degree in biology consists of 36-45 hours of biology courses of which 18 hours must be 3000-4000-level courses. With the approval of the department chairperson, certain advanced courses in related fields may be included in the major. A foreign language is not required, but a student must take nine hours of approved courses in mathematics/computer science/statistics. The required courses are Biology 1450, 1750, 2140, 3020, 3340; a selection of one course from Block I (Biology 4140, 4440, 4640, 4740, or 4850); a minimum of three credits from Block II (Biology 3230, 3240, 3830, 4100, 4120, 4130, 4140, 4180, 4210, 4220, 4230, 4310, 4320, 4450, 4540, 4640, 4790, 4850 and 4960); a minimum of three credits from Block III (Biology 3530, 3630, 4350, 4370, 4380, 4390, 4430, and 4440); and a minimum of three credits from Block IV (Biology 3100, 3104, 3730, 3740, 4270, 4280, 4340, 4720, 4730, 4740, 4780, 4790, 4840, 4880, 4910, 4920, 4940, 4950 and 4980).

Students may not use any course to satisfy more than one Block. Also required are either Chemistry 1140-1144, 2210-2214, 3650-3654, or 1180-1184, 1190-1194, 2250, 2260, 2274; and Physics 1050-1054, or 1110-1154, 1120-1164, or 2110-1154, 2120-1164. One laboratory course in geology or physical geography is strongly recommended.

All courses in biology have both lecture and laboratory unless otherwise indicated in the Course Description section of this catalog. Biology 1020, 1330, 1730, 2440, 2740, 2840 are usually not part of a biology major's program. BIOL 3150 is recommended as the advanced writing course for biology majors, but students may select any advanced writing course approved by the College of Arts and Sciences. Students interested in a teaching field in biology should contact the College of Education.

#### Beta Beta Beta (Tri-Beta) Biological Society

Active membership in the national biology honor society Beta Beta Beta (Tri-Beta) is open to students with at least a 3.0 grade point average in all biology courses (with a minimum of three courses completed, one of which is a 2000 level or above) and overall GPA of 2.5. Associate membership requires at least a 2.5 GPA in all biology courses (with a minimum of 10 hours completed) and an overall GPA of 2.0.

#### Pre-Veterinary Medicine with Biology Major

The biology major leading either to the B.A. or B.S. degree is well-suited for students desiring to meet the admission requirements of veterinary colleges. The following courses meet specific requirements of most veterinary schools: nine credit hours of English

composition selected from English 1150, 1160, 2400, 2430, 3980; 20 credit hours of chemistry, Chemistry 1180, 1184, 1190, 1194, 2250, 2260, 2274, 3650, and 3654; 10 credit hours of physics, Physics 1110, 1154, 1120, 1164; three credit hours of nutrition. Required courses in biology include Biology 1450, 1750, 2140, and 2440; also recommended are Biology 4140 or 4740, 4950. Some veterinary colleges require course background in animal science (e.g., Kansas State University recommends nine credit hours); such course work is not available at UNO, but may be taken at UNL (East Campus). Kansas State University also requires GRE scores. For specific entrance requirements, students should consult catalogs from veterinary colleges to which they plan to apply. See Professor de Graw in biology, or the Dean's Office for further information.

#### **For more information...**

please call (402) 554-2641.

#### **BIOTECHNOLOGY**

A Bachelor of Science degree in biotechnology is offered within the department of biology at UNO. A cooperative agreement with UNMC allows students to participate in a biotechnology internship program in laboratories on the UNMC campus.

A Bachelor of Science degree in biotechnology consists of 36-45 hours of biology courses of which 18 hours must be 3000-4000 level courses. A foreign language is not required, but is recommended. Many graduate programs require foreign language proficiency. The required courses are Biology 1450, 1750, 2140, 3020, 3240, 4550 and three courses selected from the following: Biology 4130, 4140, 4450, 4640, 4850; Biochemistry II (Biology 4660/4664 or Chemistry 4660/4664). Also required are Chemistry 1180-1184, 1190-1194, 2250, 2260, 2274; Physics 1110-1150 and 1120-1164 or 2110-1154 and 2120-1164.

Biochemistry I (Biology 4650/4654 or Chemistry 4650/4654) also is required. Nine hours in mathematics are required and must include Mathematics 1930 or equivalent. Biology 3150 is recommended as the advanced writing course for biotechnology majors, but students may select any advanced writing course approved by the College of Arts and Sciences. The biotechnology internship (Biology 4550) provides practical laboratory experience in molecular biology by allowing students to join a research laboratory for one semester. The internship should be taken during the senior year and enrollment will be limited. Adviser: Dr. William E. Tapprich.

#### **For more information...**

please call (402) 554-2948.

#### **BLACK STUDIES**

The Black studies department at UNO was established in 1971. As one of the oldest departments in the country, the Black studies department is a very vital component of UNO's College of Arts and Sciences. It contributes to the University's liberal arts education by providing a multidisciplinary sequence of courses that cover the history, tradition, and cultural heritage of continental and diasporic Africans.

The Black studies major and minor provides students an integrated multidisciplinary and multicultural curriculum that brings together courses that conduct a treatment of continental and diasporic African culture.

Black studies offers students, university personnel and the community opportunities to study history, philosophy, social-psychology, politics, economics, aesthetics and religion of Black people, both in Africa and the diaspora.

As a discipline, Black studies is an academic enterprise, which seeks to systematically examine Africana phenomena from a holistic perspective. While studying the merits of pluralism, Black studies challenges students to query the relevance and rationale of human reason in a multicultural society.

## Bachelor of Arts in Black Studies

The Black studies department offers only a BA degree. Students are advised to examine the degree requirements for the College of Arts and Sciences.

A Black studies major may be obtained in one of three ways: Standard Black studies major, African Studies emphasis or African-American studies emphasis.

**African Studies.** The African studies major may be earned by completing the following requirements: BLST 1050, 1340, 2120, 2130, 2900, 3030, 3500, 4700. The remainder of the required 36 hours may be selected from BLST 1260, 2260, 3140, 3200, 3850, 3980 (when appropriate); 4900 (when appropriate); 2150, 3200; ANTH 3210; at least 18 hours must be completed at the 3000-4000 level.

**African-American Studies.** The African-American studies major may be earned by completing the following requirements: BLST 1100, 1950, 2410, 2420, 2730, 3220, 3950, 3990, 4500; the remainder of the required 36 hours may be selected from BLST 1220, 1260, 1400, 2000, 2210, 2260, 2360, 2510, 3000, 3120, 3200, 3650, 3850, 3920, 3980 (when appropriate), 4900 (when appropriate); at least 18 hours must be completed at the 3000-4000 level.

There are five foci in the non-traditional academic discipline of Black studies: historical; social- psychological; political-economic; aesthetic; and philosophical-religious. The objective of the format is to ensure breadth, depth and rigor in the preparation of students majoring in Black studies. Majors must complete 36 hours of course work in the discipline. BLST 3980 and BLST 4900 may each be selected twice and applied to the appropriate focus. At least 18 hours must be taken at the upper divisional level. It is strongly recommended that students majoring in Black studies take a minor in another field, and take BLST 1000 to fulfill an Arts and Sciences divisional requirement and as background for the major.

In addition to the college requirements, students taking the standard major in Black studies must complete the following:

### Core Requirements

BLST 1050 Ancient African Civilization .....	3
BLST 1260 Survey of Black Literature .....	3
BLST 2410 Afro-American History to 1865 .....	3
BLST 2420 Afro-American History since 1865.....	3
BLST 3030 Geography of Africa .....	3

BLST 3950 Philosophy of Afro-Americans.....	3
BLST 3990 Community Study Project.....	3
BLST 3950 Philosophy of Afro-Americans.....	3
BLST 3990 Community Study Project.....	3

### Electives

Select at least one course from each of the following foci:

#### Historical Focus

BLST 2900 African Civilization--the Middle Period.....	3
BLST 3220 Afro-American History since 1954.....	3
BLST 3650 Slavery and	

Race Relations in the Americas .....

#### Social-Psychological Focus

BLST 2000 The Black Experience in Society.....	3
BLST 2210 The Black Family in the United States. ....	3
BLST 3000 Survey of Black Education .....	3
BLST 3650 Slavery and	

Race Relations in the Americas .....

#### Political-Economic Focus

BLST 3120 The Black Experience in Am. Politics.....	3
BLST 3140 Apartheid in South Africa .....	3
BLST 3200 Black Nationalism and Pan Africanism ....	3
BLST 3500 Economic Development in South Africa .....	3

#### Aesthetic Focus

BLST 3750 Issues in Black Literature .....	3
BLST 3850 Black Oratory .....	3
BLST 3920 Black Aesthetics .....	3

#### Philosophical-Religious Focus

BLST 4500 Philosophy and Theology of	
Martin L. King Jr. and Malcolm X .....	3
BLST 4700 African Philosophy .....	3

Twenty-one hours or more are required for the minor. A Black studies minor may be obtained in one of three ways: standard Black studies minor, African studies emphasis and African-American studies emphasis. The required courses for the African studies minor are BLST 1050, 1340, 3030, 3500, 4700; any course from the corresponding major may be selected; 12 hours from the upper division are required. The required courses for the African-American studies minor are BLST 2410, 2420, 3850, 3950, 4500; any course from the corresponding major may be selected; 12 hours from the upper division are required.

### Standard Minor in Black Studies Core Requirements

BLST 1050 Ancient African Civilization.....	3
BLST 2410 Afro-American History to 1865 .....	3
BLST 2420 Afro-American History since 1865.....	3
BLST 3030 Geography of Africa .....	3
BLST 3920 Black Aesthetics .....	3
BLST 4700 African Philosophy .....	3

### Electives

One other course selected from the upper divisional level.

### For more information...

please call (402) 554-2412.

## CHEMISTRY

The department of chemistry, which is approved by the American Chemical Society, offers both the Bachelor of Science and the Bachelor of Arts degrees. The B.S. degree in chemistry is designed for majors planning to be industrial chemists, planning to do research in any chemically allied field or planning to take graduate training in chemistry or biochemistry. The B.A. degree is designed for high school chemistry teachers, pre-professional students and chemical technologists.

High school students who have had advanced level courses in chemistry should consult with the department chairperson about a modified course of study.

Any students working toward a B.S. or B.A. degree in chemistry must earn a grade of "C" or better in all chemistry, physics, and mathematics courses required for the degree.

Except for Chemistry 1010-1014 and Chemistry 1180-1184 all chemistry courses and their associated laboratories must be taken concurrently. Chemistry 2274 is to be taken concurrently with Chemistry 2260.

A background in computer programming (BASIC, FORTRAN or PASCAL) is highly recommended before taking Chemistry 3350.

The third writing course requirement for chemistry degrees may be satisfied by successful completion of two of the following courses: NSCI 2500, NSCI 3354, NSCI 3930, or NSCI 4960.

## Bachelor of Science

The program leading to a B.S. degree in chemistry requires a minimum of 130 credit hours and consists of 45-50 hours in the major. The required courses are Chemistry 1180, 1184, 1190, 1194, 2250, 2260, 2274, 2400, 2404, 2500, 3350, 3354, 3360, 3364, 3414, 3424 or 3514, 4400, 4404, 4500, 4650, and 4654. The remaining hours may be selected from Chemistry 3424, 3514, 4230, 4240, 4660, 4664, 4930, 4950 and 4960. The department strongly recommends that all B.S. degree students take Chemistry 4950.

Cognate courses in mathematics and physics also are required. These include two semesters of calculus (Math 1950 and 1960) and two semesters of physics with associated laboratories (Physics 2110, 1154, 2220 and 1164).

Each student also must complete an area of enrichment consisting of a minimum of twelve credit hours of coherent courses chosen by the student and approved by the department. At least six of these hours must be above or at the 2000 level. The area of enrichment should reflect and support the life interests and/or career goals of the student. Students should see their chemistry department adviser or the department chair for guidelines in choosing courses to meet this requirement.

Graduates with B.S. degrees are certified by the American Chemical Society.

## Bachelor of Arts

The program leading to a B.A. degree in chemistry requires a minimum of 125 credit hours and consists of 36-40 hours in the major. The required courses are Chemistry 1180, 1184, 1190, 1194, 2250, 2260, 2274, 2400, 2404,

2500, 3350, 3354, 3360, 3364 and 3414. Additional chemistry courses may be selected from any of the courses approved for the B.S. degree.

Supporting courses must include two semesters of calculus and one year of college physics with associated laboratories.

## Chemistry Minor

A minor in chemistry requires a minimum of 20 semester credit hours. All courses counted toward a minor in chemistry must be applicable toward a major in chemistry. These hours must include at least twelve semester credit hours of advanced courses chosen from Chemistry 2250, 2260, 2274, 2400, 2404, 2500, 3350, 3354, 3360, 3364, 3414, 3424, 3514, 4230, 4240, 4400, 4404, 4650, 4654, 4660, 4664, 4930, 4950 and 4960.

The advanced work must include courses and associated laboratories from at least two different areas of chemistry (organic, inorganic, analytical, physical or biochemistry).

## For more information...

please call (402) 554-2651.

## CHICANO/A LATINO/A STUDIES (Minor Only)

The Chicano/a-Latino/a studies minor requires a minimum of 18 credit hours. The hours must include Introduction to Chicano/a-Latino/a studies (HUMN 1200) as well as 12 hours taken at the 3000-4000 level among approved courses. Also, successful completion of at least the first-year Introductory Spanish courses is strongly recommended. A minimum grade of "C" is required in each course counted by the student toward this minor. It will be the responsibility of the Chicano/a-Latino/a Studies Committee to approve all courses for the minor based on course purposes and their appropriateness to the overall minor.

## Approved courses are:

HUMN 1200 Intro to Chicano/a-Latino/a Studies .....	3
ART 4006/8006 Special Studies: Art Ed in Mexico .....	3
GEOG 3060 Geography of Middle America .....	3
GEOG 3070 Geography of South America .....	3
HIST 2470 Latin American History: Mexico and Caribbean .....	3
HIST 2480 Latin American History: South America .....	3
HIST 3910 Special Topics: Modern Mexico .....	3
HIST 3910 Special Topics: Hispanic Americans .....	3
PSCI 3680 Latin American Politics .....	3
PSCI 4280/8286 Inter-American Politics .....	3
SOC 2800 Latin American Sociology: Social Issues .....	3
SOWK 4030/8036 Social Work with Hispanic Families .....	3
SOWK 4890 Special Studies: Nicaragua Trip .....	1-4 (TBA)
SPAN 3210 Survey of Latin American Literature I .....	3
SPAN 3220 Survey of Latin American Literature II .....	3
SPAN 4050 Seminar in Mexican Culture and Civilization .....	3
SPAN 4160 Latin American Literature of the 20th Century .....	3
SPAN 4180/8186 Latino Literature and Culture .....	3
SPAN 4350 Latin American Short Story .....	3



# DEGREE REQUIREMENTS ARTS AND SCIENCES

## COMMUNICATION

The department of communication offers Bachelor of Arts and Bachelor of Science degree programs with majors in broadcasting, journalism and speech communication. The emphasis in the broadcasting major is on broadcast news; in the journalism major, sequences are available in news editorial (print journalism) and public relations/advertising; and in the speech communication major, sequences are available in public communication, organizational communication and interpersonal communication.

The only difference between the B.A. and B.S. degrees is that the B.A. degree includes the college foreign language requirement (16 hours or equivalent), while the B.S. degree substitutes a minimum of 15 hours in a second field for the foreign language requirement. A second field is defined as courses all within a single department of the University or as courses that all relate to a single subject area or topic. The second field must include at least six hours of upper level courses except as specifically exempted in writing by a departmental adviser or the department chair. Students must earn at least a "C" in all courses presented in satisfaction of the second field.

A total of 125 credit hours is required for graduation in the public communication, organizational communication and interpersonal communication sequences in the speech communication major.

A total of 130 credit hours is required for graduation in the broadcasting major and in the news editorial and public relations/advertising sequences of the journalism major. Broadcasting, news editorial and public relations/advertising majors may not take more than 40 hours in broadcasting and journalism courses combined within the 130 hours required for graduation.

Courses which have been applied toward College of Arts and Sciences requirements may not be applied to the major or second field requirements in the B.S. majors in journalism, broadcasting or speech communication.

JOUR 2150, 3220, 3400 or 4220 qualifies as the third writing course for department majors. All students who take sophomore level or above (2000, 3000 or 4000 level) journalism or broadcasting courses, or junior level or above (3000 or 4000 level) speech courses are required to have a cumulative grade point average of at least 2.25. Any exceptions will be by written permission of the department. All department majors will be supplied with a requirement worksheet to keep track of their progress toward a degree.

### Broadcasting

A major in broadcasting consists of a minimum of 35 hours to include the following:

<u>Broadcasting</u>	<u>41-46 hours</u>
JOUR 2150 News Writing and Reporting.....	3
BRCT 2320 Television Production I.....	3
BRCT 2370 Radio Production I.....	3
BRCT 3030 Radio and TV News Writing.....	3
JOUR 3270 Public Affairs Reporting.....	3
BRCT 3330 Television News Video.....	3
BRCT 3390 Electronic Media Management.....	3
JOUR 4010 History of Mass Comm.....	3

BRCT 4340 Telecommunication Regulation

or

JOUR 4410 Communication Law.....3

BRCT 4310 Political Broadcasting

or

4350 Mass Communication Research

or

JOUR 4400 Mass Media Ethics

or

JOUR 4500 Mass Comm. and Public Opinion.....3

BRCT 4450 Broadcast Journalism.....3

JOUR 3970 Applied Journalism/Broadcasting  
(2 semesters).....2

or

JOUR 4970 Journalism/Broadcasting Internship.....2

BRCT or JOUR Electives.....0-5

Speech Electives.....6

Courses chosen by the student to fulfill the speech elective requirement must be approved by a department adviser.

The broadcasting major must earn at least a "C" in all communication department courses (BRCT, JOUR and SPCH) presented in satisfaction of the major.

All broadcasting majors are required to participate in professional activities related to their major, such as working for KYNE-TV or KVNO radio, or taking an internship. Broadcasting majors may not complete more than a total of four hours of credit in professional internships, applied journalism/broadcasting, independent study and advanced practicum.

### Journalism

A major in journalism consists of a minimum of 35 hours to include the following:

<u>News Editorial</u>	<u>41-46 hours</u>
JOUR 2150 News Writing and Reporting.....	3
JOUR 2160 News Editing.....	3
JOUR 3110 Photography.....	3
JOUR 3220 Critical Writing for the Mass Media	
or JOUR 3400 Magazine Article Writing	
or JOUR 4220 Literary Journalism.....	3
JOUR 3270 Public Affairs Reporting.....	3
JOUR 3410 Magazine Editing.....	3
JOUR 4010 History of Mass Communication.....	3
JOUR 4400 Mass Media Ethics	
or JOUR 4420 Theories of First Amendment	
or JOUR 4500 Mass Comm and Public Opinion.....	3
JOUR 4410 Communication Law.....	3
JOUR 3970 Applied Journalism/Broadcasting (two semesters)	
or JOUR 4970 Journalism/Broadcasting Internship.....	2
JOUR or BRCT Electives.....	6-11
Speech Electives.....	6

Public Relations/Advertising 41-46 hours

JOUR 2150 News Writing and Reporting.....3

JOUR 2160 News Editing.....3

JOUR 3400 Magazine Article Writing

or JOUR 4220 Literary Journalism.....3

JOUR 3500 Publication Design and Graphics.....3

JOUR 3620 Principles of Creative Advertising.....	3
JOUR 4010 History of Mass Communication	
<b>or</b> JOUR 4400 Mass Media Ethics	
<b>or</b> JOUR 4410 Communication Law .....	3
JOUR 4230 Principles of Public Relations .....	3
JOUR 4240 Public Relations Case Studies .....	3
JOUR 4250 Public Relations Writing .....	3
BRCT 4350 Mass Communication Research .....	3
JOUR 4500 Mass Comm. and Public Opinion .....	3
SPCH 4510 Persuasion .....	3
JOUR 4960 Public Relations, Organizational Communication, and Advertising Internship	
<b>or</b> JOUR 4970 Journalism/Broadcasting Internship	
<b>or</b> JOUR 3970 Applied Journalism/Broadcasting (two semesters) .....	2
JOUR or BRCT Electives .....	3-6
Speech Elective .....	3

Courses chosen by the student to fulfill the speech elective must be approved by a department adviser.

The journalism major must earn at least a "C" in all communication department courses (JOUR, BRCT and SPCH) presented in satisfaction of the major.

All journalism majors are required to participate in professional activities related to their major, such as working for the student newspaper or taking an internship. Journalism majors may not complete more than a total of four hours of credit in professional internships, applied journalism/ broadcasting, independent study and advanced practicum.

### **Speech Communication**

A major in public communication, organizational communication or interpersonal communication includes the following:

<u>Public Communication</u>	<u>41 hours</u>
SPCH 1120 Argumentation and Debate .....	3
SPCH 2010 Interpersonal Communication .....	3
SPCH 2410 Small Group Communication and Leadership.....	3
SPCH 3140 Advanced Public Speaking	
<b>or</b> SPCH 3130 Speech Communication in Business and the Professions	
<b>or</b> SPCH 3120 Persuasive Speaking .....	3
SPCH 3520 Interviewing .....	3
SPCH 3600 Special Topics in Speech Communication- Political Communication .....	3
SPCH 4110 Rhetorical Theory and Criticism .....	3
SPCH 4510 Persuasion .....	3
JOUR 4500 Mass Communication and Public Opinion <b>or</b> BRCT 4310 Political Broadcasting .....	3

**Two** of the following courses:

SPCH 3600 Special Topics in Speech Communication
SPCH 3700 Interpersonal Conflict
SPCH 3750 Gender and Communication
SPCH 4140 Communication and Human Relationships
SPCH 4170 Organizational Communication
SPCH 4530 Cross-Cultural Communication
SPCH 4540 Contemporary Systems of Communication
SPCH 4550 Nonverbal Communication .....

**One** of the following courses:

SPCH 2420 Parliamentary Procedure and Meeting Management
SPCH 3150/3160 Intercollegiate Forensic Activities
JOUR 3970 Applied Journalism/Broadcasting (two semesters)
JOUR 4960 Public Relations, Organizational Communication and Advertising Internship
JOUR 4970 Journalism/Broadcasting Internship
SPCH 4980 Independent Study in Communication
SPCH 4990 Advanced Communication Practicum .....
JOUR or BRCT Electives .....

### Organizational Communication 41 hours

SPCH 2010 Interpersonal Communication .....	3
JOUR 2150 News Writing and Reporting.....	3
SPCH 2410 Small Group Comm. and Leadership .....	3
SPCH 3520 Interviewing .....	3
SPCH 3700 Interpersonal Conflict .....	3
SPCH 4110 Rhetorical Theory and Criticism .....	3
SPCH 4170 Organizational Comm. ....	3
JOUR 4230 Principles of Public Relations .....	3
SPCH 4510 Persuasion .....	3

**One** of the following courses:

SPCH 3120 Persuasive Speaking
SPCH 3130 Speech Communication in Business and the Professions
SPCH 3140 Advanced Public Speaking .....

**Two** of the following courses:

SPCH 3600 Special Topics in Speech Communication
SPCH 3750 Gender and Communication
SPCH 4140 Communication & Human Relationships
SPCH 4530 Cross-Cultural Communication
SPCH 4540 Contemporary Systems of Communication
SPCH 4550 Nonverbal Communication .....

**One** of the following courses:

JOUR 3970 Applied Journalism/Broadcasting (two semesters)
JOUR 4960 Public Relations, Organizational Communication, and Advertising Internship
JOUR 4970 Journalism/Broadcasting Internship
SPCH 4980 Independent Study in Communication
SPCH 4990 Advanced Communication Practicum .....
JOUR or BRCT Elective .....

### Interpersonal Communication 36 hours

SPCH 2010 Interpersonal Communication .....	3
SPCH 2410 Small Group Communication and Leadership.....	3
SPCH 3520 Interviewing .....	3
SPCH 3700 Interpersonal Conflict .....	3
SPCH 3750 Gender and Communication. ....	3
SPCH 4140 Communication and Human Relationships .....	3
SPCH 4510 Persuasion .....	3
SPCH 4550 Nonverbal Communication .....	3
SPCH 3600 Special Topics in Speech Communication <b>or</b> SPCH 4170 Organizational Communication <b>or</b> SPCH 4530 Cross Cultural Comm. ....	3

SPCH 4980 Independent Study in Comm. or SPCH 4990 Advanced Comm. Practicum.....	3
JOUR or BRCT Electives .....	6

The student following the interpersonal communication sequence must also complete six hours in research methods and statistics. The student following the organizational communication sequence must also complete three hours in research methods and statistics. (See adviser regarding appropriate courses.)

The speech major must earn at least a "C" in all communication department courses (SPCH, JOUR and BRCT) presented in satisfaction of the major.

Speech communication majors may not complete more than a total of three hours of credit for forensics activities (SPCH 3150-3160) nor more than a total of four hours of credit for professional internships, applied journalism/broadcasting, independent study and advanced practicum.

Courses chosen by the student to fulfill the journalism/broadcasting elective requirement must be approved by a department adviser.

## Journalism, Speech, or Speech and Drama Education

Students who wish to teach journalism, speech, or speech and drama in secondary schools should contact the College of Education for specific requirements.

## Minor in Speech or Mass Communication

Students may earn a minor in speech or mass communication (courses to be chosen from journalism and/or broadcasting) by completing 18 hours in the chosen area, including 12 hours of upper level work. All courses must be completed with a grade of "C" or better.

## **For more information...**

please call (402) 554-2600.

## **ECONOMICS**

Economics is concerned with how resources are allocated in production, prices are determined, incomes are distributed and growth occurs. Economists examine such issues as how fiscal and monetary policies affect prices and employment, the effect of the balance-of-payments problem on international trade, the size and future composition of the labor force, and the effect of government regulations in price, quantity and quality of goods and services, and costs and benefits of environmental policies.

Economists are employed by private businesses, utilities, railroads, government at all levels, educational institutions, labor unions, trade associations and other institutions. In businesses, economists' duties may include forecasting the future environment of the firm, or analyzing, making recommendations, and making decisions for important activities such as capital investments, marketing new products, environmental questions, health care financing issues, and regulatory issues. In addition, economics is superb preparation for graduate work in areas such as business, law, political science, gerontology, social work, criminal justice, and accounting. Economics also is an excellent dual major or minor with these other areas of study.

## **Bachelor of Arts**

A student in the College of Arts and Sciences may take a Bachelor of Arts degree with a major in economics by meeting the Arts and Sciences general requirements and by completing the following minimum program in the economics department of the College of Business Administration.

A Bachelor of Arts in economics consists of a minimum of 30 credit hours. The following specific courses are required: Principles of Economics: Micro and Macro (ECON 2200 and 2220), Economic Theory: Micro (ECON 3200), Economic Theory: Macro (ECON 3220), Principles of Business Statistics (BSAD 2130), nine hours of economics electives from 3000-4000 level courses and six hours of economics electives from 4000 level courses. A minimum grade of "C" is necessary in each required course.

Students may also take Money and Banking (FNBK 3450) and State and Local Finance (FNBK 4560) for economics credit. The economics courses and finance and banking courses are listed in the College of Business Administration.

Students are encouraged to take Computer Literacy with Applications (CSI 1000), Calculus for Managerial, Life and Social Science (MATH 1930), and Business Statistical Applications (BSAD 3140).

Students are encouraged to meet with the undergraduate adviser within the economics department to design a program which will include economics and related courses.

## **Bachelor of Science**

Students in the College of Arts and Sciences may take a Bachelor of Science degree with a major in economics by meeting the Arts and Sciences general requirements, except for the foreign language requirement, and by completing the following minimum program in the economics department of the College of Business Administration.

A Bachelor of Science in economics consists of a minimum of 36 credit hours. The following specific courses are required: Principles of Economics: Micro and Macro (ECON 2200 and 2220), Economic Theory: Micro (ECON 3200), Economic Theory: Macro (ECON 3220), Principles of Business Statistics (BSAD 2130), 15 hours of economics electives from 3000- or 4000-level courses and six hours of economics electives from 4000-level courses. A minimum grade of "C" is necessary in each required course.

Students may also take Money and Banking (FNBK 3450) and State and Local Finance (FNBK 4560) for economics credit. The economics courses and finance and banking courses are listed in the College of Business Administration.

Students are required to take Computer Literacy with Applications (CSCI 1000) and either Calculus for Managerial, Life and Social Science (MATH 1930) or Calculus I (MATH 1950). Students are encouraged to take Business Statistical Applications (BSAD 3140). These courses may be used to partially fulfill the requirement to take 15 hours of related (cognate) courses.

Students are encouraged to meet with the undergraduate adviser within the economics department to design a program which will include economics courses and additional related (cognate) courses. These related

(cognate) courses may be drawn from the following cognate fields: business administration, computer science, geography, history, international studies, mathematics, political science, public administration, sociology, statistics and urban studies. Cognate courses from other fields must be approved by the economics undergraduate adviser.

**For more information...**  
please call (402) 554-2806.

## Minor in Economics

A minor in economics may be secured by completing Economics 2200 and 2220, Principles of Economics, plus 12 hours of upper division courses in economics. Any course that may be used for the major may be used for the minor. A grade of "C" or better is required in each course counting toward the minor.

## ENGLISH

### Major in English

The English department offers only the Bachelor of Arts Degree. Students who elect to major in English must pass with a grade of "C" or above a core of 12 hours, including English 2310, 2320, 4600, and either 2450 or 2460. In addition to the core courses, students must pass with a grade of "C" or above 27 semester hours from courses counting toward one of three areas of concentration:

#### Concentration in British Literature

- 3 hours of English 2410
- 6 hours from among English 4040, 4320, 4330, 4340, 4480, 4500, 4620, 4640
- 6 hours from among English 3430, 4040, 4250, 4260, 4650, 4660, 4810, 4820, 4850, 4910, 4950
- 6 hours from among English 4040, 4050, 4180, 4250, 4910, 4930, 4970, 4980
- 3 hours from among English 4530, 4700, 4750, 4760
- 3 hours from among English 4580, 4680, 4780, 4880, 4960

#### Concentration in American Literature:

- 3 hours of English 2410
- 3 hours from among English 4040, 4320, 4330, 4340, 4480, 4500, 4620, 4640
- 3 hours from among English 3430, 4040, 4250, 4260, 4650, 4660, 4810, 4820, 4850, 4910, 4950
- 12 hours from among English 4040, 4050, 4180, 4250, 4910, 4930, 4970, 4980
- 3 hours from among English 4530, 4700, 4750, 4760
- 3 hours from among English 4580, 4680, 4780, 4880, 4960

#### Concentration in Writing and Linguistics

- 3 hours of English 2420
- 3 hours from among English 3430, 4250, 4260, 4320, 4330, 4340, 4480, 4500, 4620, 4640, 4650, 4660, 4810, 4820, 4850, 4910, 4950
- 3 hours from among English 4050, 4180, 4250, 4910, 4930, 4970, 4980
- 15 hours from among English 4040, 4530, 4580, 4680, 4700, 4750, 4760, 4780, 4880, 4960\*

- 3 hours from among English 4580, 4680, 4780, 4880, 4960

*\*With department approval, 6 hours of upper-level courses from other departments may count in this category.*

#### For all three concentrations:

- English 4940, 4950 and 4990 will satisfy requirements in one of the categories under each concentration – the category to be determined by the specific topic studied.
- In order to graduate, majors must complete outcomes assessment measures designated by the department.
- Majors who entered the program before fall semester 1998 may substitute English 2430 for English 2410 or 2420.

## Minor in English

Students who elect a minor in English must pass with a grade of "C" or above a minimum of 18 hours in English with the following distribution:

- 3 hours of either English 2410 or 2420\*
- 6 hours of English 2310, 2320, 2450, 2460, 2500, 2510, 2520
- 9 hours of English courses at the 4000-level (English 3430 can be substituted for one 4000-level course).

*\*Those minoring in English who entered the program before fall semester 1998 may substitute English 2430 for English 2410 or 2420.*

## Major in English for Secondary Teaching

Students who elect English as their major field for secondary teaching must pass with a grade of "C" or above courses from each of the following groups:

- 18 hours from English 2430, 4750, 4761, 4700, 4580 and 4780 (TED 3750 and 4660 are also required);
- 9 hours from English 2310, 2320, 2450 and 2460;
- 3 hours from English 2500, 2510 and 2520;
- 3 hours from English 4660, 4850, 4910 and 4950; 4500, 4600, 4620, 4640, 4650, 4810, 4820, 4930, 4970, and 4980.

Students who elect English as their major field for secondary teaching may select either

- a major in the College of Education,
- or a major in the College of Arts and Sciences\*

*\*Students must satisfy the requirements for both English as a major field for secondary teaching and for a major in English. Students wishing secondary school certification in English must also satisfactorily complete a sequence of courses in the College of Education.*

#### **For more information...**

please call (402) 554-2635.

## ENVIRONMENTAL STUDIES

The environmental studies major is designed so that a student specializes in one of the following areas of emphasis or options: analytic, earth sciences, geography and planning, or life science. Each option is designed for the student to develop enough depth in that discipline to continue on to graduate school in that discipline. The courses required in each option, however, are also chosen with the intent that a student with a Bachelor's degree is competitive in the environmental job market. Only a B.S. degree is offered.

Analytic Option. The analytic option is designed to produce chemists who are particularly interested in the chemical pollutants that are being released into the air, earth and water environments of our planet. They may find jobs with local and state health departments, state and national environmental protection agencies, local testing laboratories, as well as in the private chemical-producing industries. Typically graduates work as laboratory and field technicians who sample and analyze chemical pollutants.

Advisers: Dr. Frederic C. Laquer or Dr. Dan Sullivan

Earth Sciences Option. The earth sciences option is designed to prepare students for a career in environmental geology. Today many environmental problems are associated with the earth and our use of it. Thus contamination of surface and underground waters, pollution of the soil and construction of dams and other large structures all require earth science environmental specialists to either help alleviate the problem created by misuse, or avoid environmental problems during project development. Many public and private agencies, including engineering and construction firms, have jobs for people trained in this area. Advisers: Dr. Harmon Maher and Dr. Bob Shuster.

Geography and Planning Option. The geography and planning option is primarily designed to produce local and regional planning specialists who have a good understanding of environmental problems. Anytime humans change the nature of the landscape by constructing new housing developments, highways, shopping centers, etc. a potentially negative environmental impact to the natural landscape exists. Today planners who are environmentally sensitive are in great demand to help avoid the common confrontations that arise between developers and those groups that are affected by the project. Advisers: Dr. Charles Gildersleeve and Dr. Jeff Peake.

Life Science Option. The life science option is designed to prepare a student for jobs in environmental biology which have something to do with the impact of modern technology and change on life forms. These include working as pollution technicians for various public agencies such as county and state health departments, as well as state and national environmental protection agencies; students may also find themselves attracted to jobs with local, regional and national nature conservation agencies, both public and private. These jobs may involve monitoring endangered species, evaluating habitat, making inventories of wildlife, or interpreting nature as a ranger in a public or private environmental education center. Advisers: Dr. Sue Fairbanks and Dr. Roger Sharpe.

## Environmental Studies - The Core Curriculum

All environmental studies majors, no matter which option they choose, are required to take the same core of courses which provide breadth, environmental values, and a fundamental understanding of our social/legal processes. Some of the courses in the core curriculum may be used to fulfill divisional requirements. Note that some required course areas in the core curriculum may be fulfilled by several options. Students who are unsure about which option to choose may contact any of the advisers listed above.

Courses needed to fulfill the core curriculum include BIOL 1330, CHEM 1010, 1014, GEOL 1010, ECON 2200, GEOG 1030 or 1060 or 1070, LAWS 3230 or PA 2170 or ECON 3320 or BIOL 4820/GEOG 4820, PHIL 2030 or 3180, SOC 3840 or 3850 or an approved course in sociology, an approved course in statistics, BIOL/GEOG/GEOL 4610 and 4800.

## Environmental Studies - Option Curricula

To fulfill the analytic option the following is required: CHEM 1180/1184, 1190/1194, 2210/2214 or 2250/2260/2274, plus 2400/2404, 2500, 3350/3354, 3414, 3650/3654, and 3700/3704. Plus the following cognate courses: BIOL 2440, an approved course in computer science, GEOG 4010, MATH 1950/1960, PHYS 2110, 2120, 1154, 1164 and one course from the following: GEOG 2620, 3510, 4630, GEOL 1170, 2600, 4540.

The earth science option follows: GEOL 1170, 4260, and GEOG 4330 are required. An additional 26 hours are required and may be chosen from the following courses: GEOL 1180, 2500, 2600, 2750, 2754, 2760, 2764, 3300, 3310, 3450, 3454, 4300, 4540, and GEOG 3510, 4010, 4100, 4320, or 4630. Plus one of the following chemistry sequences: CHEM 1140/1144, 2210/2214, 3650/3654 or 1180/1184, 1190/1194, 2250, 2260, 2274. Plus one of the following physics sequences: PHYS 1050/1054 or 1110/1154 or 2110.

The geography and planning option requires GEOG 1000 or 1020 plus UBNS 1010 and CRP 4000 or GEOG 4120. Three courses are to be selected from the following: GEOG 3510, 4100, 4250, 4260, 4320, 4330, or 4340. Two courses are to be selected from GEOG 3130, 3930, 4010, 4120, or 4820. Four courses should be chosen from the following: GEOG 3530, 3540, 4020, 4030, 4050, 4610, 4630 or 4660. Two courses must be taken from the following: BIOL 1450, 3340, 3530, 4120, 4180, or 4210. Two computer science courses must be taken (to be approved by an adviser). One of the following chemistry sequences must be taken: CHEM 1140/1144 or 1180/1184. One of the following physics sequences must be taken: PHYS 1050/1054 or 1110/1154.

The life science option requires BIOL 1450, 1750, 2140, 2440, 3340, 3530, 4120, plus two additional upper division hours in biology (note that six hours of the ES Core apply to the 18 hour upper division rule). Plus one of the following chemistry sequences: CHEM 1140/1144, 2210/2214, 3650/3654 or 1180/1184, 1190/1194, 2250, 2260, 2274. Plus one of the following physics sequences: PHYS 1050/1054 or 1110/1154, 1120/1164.

## Minor in Environmental Studies

Biology 1330	Environmental Biology, 3 credit hours
Chemistry 1010	Chemistry in the Environment and Society, 3 credit hours
Geology 1010	Environmental Geology, 3 credit hours

Philosophy 3180 Environmental Ethics, 3 credit hours

Plus 9 credit hours chosen from the following list, provided that those courses are not in the student's major field of study: Biology 3340, 3530, 3730, 4100, 4120, 4210, 4220, 4230, 4270, 4340, 4350, 4370, 4540, 4610,

4780, 4790, 4800, 4820, 4840, 4880, 4910, 4920, 4940, 4980; Chemistry 3350/3354, 3414, 3650/3654, 3700/3704; Geography 3130, 3510, 3530, 3540, 3930, 4010, 4020, 4030, 4050, 4100, 4120, 4250, 4260, 4320, 4330, 4340, 4610, 4630, 4820; Geology 3300, 3310, 3450, 3454, 4300, 4540. Exceptions must be approved by the Environmental Studies Coordinating Committee.

**For more information...**

please call (402) 554-2390.

**FOREIGN LANGUAGES AND LITERATURE**

The department offers undergraduate majors and minors in French, German, and Spanish as well as courses through the intermediate level in Hebrew, Russian, Japanese, and Italian. In addition, it participates in such interdisciplinary programs as Latin American Studies, International Studies and English as a Second Language.

To expedite the study of the beginning and intermediate levels, intensive summer programs of 16 credit hours in French, German, Japanese, Russian and Spanish are offered on a rotating basis. The department also offers summer courses in Germany, Mexico and Quebec.

French 4040, German 4040, and Spanish 4040 are the approved university third writing courses for French, German and Spanish majors respectively. Students must have completed English 1160 in order to take their third writing course (of the university core curriculum) in a foreign language.

There is a laboratory fee for all foreign language courses at the 1000 and 2000 levels.

**Major in Foreign Languages**

Thirty credit hours at the 3000 and 4000 level are required for a major in French, German or Spanish as follows.

Requirements for a major in French are 3030, Conversation; 3040, Grammar and Composition; 3150, Introduction to Literature I; 3160, Introduction to Literature II; 3370, French Civilization; 4030, Advanced Conversation; 4040, Advanced Composition and Stylistics; and 9 credit hours of electives in French.

Requirements for a major in German are 3030, Conversation; 3040, Grammar and Composition; 3150, Introduction to Literature; 3370, Civilization; 4030, Advanced Conversation; 4040, Advanced Composition and Stylistics; and 12 credit hours of electives in German.

Requirements for a major in Spanish are 3030, Conversation; 3040, Grammar and Composition; 4030, Advanced Conversation; and 4040, Advanced Composition and Stylistics. Six hours from 3170, Survey of Spanish Literature I; 3180, Survey of Spanish Literature II; 3210, Survey of Latin American Literature I; and 3220, Survey of Latin American Literature II. Three hours from Spanish 3410, Spanish Civilization; or 3420, Latin American Civilization. Nine hours of electives at the 3000 or 4000 level.

All foreign language majors must complete a minimum of 12 credit hours in their major language at the 3000 and 4000 level in residence at UNO. It is strongly recommended that all foreign language majors include a

study abroad component of at least one month during the second half of their program of study. All courses credited to a major or minor in a foreign language must be passed with a grade of "C" or better. No courses in the department may be taken for credit/no credit by students majoring or minoring in foreign languages. No foreign language course may be audited. Courses in the 1110, 1120, 2110, 2120 sequences may not be taken out of order. Students must pass the prerequisite course before taking the next course in the sequence, and may not take an earlier course in any sequence for credit once they have received credit in a later course in any sequence. All 3000 and 4000 courses may be taken for honors credit in cooperation with the honors program.

**Minor in Foreign Languages**

All foreign language minors must complete a minimum of 9 credit hours in their minor language at the 3000 or 4000 level in residence at UNO.

A minimum of 15 credit hours in courses at the 3000 to 4000 level are required for a minor in French, German or Spanish.

**For more information...**

please call (402) 554-4841.

**GENERAL SCIENCE**

In addition to college requirements, a major in general science consists of Chemistry 1180-1184 and 1190-1194; Physics 1110-1154, 1120-1164 or Physics 2110-1154, 2120-1164; Mathematics 1430-1530 or Calculus I; Biology 1450 and 1750; Geology 1170; plus 12-14 credit hours of courses at the 2000 level or above as determined by the adviser to attain a total of 42-45 hours of credit in the natural sciences. Only a B.A. degree is offered.

**GEOGRAPHY\***

**Bachelor of Arts**

A Bachelor of Arts degree with a major in geography consists of 36 credit hours plus two years of college work in one foreign language or the equivalent as determined by the Department of Foreign Languages. Lower division requirements: 1000 or 1020; 1060 and 1070. If Geography 1030 is taken prior to a major declaration, then Geography 1070 and Geography 3510 must be taken to satisfy the core in physical geography. Geography 3510 in this case then also counts toward upper division physical requirements.

Three upper division groups are required:

Group 1

- a. Physical (choose one of the following): 3510, 4100, 4250, 4320, 4330 and 4340.
- b. Human (choose two of the following): 3130, 3930, 4010, 4120, 4150, 4160 and 4900.

Group 2

- a. Regional (choose two of the following) 3030 through 3240, 4900 or 4600;
- b. and (one of the following) 3330, 4230 or 4530.

Group 3

Techniques

- a. 3530 and 3540.

- b. one of the following: 2620, 4020, 4030, 4050, 4610, 4630, 4660 and 4800.

One additional upper level course (3000- or 4000-level) from the three groups must be selected to complete the major.

## Bachelor of Science

Requirements for a Bachelor of Science degree with a major in geography are the same as for the B.A. except that (in lieu of a foreign language) the following courses are required:

- Computer Science six credit hours of approved courses;
- Mathematics 1530 or Statistics 3000; and
- English 2400; plus three additional credit hours in mathematics, computer science or statistics.

For students who wish more technical applications in geography, the department also offers, in addition to a general geography major, an undergraduate concentration in Geographic Information Systems within the Bachelor of Science Program. In order to receive a certificate for the special concentration, a student must include the following courses as part of or in addition to the 36 hour minimum in geography and 15 hours B.S. requirement: Geography 4030 and 4050; Math 1320, 1330, and 1950; and six credit hours of approved courses in computer science.

## Advanced Writing Course

English 2400 has been approved as the advanced writing course for geography majors.

## Minor

A minor in geography requires a minimum of 22-24 credit hours including 1000 or 1020, 1060, 1070, plus an additional four upper level courses under specific faculty advisement.

*\*A geography major is also available through the Colleges of Education and Continuing Studies. Courses 1030, 1060, 1070, 2620, 3510, 3530, 3540, 3550, 4030, 4050, 4100, 4250, 4260, 4320, 4630 and 4660 offer credit in the Natural Science Division. All other geography courses offer credit in the Social Science Division in the University.*

## GEOLOGY

### Bachelor of Science

A Bachelor of Science degree in geology consists of a minimum of 44 credit hours. The following geology courses are required: 1170, 1174, 1180, 1184, 2750, 2754, 2760, 2764, 3100, 3104, 3300, 3310, 3450, 3454, 3460, geology summer field camp 4620, 4950, one course from 4250, 4260, or GEOG 4330, and one course from 2600, 4400, 4540, or another course approved by an adviser. A Bachelor of Science degree also requires a program of: Chemistry 1180, 1184, 1190, 1194; Physics 2110, 2120; Calculus 1950, 1960; and any two of Statistical Methods 3000, 3010, Computer Science 1610 or programming languages 1800 or 1820.

### Bachelor of Arts

A Bachelor of Arts degree in geology consists of a minimum of 44 credit hours. The following geology courses are required: 1170, 1174, 1180, 1184, 2750, 2754, 2760, 2764, 3100, 3104, 3300, 3310, 3450, 3454, 3460, 4950, geology summer field camp 4620, one course from 4250,

4260, or GEOG 4330, and one course from 2600, 4400, 4540, or another course approved by an adviser. A Bachelor of Arts degree also requires a program of: Chemistry 1180, 1184, 1190, 1194; Physics 2110, 2120; Calculus 1950, 1960; and any two of Statistical Methods 3000, 3010, Computer Science 1610 or programming languages 1800 or 1820. In addition, a student must complete two years of college work in one foreign language or the equivalent as determined by the department of foreign languages.

## Minor

The requirements for a minor in geology are 1170 and 1180 (8 credit hours) plus an additional 15 hours (including at least 12 hours of 3000- and/or 4000-level courses) from selected optional courses under specific faculty advisement. Students wishing to emphasize geology beyond the minor may wish to enroll in the interdisciplinary studies major.

*\*All geology courses offer credit in the Natural Science Division of the University.*

## For more information...

about geography or geology, please call (402) 554-2662.

## HISTORY

### Bachelor of Arts

In addition to college requirements, students who elect a major in history and seek the B.A. degree must pass, with at least a "C" grade, History 1000 and 1010; nine hours from among History 1020-2990 (no more than three hours of History 2990 may be taken to fulfill the nine hour requirement); and 21 hours of history or the equivalents from courses in the 3000 and 4000 levels. The 21 hours must include History 3930 (Historical Research). No upper-division courses offered toward a degree in history may be taken on a Credit/No Credit basis. Students wishing to substitute any course in partial fulfillment of the history major must petition the Executive Committee of the department of history. In so doing they must demonstrate that the proposed substitute is germane to their particular historical field of interest. Such petition must be made and approved prior to enrollment. There will be no credit by examination for history courses except through CLEP, and only for History 1110/1120 and History 1510/1520.

### Bachelor of Science

Students who plan to undertake graduate study in history are advised that the B.A. degree is preferred to the B.S. degree by most graduate admissions committees and that knowledge of one or more foreign languages is necessary in most fields of historical research and writing.

Students who elect a major in history and seek the B.S. degree must meet the same history requirements and follow the course of study outlined for the B.A. degree with two important exceptions. First, students working toward the B.S. degree are exempt from the foreign language requirement of College of Arts and Sciences. Second, all candidates for the B.S. degree must successfully complete 15 credit hours in cognate courses, including one 3-hour course in logic ( Philosophy 2010) or statistics

(Mathematics 1530 or Psychology 2130 or Sociology 2130) or any one of the "Writing Courses" approved by the College of Arts and Sciences (in addition to Hist 3930). The balance of the hours must include twelve hours from 3000/4000 level courses selected to complement the student's interests in history. None of the foregoing courses may be used to fulfill the "Enhancement of Fundamental Competencies" requirements or any "Distribution Requirements" of the College of Arts and Sciences. Approval for the 15 hours of cognate courses for the B.S. in history shall be in the form of a written contract to be signed by the student's history faculty adviser and placed in the student's file. In that contract, the upper-division hours may be described either as specific courses or as the number of credit hours required in one or more fields of study.

#### **Advanced Writing Course**

History 3930 is the advanced writing course for history majors (English 1160 is a prerequisite). There is a heavy demand for this relatively limited enrollment course. Because of this, students registering in this class must get the written permission of the Chair, or the Chair's designee, to complete their enrollment. Students who drop History 3930 will not, in subsequent semesters, be allowed to register unless there are spaces available after seniors have had the opportunity to register during regular registration.

#### **Minor in History**

Students may take a minor in history by completing 15 hours in history at the 2000-4990 levels, with no more than three hours in 2000-level courses. All courses must be completed with a grade of "C" or above.

#### **Pre-Law**

Students majoring in history, who also anticipate professional training in law, are encouraged to complete all requirements for the Bachelor of Arts degree. Pre-law advisers for history majors will assist each student in the selection of a program that will enable that student to attain a broad general education while progressing toward the bachelor's degree.

#### **Education Subject Endorsement**

Those students seeking a subject endorsement for a degree in the College of Education must take History 1000/1010 and 1110/1120; 6 hours of course work at the 2000 level; 18 hours of course work at the 3000/4000 level; and 6 hours of work in cognate courses. For advice, please check with Student Services in the College of Education (KH 326).

#### **Western Civilization/World Civilizations**

Transfer students who have taken two semesters of Western Civilization may count 3 hours toward the World Civilization requirement and then take 3 hours (usually History 1000) to complete their World Civilization requirement or they may take one of the following: History 2470, 2480, 2710, 2810, 2820, 2900, 2920.

#### **For more information...**

please call (402) 554-2593.

#### **INTERDISCIPLINARY STUDIES**

As an alternative to the departmental major, the interdisciplinary studies program enables the student whose interests follow area or topic lines to undertake an interdisciplinary, integrated program of studies. Each student's interdisciplinary major is structured to fit his or her particular interest area; however, all college requirements must be satisfied. Students interested in the program should contact the Dean of the College of Arts and Sciences no later than the first semester of the junior year. Either the B.A. or B.S. degree is offered.

#### **INTERNATIONAL STUDIES**

##### **Bachelor of Arts**

The international studies program provides a substantial foundation for professional careers in international business and commerce, secondary school teaching, or government service. The program also prepares students for graduate study in a variety of disciplines, including business, international management and law.

A major in international studies requires:

- satisfying a foreign language proficiency requirement equivalent to three years of university-level foreign language training in one language or two years each of two foreign languages; and
- completing a minimum of 45 credit hours in the approved international studies curriculum, which includes the core courses (International Studies 2130 and 2140, Economics 2220, Geography 1020, Computer Science 1000 and Political Science 2210).

A major in international studies will meet or exceed the requirements for a major as specified by the College of Arts and Sciences, including at least 18 credit hours of upper division work. Beyond the core courses and foreign language classes, the curriculum for international studies majors is constructed of those courses that have an international focus in disciplines such as history, political science, geography/geology, sociology, economics, philosophy and religion, English, and related courses in the fine arts and humanities.

Four options are available for a major in international studies:

1. International studies with a specialization in international management and business.
2. International studies with an area studies specialization.
3. International studies with a combination of the specializations in options 1 or 2.
4. Double Major: international studies as in 1, 2 or 3 plus a major in another discipline.

##### **Area Studies Specialization**

This specialization offers the opportunity to focus on one or more areas of regional interest. Examples are: Latin America, Eastern Europe, Western Europe, Africa, East Asia and Third World Development. It may be possible to work out other areas of concentration, depending on the availability of relevant courses at a given time. Individuals opting for an area studies specialization must complete at least 15 hours



of upper division courses on the region they select. At least one foreign language studied by those selecting this specialization must be associated with the area chosen.

## International Management and Business Specialization

This specialization, with its international career track, is recommended for individuals who are interested in careers in government, international private organizations and foundations, and international business and commerce. Students choosing this specialization may take courses from the areas of international finance, international marketing and international economics, as well as related courses in political science, geography, history, et alia. Students choosing to specialize in international management and business must add the following core business courses to their curriculum: Accounting 2010, 2020 and Economics 2200. At least 15 hours of upper division course work must be completed in business-related classes.

### For more information...

please call (402) 554-2376.

## MATHEMATICS

### Bachelor of Arts and Bachelor of Science with a Major in Mathematical Sciences

Students wishing to specialize in mathematics and intending to do either graduate work in mathematics or work in business and industry will be interested in this degree. The degree with a major in the mathematical sciences consists of 47 hours of required courses in mathematics and computer science, combined with either (1) for the Bachelor of Science degree, 18 hours in related cognate courses outside the department (which must be developed with an adviser and specifically approved by the Mathematics and Statistics Curriculum Committee of the department of mathematics) or (2) for the Bachelor of Arts degree, 16 hours in a foreign language. Specifically, the requirements are as follows:

- Required mathematics courses - 1950, 1960, 1970; 2230; 2050; 3100; 3230; 3350; 4740 and three upper division (courses numbered 3000 or above) mathematics electives (nine hours) including two 4000-level courses.
- Required computer science courses -1610 or equivalent, one from 1620, 1800, or 1840.
- For the Bachelor of Science degree, 18 hours in cognate courses outside the department and approved by the department as a cohesive group of courses.
- For the Bachelor of Arts degree, 16 hours in a foreign language.
- There are five suggested alternatives for the upper division mathematics electives: applied mathematics, computer science, operations research, statistics, and traditional mathematics.
- Further information is available in the degree brochure which can be obtained in DSC 203.
- The MFAT national exam must be taken in one of the two semesters prior to graduation.
- Completion of the required, hands-on, computer algebra exam.

## Third Writing Course

To satisfy the third writing course required by the College of Arts and Sciences, the department recommends either GET 2140 - Technical Writing or English 3980-Special Topics in Composition/Technical Writing. English 2400 - Advanced Composition will also be accepted. The student may petition the department to meet this requirement with some other course for which English 1160 is a prerequisite.

## Minor in Mathematics

A minor in mathematics may be obtained by successful completion of 26 hours in mathematics courses consisting of MATH 1950, 1960, 1970, 2030 or 2230, 2050 and two upper-level (3000 or higher) courses.

### For more information...

please call (402) 554-3430.

## NATIVE AMERICAN STUDIES (Minor Only)

A minor in Native American studies requires 18 credit hours. The only required course is Humanities 1100. At least 12 credit hours must be courses at the 3000 or 4000 level. Courses approved for Native American studies credit include ANTH 3320 ANTH 4220, ENGL 2470, ENGL 3100, HIST 4400, MUS 3790, MUS 4090, RELI 3020, SOWK 4010, and UBNS 3010. Independent Studies courses and Special Topics courses may also be available for credit. To sign up for the Native American studies minor, contact Professor Bruce Johansen, ASH 151J, 554-4851.

## PHILOSOPHY AND RELIGION

The department offers a major in either philosophy or religion.

In addition to the general requirements for the B.A. degree, a major in philosophy may be secured by successfully completing 30 credit hours in philosophy, of which at least 18 hours must be in upper division courses.

The department requires for all **philosophy** majors either Critical Reasoning (1210) or Logic (2010); and Introduction to Ethics (2030), History of Ancient Philosophy (2110), and History of Modern Philosophy (3130). Philosophy 3130 has been approved for the third writing course.

The department strongly recommends Philosophy of Natural Science (3400) or Philosophy of the Social Sciences (3410), and Theory of Knowledge (4100) or Metaphysics (3700).

The department also strongly recommends one course from the following, Philosophy of Religion (3200), Social Philosophy (3210), Philosophy of Art (3220), and one course from the following, Nineteenth Century Philosophy (3140), Existentialism and Phenomenology (3510), Interpretation, Critique, and Deconstruction (3520).

An undergraduate minor in philosophy may be secured by completing 12 hours of upper division courses in philosophy and Critical Reasoning (1210) or Logic (2010), and Introduction to Ethics (2030).

In addition to the general requirements for the B.A. degree, a major in **religion** consists of a minimum of 27 credit hours in the field, of which at least 18 hours must be in upper division courses. Introduction to World Religions (1010), Old Testament (2150), New Testament (2160), Religions of the East (3050), and Religions of the West

(3060) are strongly recommended for all religion majors. An undergraduate minor in Religion may be secured by completing 12 hours of upper division courses in religion. Old Testament (2150) has been approved for the third writing course.

The three-hour Summer Biblical Archaeology Dig (RELI 3500) may be combined with Readings in Religion (RELI 3960) for three additional credit hours in religion or combined with International Studies 3000 to earn three hours in international studies.

**For more information...**

please call (402) 554-2628.

**PHYSICS**

Students with a serious interest in physics should consult the departmental Chairperson as early as possible in order to determine which program best fits their needs.

The minimum departmental requirements for all physics majors can be summarized as follows: certain introductory courses (Physics 1110-2150 and 1120-2160 or 2110-2120, 1154, 1164, 2130, and 3250); Calculus I, II and III; the core courses (Physics 3020, 3450, 3750, 3760 and 3850); three advanced laboratories; and a senior project. Students who have taken Physics 2110-2120 should substitute Physics 4200 for Physics 2130; those taking a number of advanced mathematics courses may be permitted to waive Physics 3250.

Physics 1030, 1050, 1350 and 1750 and associated laboratories do not count toward a major in physics.

The core courses contain the classical materials with which all physicists should be acquainted. In addition, physics majors should strive to take as many of the courses in modern physics (4200, 4210, 4220, 4230) and electronics (3010) as their program will permit. A grade of D+ or lower in a core course is not acceptable toward the fulfillment of the requirements for a degree in physics. The senior project must be approved and the department chair notified at least eight months prior to graduation as a physics major and the student must register for either Physics 4950 or 4960.

Upper division courses (3000-level or higher) will assume that students have at least some experience with, and ability to use, computers for solving physics problems. Majors are encouraged to take as many computer science courses as possible.

The requirement of a third writing course may be satisfied by: GET 2140 (Technical Report Writing), ENGL 3980 (Technical Writing) or with special approval by the physics department, courses in other disciplines identified as writing courses.

**Bachelor of Arts with a Major in Physics**

Students who desire a broad education with a minimum amount of specialization and who do not want to forsake the option of doing graduate work in physics will be interested in this degree. They must satisfy the minimum requirements stated above.

**Bachelor of Science with a Major in Physics**

This degree leads to a strong specialization and preparation for graduate school. The student must take 44 hours of physics including 4200. A foreign language is not required.

**Bachelor of Science with a Major in Engineering Physics**

A student with this degree should have a large number of options. He/she could go on to graduate school in physics or could enter various other graduate programs such as oceanography, mechanics, aerospace, or electrical engineering. His/her immediate usefulness to industry should be enhanced by the engineering content.

The departmental requirements are the same as for the Bachelor of Arts degree with the addition of 20 hours of engineering courses selected from among the following: EM 1120, EM 2230, EM 3250, EM 3350, EM 3730, EM 3760, EE 2110, ME 2000, and CE 3100. In cases where the course content of the engineering and physics courses is similar, the student may substitute engineering for some core physics courses with departmental consent. A foreign language is not required.

**B.G.S. Degree**

Those interested in a physics concentration with a B.G.S. degree through the College of Continuing Studies must satisfy essentially the same requirements as for the Bachelor of Arts degree. However, actual programs of course work are somewhat flexible and are individually arranged with the approval of the physics department.

**Minor in Physics**

A minor in physics shall consist of a minimum of 18 hours of physics courses with at least 15 hours chosen from among those courses normally counted toward the B.A. in physics. Education majors should consult the physics chairperson about exceptions.

**For more information...**

please call (402) 554-2511.

**POLITICAL SCIENCE**

The Bachelor of Arts and Bachelor of Science degrees with a major in political science are offered by the department of political science. Both degree programs are flexible and are designed to meet a wide variety of student needs and interests. A student may wish to concentrate in a specific subfield of political science or take as diverse a range of courses as possible. Whatever the case, each student's program must be carefully planned with a departmental adviser to meet his/her needs and interests.

**Bachelor of Arts With a Major in Political Science**

The major consists of a minimum of 27 credit hours in political science. In addition, 12 credit hours from cognate fields outside the department of political science are required. B.A. requirements are as follows:

- Political Science 1000 and 1100 (unless one is waived by the department), 2000, and 4950.
- At least one three-hour course in each of the following subfields: political theory, American politics, comparative politics, and international politics.
- Remaining hours in political science shall be elected by students in accordance with their interests.

- At least 18 hours of political science courses must be taken at the 3000 and 4000 levels.
- Students shall take a minimum of 12 credit hours of courses in other fields (e.g. history, economics) regarded by their departmental advisers as cognate to each student's primary interests in political science.
- A foreign language is required. (The requirement is the same as that of the College of Arts and Sciences.)

## Bachelor of Science With a Major in Political Science

The major consists of a minimum of 36 credit hours in political science. In addition, 15 credit hours from cognate fields outside the department of political science are required. B.S. requirements are as follows:

- Political Science 1000 and 1100 (unless one is waived by the department), 2000, and 4950.
- At least one three-hour course in each of the following subfields: political theory, American politics, comparative politics, and international politics.
- Remaining hours in political science shall be elected by students in accordance with their interests.
- At least 24 hours of political science courses must be taken at the 3000 and 4000 levels.
- A minimum of 15 credit hours of cognate course work that support the student's work in the major must be taken in other disciplines. This may be satisfied by one of the following options:  
**OPTION 1:** One year of a foreign language (counted both as cognate hours and as hours toward the humanities requirement) PLUS additional hours of cognate courses (to a total of 15) that support the student's work in the major.  
**OPTION 2:** Three hours of an approved course in statistics AND three hours in an approved course in computer science PLUS additional hours of cognate courses (to a total of 15) that support the student's work in the major.  
 In either option, courses are approved through consultation with departmental advisers.

## Quality of Work and Subfields

A political science major must earn at least a "C" in all required courses. While a minimum of 27 (B.A.) or 36 (B.S.) hours of political science is required of a major, up to 45 hours may be applied toward either the B.A. or B.S. degree.

The subfields of political science and the courses they include are as follows:

American Politics - 2010, 2100, 2110, 3020, 3040, 3100, 3120, 3130, 3160, 3170, 4030, 4040, 4050, 4120, 4170, 4180, 4190

Comparative Politics - 2500, 2560, 2660, 3500, 3560, 3580, 3640, 3660, 3680, 4350, 4360, 4370, 4500, 4520

International Politics - 2210, 3220, 3260, 4200, 4210, 4280

Political Theory - 2310, 3340, 4000, 4310, 4320, 4330

Political Science 3920, 4900, 4910 and 4950 normally will not satisfy the subfield distribution requirement; however, in extraordinary cases, exceptions can be made with departmental permission. No course may be used to satisfy more than one departmental requirement.

## Graduate Studies in Political Science

The political science major who intends to pursue graduate studies in the field is advised to take Political Science 4000 and at least one of the following courses: Political Science 3340, 4310, 4320, or 4330.

## Pre-Law

The political science major who intends to pursue a legal career is encouraged to obtain as broad and liberal preparation as possible. The following courses are highly recommended (but not required) for the major seeking entry into law school: Political Science 4050, 4170, 4180 and 4190; History 4330, 4340 and 4600; Economics 2010 and 2020; English - advanced literature and composition courses; Accounting 2010 and 2020. Other courses generally regarded as useful are Philosophy 2010; Communication 1120; Biology 2140; Mathematics 1310, 1320; Computer Science 1610; Psychology 4440.

## Public Service

A political science major interested in a career in public service is encouraged to include in his or her academic program courses selected from but not limited to the following: Political Science 2010, 2100, 2110, 4030, 4040, 4170 and 4180; Public Administration 4410 and 4430; History 1110, 1120; Economics 2010, 2020; Accounting 2010, 2020; Geography 4120; Urban Studies 1010; and Computer Science 1610, 1620.

## Minor in Political Science

An undergraduate minor in political science may be secured by completing 18 hours of political science, 12 of which must be at the 3000 to 4000 level. All of these courses must be completed with a grade of "C" or better.

## For more information...

please call (402) 554-2624.

## PSYCHOLOGY

The psychology department offers two avenues by which a student may complete an undergraduate major. The first leads to a Bachelor of Arts degree. It is intended for the student who is seeking a broad, liberal education. The second path leads to a Bachelor of Science degree, a more rigorous, challenging program of study. More mathematics and natural science as well as more laboratory work in psychology are required. Both programs prepare the student for admission to graduate programs in psychology.

In addition to these two programs, a student in either the College of Arts and Sciences or the College of Education may elect psychology as a secondary education teaching field. Students electing psychology as a teaching field should confer with the College of Education for specific requirements.

Students are advised to pay particular attention to the prerequisites for each course. Students should begin taking courses early in their college years that are the

prerequisites for more advanced course work in the major or minor in psychology. Specifically, PSYC 1010, 1020, and 1024 are prerequisites for PSYC 2130, which is the prerequisite for PSYC 2140. All of the above courses are the prerequisites for PSYC 3014, 3074, 3214, 3234, and 4280.

A grade of "C" or better must be earned in all courses required for the B.A. and B.S. degrees in psychology. Permission of the department must be obtained to substitute another course for one in which a grade of less than "C" is earned.

#### Advanced Writing Requirement

PSYC 2140 and one of the following courses is required to satisfy the advanced writing course requirement for all psychology majors: PSYC 3014, 3074, 3214, 3234, 4280, 4960, 4990.

#### **Bachelor of Arts With a Major in Psychology**

An undergraduate major in the B.A. program may be secured by completing the following courses:

Psychology 1010, 1020, 1024, 2130, 2140.

Minimum of 18 hours of upper division psychology.

One of the following lecture/lab pairs: 3010/3014, 3070/3074, 3210/3214, 3230/3234, 4270/4280.

Election of the B.A. degree does not preclude admission to graduate school, but it does not provide as thorough a preparation as does the B.S. program.

#### **Bachelor of Science With a Major in Psychology**

An undergraduate major in the B.S. program may be secured by completing the courses listed below:

##### Required Psychology Courses for B.S. Degree

Psychology 1010, 1020, 1024, 2130, 2140.

Minimum of 18 hours of upper division psychology.

One of the following lecture/lab pairs: 3010/3014, 3070/3074, 3210/3214, 3230/3234, 4270/4280.

One additional lecture course from 3010, 3070, 3210, 3230, 4270.

One of the following courses to meet the research requirement: 3014, 3074, 3214, 3234, 4280, 4960, 4990. Discuss with your adviser the best option for you among these alternatives.

One of the following courses in applied psychology: 3410, 3510, 3630, 3640.

One of the following courses in social/personality/abnormal psychology: 3430, 3450, 4440, 4450.

##### Other Required Courses for B.S. Degree

Two years of a foreign language are required. The six hours of second-year foreign language courses may count toward meeting the College's humanities requirement.

One course from the following is required: Philosophy of Natural Science, Philosophy of Social Science, or History of Psychology.

Six hours of sociology and/or anthropology.

Two courses in biology are required, at least one of which must include a laboratory section.

Students are required to complete one of the following pairs of natural science courses:

1. General Physics (1110/1154) and General Physics (1120/1164).
2. College Chemistry (1040/1044) and Elementary Organic Chemistry (2210/2214).
3. Equivalent courses at a higher level.

Either MATH 1930 or MATH 1950 is required.

Students are required to complete one course in computer science having a programming component. Computer Literacy with Programming (CSCI 1500) or another computer science course at or above the 1500 level will satisfy this requirement.

#### **Minor in Psychology**

An undergraduate minor in psychology may be secured by completing 12 hours of upper division courses in psychology. Psychology 2130 and 2140 may be included for six of the 12 hours. All course work satisfying the minor in psychology must be completed with a grade of "C" or better.

#### **For more information...**

please call (402) 554-2581.

#### **SOCIOLOGY**

The sociology department offers the Bachelor of Arts degree. The undergraduate major in sociology consists of the courses:

Sociology 1010, (Introductory), 2130 (Basic Statistics), 2510 (Research Methods), plus an additional 21 hours.

One course from each of the following must be included in these 21 hours:

Social Problems (2100 or 4130);  
Social Psychology (3450 or 4020);  
Social Organization (3610, 3630, 3690, 4100, or 4620);  
Sociological Theory (4710 or 4720), and  
Anthropology (1050 or 4210).

A minimum of 18 hours of the major must be completed in 3000- to 4000-level courses.

A minor in sociology requires 18 hours, 12 of which must be upper division.

#### **For more information...**

please call (402) 554-2626.

#### **Minor in Anthropology**

An undergraduate minor in anthropology may be secured by completing Anthropology 1050 (Introduction to General Anthropology) and at least 12 additional hours of upper level anthropology courses. (**NOTE:** An anthropology course used to meet sociology major requirements may not be used to complete the anthropology minor). The anthropology offerings are listed just ahead of the sociology offerings in the Course Descriptions Section.

#### **WOMEN'S STUDIES (Minor only)**

A minor in women's studies requires 18 credit hours. Six of those hours consist of two interdisciplinary core courses: Women's Studies 2010 and Women's Studies 2020. The remaining courses should be selected from

designated women's studies courses available in the various departments. Twelve credit hours must be at the 3000 or 4000 level. Three hours toward the minor may be upper level independent study; pursuit of a specialized topic through independent study is a desirable option.

Women's studies include courses regularly offered by departments, as well as special topics courses offered on an occasional basis.

**For more information...**

please call (402) 554-2629.

The College of Business Administration is committed to providing academic excellence in its undergraduate programs. The college faculty provide innovative quality instruction so that students have the opportunity to develop their full intellectual capabilities in preparation for a career in business. The curriculum provides a general common body of knowledge through required business core courses along with a number of business specialization program options. The business curriculum emphasizes the development of decision-making skills along with the ability to analyze problems and identify solutions. Oral and written communication, information technology and interpersonal skills are other areas of emphasis.

Features of the college include: the highest business school accreditation from the AACSB, The International Association for Management Education which places the college with approximately 25% of colleges of business accredited nationally; state-of-the-art computer labs; partnerships with the business community; and faculty dedicated to teaching, research and service.

Business faculty are dedicated to serving students and providing a strong educational experience. Through research, faculty help advance business theory and application. Faculty, administration and staff also provide extensive service to the University as well as the community-at-large including government, business and civic organizations. Through partnerships with the business community, the college has a large internship program offering a variety of opportunities to students to gain practical experience with corporations, small businesses, not-for-profit or governmental organizations.

The College of Business Administration offers courses in several program areas leading to the degree of Bachelor of Science in Business Administration (B.S.B.A.). Degrees are granted, upon application, to students who successfully complete the prescribed requirements for the four-year curriculum established by the College of Business Administration.

#### **GENERAL ADMISSION REQUIREMENTS**

Before entering a degree program in the College of Business Administration, all students must meet the University and College of Business Administration admissions requirements detailed in the "Admissions" section of this catalog.

#### **GENERAL REQUIREMENTS FOR THE B.S.B.A. DEGREE**

- A total of 125 credit hours is required for the B.S.B.A. degree.
- No more than 50% (62 credit hours) of the 125 credit hours required for graduation may be taken within the College of Business Administration. All courses in economics and six hours of business statistics are excluded from this 50% limit.
- A minimum of 54 credit hours presented for the degree must be earned in upper division courses (3000 and 4000 level).

- A student must complete in residence in the College of Business Administration not less than 30 of the last 36 hours required for the degree. A minimum of one-half of the required course work in the student's area of specialization must be completed in residence in the College of Business Administration.
- Courses such as English 1050, 1090 and 1100, and orientation courses at other institutions may not be counted as a part of the minimum 125 credit hours in the degree program. University Seminar 1010 may be applied as an elective if taken within the first 30 hours of the degree program.
- No more than a maximum of 12 semester credit hours of approved courses may be taken in any one department outside the College of Business Administration, with the exception of foreign languages. A maximum of 16 semester credit hours in any one foreign language may be applied toward the degree. More than one foreign language is allowed.
- A maximum of eight credit hours in music laboratory courses such as band, chorus, madrigal singers, orchestra, or technique courses, either singly or in any combination, may be applied toward the degree.
- A maximum of four credit hours of physical education activity courses included in the catalog section entitled Physical Education Service Program may be applied toward the degree. Courses from the professional Health, Physical Education and Recreation (HPER) programs are not included in this four-hour limit. ROTC courses will be evaluated to determine their applicability to degree requirements.
- Refer to College of Business Administration program information booklet for academic standards.

#### **SPECIFIC REQUIREMENTS**

- ECON 2200, Principles of Economics (Micro)
- ECON 2220, Principles of Economics (Macro)
- The requirement in English is a minimum of six credit hours to be determined by the English Placement and Proficiency Exam (EPPE). An additional three hour writing course, MGMT 3200 will also be required.

All freshman students must take the English Placement and Proficiency Exam.

Transfer students who have earned English credit from accredited institutions are encouraged to see an adviser to determine if the EPPE is required.

- CSCI 1000: Computer Literacy with Applications
- MATH 1320: College Algebra.
- Public Speaking (six hours): this requirement may be fulfilled by selecting from the college's approved list of speech communication courses. (See the college's program information book.)

- Distribution Requirement (total of 30 hours)
  - Natural and physical sciences (eight hours minimum, including one laboratory course): this requirement may be fulfilled by courses from any level in biology, chemistry, physics and any of the following courses: GEOG 1030, 1060, 1070, 3510, 4250, 4320, 4630; or GEOL 1010, 1170, 1180, 2750, 2760, 3700, 4260 and FSCI 1310. [Upper division natural science generally require prerequisite(s)]
  - Humanities and fine arts (eight hours minimum): This requirement may be fulfilled by courses from any level in art, English (other than ENGL 1050, 1090, 1110, 1150 and 1160), foreign languages, music (other than laboratory courses), philosophy, dramatic arts, religion, HUMN 1100, 1200 and speech (other than SPCH 1110, 1200 and 1120). Skill and technique courses may not be used to meet the humanities and fine arts requirement. The second of two international studies courses, INST 2140, applies toward the humanities requirement.
  - Social and behavioral sciences (eight hours minimum): This requirement may be fulfilled by courses from any level in history, political science, sociology, psychology and geography (except those geography courses listed in natural and physical sciences). The first of two international studies courses, INST 2130, applies toward the social and behavioral science requirement.

- Cultural Diversity (six hours minimum)  
Three hours must come from the United States racial or Hispanic minority groups.

Courses which satisfy this requirement as humanities:

BLST 1100, 1260, 2260, 2360, 2510, 2730, 2830, 3850, 3920, 3950, 4500  
ENGL 2230, 2260, 2350, 2360, 2470, 3100, 4180  
GDRH 1110  
HUMN 1100, 1200  
MUS 1070  
RELI 3020  
SPAN 4180.

Courses which satisfy this requirement as social sciences:

ANTH 3220, 4220  
BLST 1000, 1220, 1400, 1950, 2000, 2210, 2410, 2420, 3000, 3120, 3200, 3220, 3650  
HIST 4400  
PSCI 3100, 3120  
SOC 3900.

The course which satisfies this requirement as a business elective is MGMT 2010.

Three hours must come from the minority studies, women's studies, or course work with an international or foreign focus.

Courses which satisfy this requirement as humanities:

ART 2040  
BLST 1050, 4700  
ENGL 4250, 4860  
MUS 1080  
PHIL 2110, 3500  
RELI 1010, 2190, 3050, 3060, 3150, 3200, 4020;  
SPAN 4160  
SPCH 3750.

Courses which satisfy this requirement as social sciences:

ANTH 1050, 3210, 4210  
BLST 1340, 2120, 2130, 2900, 3030, 3140, 3500  
GEOG 1020, 3030, 3060, 3070, 3080, 3090, 3230, 3240  
HIST 1000, 1010, 1050, 2190, 2470, 2480, 2510, 2520, 2560, 2580, 2610, 2620, 2660, 2710, 2720, 2810, 2820, 2900, 2920, 4060, 4540, 4560, 4610, 4640, 4710, 4780, 4910  
PSCI 2500, 2560, 3220, 3500, 3560, 3580, 3640, 3660, 3680, 4200, 4210, 4280, 4360, 4370, 4500, 4520  
SOC 2010, 2190, 3220, 4220, 4300, 4530.

Business courses which satisfy this requirement: ECON 3130, 3360, 4610, 4620, 4660; FNBK 3700; MGMT 4150; MKT 3380.

Courses which satisfy this requirement as non-business electives: SOWK 4860; UBNS 4010.

Students may apply these hours, if applicable, toward satisfaction of the humanities, social sciences, or international dimension (for selected courses), or apply the credits as non-business electives.

- International dimension (nine hours)  
Students' general education requirement must include at least nine hours of course work with a global perspective (i.e., history, political science, literature or geography of foreign countries, foreign languages, etc.). Students may apply these hours toward satisfaction of the humanities, social sciences, and cultural diversity requirements (for selected courses), or apply the credits as non-business electives.

Courses which satisfy the requirements as humanities:

ART 2050, 2060, 2070, 2080, 3150, 3260, 3270  
SPCH 4530  
DART 1010, 2810, 2820, 4710, 4720  
ENGL 2280, 2520, 3430, 4150, 4170, 4180, 4580, 4860  
FAPR 4300, 4310  
INST 2140, 3000  
MUS 1080, 2550, 2560, 2570, 1070  
PHIL 2110, 3130, 3510  
RELI 1010, 2150, 2160, 3050, 3060, 3150, 3200, 4150, 3500 (when applicable).

Courses which satisfy the requirement as social sciences:

ANTH 1050, 3260, 4210  
BLST 1340, 2110, 2120, 2130, 3030, 3140, 3500  
GEOG 1000, 1020, 3030, 3060, 3070, 3080,  
3090, 3130, 3230, 3240, 3330, 3930  
HIST 1000, 1010, 2470, 2480, 2560, 2580, 2610,  
2620, 2630, 2650, 2660, 2710, 2720, 2810,  
2820, 4350, 4510, 4520, 4550, 4640, 4780  
INST 2130  
PSCI 2210, 2500, 3220, 3500, 3560, 3580,  
3640, 3660, 3680, 4200, 4210, 4280, 4360,  
4370, 4500, 4520  
SOC 4530.

The course which satisfies the requirement as a non-business elective is UBNS 4820.

## ACADEMIC PERFORMANCE

To meet requirements for the degree, students must earn a minimum of 125 credit hours in courses acceptable to the College of Business Administration, with the following grade point average requirements:

- Business GPA of 2.25 or above
- Cumulative GPA of 2.50 or above
- Specialization GPA of 2.50 or above for all accounting majors

In order to be admitted to the Upper Division College of Business Administration program, students must complete all pre-business core courses with a grade of "C" or above, have an overall cumulative GPA of 2.50, and have a minimum of 50 credit hours completed.

Any students who earn less than a 2.50 GPA for any semester while enrolled in the B.S.B.A. degree program will be placed on a "warning status." If the GPA falls below a 2.50 after being admitted to the B.S.B.A. degree program, the student will not be allowed to take any new Upper Division Business courses until the overall GPA is raised to at least a 2.50. No grade below a "C" will be counted as satisfactory completion of Upper Division CBA courses. No business course may be taken on a Credit/No Credit basis. Upper division accounting courses may be repeated only twice.

## CURRICULUM

The first 50 hours of course work toward the B.S.B.A. degree are defined as the pre-business curriculum. Of these, 33 credits must be from the following list and the remainder from any courses listed under the section Specific Requirements For The B.S.B.A. Degree under the categories of natural science, humanities, social sciences, and non-business electives.

### Required Pre-Business Program

ENGL 1150 (or proficiency)  
ENGL 1160 (or proficiency)  
SPCH 1110 or 1120  
BSAD 1500 Introduction to Business  
ECON 2200 Principles of Economics (Micro)  
ECON 2220 Principles of Economics (Macro)  
MATH 1320 College Algebra  
ACCT 2010 Principles of Accounting I  
ACCT 2020 Principles of Accounting II  
CSCI 1000 Computer Literacy with Applications

BSAD 2130 Principles of Business Statistics  
Students who have completed all of the pre-business core courses with a grade of "C" or above, an overall Cumulative GPA of 2.50, and a minimum of 50 credits completed will be eligible for admission to the Upper Division College of Business Administration.

### Required Core Curriculum

BSAD 3140 Intermediate Business Statistics\*  
MGMT 3200 Managerial Communications  
LAWS 3910 Business Law I  
LAWS 3920 Advanced Business Law  
FNBK 3250 Principles of Financial Management  
MKT 3310 Principles of Marketing  
MGMT 3490 Principles of Management  
BSAD 3100 Management Information Systems  
BSAD 3500 Production/Operation Management  
MGMT 4480 Corporate and Business Strategy

### OR

MGMT 4490 New Venture Strategy

*\*Students must enroll in either MATH 1930, or BSAD 3140, depending upon the specialization chosen.*

Accounting: BSAD 3140

Finance and Banking: MATH 1930 or BSAD 3140

Economics and Business Economics: MATH 1930 or BSAD 3140

General Management, Small Business Management and Personnel/Human Resources Management: BSAD 3140

Real Estate and Land Use Economics: MATH 1930 or BSAD 3140

Marketing: BSAD 3140

### Prerequisites for Upper Division Core Courses

MATH 1930 Four years of high school mathematics (not including trigonometry) or equivalent and satisfactory score on the CRE (Calculus Readiness Exam),  
Math 1320

### OR

BSAD 3140 BSAD 2130  
MGMT 3200 ENGL 1160 and CSCI 1000  
LAWS 3910 ENGL 1150 and SPCH 1110 (or higher)  
LAWS 3920 LAWS 3910 and ECON 2200  
FNBK 3250 ACCT 2020, ECON 2200, ECON 2220 and BSAD 2130

MKT 3310 Sophomore standing. Note: ECON 2200 is recommended.

MGMT 3490 ENGL 1160  
BSAD 3100 ACCT 2020 and Junior standing  
BSAD 3500 BSAD 2130 and MGMT 3490  
MGMT 4480 Admission to BSBA, MGMT 3200, BSAD 3100, BSAD 3500, BSAD 3140, LAWS 3910, LAWS 3920, FNBK 3250, MKT 3310, MGMT 3490, and completion of 99 credit hours (NOTE: With the exception of MGMT 3490, MGMT 3200, MKT 3310 and FNBK 3250, students may be enrolled in one of the above courses concurrently with MGMT 4480 or MGMT 4490.)

### OR



MGMT 4490 Admission to BSBA, MGMT 3200, BSAD 3100, BSAD 3500, BSAD 3140, LAWS 3910, LAWS 3920, FNBK 3250, MKT 3310, MGMT 3490 and completion of 99 credit hours. (NOTE: With the exception of MGMT 3490, MGMT 3200, MKT 3310, and FNBK 3250, students may be enrolled in one of the above courses concurrently with MGMT 4480 or MGMT 4490.)

## Specialization Curriculum

Specific requirements for each specialization are identified in the following section of this catalog.

Prerequisites for specialization courses are identified in the back of this catalog under "Course Descriptions."

Credits not required under general requirements, pre-business program, B.S.B.A. core curriculum or specialization can be taken as electives in business and/or non-business areas to complete the required 125 hours for the B.S.B.A. degree.

## THE BSBA AS A SECOND BACHELOR'S DEGREE

A student who has already earned a bachelor's degree, other than a business degree, from an accredited institution may earn the B.S.B.A. by completing the following requirements:

- The student must complete a minimum of 30 hours in residence in the College of Business Administration.
- The student must complete the following course requirements:
  - MATH 1320
  - pre-business core courses ECON 2200 and 2220, ACCT 2010 & 2020, BSAD 2130 and the 30 hour B.S.B.A. core curriculum;
  - specialization requirements.

Courses taken as part of the first bachelor's degree will be evaluated as regards satisfaction of these requirements.

Students who have previously earned a B.S.B.A. degree from an accredited institution will not be awarded a second B.S.B.A. degree. These individuals may complete a second specialization by completing all of the requirements listed under their new specialization as well as all necessary prerequisites for those courses.

## PROFESSIONAL ACCOUNTING

The objectives of the professional accounting program are to provide quality educational experiences for graduate and undergraduate students pursuing careers in accounting, to contribute to the expanding body of knowledge through faculty research and publication, and to enhance the relationships between the professional accounting program and the various constituencies it serves through professional and community service activities.

Providing a contemporary accounting education for students requires that faculty in the program seek appropriate teaching methodologies and strive to incorporate the most recent developments in their

discipline into the curriculum. The faculty of the professional accounting program are dedicated to providing students with the opportunity to acquire an excellent accounting education. They therefore try to create an environment which maximizes the development of critical skills such as problem solving, analysis, communication and teamwork.

After successfully completing the professional accounting program, many individuals find it challenging and rewarding to continue their development by seeking one or more professional certification designations. Several certification programs exist, including the Certified Public Accountant (CPA), the Certified Management Accountant (CMA), the Certified Internal Auditor (CIA) and, the Certified Information Systems Auditor (CISA).

As of January 1, 1998, applicants for the CPA Exam will be required to have taken 150 or more college semester credit hours. Students who want to satisfy the requirement by obtaining a Master of Professional Accounting degree (MPA) should refer to the UNO Graduate Catalog. Additional information about the requirements of these certification programs or the MPA program can be obtained by contacting members of the professional accounting faculty.

A student may enroll only twice in any upper division accounting course. You are enrolled in a course if your name appears on the final class list published immediately after drop/add week. Therefore, you may drop a course only one time (excluding drops during drop/add week). If you drop the same course twice (or receive a "D" and/or "F" twice), you will not be permitted to enroll in this course a third time. To enroll in any upper-division course or to graduate with a major in accounting, a student must have earned at least a 2.50 overall GPA, as well as at least a 2.50 GPA in all accounting courses taken to date. This policy will be enforced each semester a student enrolls in an upper-division accounting course.

Prerequisites for non-business students taking upper division accounting courses are: a 2.50 cumulative GPA and a 2.50 GPA in all accounting courses completed; junior standing; and a "C" or better in ACCT 2020 and in ECON 2200. Students who wish to contract to take upper-division accounting courses as "honors" courses should contact the course instructor.

For a specialization in accounting, students must complete a total of 24 credit hours, including 18 credit hours in required courses and six (6) credit hours in specialization electives.

### Required courses

ACCT 3020	Basic Federal Income Taxation
ACCT 3030	Intermediate Financial Accounting I
ACCT 3040	Intermediate Financial Accounting II
ACCT 3050	Intermediate Managerial Accounting
ACCT 3080	Accounting Information Systems
ACCT 4080	Principles of Auditing

To complete his or her specialization requirement, the student must select any two of the following courses:

ACCT 4010	Advanced Financial Accounting
ACCT 4040	Advanced Federal Income Taxation

ACCT 4060	Advanced Managerial Accounting
ACCT 4070	Governmental/Nonprofit Accounting and Auditing
ACCT 4090	Advanced Auditing

Students who wish to pursue the MPA degree should consult with their adviser before registering for any of these courses. To aid the student in selecting the six hours of specialization electives, the following descriptions of four distinct areas of accounting practice are presented. The descriptions are for informational purposes only.

## **SUGGESTED AREAS OF SPECIALIZATION**

### **Auditing and Information Systems**

The auditing and information systems specialties are designed for those individuals who want an in-depth understanding of auditing or information systems. A number of approaches for conducting financial and performance audits are addressed. We recommend the ISQA courses below because understanding the design of information systems is fundamental to controlling them.

The knowledge acquired in the auditing or information systems specialties is useful in career positions such as financial auditor, internal auditor, governmental auditor, and information systems auditor. In addition, those in management positions in an organization, especially in the accounting and finance areas, will benefit from understanding the information resource and auditing.

#### Suggested Specialization Electives

ACCT 4070	Governmental/Nonprofit Accounting and Auditing
ACCT 4090	Advanced Auditing

#### Recommended Electives

ISQA 3310	Managing the Data Base Environment
ISQA 4110	Information Systems Analysis
ISQA 4120	Systems Design and Implementation

### **Financial**

The financial specialty is designed for those individuals wishing to pursue one of several different career paths. The field of financial reporting deals with reporting to interested parties outside the organization, other than taxing authorities. It includes such career paths as: financial accountant, controller and chief financial officer. Additionally, a strong grounding in financial accounting is necessary to be an effective auditor.

#### Suggested Specialization Electives

ACCT 4010	Advanced Financial Accounting
ACCT 4070	Governmental/Nonprofit Accounting and Auditing
ACCT 4090	Advanced Auditing

#### Recommended Electives

FNBK 3400	Investment Principles and Practices
FNBK 3700	International Financial Management

### **Managerial**

The managerial accounting specialty is designed for those individuals who see their career directed toward being the controller or chief financial officer of an organization or a management services consultant for a

CPA firm. The organization may be a private or public for-profit business, or a not-for-profit entity such as a hospital, charity or governmental unit.

The managerial accounting specialty concentrates on developing and reporting accounting information to assist management in determining and achieving the organization's objectives. The management accountant is an integral part of the management team and, as such, must understand the operations of an organization to assess which financial and non-financial information is necessary to assist management decision-making.

#### Suggested Specialization Electives

ACCT 4040	Advanced Federal Income Taxation
ACCT 4060	Advanced Managerial Accounting

#### Recommended Electives

ISQA 3150	Principles of Operations Research
ISQA 4730	Decision Support Systems
ECON 3800	Managerial Economics
MGMT 4340	Management of the Work Group
FNBK 4590	Risk Management for Business Managers

### **Tax**

The field of taxation is one of the most complex and demanding areas in business. Tax laws are continuously being rewritten and reinterpreted by Congress, the IRS and the judicial system. The tax specialty will provide individuals with the technical knowledge of taxation which, along with a solid background in business principles, is needed to be a skilled tax professional.

The knowledge acquired will be useful in career positions such as tax specialist in a CPA firm or in private industry, IRS auditor, and state department or revenue auditor. Additionally, those in managerial positions will find that the increased tax knowledge will improve their business decisions.

#### Suggested Specialization Electives

ACCT 4010	Advanced Financial Accounting
ACCT 4040	Advanced Income Tax Accounting
RELU 2410	Real Estate Principles and Practices
<b>OR</b>	
RELU 3410	Real Estate Concepts and Processes

### **Recommended Electives Regardless of Area of Specialization**

SPCH 3130	Speech-Communication in Business and the Professions
ECON 3200	Economic Theory: Micro
ECON 3220	Economic Theory: Macro
MGMT 4040	Organizational Behavior
ISQA 4150	Applied Business Statistics
LAWS 3920	Advanced Business Law
ACCT 4500	Special Problems in Accounting
ACCT 4510	Accounting Internship

#### **For more information...**

please call (402) 554-3650.

### **FINANCE AND BANKING**

Two specializations are available: Business Finance and Banking and Financial Markets.

## Business Finance

The objective of the business finance specialization is to prepare students for careers in such areas as financial management, investments and security analysis, and international financial management. The focus is on the functions of finance in the firm, financial and investment analysis and planning, sources of financing, the financial system and securities markets.

For this specialization students complete a total of 18 credit hours, including 15 credit hours in required courses, and three (3) credit hours in specialization electives. Students are also advised to use three credit hours out of the nine hours business electives for a second finance elective or a recommended elective listed here. The completion of specified courses in business finance and banking may be applied toward specialization requirements in both areas.

### Required courses

FNBK 3000	Financial Reporting and Analysis
FNBK 3400	Investment Principles and Practices
FNBK 3500	Financial Markets
FNBK 3700	International Financial Management
FNBK 4150	Intermediate Financial Management

### Specialization electives

FNBK 3550	Public Finance
FNBK 3650	Commercial Bank Management
FNBK 4500	Special Problems in Finance
FNBK 4510	Finance and Banking Internship
FNBK 4590	Risk Management for Business Managers
FNBK 4600	Derivatives

### Recommended electives

ACCT 3020	Basic Federal Income Taxation
ACCT 3030	Intermediate Financial Accounting I
ACCT 3040	Intermediate Financial Accounting II
ACCT 3050	Intermediate Managerial Accounting
RELU 4400	Real Estate Finance

## Banking and Financial Markets

The objective of the banking and financial markets program is to provide additional study in the areas of financial management of commercial banks including the organization, operation, financing and functions of banks and certain related financial institutions. This program is specifically designed for those students interested in pursuing careers in banking, bank regulatory agencies, or in related financial institutions, such as savings and loan associations, credit unions, sales and consumer finance companies, and government agencies.

For this specialization students complete a total of 18 credit hours, including 15 credit hours of required courses, and three (3) credit hours of banking specialization electives. Students are also advised to use three credit hours out of the nine hours business electives for a second finance elective or a recommended elective listed here.

### Required courses

FNBK 3400	Investment Principles and Practices
FNBK 3500	Financial Markets
FNBK 3650	Commercial Banking Management
FNBK 3700	International Financial Management
FNBK 4150	Intermediate Financial Management

### Specialization electives

FNBK 3000	Financial Reporting and Analysis
FNBK 3550	Public Finance
FNBK 4500	Special Problems in Finance
FNBK 4510	Finance and Banking Internship
FNBK 4590	Risk Management for Business Managers
FNBK 4600	Derivatives

### Recommended electives

ACCT 3020	Basic Federal Income Taxation
ACCT 3030	Intermediate Financial Accounting I
ACCT 3040	Intermediate Financial Accounting II
ACCT 3050	Intermediate Managerial Accounting
RELU 4400	Real Estate Finance

### For more information...

please call (402) 554-2818.

## ECONOMICS

Economics is concerned with how resources are allocated in production, prices are determined, incomes are distributed and growth occurs. Economists examine such issues as how fiscal and monetary policies affect price and employment, the effect of the balance-of-payments problem on international trade, the size and future composition of the labor force, the effect of government regulations on prices, quantity and quality of goods and services, and costs and benefits of environmental policies.

Economists are employed by private businesses, utilities, railroads, government at all levels, educational institutions, labor unions, trade associations and research institutions. Duties of an economist may include forecasting future revenues and costs, analyzing market conditions, and making recommendations which involve capital investments, marketing new products, environmental costs, health care financing and the effects of regulation. In addition, economics is superb preparation for graduate work in areas such as financial management, marketing, international relations, public administration, law, political science, gerontology, social work, criminal justice and accounting. Economics is also an excellent dual major or minor for areas of study listed above.

For this specialization students must complete a total of 18 credit hours of economics courses.

### Required courses

ECON 3200	Economic Theory: Micro
ECON 3220	Economic Theory: Macro

### Specialization electives:

Students must select a minimum of 12 credit hours from economics department courses at the 3000 or 4000 level, of which at least six credit hours must be at the 4000 level.

### Directed electives:

Students must select nine credit hours from courses outside the economics program. Listed below are some suggested nine credit-hour course packages.

#### Real Estate and Land Use Economics:

(3 out of the following courses)

RELU 3410	Real Estate Concept and Practices
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RELU 3450	Real Estate Management
RELU 3460	Real Estate Law
RELU 4390	Real Estate Investments
RELU 4400	Real Estate Finance
RELU 4420	Income Property Appraisal

Finance and Investments:

ACCT 3030	Intermediate Financial Accounting
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**OR**

FNBK 3000	Financial Reporting and Analysis
FNBK 3400	Investment Principles and Practices
FNBK 3500	Financial Markets

International Business:

FNBK 3700	International Financial Management
MGMT 4150	International Management
MKT 3380	International Marketing

Public Administration:

PA 2170	Introduction to Public Administration
PA 3180	Elements of Public Management
PA 4390	Public Budgeting

Aviation (3 of the following):

AVN 3050	Air Transportation and Intermodal Systems
AVN 3090	Airport Master Planning and Management
AVN 4050	General Aviation Operations
AVN 4100	Aviation Marketing

## Business Economics

The specialization in business economics is designed for the student who intends to pursue a career in the private sector or in regulated industries. The specialization emphasizes the application of economic tools to such problems as forecasting the future environment of the firm, giving advice on capital investments, marketing of new products, and understanding antitrust laws. Business economists are found in industries and areas such as financial institutions, transportation, utilities, real estate, agribusiness, petroleum, and non-profits, among others. The work of economists in business is supported by the National Association for Business Economics and its affiliated local chapters, including the Omaha Association for Business Economics.

For this specialization students must complete a total of 18 credit hours in economics or approved courses.

Required courses

All of the following:

ECON 3200	Economic Theory: Micro
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**OR**

ECON 3800	Managerial Economics
ECON 3250	Business Conditions Analysis
ECON 3300	Intro to Econometrics

At least one of the following:

ECON 3200	Economic Theory: Micro
ECON 3220	Economic Theory: Macro
ECON 3600	Introduction to International Economics
ECON 3800	Managerial Economics
ECON 4210	Industrial Organization
ECON 4300	Quantitative Applications

ECON 4450	Monetary Theory and Policy
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Specialization electives

Any of the courses from the economics program. Of the 18 credit hours required for a business economics specialization, six credit hours must be at the 4000 level.

Directed Electives

Students must select nine credit hours from courses outside the economics program. Listed below are some suggested nine credit-hour course packages.

Real Estate and Land Use Economics:

(3 out of the following courses)

RELU 3410	Real Estate Concept and Practices
RELU 3450	Real Estate Management
RELU 3460	Real Estate Law
RELU 4390	Real Estate Investments
RELU 4400	Real Estate Finance
RELU 4420	Income Property Appraisal

Finance and Investments:

ACCT 3030	Intermediate Financial Accounting
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**OR**

FNBK 3000	Financial Reporting and Analysis
FNBK 3400	Investment Principles and Practices
FNBK 3500	Financial Markets

International Business:

FNBK 3700	International Financial Management
MGMT 4150	International Management
MKT 3380	International Marketing

Marketing Research:

MKT 3320	Consumer Behavior
MKT 3340	Market Research
MKT 3380	International Marketing

Human Resource Management:

(3 out of the following)

MGMT 3510	Human Resource Management
MGMT 4010	Compensation Management
MGMT 4020	Seminar in Human Resource Management
LAWS 4220	Jurisprudence of Labor Relations

Entrepreneurship:

MGMT 3250	Managerial Decision Making
MGMT 4250	New Venture Initiation
MGMT 4340	Small Business Management

## Secondary Specialization in Economics

A secondary specialization in economics, as a supplement to a specialization in another area, may be obtained by completing Economics 2200 and 2220, Principles of Economics, plus nine hours of upper division courses in economics. Any course that may be used for specializing in economics may also be used for the secondary specialization, provided that at least one of the courses is Economics 3200 (Economic Theory: Micro), 3220 (Economic Theory: Macro), or 3800 (Managerial Economics). A grade of "C" or better is required in each course applied toward the secondary specialization.

## REAL ESTATE AND LAND USE ECONOMICS

Professional training in the fields of real estate and land use economics is offered to prepare students for participation in the rewarding opportunities available in both the public and private sectors of our society. Every public agency dealing with human problems found in a real estate environment needs trained people to help find solutions. Urban and suburban community design agencies, including planning and zoning, environmental controls, housing standards, United States Park Service, Corps of Engineers, highway and road departments and others, want and need trained personnel for their operations.

Similarly, major corporations diversifying into real estate investments, brokerage companies, managers, appraisers, railroads, banks, savings and loans, insurance companies, land developers and others require trained and talented people. The program prepares the student for important roles in these activities.

For this specialization students complete a total of 18 credit hours, including 12 hours in required courses, and six hours in real estate electives. In addition, the student is required to select nine hours from the list of recommended directed electives.

### Required courses

RELU 2410	Real Estate Principles and Practices
<b>OR</b>	
RELU 3410	Real Estate Concepts and Processes
RELU 3460	Real Estate Law
RELU 4400	Real Estate Finance
RELU 4410	Residential Real Estate Appraisal
<b>OR</b>	
RELU 4420	Income Property Appraisal

### Real estate electives

RELU 3430	Real Estate Salesmanship & Brokerage
RELU 3450	Real Estate Management
RELU 4390	Real Estate Investments
RELU 4410	Residential Real Estate Appraisal
<b>OR</b>	
RELU 4420	Income Property Appraisal
RELU 4510	Real Estate Internship

### Directed electives

This is a partial list of specialization electives. Other business courses may be acceptable, based on their relevance to the major.

ECON 3350	Comparative Economic Systems
ECON 3550	Public Finance
ECON 3800	Managerial Economics
FNBK 3500	Financial Markets
FNBK 4560	State and Local Finance
FNBK 3710	Principles of Insurance
MKT 3360	Advertising
MKT 4320	Sales Management

## Secondary Specialization in

### Real Estate and Land Use Economics

A secondary specialization in real estate and land use economics may be accomplished by completing RELU 2410 or RELU 3410 plus nine (9) hours of upper division courses in real estate and land use economics which

consists of RELU 3460 (Real Estate Law), RELU 4400 (Real Estate Finance) and RELU 4420 (Income Property Appraisal). A grade of "C" or better is required in each course counted in the secondary specialization.

### Certificate in Real Estate and Land Use Economics

A certificate in real estate can be earned by taking the following 15 credit hour sequence: RELU 2410 or RELU 3410, RELU 3460, RELU 4400, RELU 4420 and RELU 4390. A grade of "C" or better is required in each course.

### For more information...

please call (402) 554-2570.

## MARKETING/MANAGEMENT

### Management Program

Managers combine human and material resources to accomplish organizational objectives. Such results are achieved through the managerial processes of planning, leading, organizing and controlling. A firm's existence is based on how well managers perform these functions in an environment of risk, uncertainty and ambiguity.

For this specialization, the student completes nine hours in the management core and an additional nine hours from the chosen option. The options are general management, entrepreneurship and human resource management. A student may choose more than one option with a resulting increase in number of hours required.

### Management Core

Today's competitive, global business environment presents many interesting challenges to managers. These challenges include managing change and innovation, managing diversity, developing a global perspective, becoming an effective leader, and improving organizational performance by focusing on quality and continuous improvement. The management core has been designed to include courses to prepare students to more effectively face these challenges as managers in the twenty-first century.

Students will select three (3) of the following courses (for a total of 9 credit hours):

MGMT 3040	Managerial Decision Making
MGMT 3510	Human Resource Management
MGMT 4040	Managerial Leadership
MGMT 4100	Organizational Change and Design
MGMT 4150	International Management
MGMT 4440	Management of Quality and Process Improvement

### General Management Option

The general management option provides students with opportunities to develop the technical, interpersonal, conceptual, diagnostic, communication and decision-making skills to effectively carry out the management function. The general management option is designed with the flexibility to permit students to select management courses to meet their specific interests and needs as managers of the future.

## Courses for the general management option

Students will select three (3) of the following courses  
(for a total of 9 credit hours):

MGMT 4000	Special Topics in Management
MGMT 4010	Compensation and Benefits
MGMT 4020	Seminar in Human Resource Management
MGMT/LAWS 4220	Legal Issues in Management
MGMT 4250	New Venture Initiation
MGMT 4310	Small Business Management
MGMT 4340	Management of Teams
MGMT 4510	Management Internships
MGMT 4500	Special Problems in Management
MKTG 4420	Business Demographics

Students may choose to take additional courses from the management core in fulfillment of the general management option. Courses counted as satisfying the core requirements may not be utilized to fulfill the general management option requirements.

## **Entrepreneurship Option**

The entrepreneurship option is for students who are interested in owning and/or operating a business venture. Students who are interested in serving entrepreneurial ventures in capacities such as consultants, bankers, accountants, marketing professionals, or real estate specialists may also have an interest in this option. The entrepreneurship option has a practical emphasis designed to assist students in developing and operating their new and/or small ventures. Courses in this option lead students through the different processes of getting into business, addresses important operating issues relevant to the running of day-to-day activities of a venture, and discusses the important topic of planning for business growth and development. Students selecting the entrepreneurship option are encouraged to use their elective hours to develop important competencies that will assist them in developing and operating their business ventures.

Students must complete the following two (2) courses:

MGMT 4250	New Venture Initiation
MGMT 4340	Small Business Management

Students will select one (1) of the following courses:

MGMT 3040	Managerial Decision Making
MGMT 3510	Human Resource Management (provided that it has not been selected to provide the nine-hour management core option above)
MGMT 4010	Compensation and Benefits
MGMT 4150	International Management (provided that it has not been selected to provide the nine-hour management core option above)
MGMT/LAWS 4220	Legal Issues in Management
MGMT 4510	Management Internship
MGMT 4500	Special Problems in Management
MKTG 3100	Professional Salesmanship
MKTG 3320	Consumer Behavior
MKTG 3340	Channels of Distribution

MKTG 4300	Marketing Management
MKTG 4340	Marketing Research
MKTG 4420	Business Demographics
FNBK 2710	Principles of Insurance
FNBK 3750	Risk Management for Business Managers
FNBK 4150	Management of Business Finance
LAWS 3170	Ethics in Business
LAWS 3460	Real Estate Law
RELU 3410	Real Estate Concepts and Processes
RELU 3430	Real Estate Salesmanship and Brokerage
RELU 3450	Real Estate Management
RELU 3460	Real Estate Law
RELU 4400	Real Estate Finance

Students following the entrepreneurship option must take MGMT 4490 New Venture Strategy as their capstone course.

## **Human Resource Management Option**

The human resource management emphasis is for students who desire an educational experience focusing on the human resource management functions of an organization. These functions include personnel recruitment and selection, training and development, performance appraisal, compensation and benefits, health and safety issues, and labor-management relations, including collective bargaining.

Students will select three (3) of the following courses:

MGMT 4010	Compensation and Benefits ( <i>offered Fall Semester only</i> )
MGMT 4020	Seminar in Human Resource Management ( <i>offered Spring Semester only</i> )
MGMT/LAWS 4220	Legal Issues in Management
MGMT 4510	Management Internships
MGMT 4500	Special Problems in Management
MKTG 4420	Business Demographics
ECON 3180	Collective Bargaining

**For more information...**

please call (402) 554-2525.

## **Marketing Program**

Students in the marketing program learn how marketing decisions and strategies are affected by the character of the market, the desires of the business, and the influence of competitors. Each student develops skills in advertising designs, pricing decisions, building distribution networks, and even in the creation and changes of products.

Career opportunities are increasing and are in just about any industry: banking, healthcare, manufacturing, retailing, railroad and trucking, even zoos and politics.

Students majoring in marketing complete a minimum of 18 credit hours in marketing courses after the Principles of Marketing course. Within these 18 credit hours all marketing students must complete Marketing Research and Marketing Management.

Students often ask which courses they should take for a career in marketing. There is no single answer. To help students make those decisions, the courses have been grouped into possible specializations.

## Marketing Management

Marketing strategies and the design of effective programs are the emphasis of this specialization. Many career opportunities exist in management, purchasing and product planning. Frequently, business executives are selected from employees who have experience as a marketing manager.

### Required marketing courses

MKT 3320	Consumer Behavior
MKT 3610	Business to Business Marketing
MKT 3380	International Marketing
MKT 4300	Marketing Management
MKT 4340	Marketing Research

### Recommended courses

MKT 4320	Sales Management
MKT 4420	Business Demographics
MKT 4510	Marketing Internship
MKT 4800	Honor Studies in Marketing

## Advertising Management

Students who want a professional career in advertising find this program excellent preparation. Career opportunities include advertising agencies, advertising department of manufacturers and retailers, television and radio sales departments, as well as the advertising departments of banks, insurance companies, stock brokerages, and transportation companies.

### Required courses

MKT 3320	Consumer Behavior
MKT 3360	Advertising
MKT 3370	Marketing Promotions
MKT 4300	Marketing Management
MKT 4340	Marketing Research

### Recommended courses

MKT 3100	Professional Salesmanship
MKT 4320	Sales Management
MKT 4420	Business Demographics
MKT 4510	Marketing Internship
MKT 4800	Honor Studies in Marketing

## Business Marketing

Manufacturers, transportation companies, distribution firms, and businesses that supply other businesses have excellent opportunities for these students. The emphasis is on how products and services are sold to businesses (rather than to consumers).

### Required courses

MKT 3100	Professional Salesmanship
MKT 3610	Business to Business Marketing
MKT 3340	Channels of Distribution
MKT 4300	Marketing Management
MKT 4340	Marketing Research

### Recommended courses

MKT 3380	International Marketing
MKT 4320	Sales Management
MKT 4420	Business Demographics
MKT 4510	Marketing Internship
MKT 4800	Honor Studies in Marketing

## Sales and Sales Management

Many businesses employ sales staffs and managers of those staffs. Students are prepared for careers in the area of professional sales and the management of professional sales people. Many "first positions" in marketing are through sales.

### Required courses

MKT 3100	Professional Salesmanship
MKT 3320	Consumer Behavior
MKT 4320	Sales Management
MKT 4300	Marketing Management
MKT 4340	Marketing Research

### Recommended courses

MKT 3360	Advertising
MKT 3610	Business to Business Marketing
MKT 4510	Marketing Internship
MKT 4800	Honor Studies in Marketing
SPCH 4510	Persuasion

## Marketing Research

Many companies are looking for students who know how to gather information and make reports about customers, product sales performance, and even reports about competitors. These careers are very involved in marketing departments when decisions and plans are made, as many times these professionals are the most knowledgeable about the markets.

### Required courses

MKT 3320	Consumer Behavior
MKT 3380	International Marketing
MKT 4300	Marketing Management
MKT 4340	Marketing Research
MKT 4420	Business Demographics

### Recommended courses

ISQA 4150	Applied Business Statistics
MKT 4510	Marketing Internship
MKT 4800	Honor Studies in Marketing

## Fashion Merchandising

Fashion merchandising offers a wide variety of excellent opportunities for the marketing student interested in the world of fashion. Employment opportunities are found in retail stores, buying offices, manufacturing establishments, publishing houses and advertising agencies. Specific positions include buyer, merchandise manager, fashion coordinator, fashion editor, copy writer, advertising manager, fashion consultant, fashion training director, publicity director, and top-level executive positions in fashion-oriented businesses as well as owner-manager of one's own business. The increasing importance of fashion in varied merchandise lines demands qualified men and women to fill these positions.

Students specializing in this area complete 15 hours of required specialization courses and 15 hours of required non-business courses. Fashion merchandising students are not required to complete MKT 4340, Marketing Research.

Required specialization courses

MKT 3320	Consumer Behavior
MKT 3340	Channels of Distribution
MKT 3360	Advertising
TXCD 4100	Socio-Psychological Aspects of Clothing (Lincoln Campus)
TXCD 4130	Textile and Apparel Merchandising (Lincoln Campus)

Required non-business courses

TXCD 1210	Design Essentials
TXCD 1230	Costume Selection and Design
TXCD 2060	Textiles
TXCD 2130	Textile and Apparel Industry Processes
TXCD 3140	Visual Merchandising

Recommended electives

MKT 3100	Professional Salesmanship
SPCH 3130	Speech Communication in Business and the Professions
PSYCH 3620	Industrial Organizational Psychology
MGMT 3510	Human Resource Management

**For more information...**

please call (402) 554-3986.

**OTHER INFORMATION**

**Degree with Distinction**

Any student with a cumulative grade point average of 3.750 to 3.899 who has at least 60 hours of credit in residence may graduate with distinction. Any student with a cumulative grade point average of 3.900 to 4.000 who has at least 60 hours of credit in residence may graduate with high distinction.

**Honors Program**

The purpose of the Honors Program is to provide dedicated students an opportunity to express their excellence. This is achieved through a 30-hour program of elective and required courses.

All students entering or enrolled in good standing in the College of Business Administration may be considered for membership in the Honors Program. The admission requirements and procedures are:

- For entering freshmen:  
A composite ACT score of 26 or above.
- For transfer and current students:  
A cumulative grade point average of 3.25 or above  
for at least 12 credit hours at UNO.

Applications will be submitted to the Dean's Office, CBA 414. After a review of the application, the College of Business Administration Honors Program Committee will invite to membership those individuals who meet the admission criteria.

If more specific information is desired, contact the Dean's Office.

**Beta Gamma Sigma**

Beta Gamma Sigma is the national scholastic honor society in the field of business. Election to membership is available to both undergraduate and graduate students in business. Selection is based upon outstanding scholastic achievement.

**Academic Advising**

The aim and purpose of academic advising is to assist students in meeting the requirements of the degree program and to interpret College policy regarding academic requirements. In the College of Business Administration, academic advising is carried out through the office of the Dean with primary responsibility for this function assigned to the Associate Dean and the undergraduate advisers. Students should see an adviser whenever questions arise concerning their academic programs, but especially prior to registering for freshman year, choosing a specialization, and registering for senior year. Informal academic advising is an ongoing faculty responsibility.

Business students should file an Application for Admission to Upper Division B.S.B.A. Degree Program in the advising office of the College of Business Administration during the semester in which they are completing the pre-business core. Admission to the Upper Division B.S.B.A. Degree Program is based upon the following:

- Completion of the pre-business core with a grade of "C" or above in each course and
- Completion of a minimum of 50 hours with a GPA of 2.50 or above.

Once admitted into the Upper Division B.S.B.A. Degree Program, the student is eligible to take business core and specialization courses.

Every business student should file a Senior Check form in the advising office of the College of Business Administration at the end of the junior year (or upon the completion of 90 hours). An audit of the prospective graduate's academic record is then conducted and the student is provided with an official list of the remaining degree requirements. If a student fails to file the form, the responsibility for meeting the requirements for graduation is his/hers and, if in error, will prevent graduation at the intended time.

All students graduating from the University of Nebraska at Omaha must file with the Office of the Registrar an Application for Degree at the beginning of their final semester. This simple and most important procedure confirms that the prospective graduate is a degree candidate and assures the issuing of a diploma upon satisfaction of the degree requirements.

All students registering for their final semester should be alerted to the deadline for the filing of their Application for Degree. Failure to file the Application by the posted deadline will postpone a student's graduation date.

Final responsibility for scheduling courses and satisfactorily completing curriculum requirements for any degree rests with the student.



**Choice of Catalog**

A student registering in the College of Business Administration of the University of Nebraska at Omaha for the first time may, except for the limitations described below, complete work for the degree according to:

- the requirements of the catalog of the year in which you last entered the College and have since been in continuous (i.e., no enrollment gap of more than two consecutive semesters) enrollment or the catalog current at the time you applied for your degree.
- the catalog current at the time the student applied for their degree. For students continuously enrolled a seven-year rule applies. This means that for students who have been continuously enrolled their catalog year can only extend back seven years. Students enrolled more than seven years will be moved up one catalog year at a time. For example, from 1983-84 to 1984-85.

The earliest catalog available to an intra-University transfer will be that applicable at the time the student transfers to the College of Business Administration.

Students entering the College for the first time in the summer will be subject to the catalog for the academic year immediately following.

Failure to complete the requirements for the degree within seven years after the date the student first enters the College will subject him to graduation under the requirements of a later catalog to be approved by the Dean.

The College reserves the right to institute and make effective, after due notice, during the course of a student's work toward a degree, any new ruling which may be necessary for the general good of the College, and to substitute courses currently offered for those no longer offered.

It is the responsibility of each student admitted to the College of Business Administration to become familiar with the procedures and regulations in the Undergraduate Catalog.

**Credit Options**

In addition to course credit earned at UNO and credit earned in residence at other institutions, students may apply toward the degree credit earned in the following ways:

**Correspondence course credit:** a maximum of six hours of correspondence course credit from accredited institutions may be applied toward the degree, subject to approval of the program chair if the course(s) is to be used as specialization elective hours or as substitution for required specialization courses. Business Core requirements taken by correspondence are not applicable to the B.S.B.A. degree. If taken prior to enrolling at UNO, ACCT 2010 and 2020, and ECON 2200 and 2220, subject to the six hour limit, may be taken by correspondence.

**Professional Development Course Credit:** a maximum of six hours of professional development course credit may be taken from any educational body if evaluated by the American Council on Education (ACE) as

equivalent to collegiate credit, and then may be applied toward the degree. Such credit may be used for non-business electives. The program chair must give written approval if the course(s) is to be used as specialization elective hours or as substitution for required specialization courses. Business core requirements taken by professional development course are not applicable to the BSBA degree. Also note the maximums in the section "Limit on Credit Options" below.

**Credit by examination:** students interested in attempting credit by examination are referred to the section "Credit by Examination at UNO" in the General Information section of this catalog, and to the section "Limit on Credit Options" below.

**Credit/No Credit:** students may select the Credit/No Credit option in non-required, non-business courses, according to the guidelines established in the "Credit/No Credit Privilege" section of this catalog, and the limits on credit options given below.

**Limits on credit options:** as noted above, students may apply a maximum of six credit hours of correspondence course credit. In addition, a maximum of 24 hours of combined Credit/No Credit, credit by examination, College Level Examination (CLEP) and correspondence courses may be applied.

**Grade Appeal**

Students who wish to appeal a grade which they feel was capriciously or prejudicially given shall first discuss the matter with the instructor and/or the department chairperson. If a satisfactory agreement cannot be reached, the student may submit a written appeal to the Office of the Dean within 30 days of receipt of the grade report from the Registrar's Office. The Academic Evaluation Appeals Committee of the College of Business will hold a hearing to make a final determination based on the facts presented.

**Academic Amnesty**

A student may remove one or two semesters' grades from their cumulative grade point average and degree consideration by petitioning for academic amnesty in the Advising Office, CBA 415. Removal shall be by entire semester(s).

Petitioning students must have completed 24 consecutive hours with a minimum grade point average of 2.50. (Part-time students must have completed 12 consecutive hours with a minimum grade point average of 2.50.) Students who are granted academic amnesty will not be considered for degree with academic honors.

The petition for academic amnesty is submitted to the academic adviser. The adviser will submit the petition to the Undergraduate Program Committee for final approval.

**Business Administration Graduate Programs**

The College of Business Administration, in cooperation with the Graduate College, offers course work leading to the following degrees: Master of Business Administration (MBA), the Master of Science (MS) in Economics, the Master of Arts (MA) in Economics, and the Master of

Professional Accounting (MPA). The College also has an Executive Master of Business Administration program.

For a description of the degree requirements and courses in these graduate programs, please refer to the graduate bulletin.

**GENERAL INFORMATION**

The College of Continuing Studies administers one of the nation's first baccalaureate degree programs designed especially for adults, operates credit classes at various Omaha locations and develops noncredit courses, conferences, and institutes of an educational nature. The mission of the College of Continuing Studies is to provide lifelong learning opportunities for individuals, organizations, and communities by extending the university's resources and services beyond the traditional experience.

**Bachelor of General Studies Degree**

The Academic Programs Division of the College of Continuing Studies administers the Bachelor of General Studies (B.G.S.) degree. The B.G.S. degree, one of the first degree programs in the United States developed especially for adults, has been conferred on more than 20,000 candidates since its inception in 1950. The B.G.S. degree grew out of the realization that men and women who seek college degrees during their working years have educational needs different from traditional students just out of high school.

**What Makes the B.G.S. Unique?**

The Bachelor of General Studies degree is geared toward the unique circumstances and needs of the adult student.

- It affords maximum flexibility of course selection within degree requirements so that you may choose courses in order to meet individual career requirements, build programs of maximum academic strength in preparation for graduate study or satisfy personal interests.
- It has liberal "credit by examination" provisions to enable you to establish degree credit for knowledge you have acquired.
- It features comprehensive policies for granting credit for the formal learning experiences you have had outside the college classroom, such as in military service schools, hospital diploma programs for nurses and radiologic technicians, and professional programs in banking and insurance.
- It features liberal acceptance of earned credits from any regionally accredited postsecondary institution's collegiate curriculum.
- It offers a "second chance" through its academic amnesty policy to proficient adult students who compiled poor collegiate records in earlier years from the University of Nebraska system.
- It recognizes the geographic mobility of adult students by its innovative residency policy.

**CCS Academic Advisers**

Academic advisers from the College of Continuing Studies (CCS) are available to meet with you at any step in your academic career – to answer your initial questions about the suitability of the B.G.S. for you, to help you map your course choices and customize your learning experience, to help you through the administrative checkpoints along the way to earning your B.G.S. degree.

Call 402/554-2370 to schedule an appointment with a CCS academic adviser on campus or at UNO's Peter Kiewit Conference Center. Both day and evening appointments are available. Call 402/595-2371 to schedule an appointment at Offutt Air Force Base in Bellevue. Daytime hours are from 8 a.m. to 5 p.m., Monday through Friday.

**ADMISSION REQUIREMENTS FOR THE COLLEGE OF CONTINUING STUDIES**

A few special policies have been developed to streamline the admission of adult students to CCS:

- You ARE NOT required to submit high school transcripts.
- You ARE NOT required to submit scores from the ACT or SAT college entrance tests.
- Transfer students are welcome. You must submit official transcripts from each college or university you have attended. Course credits with grades of "C" or better are accepted from all accredited colleges and universities. A maximum of 64 semester hours of credit will be accepted from two-year institutions.
- Only individuals who are 21 years of age or over are accepted as candidates for the Bachelor of General Studies degree.

**What If I Didn't Finish High School?**

Adults who have not completed high school, should take the high school equivalency examinations (GED). For information about the high school level GED tests and about special courses to prepare for success on these tests, contact your local high school principal.

**Structuring Your B.G.S. Degree**

Selecting the courses for your B.G.S. degree is both a self-directed activity and a cooperative effort with your CCS academic adviser. The degree's structure encourages you to choose the specific courses which can give you maximum advantage in your career or personal interests. While freedom of choice is stressed, this by no means implies an absence of guidelines. You must take those entry-level courses which are prerequisite to further study in a given discipline. Also, depending upon how you plan to use your degree, a number of courses may be crucial to your program, even though they may not be specified as mandatory by this College.

Your best strategy will be to consult a CCS adviser early in your academic career to discuss your educational needs and the particular courses that need to be part of your personalized curriculum. Many B.G.S. candidates also find it beneficial to check other UNO college's requirements for B.A. or B.S. majors in their fields, as outlined in this catalog. Specifications of entrance requirements for graduate programs are another fruitful source of guidance for course choices.

Another excellent source of information and guidance in selecting courses are the faculty members who are specialists in the discipline that you have chosen as your area of concentration or area of emphasis.

**REQUIREMENTS FOR THE BACHELOR OF  
GENERAL STUDIES DEGREE**

To earn the Bachelor of General Studies degree, you must:

- successfully complete 125 credit hours;
- take a minimum of 24 of your final 60 credit hours as graded academic credits earned in residence with the College of Continuing Studies;
- earn at least 30 credits through upper division courses (junior-senior level, which are numbered 3000 or higher on this campus);
- maintain a minimum overall grade point average of 2.0 ("C" grade level) for all courses taken at the University of Nebraska at Omaha;
- earn a grade of "C" or above in all English composition classes; and
- earn a grade of "C" or above in all courses used in an area of concentration (Option I) or in an area of emphasis (Option II).

**B.G.S. Academic Core**

There are two options for pursuing the Bachelor of General Studies degree. Both options share in common a liberal arts academic core of 45 credits. Each option provides for a substantial number of free elective credits.

Liberal Arts Academic Core (Common to all B.G.S. degree students)

**Requirement**

- English Composition.....9  
You may satisfy the first six hours of the English Composition requirement for CCS by one of the following methods: (1) placing above the academic level of English Composition 1150 and 1160 on the UNO Department of English Diagnostic Examination (EPPE); or (2) successfully completing English 1150-1160 at UNO with a grade of "C" or above; or (3) transferring a full year (six credit hours, or equivalent, grade "C" or better) from another accredited college of university. Transfer of English Composition credit from another institution should occur at the time you are admitted to the B.G.S. program.  
Your choices of fulfilling the remaining three credit hours depends on the area of concentration you have chosen.
- Social Sciences .....12  
No more than six hours may be applied from any one of the social sciences. Ask a CCS academic adviser for a list of the courses which will fulfill this requirement.
- Natural Sciences and Mathematics.....12  
You must complete Mathematics 1310 or the equivalent to satisfy the three-hour mathematics portion of this requirement. You must take between four and nine hours of natural or physical science laboratory courses, plus three to five hours of standard natural or physical science classes (biology, chemistry, food science, physical geography, geology, horticulture, meteorology or

physics) to fulfill nine hours of this requirement. Ask a CCS academic adviser for a list of specific classes which will fulfill this portion of the requirement.

The CLEP/GE Natural Sciences and Mathematics tests may be used to earn a maximum of six credits toward this requirement. Students eligible for credit for both tests may choose which one (natural science or mathematics) will apply toward this requirement. All credits from the other category will be counted as electives.

Any UNO five-credit science course will satisfy one-half of your 12-hour natural science and mathematics requirement.

- Humanities .....12  
Three hours of the humanities requirement must be filled by SPCH 1110 or its equivalent. Of the remaining nine hours, no more than six hours may be taken in any one of the following categories: black studies; broadcasting, journalism, or speech; English; art, dramatic arts or music; foreign languages; philosophy or religion. Foreign languages at any level may be counted toward the humanities requirement.  
Another alternative for fulfilling the humanities requirement is to take SPCH 1110, either HUMN 1010, 1020, 2100, or 2200 and one three-hour course from any of the above disciplines. Although these four courses are five-credit introductory courses that will only count toward five of your 125-hour degree total, they will fulfill the humanities requirement when taken in conjunction with SPCH 1110 and one other three-hour course.
- Cultural Diversity .....6  
A minimum of six credit hours must be taken in cultural diversity courses that can be used to satisfy other requirements as well. Three credit hours of this requirement must be the study of U.S. racial or Hispanic groups. Ask a CCS academic adviser for a list of the courses which will fulfill this requirement.

**Option I - Area of Concentration Option**

Option I provides for a 30-credit area of concentration, supplemented by two secondary fields of 12 credits each. If you choose Option I, the discipline you select as your area of concentration will be specified on your UNO permanent record. (A list of the disciplines available at UNO which may be used as the area of concentration is given below.)

While course selection for most areas of concentration is your free choice, there are some areas of concentration in which the course content is partially or completely specified by the faculty of the appropriate UNO department or college. The requirements for all areas of concentration may be obtained from a CCS academic adviser or through CCS's pages on the World Wide Web at <http://www.unomaha.edu/~ccswww/ccs3a.html>.

Primary Area of Concentration	Allied Fields (Optional)
Art .....	None
Aviation Administration .....	FAA License, AVI courses
Aviation Studies .....	None
Biology .....	None
Black Studies .....	None
Broadcasting .....	Journalism, Speech
Chemistry .....	None
Communication .....	None
Computer Science .....	None
Criminal Justice .....	Business, Political Science, Psychology, Public Administration, Sociology
Dramatic Arts .....	None
Economics .....	Business, Geography, History, Political Science, Sociology
English .....	Speech, Writer's Workshop
French .....	None
General Administration* .....	Economics, Political Science (See special note below)
General Science .....	None
Geography .....	Economics, History, Political Science
Geology .....	None
German .....	None
Gerontology .....	Nursing, Social Work, Public Administration
History .....	Economics, Geography, Political Science, Sociology
Information Systems and Quantitative Analysis .....	None
International Studies .....	None
Journalism .....	Broadcasting, Speech
Library Media .....	English
Management Information Systems .....	None
Mathematics .....	None
Music .....	None
PA Aviation .....	None
Paralegal Studies .....	Paralegal Training
Philosophy .....	Religion
Physics .....	None
Political Science .....	Economics, Geography, History
Psychology .....	Sociology
Public Administration .....	Criminal Justice, Urban Studies
Recreation/Leisure Studies .....	None
Religion .....	Philosophy
Sociology .....	Anthropology, Economics, History, Psychology, Religion
Spanish .....	None
Speech .....	Broadcasting, Journalism

## Option I Specific Requirements

- Area of concentration .....21 (minimum) to 30  
B.G.S. degree candidates who select Option I must choose one of the available areas of concentration from the list printed above. A minimum of nine credits in the primary area of concentration must be earned in UNO upper division (3000- and 4000-level) courses. Credits earned under modified grading options such as "credit/no-credit" or "pass/fail" cannot be applied toward area of concentration requirements.

- Allied field (optional) .....0-9 (maximum)  
Allied fields have been authorized for some areas of concentration, recognizing that work in a closely related discipline may be as valuable as further specialization in the primary area of concentration. There is no obligation to use the allied field alternative, and for some areas of concentration, no allied fields are authorized.
- Two secondary fields (12 hours each) .....24  
The two 12-credit secondary fields provide for additional breadth in your program. Each secondary field must be "pure" – that is, all 12 credits must be from the same academic department (e.g. English) or the same professional curriculum (e.g. forestry). Any recognized collegiate discipline, whether or not available at UNO, may be used as a secondary field, except that the discipline you choose for your primary area of concentration cannot double as a secondary field. An allied field discipline, however, may also be elected as a secondary field. Credits earned under modified grading options such as "credit/no credit" or "pass/fail" cannot be applied toward secondary field requirements.
- Electives .....26  
Electives are the courses you choose beyond your core and concentration requirements. If the total credit value of courses used to satisfy any of the previous requirements happens to exceed the minimum specification (does not come out to an even 12 in humanities, for example), any excess is considered to be elective credit.  
Total Credits Required for the B.G.S. Degree .....125

## Special Note: General Administration

The general administration area of concentration incorporates business administration and/or public administration course content with provision to include either economics or political science credit hours as an allied field. You must take a minimum of 21 credit hours of either business administration or public administration courses, or any desired combination of the two, to fulfill the primary area of concentration requirement. At least nine of these 21 credits must be earned in UNO upper division (3000/4000-level) courses. The balance of nine credits needed to satisfy the total requirement of 30 credits may be additional credits from business administration and/or public administration. Alternatively, you may select either economics or political science as an allied field, and use up to a maximum of nine credits presented from one of these disciplines.

Regardless of the area of concentration you choose, no more than 30 credit hours in business administration courses can be counted toward the required total of 125 credits for your B.G.S. degree.

## Option II - Areas of Emphasis Option

- Three areas of emphasis (15 hours each) .....45  
Option II requires three areas of emphasis of 15 credits each. If you choose Option II, you will have "General Studies" entered as your major field of study on your UNO permanent record. Two of the three disciplines selected as areas of emphasis must be

chosen from those available at UNO. (All UNO undergraduate disciplines are eligible for selection.) The third area of emphasis may be any recognized collegiate discipline, whether available at UNO or not. Course selection in all three areas of emphasis is entirely a matter of choice, provided you meet the prerequisites for the specific courses you choose. A minimum of six credits in each of two of the areas of emphasis must be earned in University of Nebraska at Omaha upper division (3000- and 4000-level) courses. Credits earned under modified grading options such as "credit/no credit" or "pass/fail" cannot be applied toward area of emphasis requirements.

- Electives .....35  
Electives are the courses you choose beyond your core and concentration requirements. If the total credit value of courses used to satisfy any of the previous requirements happens to exceed the minimum specification (does not come out to an even 12 in humanities, for example), any excess is considered to be elective credit.

Total Credits Required for the B.G.S. Degree.....125

#### Non-Traditional Credit Policy

You can apply up to 65 credits from non-traditional sources toward your Bachelor of General Studies degree. In this context, the term "non-traditional" refers to sources other than the college or university classroom or laboratory. Some of the individual non-traditional categories have lower maximum allowances.

<u>Source of Credit</u>	<u>Maximum Credit Granted</u>
Credit by Examination .....	30
This includes UNO examinations, CEEB Advanced Placement, CLEP and DANTES	
Credit for Independent or Extramural Study.....	25
This includes college or university correspondence courses, non-interactive television courses and courses by newspaper	
Credit for non-collegiate-sponsored instruction.....	65
This includes sources of college-equivalent knowledge outside the traditional classroom	

#### Credit by Examination

You can earn credits toward your B.G.S. degree by achieving acceptable scores on four types of examinations:

1. UNO's special examination procedure. This involves "challenging" one of the subjects taught at UNO by attempting a departmental examination.
2. College-Level Examination Program Subject Examinations (CLEP/SE).
3. The General Examinations battery of the College-Level Examination Program (CLEP/GE). Six credits each may be granted on the natural sciences, humanities and mathematics sections. Since the purpose of the CLEP General Examinations battery is to credit individuals for the knowledge they have acquired outside the college setting, your eligibility for such credit will be reduced by the amount of

credit which you have already earned in college subjects in the academic core areas prior to the CLEP test date. Additional stipulations of the CLEP testing program are:

- Only the scores earned on your first attempt at each test will be considered. Since only successful attempts are entered on your record, the only penalty for an unsuccessful attempt is that you cannot take the test again.
- In order to be eligible for CLEP/GE credit, the student must take the test before you have earned 27 credits at UNO.
- No CLEP/GE credit will be accepted from students who have acquired 65 or more credits applicable toward a B.G.S. degree before the CLEP/GE test date.  
On the other hand, course work taken after the CLEP test date generally will not reduce CLEP credit you have already been awarded.  
However, there are a few exceptions. Please consult a CCS academic adviser.

4. Defense Activity for Non-Traditional Education Support (DANTES) examinations. These exams cover certain academic subject areas, and may be taken at any point in your academic career. The University of Nebraska at Omaha is an authorized CLEP/DANTES test administration center. The CLEP General Examinations battery and CLEP Subject Examinations are given on the third Saturday of each month. DANTES exams are not held on a regular schedule, but may be arranged through the Testing Center. For more information, contact the UNO Testing Center, (402) 554-4800.

#### Credit for Non-Collegiate-Sponsored Instruction

The College of Continuing Studies grants academic credit for selected college-equivalent knowledge which adults have acquired outside the college classroom. Credits granted by CCS derive from two sources of authorization, one national and one local. The national authority is the American Council on Education (ACE). The College of Continuing Studies honors ACE credit recommendations for educational programs conducted by branches of the United States Armed Services and by an increasing number of business, governmental and professional organizations. Locally, the College of Continuing Studies makes recommendations for granting credit which must be approved by the CCS Faculty Academic Policy Committee in order to become official policy.

The major sources of non-collegiate-sponsored instruction for which credit is currently granted toward the B.G.S. degree are listed below, with indications of either the specific amount (where single values are given) or the approximate range of credit involved.

## Source of Instruction or of Validating Examination Credits Granted

### U.S. Armed Services Programs

One continuous calendar year of enlisted active duty service including basic training.....	10
Officer Training School (in addition to above) .....	12
Vocational-technical program ("service schools") typically .....	2-6
U.S. Army military occupational specialties (MOS) typically .....	5-20

### Federal Aviation Administration Programs

Certified aircraft pilot ratings .....	up to 21
FAA Academy .....	up to 15
FAA Management Training School .....	up to 28

### Professional Secretaries International

Certified Professional Secretary Program.....	up to 30
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### Professional Banking Programs

American Institute of Banking correspondence program .....	up to 30
Institute of Financial Education .....	up to 24

### Professional Insurance Programs

American Institute for Property and Liability Underwriters (CPCU Program).....	up to 27
Insurance Institute of America.....	up to 30
The American College (CLU) .....	up to 30
Health Insurance Association of America .....	up to 4
Life Office Management Association (FLMI) .....	up to 27

### Public Health Service, Department of Health,

#### Education, and Welfare

Proficiency Examination for Clinical Laboratory Technologists .....	65
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### Registered Nursing Programs

Hospital-based diploma programs accredited by the National League for Nursing.....	64
or	
Holder of Registered Nurse license from any state in the United States.....	64

### Radiologic Technologist Programs

Hospital-based diploma programs approved by the AMA Council on Medical Education .....	58
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If you think you may be eligible for credit in any of the above categories, contact a CCS adviser.

## BACHELOR OF GENERAL STUDIES POLICIES

### **Academic Amnesty**

Academic amnesty is one of the significant features of the Bachelor of General Studies degree. If your previous grade point average (GPA) has been lowered by poor performance or failure in a number of courses, this "second chance" policy represents the only practical hope for freeing yourself from a severe GPA deficit. Although the amnesty does not remove poor grades from your transcript, it does recalculate your GPA by not including the poorest grades after you have earned a GPA at or above a 2.5 in 24 semester hours of UNO course work. You must request amnesty prior to earning 18 credit hours at UNO and after a

period of at least one year of no course work since receiving the grades for which you desire amnesty.

### **Residency**

The College of Continuing Studies recognizes the high degree of mobility possible within the adult population it serves. The residency requirement for the B.G.S. degree specifies that 24 of the last 60 credit hours must be graded credit earned at UNO while enrolled as a student in the College of Continuing Studies. The residency requirement also specifies that in B.G.S. degree Option I, your area of concentration must include nine hours of upper division credit earned at UNO; in B.G.S. degree Option II, you must earn at least six hours of upper division credit from UNO in each of two areas of emphasis for a total of 12 upper division credit hours from UNO.

### **Credit/No Credit Grading Policy**

B.G.S. students may take up to 24 hours on a "credit/no credit" grading policy to apply toward academic core requirements and as electives. However, it is important to note that credits earned under the "credit/no credit" option (or under other similar policies in effect elsewhere, such as "pass/fail") cannot be applied toward area of concentration, secondary field or area of emphasis requirements for the B.G.S.

### **Combined Degree Policy**

#### **B.G.S./Professional**

Candidates for the Bachelor of General Studies degree who plan to continue with a professional degree program such as dentistry, law or medicine may qualify for a combined degree program. You may apply up to 29 credit hours from your professional school work toward the B.G.S. degree. This allows you to enter professional school earlier, without sacrificing the opportunity to complete a baccalaureate degree.

### **Statement of Remaining Requirements**

Students working toward a B.G.S. degree should apply to CCS for a Statement of Remaining Requirements (SRR) when they have earned 95 hours. A CCS academic adviser will prepare an SRR form which summarizes the remaining requirements you must meet in order to receive your degree. Also, a tentative date for completion of the degree is worked out, leaving a margin for unanticipated delays. The resulting Statement of Remaining Requirements is of significant value. Having the nature of a contract, it protects you against subsequent changes in degree requirements, provided the degree is completed on or before the agreed-upon date.

If you choose not to obtain a Statement of Remaining Requirements, you are assuming all responsibility for meeting the requirements for graduation. If an error is made or if degree requirements change, graduation at the anticipated time may not be possible.

To obtain an SRR, schedule an appointment with a CCS adviser. Be sure to specify the purpose, so that a complete academic inventory and the SRR can be prepared.

As a separate procedure, all degree candidates must file an Application for Degree form with the University

Registrar shortly after the start of their final term. See the current academic calendar for the last date on which degree applications will be accepted by the Registrar.

### **Special Credit Programs**

Several other programs which the Academic Programs Division administers deserve special mention.

#### "Bootstrap" Program

This degree completion program serves active duty military personnel. Each year it brings men and women in the U.S. Armed Services to Omaha for a final period of full-time study in their pursuit of a college degree. Since 1951, more than 12,500 career military personnel, both enlisted and commissioned, have earned baccalaureate degrees in the Bootstrap Program. Information about this program may be obtained from military educational services officers, by writing to Military Programs, College of Continuing Studies, University of Nebraska at Omaha, Omaha, Nebraska 68182, or by calling (402) 554-2371.

#### Offutt Air Force Base Program

Since 1950, shortly after the Strategic Air Command established its headquarters at Offutt Air Force Base, the College of Continuing Studies has provided courses at Offutt for military personnel, their dependents and civilian employees. Because these on-base courses count as residence credit toward UNO degrees, many military personnel have been able to complete degrees through this program. All Offutt classes are scheduled as either 7- or 14-week sessions and take into account the specialized needs of a mobile military population.

#### Servicemember's Opportunity College

The College of Continuing Studies is a charter member of the Servicemember's Opportunity College Program, a nationwide effort to make postsecondary education more readily available to men and women in the U.S. Armed Services. For over 40 years, CCS's degree policies have served as models for this development. Both the Bootstrap and Offutt AFB programs attest to UNO's long-term cooperation with service personnel who want to earn a baccalaureate degree.

#### Off-Campus Credit Courses

Each semester, CCS schedules credit classes at locations such as schools, community centers and other community sites to meet the needs of various constituent groups. The majority of the classes are undergraduate and are held at the end of the working day, downtown in UNO's Peter Kiewit Conference Center.

Off-campus credit courses are available to students pursuing any degree in the University, and for non-degree purposes as well.

### **OTHER SERVICES OF THE COLLEGE OF CONTINUING STUDIES**

#### **Noncredit Programs**

The College of Continuing Studies extends the University's resources to the community through a variety of noncredit daytime and evening courses, workshops, seminars, weekend programs, and conferences. Programs are offered in professional development, management,

computer essentials, information technology, test preparation, art, photography, music and personal enrichment. The roster of instructors includes faculty from all colleges in the University as well as individuals from the community.

Courses are timely and challenging learning experiences. They are presented in a non-competitive, informal atmosphere where interest in learning is the central consideration. No entrance or non-resident fees are required. For information, call (402) 595-2309 or email [webmaster@unomaha.edu](mailto:webmaster@unomaha.edu).

#### **UNO's Peter Kiewit Conference Center**

Operating a fully equipped conference center expressly designed for meetings, conferences and other programs of an educational nature is an important part of the College of Continuing Studies' mission. UNO's Peter Kiewit Conference Center, located at 1313 Farnam in downtown Omaha, is available to UNO faculty, staff and students as well as businesses, organizations and the general public. The Conference Center also hosts UNO off-campus classes. For more information, call (402) 595-2300 or e-mail [kcacioppo@unomaha.edu](mailto:kcacioppo@unomaha.edu).

#### **Conference Coordination**

Experienced staff from the Division of Conferences and Community Programs work with representatives from other UNO colleges and organizations in cosponsoring a wide variety of conferences and workshops each year. These events attract local, regional, national and international audiences. The Division provides services in budgeting, program planning, marketing and publicity, and logistical arrangements for these cosponsored events. For more information, call (402) 595-2355 or e-mail [webmaster@unomaha.edu](mailto:webmaster@unomaha.edu).

#### **Labor Studies**

The William Brennan Institute for Labor Studies provides continuing education for a specialized audience. The Institute serves the labor movement state-wide by helping to develop citizenship and leadership. Through educational programs, individual workers gain the knowledge and skills that will equip them to be effective leaders in a democratic labor movement in a democratic society. For more information, call 402/595-2343 or e-mail [webmaster@unomaha.edu](mailto:webmaster@unomaha.edu).

#### **Distance Education and Information Technology**

UNO's Peter Kiewit Conference Center can receive (downlink) audio and video programs via television satellite and telephone. The Center's Computer Training and Board Room combines the functions of a computer training facility and executive meeting room with interactive Internet-based computer linkage. The conference center also has special facilities for distance education. For more information, call 402/595-2300 or e-mail [kcacioppo@unomaha.edu](mailto:kcacioppo@unomaha.edu).

In partnership with the College of Continuing Studies, the Aviation Institute now offers a Bachelor of General Studies degree through distance learning. For more information, call (402) 554-3424.



A computer user room is available at the conference center for UNO credit students. Call (402) 554-3282 for hours of operation.

**Customized Programming**

Businesses or organizations which need specialized education or training programs can use the resources of the University through the College of Continuing Studies. Staff members in the Division of Conferences and Community Programs are available to assess needs, develop course content and goals, and make instructional arrangements. Programs can be presented at a location and time most convenient for the organization. For more information, call (402) 595-2355 or e-mail [webmaster@unomaha.edu](mailto:webmaster@unomaha.edu).

**Office Locations**

The College of Continuing Studies is headquartered in UNO's Peter Kiewit Conference Center at 1313 Farnam in downtown Omaha. The College also maintains a suite of offices in Arts and Sciences Hall on the UNO main campus at 60th and Dodge Streets, and in the Base Education Center at Offutt Air Force Base in Bellevue.

**Web Location**

The College of Continuing Studies maintains pages on the World Wide Web at <http://www.unomaha.edu/~ccswww/index.html>. A full description of current noncredit programs, conferences and B.G.S. Option I area of concentration requirements is available there.

## GENERAL INFORMATION

The College of Education seeks to prepare students for careers in education; to provide professional services to individuals, schools and other agencies; and to promote research for the improvement of educational practice. It is comprised of five units: the department of counseling; the department of educational administration and supervision; the School of Health, Physical Education, and Recreation; the department of special education and communication disorders; and the department of teacher education.

Through its departments and school, the College offers several programs to students majoring in education. This catalog describes only those at the undergraduate level. While all lead to the Bachelor of Science in education degree, some programs must be pursued in conjunction with others and most lead to state certification. Additionally, the College offers a number of special course sequences which of themselves do not result in a degree but which qualify students for added teaching endorsements.

The College of Education in cooperation with the Omaha Public School offers the Minority Intern Program to encourage minority students to enter the teaching profession. The Minority Intern Program provides opportunities for minority students to work in the classroom while pursuing a degree in teaching.

## ADMISSION AND TRANSFER POLICY

Application deadlines for admission to the College of Education are August 1 for the fall semester, December 1 for the spring semester and June 1 for summer sessions. Prospective students may apply for entrance into the College by indicating their preference on the University Application for Admission. Only students with "Full Standing" admission status will be eligible for entrance into the College. (See the General Information section of this Catalog for description of the admission categories.) Students may transfer into the College from other institutions and from schools and colleges within the University.

Students transferring into the College of Education for teacher certification programs are required to meet the minimum cumulative grade point average of 2.50 as well as successfully completing the Pre-Professional Skills Test (PPST) or the Content Mastery Examination (CME) and having those scores on file in the College of Education's Office of Student Services. Although UNO does not transfer grade point averages from institutions outside of the University of Nebraska system, the College of Education, in an attempt to assure consistency in the determination of eligibility for professional education courses, does require the computation of the grade point average be based on all course work attempted (UNO and transfer hours).

Transfer students enrolling in the College of Education for certification only must successfully complete all program requirements prior to student teaching. (The program course work for any endorsement must total a minimum of 12 hours, six of which are in the major area.)

Official college transcripts must be sent by the Registrar's Office to the UNO Office of Admissions from each previous college or university attended whether credit was earned or not. Hand-carried or student submitted transcripts are not acceptable.

Credits earned at an institution which is part of the Nebraska Network of Community Colleges will be accepted by the College provided the grades are the equivalent of a "C" or better. Acceptance of credits by the College does not insure their application to a particular program or endorsement; determination of applicability is the responsibility of the specific department/school. Only credits earned at accredited institutions will be accepted by the College. Credits from C-accredited institutions will be accepted after 30 hours of work are satisfactorily completed at UNO.

Professional education courses will be accepted only from institutions which are accredited for teacher education by the state and/or regional accrediting agency. Education courses will not be accepted from junior colleges or other two-year institutions.

NOTE: In accordance with Nebraska Department of Education, Rule 20, the following information must be provided to all persons who apply for admission to programs leading to teacher certification: Persons who have felony convictions or misdemeanor convictions involving abuse, neglect, or injury to any person, or any conviction involving moral turpitude are automatically rejected by the Nebraska State Department of Education for certification.

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EDUCATION DEGREE

General studies, the professional education sequence and academic work for one or more endorsed teaching areas are the components of the Bachelor of Science in education degree program. Students seeking certification but not the degree must meet all requirements in general studies, in professional education requirements and major fields. Program specifications and exceptions are noted below. A Bachelor of Science in education degree requires a minimum of 125 credit hours; 30 of the last 36 hours must be taken in residence.

### General Education

Courses in this component pertain to the student's liberal education. They are not in pedagogy and are not intended to satisfy professional requirements. Forty-five credit hours of general education courses are required by the College. Students should consult with their advisers, prior to each registration, about the applicability of courses toward meeting the general education requirements. The distribution of hours is as follows:

### Fundamental Academic Skills – Total 15 hours

(A grade of "C" or better is required for all course work in the fundamental academic skills area.)

English and Writing .....	9
English (equivalent to ENGL 1150 and 1160) .....	6
All incoming freshman and those transfer students who have not completed six hours of English composition courses with a grade of "C" or better at other accredited institutions are required to take the English Placement Examination.	
One advanced writing course .....	3

Public Speaking .....3  
May be satisfied by SPCH 1110 or 1120.

Mathematics 1310 or equivalent .....3

### Distribution Requirements – Total 30 hours

Natural and Physical Sciences .....minimum of 8  
Minimum of eight hours including one laboratory course.

Humanities and Fine Arts .....minimum of 8  
(course work in philosophy and literature is required)

Social and Behavioral Sciences .....minimum of 8

Cultural Diversity – Total 6 hours

U.S. Racial or Hispanic Minority Groups .....3  
EDUC 2030 (Human Relations) must be completed to fulfill this requirement.

The remaining three hours of this distribution can be satisfied with another three hours in minority studies, course work in women's studies, or course work with an international or foreign focus.

*NOTE: Certain majors in the College of Education require specific courses to satisfy the above general education distributions. For further information and details, see the requirements for particular majors.*

### Professional Education Sequence

NOTE: The EDUC sequence is currently under review. Please check with an education adviser for specific course requirements.

All students in programs leading to teacher certification must complete the courses that constitute the professional education sequence. Certain programs require students to take part or all of the sequence. To enroll in any professional education course, students must have a cumulative GPA of at least 2.5 and satisfy any additional prerequisites listed for the course. Students who receive a "D," "F" or "I" in a professional education course may not continue in the professional sequence until that grade is removed.

The professional education sequence is composed of 12 credit hours organized in four courses of three credits each: EDUC 2010, Human Growth and Learning; EDUC 2020, Educational Foundations; EDUC 2510, Applied Special Education; EDUC 2520, Instructional Systems; and Level I-Field Experience.

The first two courses in the professional education sequence may be taken concurrently and must be completed satisfactorily prior to enrollment in the last two courses. Prerequisites for the first two courses are completion of 24 hours, a cumulative grade point average of 2.5 and passing scores on the PPST or CMEE. EDUC 2510 and EDUC 2520, EDUC 2520 Lab, and Level 1 Field Experience must be completed in the same semester. Students who receive a grade of "D" or "F" or are withdrawn from any laboratory or clinical experience or who voluntarily withdraw after being identified as a student in jeopardy, must petition the Field Experience Advisory Committee if they wish to continue their program.

### Proficiency/Screening Requirements

GPA - 2.5 cumulative grade point average

In an attempt to assure consistency in the determination of eligibility for professional education courses, the College of Education does require the computation of grade point average be based on all course work attempted (UNO and transfer hours).

### Policy on Repeating Courses

A student who has failed any College of Education undergraduate course (TED, SPED, EDUC, HPER) may re-enroll in that course one additional time for a total of two attempts. A student who withdraws or is removed from any field, clinical or student teaching experience may repeat the experience one time, following the appropriate appeal and reapplication process.

### English

All College of Education students must successfully pass freshman English composition prior to the completion of 60 hours of credit.

### Basic Skills Testing (PPST or CMEE)

Passing scores for the written version of the Pre-Professional Skills Tests are: Reading - 170; Mathematics - 171; and Writing - 172. Passing scores for the CBT version of the PPST are: Reading - 316; Mathematics - 316, and Writing - 318. Passing score for the CMEE is 850. With the exception of EDUC 2030, Human Relations, and certain HPER courses, no other professional education courses may be taken until a student passes all sections of the PPST or CMEE. A student who enrolls in professional education courses who has not passed the PPST or CMEE will be disenrolled from those courses.

Speech/Hearing - Upon referral, students must complete the speech/hearing screening before continuing in the program.

### GENERAL COLLEGE STUDENT TEACHING POLICIES

1. All students will be required to complete one semester of full-day student teaching for a total of 12 credit hours. Students getting endorsed in special education, early childhood and educational media will be required to complete two semesters of full-day student teaching for a total of 24 credit hours.
2. The Level II field experience is done in conjunction with student teaching. This field experience is a non-credit lab consisting of the two weeks preceding student teaching on site at a single school.
3. Application for student teaching must be made during the fall or spring term preceding the semester of student teaching. Admission to student teaching is by application only. Applicants cannot be considered for placement unless all application materials are returned by October 1 for spring student teaching and February 15 for fall student teaching.
4. Students must have a minimum overall GPA of 2.50 in order to be eligible for student teaching.

5. A grade of "C" or better is required in those courses listed on the student's program of study as professional education courses, teaching area courses for secondary students, and specialization or academic concentration courses for elementary students.
6. Students must have completed the Pre-Professional Skills Tests (PPST) or the Content Mastery Examination (CMEE) prior to student teaching.
7. Students must have completed all of their course work prior to student teaching.
8. All elementary special education students will be required to complete one semester of student teaching at the elementary level before applying for special education student teaching. All secondary education students who are earning endorsement in special education will be required to complete one semester of student teaching in their other content area before applying for student teaching in special education.
9. Grades of "D," "F" and "I" must be removed prior to student teaching in all course work listed on the student's program of study as professional education, teaching areas for secondary students and specialization/academic concentration areas for elementary students. Students receiving "D's," "F's and "I's" are responsible for contacting the advising office upon receiving said grades if they are planning on student teaching the following semester.

**Special Note:**

Student teachers who are withdrawn from any student teaching placement, or who voluntarily withdraw after being identified as a student in jeopardy, must petition the Field Experience Advisory Committee if they wish to continue their professional preparation program.

**OTHER INFORMATION**

**Academic Amnesty**

Undergraduate students who are currently enrolled in the College of Education, and who have successfully completed one full year of course work at UNO, may petition to have all course work taken during all or part of their first two years removed for the purpose of computing grade point average. One full year of successful course work at UNO shall be defined as 24 consecutive hours with a grade point average of at least 2.50.

Deletion of previous course work shall be by entire semester(s), or year(s) as the case may be and the student must be at least four years removed from the semester or year to be deleted. Individuals who apply under this rule may not be considered for degrees with honors at graduation.

The petition for academic amnesty is submitted in accordance with the following guidelines:

1. After consultation with an adviser, the student is responsible for initiating the petition.
2. The petition should be addressed to the dean of the college. It should include the student's name,

identification number, and address, as well as identification of the specific semesters for which removal is being requested.

3. The petition should be submitted to the adviser who will, in turn, forward it to the dean.
4. The student is advised in writing regarding the dean's decision. Copies of the decision are sent to the student's adviser and the registrar.

*Note: Application of the College of Education's amnesty policy for students in other colleges at UNO is possible under the following circumstances:*

1. The student meets the cumulative hour and GPA requirements of the College of Education's amnesty policy.
2. The student must have "unconditional" admission status. (See general information section of the undergraduate catalog for description of the admission categories.)
3. The application of the College of Education policy will raise the cumulative GPA to the required 2.5 overall average.

**Advising**

Students are encouraged to establish and keep close contact with their academic advisers. In this way, one's progress through a program may be facilitated and serious mistakes can be avoided. The College maintains an undergraduate advising office which is open at regularly scheduled hours and is located in Kayser Hall 330. The undergraduate advisers can provide direct assistance to students or can refer them to the appropriate faculty members for special advice. Students should consult with an adviser for schedule approval prior to each registration.

**Dean's List**

Students enrolled in the College of Education who maintain a grade point average of 3.5 or better while carrying 12 or more graded hours will earn the distinction of being placed on the Dean's Honor List at the end of the semester.

**Certification**

Upon successful completion of all course work, students are eligible for a Nebraska teaching certificate. Students will need to apply for certification the semester they graduate. Applications and information can be obtained in the Office of Student Services, Kayser Hall 326.

**First Day Attendance Policy**

The College of Education enforces a "first day attendance" policy. This affects students enrolled in the following EDUC courses and identified professional courses with field experiences: EDUC 2010, EDUC 2510, EDUC 2514, EDUC 2520, PE 3060, PE 3210, PE 3250, PE 3350, PE 4000, SPED 4400, SPED 4640, SPED 4720, SPED 4730, TED 2250, TED 4250, TED 4300, TED 4310, TED 4320, TED 3690, TED 4600, TED 4630, TED 4640. Students not attending the first day of class will be administratively withdrawn.

**Grade Appeals**

Students who believe that their grade in a particular course does not properly reflect their performance should first contact the instructor to determine the rationale for the grade or if there was an error in reporting. Consultation with the instructor should take place before taking any formal action in regard to a grade appeal.

After the instructor has provided the rationale for the grade in question and has indicated that no error in reporting was made, the student may then wish to petition the department for reconsideration. In such instances, the student should contact the chair of the department in order to obtain information in regard to the procedures to be followed in requesting an appeal at the departmental level.

The Student Affairs Committee of the College of Education is the appellate body for grade appeals after a student has received a decision at the departmental level. If the student believes that departmental action did not accord with the procedures of due process or did not provide legitimate relief, he/she may petition the Student Affairs Committee. A written petition should be addressed to the chair of the committee and should include:

- the specific nature of the matter for which consideration is requested;
- the relief being sought;
- the basis for requesting that a hearing be held;
- the identification of supporting data, testimony, etc.; and
- the name, address and identification number of the petitioner.

The chair of the Student Affairs Committee will notify (at least 10 days in advance) the student, the instructor, and the chair of the relevant department of the date, time, and place of the hearing. The notification will include a description of the procedures to be followed during the hearing.

**Renewal of Certificates**

Courses taken for the renewal of a teaching or administrative certificate must be approved, prior to enrollment, by an adviser in the College of Education. Courses taken at non-accredited institutions or institutions without an approved teacher education program are not applicable to renewals.

**Special Requirements and Limitations**

Each candidate for the Bachelor of Science in Education degree or certification must attain a minimum grade of "C" in each professional education course. In addition, students who expect to graduate must present a minimum cumulative grade point average of 2.5 (UNO and transfer hours) for all courses required for graduation. All grades are included in the computation of the cumulative grade point average. Students with more than 12 credit hours of credit whose cumulative grade point average falls below 2.5 for two consecutive semesters will be disenrolled from the College of Education.

Students are expected to progress regularly toward the degree. A student enrolled in the College of Education will complete his/her work for the degree according to the requirements of the catalog of the year in which he/she entered the College. If a student interrupts his/her program

for more than one semester, he/she will be held to the requirements of the catalog of the year when he/she re-enters the College.

A candidate may not count toward graduation a total of more than 15 hours of credit taken by correspondence, television, and/or extension.

The College of Education will accept toward a degree program those courses for which credit by examination is given (up to 30 hours) and recommended by the respective departments within the colleges of the University. Up to eight credit hours of elective credit may be allowed for military service.

**DEPARTMENT OF SPECIAL EDUCATION AND COMMUNICATION DISORDERS**

In order to be admitted to a specialization and remain in good standing, a student must maintain an overall GPA of 2.5 or better. No grade below a "C" will be accepted in any professional education course.

**Education of the Hearing Impaired**

Students electing to take education of the hearing impaired as an area of study may major in elementary education with education of the hearing impaired as the professional specialization or may select education of the hearing impaired as the first teaching field in secondary education.

Required special education courses are SPED 4200, The History, Psychology and Sociology of Deafness; SPED 4220, Teaching Speech to Hearing-Impaired Students; SPED 4420, Language Development in Children; SPED 4240, Teaching Language to the Hearing Impaired\*; SPED 4250, Manual Communication for Special Educators\*; SPED 4260, Advanced Manual Communication\*; SPED 4330, Aural Rehabilitation; SPED 4350, Teaching Content Subjects to the Hearing Impaired; SPED 4370, Basic Audiology; SPED 4390, Hearing Science; SPED 4450 Speech Science II: Experimental and Applied Phonetics; SPED 4720, Student Teaching in Special Education: Each student will also complete the professional education sequence, including EDUC 2510 Applied Special Education, and EDUC 2030 Human Relations. Each student will be required to pass the Pre-Professional Skills Test.

*\*Competency in manual communication is required for student teaching.*

**Speech Language Pathology**

Please contact the department as program changes are being implemented. Students majoring in speech pathology must maintain an overall GPA of 2.5 or better. A GPA of 3.0 or better within the major area is required prior to admission into SPED 4510, Basic Clinical Practicum in Speech Pathology. SPED 4510 is taken on a Credit/No Credit basis. No other courses taken on a Credit/No Credit basis will be accepted for the purpose of fulfilling any of the required general education, special education or speech-language pathology courses. An undergraduate degree in speech-language pathology is a pre-professional degree which does not lead to a certificate endorsement in speech pathology to work in Nebraska schools. The certificate endorsement is recommended upon completion of the master's degree in speech-language pathology.

Students majoring in speech-language pathology must take the following course work as partial fulfillment of the general education requirements. Science will include BIOL 1020. Humanities will include either SPCH 1110, Public Speaking Fundamentals; SPCH 2010, Interpersonal Communication; or SPCH 4520, Psycholinguistics. PSYCH 1010, Introduction to Psychology; PSYCH 1020, Introduction to Psychology; PSYCH 1024, Laboratory: Introduction to Psychology; and PSYCH 2130, Statistics for the Behavioral Sciences are all required in the social sciences area.

The speech-language pathology requirements will include all of the following course work. Each student will take all courses in the following sequence: SPED 1400, Introduction to Communication Disorders will be taken in the first year in the program. SPED 4380, Speech Science: Speech Mechanisms SPED 4390, Hearing Science; and SPED 4450, Speech Science II, Experimental and Applied Phonetics will be taken during the fall semester of the student's second year. SPED 4420, Language Development in Children; SPED 4430, Articulation Disorders, and SPED 4370, Hearing Disorders will be taken during the spring semester of the student's second year. The requirements for the fall semester of the student's third year will include SPED 4750, Childhood Language Disorders, and SPED 4490, Pre-Clinical Observation and Assessment. During the spring semester of the student's third year SPED 4410, Organic Communication Disorders, and SPED 4500, Communication Disorders in the Elementary and Secondary Schools will be taken. SPED 4330, Speech Reading and Auditory Training will be taken during the fall semester of the student's final year. SPED 4510, Basic Clinical Practicum in Speech Pathology, may be taken during either the fall or spring semester of the student's final year.

Each student also will complete the professional education sequence, including EDUC 2510 Applied Special Education, and EDUC 2030 Human Relations. Each student will be required to pass the Pre-Professional Skills Test. SPED 3020, Data Collection Techniques and Their Role in the Teaching/Learning Process is a basic special education requirement. Elective course work equivalent to six hours in special education will be required.

### **Teaching the Mildly/Moderately Handicapped**

All undergraduate students seeking endorsement in the area of mildly/moderately handicapped must be enrolled in a program that leads to certification in elementary or secondary education and includes the professional education sequence. Each student will be required to pass the Pre-Professional Skills Test.

Special education courses required for K-9 endorsement in the area of mildly/moderately handicapped are: SPED 3020, Data Collection Techniques; SPED 4400, Introduction to Learning Handicaps; SPED 4640, Methods and Materials of Teaching in Special Education; SPED 4710, Interactions Between Professionals and Parents; SPED 4720, Student Teaching in Special Education; SPED 4800, Emotional Development of Children and Youth; SPED 4810, Classroom Techniques of Behavior Control; and one elective.

Special education courses required for 7-12 endorsement in the area of mildly/moderately handicapped are: SPED 3020, Data Collection Techniques; SPED 4400, Introduction to Learning Handicaps; SPED 4640, Methods and Materials of Teaching in Special Education; SPED 4650, Career Development; SPED 4710, Interactions Between Professionals and Parents; SPED 4720, Student Teaching in Special Education; SPED 4810, Classroom Techniques of Behavior Control; and one elective.

A 24 semester hour sequence may be chosen as a special education concentration with elementary education. This concentration does not lead to endorsement. Required courses in the nonendorsement special education concentration are: SPED 1400, Introduction to Communication Disorders; SPED 3020, Data Collection; SPED 4400, Introduction to Learning Handicaps; SPED 4810, Classroom Techniques for Behavior Control; and four electives. Elective choices include; SPED 4640, Methods and Materials in Special Education; SPED 4710, Interactions Between Professionals and Parents; SPED 4800, Emotional Development of Children and Youth; SPED 4650, Career Development, and SPED 4010, Child Abuse and Neglect. Each student will also complete the professional education sequence, including EDUC 2510, Applied Special Education and EDUC 2030, Human Relations. Elective course work equivalent to six hours in special education will be required.

### **For more information...**

please call (402) 554-2201.

### **SCHOOL OF HEALTH, PHYSICAL EDUCATION AND RECREATION Health Education**

For more information see our website at:  
[www.unomaha.edu/~health/HEDprogram.html](http://www.unomaha.edu/~health/HEDprogram.html).

#### School Health Education

The school health education program is designed to prepare students for positions in secondary schools. Students must have a GPA of 2.5, no grade lower than than "C" in required classes and no incompletes in health education courses to student teach and be recommended for graduation.

Students must meet the general education requirements. Students receiving school health education certification must complete the professional education sequence as well as EDUC 2030, Human Relations.

The following hours are also required of those seeking certification: HED 1500, Foundations of Health Education; HNFM 1510, Intro to Nutrition; HED 2070, Drug Awareness; PE 2880, Basic Physiology and Anatomy; HED 2310, Healthful Living; HED 2850, Stress Management; HED 3030, First Aid; HED 3080, Health Concepts of Sexual Development; HED 3310, General Safety Education; HED 4000, Methods and Materials in Health Education; HED 4040, Prevention and Control of Disease; HED 4060, School Health Programs; GERO/HED 4550, Health Aspects of Aging; HED 4960 Health Education: Planning and Organization; TED 4000, Methods in Second Teaching Field; plus 12 credit hours of student teaching.

Community Health Education

The community health program is designed to prepare students for positions in health-related agencies, businesses, industries, professional health organizations and health care institutions.

Students must meet the general education requirements. Additionally, students must complete: PE 2880, Basic Physiology and Anatomy; BIOL 1330, Environmental Biology; SPCH 1110, Public Speaking Fundamentals; and HIST 4470, History of American Medicine and Public Health. Students must have an overall GPA of 2.5, no grade lower than a "C" in required classes, and no incompletes in health education courses in order to be assigned a practicum and to be recommended for graduation.

Students must complete the following 58 hours of course work: HED 1500, Foundations of Health Education; HNFM 1510, Intro to Nutrition; PE 1800, Fitness for Living; HED 2070, Drug Awareness; PSYCH 2130, Introduction to Statistics; HED 2850, Stress Management; HED 2310, Healthful Living; HED 3030, First Aid; HED/GERO 3070, Death and Dying; HED 3080, Health Concepts of Sexual Development; HED 3310, General Safety Education; HED 3600, Community Health; HED 4000, Methods and Materials in Health Education; HED 4040, Prevention and Control of Disease; HED/GERO 4550, Health Aspects of Aging; PE 4940, Physiology of Exercise; HED 4960, Public Health Education — Planning and Organization; and HED 4990, Field Practicum.

Students in community health education are required to take 15 hours of professional electives and 12 of general electives. Electives can be arranged through the health education academic adviser.

**Physical Education**

The physical education program offers majors in physical education teacher preparation and exercise science. Students achieving teaching certification may also pursue a coaching endorsement and/or adapted physical education endorsement. Students interested in athletic training can enroll in the exercise science or teacher preparation majors with an emphasis in athletic training.

Physical Education Teacher Preparation

The teacher preparation programs in physical education are designed to prepare students to teach physical education in elementary and/or secondary schools. Certification programs leading to a Physical Education K-6 Endorsement and a Physical Education 7-12 Endorsement are available. Students must have a cumulative GPA of at least 2.5, no grade lower than "C" in required courses, and no incompletes in required physical education courses to student teach and be recommended for graduation. All students seeking teaching certification in physical education are required to complete the College of Education general education requirements and professional education sequence (EDUC 2010, 2020, 2510, 2520); the State certification requirements (ENGL 2300, EDUC 2030); the professional physical education course requirements (PE 1800, 2430, 2800, 2880, 4150, 4220, 4630, 4930, 4940, HED 3030, PHYS 1050, 1054);

and two hours of activity courses (PEA 1110/1120 Track & Field, Aerobic Dance/Weight Training).

K-6 Teaching Endorsement

In addition to the general education requirements, the professional education sequence, State certification requirements, the professional physical education course requirements and the activity course requirements, students seeking the K-6 teaching endorsement must complete TED 4640 and the physical education K-6 specialization requirements (PE 2300, 2350, 3060, 3210, 3350 and six hours of physical education electives). Of the electives, a maximum of three hours may be one-hour PEA courses.

7-12 Teaching Endorsement

In addition to general education requirements, the professional education sequence, the State certification requirements, professional physical education course requirements and the activity course requirements, students seeking the 7-12 teaching endorsement must complete TED 3690, 4640, and the physical education 7-12 specialization requirements (PE 2300, 2350, 3250, 4000 and six hours of physical education electives). Of the electives, a maximum of three hours may be one-hour PEA courses.

Coaching Endorsement

To receive a coaching endorsement, a student must possess or simultaneously receive teaching certification. Physical education majors must complete the requirements for K-6 and/or 7-12 endorsement and complete PE 3040, 4500, any two of PE 3730, 3740, 3750, 3760, 3770, 3780, 3790 and two coaching practica (PE 4980). Non-physical education majors must complete HED 3030, PE 3010, 3040, 3480 or 4220, and any two of PE 3730, 3740, 3750, 3760, 3770, 3780, 3790 and two coaching practica (PE 4980).

Adapted Physical Education Endorsement

To receive an adapted physical education endorsement, a student must possess or simultaneously receive teaching certification. Students seeking the adapted physical education endorsement must complete EDUC 2510/8030, SPED 4710/8716, PE 2800, 4150, 4170/8176, 4180/8186, 4260/8266, 3350 or 4000, and PEA 1110/1120 Adapted Aquatics.

Exercise Science

The exercise science program in physical education is designed to prepare students to assume positions as fitness or health promotion directors and exercise consultants in private or public agencies, health centers, cardiac rehabilitation programs, as well as corporate fitness programs. This major is also an excellent choice for students in the preprofessional programs in physical therapy, occupational therapy and medicine. It does not lead to a state teaching certification. Students must have a cumulative and major GPA of at least 2.5, no grade lower than "C" in required courses, and no incompletes in required courses to do an internship and be recommended for graduation.

In addition to the general education requirements, the following courses must be taken: PEA 1110/1120 (Weight

Training, Swimming, Racquetball, Aerobic Dance and one elective), PE 1800, 2430, 2800, 2880, 3040, 3840, 4010, 4150, 4220, 4630, 4800, 4900, 4910, 4930, 4940, 4960, HED 2310, 2850, 3030, 4200, 4550, ACCT 2010, CHEM 1140, 1040, MATH 1310, MGMT 2800, MKT 3100, HNFM 1510, PHYS 1050, 1054, PSYCH 1010, 3620 and nine hours of recommended electives.

#### Athletic Training

The athletic training endorsement provides a structured clinical learning setting for students interested in pursuing state licensure and/or national certification. Students in this program must complete the requirements for a major in physical education teacher preparation or exercise science and PE 1010, 3050, 3430, as well as a minimum of 1500 hours of clinical experience partially incorporated into the course work.

#### **Recreation and Leisure Studies**

The Bachelor of Science in education degree with a major in recreation and leisure studies prepares students for professional positions in a variety of recreation settings. Specializations are designed to meet national certification standards with concentrations as generalists with a recreation administration focus or as therapeutic recreation specialists. Both the recreation administration and the recreational therapy concentrations meet certification sitting requirements for the national written examinations of the National Recreation and Park Association and the National Council for Therapeutic Recreation Certification.

Students are required to complete an appropriate sequence of courses for the concentration which they elect. Each concentration has a required professional education sequence containing a common core of 36 credit hours, a professional specialization of 27 credit hours, plus additional supportive requirements of 15 credit hours. A total of 125 credit hours are required.

Students must complete all required course work, both general and professional, with a minimum GPA of 2.5 before applying for their practicum experiences.

Prior to graduation, all recreation and leisure studies course work must be completed with at least a 2.5 overall GPA and no grade below a "C."

#### **For more information...**

please call (402) 554-2670.

#### **TEACHER EDUCATION DEPARTMENT**

NOTE: TED undergraduate programs are currently under review. Please check with an education adviser for specific program requirements.

Students seeking teacher certification must complete the general education and professional education requirements. Students enrolling in courses in the teacher education department must have a 2.5 overall grade point average.

#### **Elementary Education**

The program in elementary education is designed to prepare students to meet Nebraska requirements for an elementary (K-8) level teaching certificate. Students must complete course work in the following areas: speech

improvement; American history; American government; geography; American, English and world literature; and natural science (must include experience in biology and physical science). These courses may be applied to the general studies requirements.

A candidate for a degree or teaching endorsement in grades K-8 must complete the following required course work: ART 2000, Art in the Elementary School; MUS 2610, Music Fundamentals and Methods for Elementary Teachers; HPER 2400, Health Education and Physical Education for the Elementary School Teacher; TED 3300, Introduction to the Teaching of Reading; TED 4300, Teaching of Reading; TED 4310, Teaching of Language Arts; TED 4320, Teaching of Social Studies; TED 4330, Teaching of Mathematics; TED 4340, Teaching of Science; TED 4650, Literature for Children and Youth; TED 4600, Student Teaching and Seminar: Elementary; and Level II-Field Experience.

In addition to completing required courses in the K-8 program, a student seeking certification must choose from one of the following professional specializations or academic concentrations:

- Completion of course work in one of the following professional specializations will allow endorsement in that area in addition to K-8 certification: early childhood, educational media, physical education, teaching the mildly/moderately handicapped and teaching of the hearing impaired. Other professional specializations are: health education, mathematics education, reading, and science education.
- A broad academic concentration of 24 credit hours of 2000-, 3000-, or 4000-level courses beyond the general studies requirements is required. Fifteen of the 24 hours must be 3000- and 4000-level courses. Within the general education and concentration requirements, credit is required in at least three subject fields and at least 15 credit hours must be completed in one subject area. Broad academic areas include humanities, social science, or natural science and mathematics.
- An academic concentration in one department approved for the elementary education program.

#### **Secondary Education**

The secondary education program is designed to prepare students to meet Nebraska requirements for a secondary (7-12) level teaching certificate or a K-12 teaching certificate.

Students completing the secondary education program must complete course work in American, English and world literature. A maximum of 18 hours from the field endorsement or nine hours from each subject endorsement may be applied to the general education requirements.

A candidate for a degree or teaching endorsement in grades 7-12 or K-12 must complete the following course requirements: TED 3550, The Art and Science of Teaching in Secondary Schools; TED 3690, Reading for Secondary Teachers; and TED 4000, Special Methods in the Content Area, which must be repeated for each subject



endorsement or area of the field endorsement. 7-12 certification requires TED 4600, Student Teaching and Seminar: Secondary; Secondary K-12 certification requires TED 4640, K-12 Student Teaching and Seminar: Elementary/Secondary.

All students seeking 7-12 or K-12 certification must complete one of the following sets of requirements: a) academic requirements for two teaching subjects or one teaching field, or b) academic requirements for K-12 certification in art, music or physical education.

Students may choose from the following teaching subjects or fields:

#### Field Endorsements

Art	Music
Language Arts	Physical Science
Natural Science	Social Science
Mathematics	

#### Subject Endorsements

Biology	History
Chemistry	Journalism
Earth Science	Mathematics
Educational Media	Mildly/Moderately Handicapped
English	Physical Education
French	Physics
Geography	Political Science
German	Spanish
Health Education	Speech
Hearing Impaired	Speech/Drama

#### Supplemental Endorsements

Adaptive PE  
Coaching  
English as a Second Language

#### **Non-Teaching Programs**

Students not desiring teacher certification may earn a non-teaching degree in the following program:

#### Library Science

All students in the library science program must complete general education requirements. Students must complete a minimum of nine hours of professional education courses. The following courses are suggested: courses in professional education sequence, TED 3300, 3690, 4080, and EDUC 2030, and three hours of elective credit in library science. Required library science courses include: TED 4570, 4650, 4660, 4710, 4720, 4740, 4750, 4760, 4770, 4800. In addition to the library science major, each student must complete an approved minor plus elective courses sufficient to reach the minimum of 125 hours for graduation.

## GENERAL INFORMATION

The College of Engineering and Technology offers programs on both the Lincoln and Omaha campuses. All the degree programs in Omaha are fully described in this catalog. In addition to three Omaha based engineering programs, the first two years of other engineering programs can be taken in Omaha with the remainder completed at Lincoln or elsewhere. Students interested in these fields should refer to the undergraduate bulletin of the University of Nebraska-Lincoln for a comprehensive description of total degree requirements.

The engineering technology programs provide intensive experiences in engineering applications to prepare engineering technologists for activities that support engineering operations. Graduates find rewarding careers in many areas of technical organizations.

To meet the need for well-rounded engineers, the College's engineering programs offer broad education in the physical sciences, social sciences, mathematics, information sciences and humanities. This education is complemented by study in engineering methods of modeling, analysis, synthesis and design in students' areas of specialization. In addition to preparing students for careers in engineering, UNL's bachelor degree programs in engineering provide excellent preparation for graduate study in engineering.

The Accrediting Board for Engineering and Technology (ABET), (111 Market Place, Suite 1050, Baltimore, MD 21202. Phone (410) 347-7700) which accredits both engineering technology and engineering programs, uses the definitions:

"Engineering technology is that part of the technological field which requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities."

"Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind."

The National Association of Industrial Technology defines industrial technology as follows:

"A management-oriented curriculum built upon a balanced program of studies drawn from a variety of disciplines related to industry. Included are a sound knowledge and understanding of materials and production processes, principles of distribution, and concepts of industrial management and human relations."

Associate of science degrees are available in fire protection and manufacturing. They are open to students who meet the admission requirements. The associate degree is obtained upon meeting the requirements as listed in the first two years of each program.

The engineering technology baccalaureate programs are open to entering freshmen. Transfers from collegiate-level technical institutes can be admitted with advanced standing.

Currently there are three bachelor of science degree in engineering programs which can be completed in four years of full-time study on the Omaha campus. These are in Civil Engineering, Computer Engineering and Electronics Engineering. A fourth program in Architectural Engineering is currently (Fall 1997) under review. The Omaha campus also offers courses that satisfy the first two years of agricultural, biological systems, chemical, electrical, industrial and management systems, and mechanical engineering.

Qualified engineering students who have attended a two-year community college transfer program in engineering may wish to consider all options available to him/her. All prospective students are invited to visit the campus and meet with an adviser.

## COLLEGE OF ENGINEERING AND TECHNOLOGY PROGRAMS

### Engineering

#### Architectural Engineering

- B.S. Degree Program

#### Civil Engineering

- B.S. Degree Program

#### Computer Engineering

- B.S. Degree Program

#### Electronics Engineering

- B.S. Degree Program

#### First two years of:

- Agricultural Engineering
- Biological Systems Engineering
- Chemical Engineering
- Industrial and Management Systems Engineering
- Mechanical Engineering

### Engineering Technology

#### Construction Engineering Technology

- B.S. Degree Program
  - Construction Engineering Technology
- Associate Degree Program
  - Fire Protection Technology

#### Industrial Technology

- B.S. Degree Program
  - Industrial Technology

#### Manufacturing Engineering Technology

- B.S. Degree Program
  - Manufacturing Engineering Technology
- Associate Degree Program
  - Manufacturing Engineering Technology

## ADMISSION AND ACADEMIC POLICIES

These policies are subject to change. Students should consult their adviser, their department chair, or the Office of the Dean, if they have questions on current policies.

## Engineering Technology Admission Requirements

- Entering students take the general University Mathematics Placement Examination (MPE) or Calculus Readiness Exam (CRE), and the College mathematics placement examination to establish the appropriate first course in mathematics.
- Transfer student (12 or more earned credit hours): official transcripts from institutions previously attended must be on file with the department and show a cumulative grade point average of at least 2.5. Exception: a minimum cumulative grade point average of 2.0 is required for students transferring from another program in the University of Nebraska system and for students seeking readmittance to technology programs.
- Applicants for whom English is not their language of nurture must score a minimum of 500 on the TOEFL before admission will be considered.
- All entering students are required to have on file with the department an official high school transcript which shows the following minimum units:
 

English .....	4
Algebra .....	2
Geometry .....	1
Natural Science .....	3
(physics or chemistry preferred)	
- A minimum composite ACT score of 20 or an SAT (verbal + math) score of 950 must be on file with the department. Exception: neither an ACT or SAT score is required for transfer or readmitted students with 12 or more earned credit hours.

## Engineering Technology Student Status

- Students who meet all of the admission requirements will be allowed entry into department programs.
- An applicant who does not meet all of the entrance requirements may be granted provisional admittance as a "restricted" student.
- All students (new, former and transfer) who are admitted under the "restricted" classification will have one semester to clear all listed admission requirements.
- Any provisionally admitted "restricted" student who fails to meet admission requirements after one semester will not be allowed to continue. An extension beyond the one semester limitation may be granted by the Associate Dean of the College of Engineering and Technology. Only those students who maintain a semester GPA of at least 2.5 for each semester in which they are enrolled under the provisional category shall be eligible to receive an extension.
- Provisionally admitted transfer students from within the University of Nebraska system and readmitted students whose cumulative GPA is below the listed minimums will be reclassified by their adviser to unrestricted status if:
  - their cumulative GPA is 2.0 or higher; and
  - they meet all other admission requirements.

- Provisionally admitted transfer students from other than University of Nebraska System whose cumulative GPA is below the listed minimums will be reclassified by their adviser to unrestricted status if:
  - their semester GPA for the first semester enrolled (after being provisionally admitted as a restricted student) is 2.5 or higher; and
  - they meet all other admission requirements.
- Provisionally admitted students whose ACT or SAT score is below the listed minimums will be reclassified by their adviser to unrestricted status if:
  - their semester GPA for the first semester enrolled (after being provisionally admitted as a restricted student) is 2.0 or higher; and
  - they meet all other admission requirements.
- Continuing students whose cumulative GPA falls below 2.0 will be placed on restriction and can take no new engineering technology courses until their cumulative GPA is raised to 2.0 or higher. Exceptions: Students who have been granted an extension. Also, introduction to engineering technology and technical problem analysis courses (GET 1000, 1100, 1010, 1020, 2010, 3010) may be assigned by the students' adviser.

## ENGINEERING STUDENT CLASSIFICATION

### Admission Requirements

#### Engineering

- High school transcripts are required of students including those transferring from colleges within UNO or the University of Nebraska system. Students wishing to enter the engineering programs must have the following units of high school credit for:
 

English .....	4
Trigonometry or pre-calculus .....	1
Algebra .....	2
Geometry .....	1
Physics .....	1
Chemistry .....	1

 Students having composite ACT scores of 28 or greater (or equivalent SAT score) will be admitted to the College of Engineering and Technology even if they lack any one of the following: trigonometry, chemistry, or physics.
- Official transcripts are required from all institutions of higher education previously attended. A grade point average from the last institution of higher education attended (for 12 or more earned collegiate credit hours) of 2.5 for residents of Nebraska and 3.0 for non-residents is required for admission to engineering. Exception: a grade point average (cumulative and most recent term) of 2.5 is required for both residents and non-residents transferring from another college in the University of Nebraska system or from an EAC of ABET program at another institution.

- A composite ACT score of 24 or SAT (verbal + math) score of 1110. Exception: transfer and readmitted students with 12 or more earned collegiate credit hours.
- All students are required to take the English Placement Exam if they have no prior college English credit. All students must also take the Calculus Readiness Exam before registering for Math 1950.
- Students for whom English is not their language of nurture must score a minimum of 500 on the TOEFL before admission will be considered.
- Students must be accepted into the their engineering program by the end of the week prior to registration.

## **Students Who Have Been Admitted to the College of Engineering and Technology**

### Students taking first two years of engineering:

New students with good academic potential for the study of engineering as identified by high school or college-level academic records, may be classified as pre-engineering students. These students will be accepted into the College of Engineering and Technology on a provisional or trial basis for the purpose of establishing their academic credentials and firming up their career objectives. Pre-engineering students may take freshman and sophomore-level courses in the College of Engineering and Technology.

Transfer and readmitted students will initially be classified as pre-engineering students when:

- All high school deficiencies have been satisfied.
  - Cumulative GPA for a total of at least 12 credit hours and most recent semester or term GPA at the University of Nebraska is at least 2.5.
- Students may be reclassified from pre-engineering to restricted status when their accumulative GPA falls below 2.4.

### Regular Engineering Students:

Students who have completed 43 credit hours that are applicable to the engineering degree they seek in the College of Engineering and Technology may apply for formal admission to a degree program. Those students whose credit hours applicable to the degree they seek exceeds 61 must receive formal admission to an engineering degree program if they are to continue to take engineering courses taught in the College of Engineering and Technology and/or be identified with the College.

Students in the College of Engineering and Technology, students from other majors or colleges in the University, readmitted students, and transfer students from other institutions may make application to an engineering degree program during the first four weeks of the fall or spring semester. Students must have at least 12 credit hours of course work from the University of Nebraska on record before an application will be considered. The application must be submitted with a complete record of course work. Students may select a first and second choice of an engineering degree program on a single application and may submit no more than two applications and only in

successive semesters. Applications will be judged on a competitive academic performance basis. Admission of non-Nebraska residents may be limited to 10 percent of the total.

Regular engineering students may have their admission to a degree program suspended if their academic record is unsatisfactory. In addition, regular engineering students whose cumulative GPA falls below 2.4 will be reclassified to restricted status.

## **Students Who Have Not Been Admitted to the College of Engineering and Technology**

Students who have not been admitted to the College of Engineering and Technology will be classified as restricted and will need to enroll in another college. These students will be restricted from taking engineering courses while in this status.

- New students or students with less than 12 credit hours of college credit will be classified as restricted students if:
  - They have not completed the high school entrance course requirements for the College of Engineering and Technology.
  - Their composite ACT score falls below 24 or their SAT (verbal + math) score falls below 1110.
- Transfer and readmitted students with 12 or more credit hours of college credit will be classified as restricted students if:
  - They have not completed the high school entrance requirements for the College of Engineering and Technology.
- They fail to meet the following GPA from their previous college work: 2.5 for Nebraska residents; 3.0 for non-residents.
- Students who have not completed admissions to UNL or UNO by the end of the week prior to general registration will be classified as restricted. (Applies to only CE on UNO campus.)
- Students may be reclassified to restricted status when their cumulative GPA falls below 2.4. These students may request reclassification from the "restricted" status to "pre" status when:
  - All high school deficiencies have been satisfied;
  - Cumulative GPA for a total of at least 12 credit hours and most recent semester or term GPA at UNO is at least 2.5.

## **GENERAL COLLEGE POLICIES**

These policies are applicable to all students in the College of Engineering and Technology, except where specific policies for engineering technology programs apply.

- Non-engineering students must meet appropriate GPA guidelines and have written approval from the College of Engineering and Technology before they can enroll in any engineering and technology classes.

- Students may take any one engineering and technology course a maximum of two times. In addition,
  - Engineering technology students may repeat a maximum of three engineering and technology courses previously failed ("F").
  - Engineering students may repeat a maximum of three engineering and technology courses previously failed ("D" or "F").
- All students must have an adviser's, chairperson's or dean's signature on all worksheets, enrollment forms and drop-add forms. Any subsequent changes on these forms must also be approved.
- In extenuating circumstances involving the above policies, the student should appeal to his or her instructor, adviser and chairperson (in that order). If a satisfactory solution is not achieved, the student may appeal his or her case through the College Academic Appeals Committee on his or her campus.
- At least 30 of the last 36 credits needed for a degree must be registered for and completed while identified with the College of Engineering and Technology. This means that, practically speaking, the last year of a student's work must be spent in residence.
- Students in the College of Engineering and Technology are not encouraged to take courses on a Credit/No Credit basis. (Exception: Engineering 4000.)
- Credits for "English for Foreign Students who are Non-native Speakers" at UNL and "English as a Second Language" at UNO are not applicable to degree programs in the College of Engineering and Technology.
- Six hours of English composition may be substituted for the written communications requirement in all engineering degree programs.

## OTHER COLLEGE INFORMATION

### Application for the Diploma

Each student who expects to receive a diploma must file an application of candidacy for the diploma at the Office of the Registrar, Eppley Administration Building. Announcements about deadline dates are posted upon bulletin boards and printed in the Gateway.

It is the responsibility of the students to inform the Registrar's Office of their graduation plans including their address and the manner in which they are completing their requirements.

Failure to meet these stipulations may necessitate postponement of graduation until the next semester.

### Graduation with Distinction

Students with outstanding scholastic records may obtain the College special honor of graduation WITH DISTINCTION upon the recommendation of the faculty of the College.

### ROTC Credit

A student, with the approval of the department, may use up to six credit hours of advanced (junior and senior) ROTC courses in fulfilling the requirements for graduation. The student may use three of the six credits as the unspecified humanistic-social elective and the remaining three credits as a technical elective. In some cases other ROTC courses may be accepted by the College of Engineering and Technology with the approval of individual departments. These credits would be in addition to the six credits specified above.

### Professional Registration

The College encourages registration and many of the College's seniors take the Fundamentals of Engineering (FE) examination prior to graduation. This examination is the first step in the process of becoming a registered professional engineer. To become a licensed professional engineer, one must pass the FE exam, have four years of experience, and pass a professional practice examination. Students may take the FE exam in the last semester of their engineering baccalaureate program. Arrangements are made through the State Board of Registration for Professional Engineers and Architects, 301 Centennial Mall South, Lincoln, Nebraska 68508.

## ACADEMIC AMNESTY AND APPEALS

The following policies shall apply for academic amnesty, appeals of course grades, and appeals of academic suspension.

### Academic Amnesty

A student may remove one or more semesters of work from degree consideration by applying to the Office of the Dean after either completing 15 simultaneous or sequential credit hours with at least a 3.0 grade point average or 30 hours with at least a 2.5 grade point average at the University of Nebraska at Omaha following the semester(s) the student wishes to remove. The application will be forwarded to the campus College Academic Appeals Committee for review and approval, if appropriate.

### Appeals of Course Grades

Students who have a valid cause for appealing a grade for a course may file a written appeal with the Office of the Dean. Appeals must be filed within 21 days after the date of mailing of the grades by the Registrar for the semester in which the appealed grade was earned. Appeals will be forwarded to the campus College Academic Appeals Committee for consideration.

### Appeals of Academic Suspension

Appeals of academic suspension must be filed in writing with the Office of the Dean within 21 days of the date of mailing of the grades by the Registrar for the semester at the end of which the suspension was invoked. Suspended students who have filed a notice of appeal may apply to the Office of the Dean for a temporary release from suspension pending the final disposition of the appeal by the campus College Academic Appeals Committee.

## REGULATIONS

The College and its various divisions and departments reserve the right to change the rules governing admission to, instruction in, and graduation from the College or its various divisions.

Such regulations are operative whenever the College authorities deem necessary and apply not only to prospective students but also to those currently enrolled in the College. The College also reserves the right to withdraw courses and to reassign instructors.

Prerequisites for courses offered in the College are effective even if they are not listed in the schedule. A maximum amount of credit that a student may earn during any semester does not generally exceed 18 credit hours without the Dean's permission.

## ENGINEERING TECHNOLOGY DEGREE REQUIREMENTS

The Bachelor of Science degree in engineering technology requires at least 130 credit hours in one of the following areas: construction engineering technology or manufacturing engineering technology. The Associate degree in the fire protection technology program requires 72 credit hours. The Bachelor of Science in industrial technology degree requires at least 130 credit hours.

In line with a rapidly growing national trend, the College of Engineering and Technology offers programs leading to Associate and Baccalaureate degrees in engineering technology. These programs are based on a foundation of natural science and mathematics. This is followed by an intensive curriculum of technology courses which prepare the graduate for a professional career within the specific area of the graduate's major field of study. These programs emphasize a solid understanding and practical application of scientific and engineering knowledge and methods. The Associate degree programs prepare two-year graduates for positions as engineering technicians. The engineering technician assists the engineering technologist by helping to convert scientific and engineering theories and ideas into workable, useful products and processes. With the increasing complexity of scientific and engineering discoveries, the technician's education must be professional and exacting.

Students must:

- Meet entrance requirements;
- Complete a curriculum as outlined;
- Obtain a quality grade point average of "C" (2.0) or above. Grades below "C" do not count in a major field;
- Fulfill residence requirements.

All grades reported by the faculty to the Registrar at the end of each semester become a part of the student's permanent record and are included in the computation of quality points earned and grade point average. Courses may be repeated, and the quality points earned substituted, at the student's request (form to be filled out in Registrar's Office), for computing the grade point average. All grades earned remain part of the student's record, however.

Transfer students may receive credit for transfer courses toward the degrees in engineering technology or industrial technology by submitting evidence of satisfactory accomplishment and obtaining departmental approval.

Students are assigned an academic adviser upon entry into the School curriculum of their choice. It is required that the student obtain the adviser's approval (and signature) of the intended course work prior to registration each semester and for changes in program, change of College or change of major. It is the responsibility of the student, with the guidance of the adviser, to determine that all curricular requirements are being met.

Humanities and Social Sciences For Engineering Technology Programs: The education of professionals in engineering technology is a continuing process. The groundwork in both technical and non-technical studies is laid while in the college, but education does not stop on the day of graduation. For a good professional career, education will be continued not only in the technical areas but in areas that relate to human and social concerns. A professional can be expected to take a leadership role in his community, and therefore must have a broad awareness of human and social accomplishments, needs, values, and a willingness to take the responsibility for meeting these needs. For these reasons, an integrated program of course work in the humanities and social sciences is a part of the educational requirements. Humanistic and social science requirements must be approved by the student's adviser and meet UNO's general education guidelines.

Because of the rapid developments in the field of engineering technology, the curricula is continually reviewed and upgraded to reflect technological advances. Currently enrolled students are expected to modify their programs to take advantage of such revisions when doing so will not materially delay their graduation. Students who do not maintain continuous progress toward a degree through enrollment in applicable course work will be considered as new students upon re-entering the School of Engineering Technology curricula sequence and will be subject to the requirements of the University Catalog current at the time of their re-entry. Prerequisites for certain courses may not be valid after two academic years; the student's academic adviser should be consulted regarding applicability.

### Tau Alpha Pi

*National Engineering Technology Honorary Society*

Tau Alpha Pi, a national scholastic honorary society for engineering technology students, has granted authorization for Pi Alpha chapter to be chartered on the UNO campus.

The objectives of Tau Alpha Pi are to honor high scholastic achievement and to further the objectives of the field of engineering technology.

Admission is open to seniors who have academic achievement within the highest 4 percent of their particular degree program.

## Architectural Engineering (AE)

Construction is one of the largest industries in the United States. With annual construction expenditures of \$850 billion, construction accounts for 13 percent of the gross domestic product and employs over 10 million persons. About 60 percent of the annual construction expenditures are for new construction. It is significant to note that typically over 70 percent of the expenditures for new construction are for some type of building construction. The program in architectural engineering provides exceptionally good preparation for engineers that serve this segment of the construction industry. Graduates are expected to find employment with professional firms engaged in the design of buildings. After several years of experience, these persons obtain professional registration and practice as professional engineers.

### Requirements

#### *Bachelor of Science in Architectural Engineering*

The 134 credit hour program in architectural engineering leads to the Bachelor of Science degree in Architectural Engineering (AE). Students have the option to specialize in either the design of building structural systems or the design of building environmental systems. The first two years are common to both and include the same math and science courses common to all engineering programs. Students take an introductory course in architectural engineering in the first semester. This one credit course exposes the students to the materials and systems that make up a modern building. It also provides a preview of the work they can expect to do after graduation. In the second semester, the AE student begins the first of a three semester sequence of courses in architectural design. During the fifth semester, the program splits into two option areas. In the last two years, students in the building structures option take 26 credits in courses related to structures and seven credits in courses related to environmental systems. Likewise, students in the environmental systems option take 22 credits in courses related to environmental systems and seven courses related to structures.

The final year of the AE program features a two semester senior design project. The project requires the student to practice all the design skills and understanding of building systems developed throughout the program. Students are encouraged to work in teams to complete a significant building design in a manner which closely simulates professional practice. The project will involve an evaluation and redesign of an actual building either recently completed or in the design process. Students are expected to obtain information on this building from the professional firms involved in its actual design and construction. The senior project will be supervised by one faculty member with other faculty members serving as consultants. At the end of the semester, each student will present his/her design and conclusions to the entire AE faculty. The faculty will select a number of these to be presented by the student to an outside jury of professionals.

Note: Architectural Engineering was initiated at UNO in the spring semester of 1998. Several course designations were tentative at the time this catalog description was prepared. Students can expect some modifications from the information contained in this catalog issue.

### Common First Two Years

#### *First Semester*

AE Introduction to Architectural Engineering .....	1
AE Construction Graphics and Design Process .....	3
MATH 1950 Calculus I .....	5
CHEM 1180 General Chemistry .....	3
CHEM 1184 General Chemistry Lab .....	1
CS 1610 Introduction to Computer Science .....	3
Total Hours First Semester .....	16

#### *Second Semester*

MATH 1960 Calculus II .....	5
PHYS 2110 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
SPCH 2010 Interpersonal Communication .....	3
ARCH 106 Introduction to Design .....	3
Total Hours Second Semester .....	16

#### *Third Semester*

ARCH 2100 Basic Design .....	3
ARCH 2200 Visual Communication .....	2
MATH 1970 Calculus III .....	4
PHYS 2120 General Physics .....	4
PHYS 1164 General Physics Lab II .....	1
EM 2230 Engineering Statics .....	3
Total Hours Third Semester .....	17

#### *Fourth Semester*

ARCH 2110 Elements of Architectural Design .....	3
AE Codes and Construction Documents .....	3
MATH 3350 Differential Equations I .....	3
EM 3250 Mechanics of Elastic Bodies .....	3
EM 3730 Engineering Dynamics .....	3
CE 3700 Mechanics of Materials Lab .....	1
Total Hours Fourth Semester .....	16

Subtotal First Two Years.....65

### Building Structures Option

#### *Fifth Semester*

STAT 3800 Probability and Statistics .....	3
CE 310 Fluid Mechanics .....	3
CE 341 Introduction to Structural Engineering .....	4
CE 334 Introduction to Geotechnical Engineering .....	4
Humanities/Social Science elective .....	3
Total Hours Fifth Semester .....	17

#### *Sixth Semester*

AE Electrical and Illumination Syst. for Bldgs. ....	3
AE Mechanical and Plumbing Systems for Bldgs. ....	4
CE 378 Materials of Construction .....	3
CE 441 Steel Design .....	3
Computer Methods.....	3
Total Hours Sixth Semester .....	16

## *Seventh Semester*

AE Senior Design Project.....	3
CE 440 Reinforced Concrete Design .....	3
CE 443 Advanced Structural Analysis .....	3
Technical Elective* .....	3
Humanities/Social Science elective .....	6
Total Hours Seventh Semester .....	18

## *Eighth Semester*

AE Senior Design Project.....	6
CE 444 Structural Design and Planning.....	3
ENGL 3980 technical Writing.....	3
Technical Elective* .....	3
Humanities/Social Science elective .....	3
Total Hours Eighth Semester .....	18

\*Technical electives are chosen from the following: CE 418 Design and Construction of Foundations (3), CE 419 Timber and Formwork Design (3), CE 446 Steel Design II (3), CE 447 Reinforced Concrete II (3).

TOTAL CREDIT HOURS .....134

## Building Environmental Systems Option

### *Fifth Semester*

STAT 3800 Probability and Statistics.....	3
CE 310 Fluid Mechanics .....	3
CE 341 Introduction to Structural Engineering.....	4
MENG 2000 Thermodynamics.....	3
Humanities/Social Science elective .....	3
Total Hours Fifth Semester .....	16

### *Sixth Semester*

AE Mechanical and Plumbing Systems for Bldg. ....	4
AE Electrical and Illumination Syst. for Bldgs. ....	3
MENG 4200 Heat Transfer .....	3
AE HVAC System Design .....	3
MENG 3330 Mechanical Engineering Analysis.....	3
Total Hours Sixth Semester .....	16

### *Seventh Semester*

AE Senior Design Project.....	3
ARCH 435 Architectural Lighting .....	3
AE Building Power Distribution Design .....	3
AE Building Controls and Automation .....	3
Humanities/Social Science elective .....	6
Total Hours Seventh Semester .....	18

### *Eighth Semester*

AE Senior Design Project.....	6
CE 441 Steel Design* .....	3
AE Bldg. Acoustics, Specialties and Equip.** .....	3
ENGL 3980 Technical Writing.....	3
Humanities/Social Science elective .....	3
Total Hours Eighth Semester .....	18

\*Alternative, CE 440 Reinforced Concrete Design.

\*\*Alternative, ARCH 437 Architectural Acoustics.

TOTAL CREDIT HOURS FOR DEGREE .....133

## **Computer Engineering (CENG)**

### Requirements

#### *Bachelor of Science in Computer Engineering*

The 133 credit hour program in computer engineering leads to the Bachelor of Science degree in Computer Engineering. The individual holding this degree will have

advanced knowledge in his or her field of engineering interest and in addition will have a university educational background involving mathematics, the physical sciences, and the humanities and social sciences. Completion of this curriculum will enable the graduate to enter employment in positions involving computer hardware design and applications, computer software design and development, microcomputer based applications, and computer networking. The program also leads to the preparation for graduate work in computer engineering, computer science or electrical engineering.

### First Year

#### *First Semester*

CEEN 1030 CEEN Fundamentals .....	4
MATH 1950 Calculus I .....	5
CHEM 1180 General Chemistry.....	3
ENGL 1160 English Comp .....	3
Total Hours First Semester .....	15

#### *Second Semester*

CEEN 1060 Microprocessor Apps. ....	3
MATH 1960 Calculus II .....	5
PHYS 2110 General Physics I .....	4
PHYS 1154 General Physics Lab I .....	1
CSCI 1610 Intro Comp. Sci. I.....	3
Total Hours Second Semester .....	16

### Second Year

#### *First Semester*

CEEN 2130 Electrical Circuits I.....	3
CEEN 2184 Circuits Lab I .....	1
MATH 1970 Calculus III .....	4
PHYS 2120 General Physics II .....	4
CSCI 1620 Intro. Comp. Sci. II.....	3
ENGL 3980 Technical Writing.....	3
Total Hours First Semester .....	18

#### *Second Semester*

CEEN 2140 Electrical Circuits II.....	3
CEEN 2220 Electronic Circuits I .....	3
CEEN 2234 Electronic Circuits Lab I .....	1
CEEN 2250 CEEN Seminar.....	1
MATH 3500 Foundations Comp. Engr .....	3
MATH 3350 Differential Equations.....	3
Humanities/social science elective.....	3
Total Hours Second Semester .....	17

### Third Year

#### *First Semester*

CEEN 3250 Communications Ckts. ....	4
MATH 3800 Engr. Probability and Stat. ....	3
CSCI 3320 Data Structures.....	3
Humanities/social science elective.....	3
Free elective.....	4
Total Hours First Semester .....	17

#### *Second Semester*

CEEN 3100 Digt. Dsgn. and Interface .....	3
CEEN 3280 Applied Fields.....	3
CEEN 3130 Switching Ckt. Theory .....	4
SPCH 3130 Speech Bus. and Prof. ....	3
Humanities/social science elective.....	3
Total Hours Second Semester .....	16



## Fourth Year

### First Semester

CEEN 4330 Digital Comp. Dsgn. I .....	4
CSCI 4500 Operating Systems .....	3
Specified tech. elective .....	4
ENGR 4690 Technology and Civ. ....	3
Humanities/social science elective .....	3
Total Hours First Semester .....	17

### Second Semester

CEEN 4980 Senior Thesis .....	3
CEEN 4360 Digital Comp. Dsgn. II .....	4
Specified tech. elective .....	4
Humanities/social science elective .....	3
Free elective.....	3
Total Hours Second Semester .....	17

## Electronics Engineering (EENG)

### Requirements

#### Bachelor of Science in Electronics Engineering

The 133 credit hour program in electronics engineering leads to the Bachelor of Science degree in Electronics Engineering. The individual holding this degree will have advanced knowledge in his or her field of engineering interest and in addition will have a university educational background involving mathematics, the physical sciences, and the humanities and social sciences. The curriculum has a strong focus in telecommunications engineering. Completion of this program will enable the graduate to enter employment in positions involving telecommunications engineering design, analog circuit design, telecommunications network performance analysis, and technical management of telecommunications networks. The program also leads to the preparation for graduate work in electronics engineering or electrical engineering.

### First Year

#### First Semester

CEEN 1030 CEEN Fundamentals .....	4
MATH 1950 Calculus I. ....	5
CHEM 1180 General Chemistry.....	3
ENGL 1160 English Comp. ....	3
Total Hours First Semester. ....	15

#### Second Semester

CEEN 1060 Microprocessor Apps .....	3
MATH 1960 Calculus II .....	5
PHYS 2110 General Physics I .....	4
PHYS 1154 General Physics Lab I .....	1
Humanities/Social Science Elective .....	3
Total Hours First Semester. ....	16

### Second Year

#### First Semester

CEEN 2130 Electrical Circuits I.....	3
CEEN 2184 Circuits Lab I .....	1
MATH 1970 Calculus III .....	4
PHYS 2120 General Physics II. ....	4
ENGL 3980 Technical Writing.....	3
Humanities/Social Science Elective .....	3
Total Hours First Semester. ....	18

### Second Semester

CEEN 2140 Electrical Circuits II.....	3
CEEN 2220 Electronic Circuits I .....	3
CEEN 2234 Electronic Circuits Lab I. ....	1
CEEN 2250 CEEN Seminar .....	1
CEEN 2560 High Level Program Apps. ....	2
MATH 3350 Differential Equations.....	3
Humanities/Social Science Elective .....	3
Total Hours Second Semester .....	16

### Third Year

#### First Semester

CEEN 3250 Communications Ckts .....	4
CEEN 3520 Electronic Circuits II. ....	4
CEEN 3550 Signals & Linear Systems .....	3
MATH 3800 Engr Probability & Stat.....	3
Humanities/Social Science Elective. ....	3
Total Hours First Semester. ....	17

#### Second Semester

CEEN 3100 Digital Dsgn & Interface .....	3
CEEN 3130 Switching Ckt Theory. ....	4
CEEN 3280 Applied Fields .....	3
CEEN 3610 Data & Telecom Transceiver .....	4
SPCH 3130 Speech Bus & Prof .....	3
Total Hours Second Semester .....	17

### Fourth Year

#### First Semester

CEEN 4630 Digital Comm Media.....	4
ENGR 4690 Technology, Science & Civ .....	3
Specified Tech Elective.....	4
Humanities/Social Science Elective .....	3
Free Elective .....	3
Total Hours First Semester. ....	17

#### Second Semester

CEEN 4980 Senior Thesis .....	3
CEEN 4660 Telecomm Engineering I. ....	4
Specified Tech Elective.....	6
Free Elective .....	4
Total Hours Second Semester .....	17

## CENG and EENG

### General Requirements

The following sections apply to both the computer engineering program and the electronics engineering program.

### Advisement

Upon entry into the curriculum, each student will be assigned a faculty academic adviser. It is required that the student meet with the adviser prior to each class registration period and that all courses to be applied toward the degree be selected with the advice and approval of the adviser.

Students should obtain approval from the department prior to application to the University registrar for award of the Degree in order to insure that all curricular requirements will be satisfied by the time of intended graduation. Curriculum: Twenty-three hours of mathematics, nine hours of physics, and three hours of

chemistry complement the required 44 hours of work in the computer engineering area. Nine hours in written and oral communications, 18 elective hours in the humanities and social sciences, and seven hours of free electives provide the opportunity for the student to acquire a general educational background and gain the cultural attributes associated with a university education.

#### Curriculum

Because of the rapid developments in the fields of computer engineering and electronics engineering, the curricular requirements are continually reviewed and upgraded to reflect technological advances. Currently enrolled students are expected to modify their programs to take advantage of such revisions. Students who do not maintain continuous progress toward the degree through enrollment in applicable course work will be considered as new students upon reentering the computer or electronics engineering curricular sequence and will be subject to the requirements of the Undergraduate Catalog current at the time of their reentry. Certain courses may not be valid as prerequisites or as credit toward the degree after two academic years; the student's academic adviser should be consulted regarding applicability.

The department maintains a high standard of excellence in meeting its objective of providing the student with extensive experience in the field of computer engineering. The development of both computer hardware and software and the knowledge of the interrelationship of these areas is enhanced through the extensive use of laboratory equipment. All course work must be of "C" grade level or higher to be credited toward graduation requirements or to be valid as a prerequisite for another course. The applicable University bulletins and College academic policies must be followed for the areas of humanities and social sciences to ensure that such enrollments satisfy both the College requirements and the campus general education requirements.

#### Senior Thesis

The capstone Senior Thesis requirement provides a unique and challenging opportunity for the undergraduate student to demonstrate his/her ability to apply the knowledge gained in the course work sequence to the planning, design, execution, testing and reporting of a significant project in the applications of engineering principles. The initiative and responsibility expected of the student executing the Senior Thesis parallel the expectations of the employer of the program graduate. After faculty approval of the Thesis topic, each student is assigned to a faculty Senior Thesis Adviser who will supervise the execution of the work.

#### Electives

Computer engineering and electronic engineering courses which are described in the catalog but are not shown as requirements in the semester sequences are offered as the need arises to provide co-interest areas wherein the students may broaden their background in the applications of computer engineering or electronics engineering. In addition, appropriate specified technical

electives will be selected to augment the student's particular area of interest. The applicability of transfer course work with engineering content toward credit in the curriculum is determined on a case-by-case basis by the department.

The credit hours in the curriculum designated as free electives are those courses that the student may choose to enhance personal objectives in his/her academic plan. These will be selected with the approval of his/her departmental adviser. Free electives may not duplicate the content of curricular requirements nor be of a remedial nature.

#### Special Interest Areas

Opportunities are provided for the development of areas of special interest through enrollment in the engineering courses CEEN 3920, Individual Study in Computer and Electronics Engineering, and CEEN 4940, Special Topics in Computer and Electronics Engineering. CEEN 3920 is offered for the student who may wish to develop a topic under the guidance of a department faculty member. Enrollment is by permission after the department chair has approved a written proposal. CEEN 4940 is offered by the department as the need arises to cover topics needing emphasis as a result of the rapidly developing fields of computer engineering and electronics engineering. Academic advisers should be consulted regarding the particular topics to be covered and the necessary prerequisites for each offering of this course.

Students who expect to continue their education at the graduate level after the award of the baccalaureate degree should consult their adviser regarding course selections that would enhance that objective.

Students are encouraged to develop their professional and leadership potential through participation in student chapters of related professional organizations and in University extracurricular activities. Participation in the University Honors Program is encouraged for those who qualify.

#### Financial Aid

There are numerous opportunities for students to obtain financial aid during the course of their academic work at the university. The office of the dean of the college and the campus financial aid office should be consulted to determine the availability of such assistance.

#### **Construction Engineering Technology (CET) Requirements**

*Bachelor of Science in Engineering Technology  
134 Credit Hours*

The objective of the construction engineering technology program is to educate professionals in all aspects of construction from conception to completion for responsible positions in the construction industry.

Under the stimulus of increasing demand for its services, the construction industry has expanded its technological capabilities. This demand has given the Construction Engineering Technology graduate an unprecedented number of opportunities for employment.

Construction is essentially a service industry whose responsibility is to convert the plans and specifications prepared by engineers and architects into a finished project, whether it be a building, bridge, highway, power plant, or other constructed facility.

The construction of these projects involves thousands of details and a team effort on the part of the owners, architects, engineers, general contractors, subcontractors, manufacturers, material suppliers, equipment distributors, governmental bodies and agencies, labor and numerous others. It is the contractor who assumes responsibility for delivery of the completed project at a specified time and cost. In so doing, he/she accepts the challenge as well as the legal, financial, and managerial obligations associated with the project.

The construction engineering technology program is designed for individuals wishing to specialize in the technological and applied aspects of building construction. Construction engineering technology courses concentrate on the application of engineering principles and practices to solve real problems in the construction industry.

Majors interested in mechanical and electrical construction should contact the department relative to the following new courses: CET 2280 Mechanical and Electrical Drawing; CET 3420 Piping Systems; CET 3900 Electrical Power Distribution System; CET 4410 Building Acoustics, Specialties and Equipment; CET 4450 Heating, Ventilation and Air Conditioning Systems; CET 4460 HVAC System Controls; and CET 4480 HVAC Senior Project.

The 134 credit-hour program outlined below leads to the Bachelor of Science degree in engineering technology, with the major option of construction engineering technology.

The construction engineering technology curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD, 21202. Phone: (410) 347-7700.

*NOTE: See general departmental requirements and elective course listings after the following FPT listing in this catalog.*

## CET Curriculum

### First Year

#### First Semester

CET 1270 Introduction to Construction .....	3
CET 1250 Construction Drawing.....	3
GET 1010 Technical Problems Analysis I (Coll. Algebra) .....	3
ENGL 1160 English Composition.....	3
SPCH 1110 Public Speaking Fundamentals.....	3
Total Hours First Semester .....	15

#### Second Semester

CET 1260 Structural and Building Drawing.....	3
CET 2250 Computational Analysis .....	3
GET 1020 Technical Problems Analysis II (Trig. and Anal. Geom.) .....	4
PHYS 1110 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
Total Hours Second Semester .....	15

### Second Year

#### First Semester

CET 2000 Construction Surveying I .....	3
CET 2110 Construction Business Methods .....	3
GET 2120 Statics .....	3
GET 2140 Technical Report Writing .....	3
PHYS 1120 General Physics .....	4
PHYS 1164 General Physics Lab II. ....	1
Total Hours First Semester .....	17

#### Second Semester

CET 2180 Soil Technology .....	3
CET 2300 Concrete Technology .....	3
CET 2500 Construction Economy .....	3
GET 2010 Tech. Problems Analysis III (Calculus) .....	3
GET 2130 Strength of Materials.....	3
Statistics elective.....	3
Total Hours Second Semester .....	18

### Third Year

#### First Semester

CET 2020 Construction Surveying II .....	3
CET 3190 Construction Methods and Equipment .....	3
CET 3160 Construction Specs and Estimating .....	3
CET 3290 Design and Construction of Steel Bldgs. ....	3
CET 2900 Electrical Systems for Buildings .....	3
ECON 2200 Principles of Economics (Micro) .....	3
Total Hours First Semester .....	18

#### Second Semester

CET 2360 Service Systems .....	3
CET 3330 Planning and Scheduling Techniques.....	3
CET 3390 Design and Constr. of Concrete Bldgs.....	3
CET 4150 Bituminous Materials.....	3
Cultural diversity elective* .....	3
Total Hours Second Semester .....	15

### Fourth Year

#### First Semester

CET 4180 Design and Constr. of Foundations .....	3
CET 4420 Quality Management in Construction .....	3
CET 3910 Applied Dynamics and Fluid Mechanics .....	3
ECON 2220 Principles of Economics (Macro) .....	3
Science elective .....	3
Cultural diversity elective* .....	3
Total Hours First Semester .....	18

#### Second Semester

CET 4140 Accident Prevention in Construction .....	3
CET 4190 Timber and Formwork Design.....	3
CET 4200 Personnel and Supervisory Methods .....	3
CET 4650 Adv. Estimating and Bidding Techniques ....	3
Social/behavioral science elective* .....	3
Humanity/fine arts elective* .....	3
Total Hours Second Semester .....	18

TOTAL CREDIT HOURS FOR B.S.E.T. ....134

*\*For core curriculum electives marked with an asterisk, students should see page 63 of the UNO Undergraduate Catalog.*

CET technical elective courses may be selected from 3000- or 4000-level courses within the School of Engineering Technology, and must be approved by the student's academic adviser.

## Fire Protection Technology

### 72 Credit Hours

The 72 credit-hour program as outlined leads to the Associate degree in fire protection technology (FPT). It prepares individuals for those positions directly related to industrial and municipal fire protection.

*NOTE: See general departmental requirements and elective course listings after the following FPT listing.*

### First Year

#### First Semester

FPT 1100 Principles of Fire Protection .....	3
CET 1270 Intro. to Construction.....	3
CET 1250 Construction Drawing.....	3
ENGL 1150 English Composition.....	3
SPCH 1110 Public Speaking Fundamentals.....	3
Free elective .....	3
Total Hours First Semester .....	18

#### Second Semester

FPT 1510 Hazardous Materials Management .....	3
FPT 1600 Fire Chemistry .....	3
FPT 2210 Hydraulics and Pumping Applications .....	3
Free elective.....	3
GET 1010 Technical Problems Analysis I.....	3
GET 2140 Technical Report Writing .....	3
Total Hours Second Semester .....	18

### Second Year

#### First Semester

FPT 2100 Municipal Fire Administration .....	3
FPT 2190 Fire Protection Equipment.....	3
FPT 2310 Fire Protection System .....	3
FPT 2520 General Insurance.....	3
Humanities/social science elective.....	3
FPT 2990 Fire Service Research.....	3
Total Hours First Semester .....	18

#### Second Semester

FPT 2200 Codes and Inspection.....	3
FPT 2300 Fire Investigation .....	3
FPT 2410 Fire Strategy and Tactics .....	3
CET 2250 Computational Analysis .....	3
CET 2900 Electrical Systems for Bldgs. ....	3
FPT 2320 Firefighter Health and Welfare .....	3
Total Hours First Semester .....	18

Total Hours for Associate Degree.....72

FPT electives are to be selected with approval of an adviser.

## CET and FPT

### General Requirements

The following elective course listings and requirements apply to all programs in the Construction Systems Technology (CST) department, including the CET and FPT programs.

### Humanities/Social Science Electives

The student may choose from among courses in the following areas: art history, economics, history, humanities, international studies, literature, philosophy, political science, psychology, sociology or foreign languages and literature.

The student is urged to design a program of electives that will broaden his or her general education and provide an appreciation and understanding of our rich cultural heritage, the complexities of interpersonal relationships and the interrelationships between technology, culture and society.

CET Students must comply with the University General Education Requirements as defined on page 63 of the UNO Undergraduate Catalog, under the topic, "Degree Requirements, Core Curriculum of all Colleges."

The CET program covers: a) the Fundamental Academic Skills, b) the Distribution Requirements and c) the Cultural Diversity Requirements either by specifically required courses, or through electives which the student chooses (in consultation with her or his academic adviser.) Such electives fall into three categories:

1. Cultural Diversity Electives - Courses dealing with U.S. racial or Hispanic minority groups, minority studies, women's studies, or course work with an international or foreign focus. Examples are not limited to, but include:
  - INST 2130 International Studies I.....3
  - INST 2140 International Studies II.....3
  - Foreign language and literature courses.....3
  - Minority studies courses.....3
  - Women's studies courses.....3
2. Social/Behavioral Science Electives - courses dealing with the social sciences and the behavioral sciences. Examples are not limited to, but include:
  - ANTH 1050 Introduction to
    - General Anthropology.....3
  - PSCI 1000 Introduction to Political Science ..... 3
  - SOC 2100 Special Problems (American) ..... 3
  - GEOG 1020 Introduction to
    - Human Geography ..... 3 |
  - GET 4690 Technology, Science
    - and Civilization..... 3 |
  - HIST 1510 Western Civilization: 1453-1789.....3
  - HIST 2020 History of Science since 1659.....3
  - PHIL 1210 Introduction to Ethics.....3
  - PHIL 2030 Critical Reasoning ..... 3 |
3. Humanity/Fine Arts Electives - courses dealing with the humanities and the fine arts. Examples are not limited to, but include:
  - ART 1000 Art Appreciation.....3
  - ART 4850 Architectural Styles and Structures ....3
  - ENGL 2300 Introduction to Literature.....3
  - ENGL 2480 The American Language ..... 3 |

*NOTE: Skill-building courses, technical courses, business, mathematics and science courses do not qualify as humanities/social science electives.*

## Science Electives

The student may choose from among courses in the physical and life sciences. The following courses are recommended:

BIOL 1020 Principles of Biology.....	5
BIOL 1330 Populations, Resources and the Environment .....	3
CHEM 1010 Chemistry and the Environment and Society.....	3
CHEM 1140 and 1144 Fundamentals of College Chemistry plus lab.....	5
GEOG 3510 Introductory Meteorology.....	3
GEOL 1170 Physical Geology .....	4
PHYS 1350 Principles of Astronomy.....	3

## Statistics Electives

The student may choose from among the following statistics courses:

MATH 1530 Introduction to Applied Probability and Statistics .....	3
ISQA 2130 Principals of Business Statistics .....	3
STAT 3000 Statistical Methods I.....	3

## Free Electives

The student may choose any course listed in the University catalog, provided it does not generally duplicate the content of his or her curricular requirements. The student may not choose an elective which is remedial or which is more elementary than any other already completed course in the same academic area.

## Departmental Controls

The department reserves the right to change or update programs. Classes which are dropped from a required curriculum may no longer apply to degree requirements. Classes added to a required curriculum may be required of all subsequent graduates. Some prerequisites may not apply after two years. A non-continuous student (one who drops out for one semester, or longer) will face revised or updated graduation requirements. Prior approvals, acceptances or other advising agreements will no longer apply in such cases of non-continuous enrollment. Access to departmental courses is controlled by the department. Students whose GPA's are below certain limits, and students who fail to acquire prior departmental approval to enroll, may not be eligible. If space is limited in classes, priority may be given to those students who are near to graduation, and need such classes for graduation.

## Academic Performance

The minimum acceptable grade for required courses in a student's major field is "C." In the CET and FPT programs, this applies to all courses prefixed by "CET," "FPT," and the specific courses: GET 2120 (Statics) and GET 2130 (Strength of Materials). In addition, the minimum acceptable grade is "C".

- 1) in mathematics and science courses completed after January 1, 1991 **and**
- 2) in all transfer courses in mathematics and science.

A student may retake any one single course, previously taken and not passed ("F"), only once. This rule also provides that he or she may retake no more than three different courses, previously taken and not passed, in such a manner. This rule applies only to courses offered in the College of Engineering and Technology. If required courses are involved, application of this rule may put the student in a position of not being able to meet graduation requirements for the program major involved. Since changing majors may involve considerable loss of time and effort, it is critical that the student withdraw from, or change status to "audit" in, any course which he or she is in jeopardy of not passing. Such changes must be made prior to the end of the eleventh week of classes.

## Transfer Students

Transfer students' equivalency credit will be evaluated by the department chairperson for official acceptance toward degree requirements. It is the students' responsibility to confer with the chairman as soon as possible to have their past work evaluated so that they do not start out in the wrong courses. The actual total number of credit hours transferred into the University may include courses which are not applicable to a given degree. For this reason credits applied to specific course-by-course graduation requirements may be less than the total credits transferred.

## Curricular Requirements

Categorical accreditation requirements for the CET program requires 27 credit hours of communications (English composition, speech and technical writing) and humanities/social science elective courses. Also required are 24 credit hours of basic sciences and mathematics, of which 12 credit hours must be in basic mathematics (not including computing). These requirements, along with departmental technical and computing requirements, are reflected in the required curricula for the programs. Graduation from these programs will require satisfaction of these (27-24-12) requirements by all students. Graduation will require completion of departmental technical and computing requirements outlined in the student's current catalog (the catalog in effect at the beginning of the student's most recent period of continuous enrollment, or, at his or her option, the latest catalog).

Elective courses must be approved by the adviser in writing, in the student file, prior to enrollment therein, or credit may not apply to degree requirements. Substitutions for required courses will not be permitted, unless:

- they meet the curricular objectives of the program, as determined by the faculty, **and**
- written approval for such substitutions is acquired from the chairperson, at least one year prior to a student's intended date of graduation.

Academic advisers will be assigned by the department. Prerequisites listed in the catalog will be strictly enforced. Elective courses may not duplicate the content of curricular requirements or be of a remedial nature.

## Graduation

Written adviser approval must appear in a student's file before a degree application will be considered. Graduation requires completion of all requirements laid out in a student's catalog (as described above), recommendation of the academic adviser, approval of the department chairman, and a majority vote for acceptance by the departmental faculty. This approval process requires lead time of up to a year, and students must write a letter to the chairman one year in advance of their intended date of graduation stipulating when they intend to graduate. Evaluation for graduation may involve specific decisions regarding specific aspects of a student's record which are considered in the context of his or her overall performance, demonstrated knowledge, skill or capability. For this reason faculty decisions regarding such specific aspects of the record may be unique to each student's case. No student shall consider such decisions in one case to be binding upon, general to, or appropriate for application to, any other case. Candidates for graduation shall have a copy of their resume on file in the department.

## Electronics Engineering Technology (EET) Requirements

### *Bachelor of Science in Engineering Technology* 133 Credit Hours

The Electronics Engineering Technology program is being phased out. Continuing students in this program must work closely with either advisers to ensure that they take courses according to the departmentally published phase-out schedule. Students wishing to transfer into the program must contact the department chair to verify that all course work needed to complete the degree requirements can be taken according to the phase-out schedule.

The 133 credit-hour program in electronics engineering technology leads to the Bachelor of Science in Engineering Technology, (BSET) with the major option of electronics engineering technology. The individual holding this degree will have advanced knowledge in his or her field of technical interest and in addition will have a university educational background involving mathematics, the physical sciences, and the humanities and social sciences. Completion of this curriculum will enable the graduate to enter employment in positions involving responsibility and creativity. He/she will be qualified to work with scientists and engineers in the design, testing, installation and operation of electronics equipment in its applications in modern industrial processes, communications, national defense and research.

Accreditation: the electronics engineering technology curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202. Phone: (410) 347-7700.

## First Year

### *First Semester*

EET 1030 Comp. Appl. for Elec. Probs. I.....	2
EET 1040 Electronics Lab I.....	1
EET 1070 Direct Curr. Ckts.....	3
EET 1060 Digital Logic.....	3
ENGL 1160 English Composition.....	3
Humanities/social science elective.....	3
Mathematics .....	*
Total Hours First Semester .....	15

### *Second Semester*

EET 1050 Electronics Lab II.....	1
EET 1080 Alternating Curr. Ckts.....	3
EET 1090 Elec. Drft. and Fabr. ....	3
EET 1160 Transistor Theory and Appl.....	3
SPCH 1110 Public Speaking Fundamentals.....	3
Mathematics .....	*4
Total Hours Second Semester .....	17

## Second Year

### *First Semester*

EET 2050 Solid State Devices .....	3
EET 2070 Circuit Design I .....	3
EET 2430 Microprocessor Fund. ....	3
MATH 1950 Calculus I .....	5
GET 2140 Technical Report Writing .....	3
EET 2360 EET seminar .....	1
Total Hours First Semester .....	18

### *Second Semester*

EET 2080 Circuit Design II.....	3
EET 2090 Communication Circuits .....	3
EET 2530 Comp. Appl. for Elec. Probs. II.....	2
MATH 1960 Calculus II .....	5
PHYS 2110 Gen. Physics-Calculus .....	4
PHYS 1154 Gen. Physics Lab I .....	1
Total Hours Second Semester .....	18

## Third Year

### *First Semester*

EET 3050 Switching Circuit Theory .....	3
EET 3080 Digital Design and Interface .....	3
PHYS 2120 Gen. Physics-Calculus .....	4
PHYS 1164 Gen. Physics Lab II .....	1
MATH 3350 (Diff. Equations I) .....	3
Humanities/social science elective.....	3
Total Hours First Semester .....	17

### *Second Semester*

EET 3020 Networks I .....	3
EET 3070 Waveshaping .....	3
EET 3430 Digital Computer Design I .....	3
SPCH 3130 Spch. Comm. in Bus. and Prof.....	3
Humanities/social science elective.....	4
Total Hours Second Semester .....	16

## Fourth Year

### First Semester

EET 4030 Networks II .....	3
EET 4430 Digital Computer Design II .....	3
EET 4610 Senior Thesis Proposal .....	1
Technical specialty elective.....	5
Math/physical science elective .....	3
Free elective.....	2
Total Hours First Semester .....	17

### Second Semester

EET 4620 Senior Thesis .....	3
GET 4690 Technology, Science and Civilization .....	3
Technical Specialty Elective.....	3
Humanities/social science elective.....	3
Free elective.....	3
Total Hours Second Semester .....	15

*\*Mathematics Proficiency: evidence of mathematics proficiency based upon University placement examinations or evaluation of college-level transfer course work is required for entry into the electronics course sequence. Failure to qualify for enrollment in MATH 1310, College Algebra, or higher will delay enrollment and make remedial work necessary. All prerequisite requirements for enrollment into MATH 1950, Calculus I, must be completed prior to the first semester of the second year. A maximum of four credit hours of those prerequisites may be counted toward the degree requirements. Credit hours from MATH 1320, Pre-Calculus Algebra, MATH 1330, Trigonometry, MATH 1340, Algebra and Trigonometry for Calculus, or from GET 1020, Technical Problems Analysis II, or appropriate transfer equivalents may be used.*

*Selection of electives must insure that the campus requirements in the fundamental academic skills, distribution requirements, and cultural diversity areas are completed.*

## Advisement

Upon entry into the curriculum, each student will be assigned a faculty academic adviser. It is required that the student meet with the adviser prior to each class registration period and that all courses to be applied toward the degree be selected with the advice and approval of the adviser.

Students should obtain approval from the department prior to application to the University registrar for award of either of the degrees. BSET students should request a departmental audit of their academic records prior to enrollment in EET 4610, Senior Thesis Proposal.

## Curriculum

Seventeen hours of mathematics through applied differential equations, 10 hours of physics, and three hours of elective math/physical science course work complement the required 70 hours of work in the technical specialty area of digital and microprocessor electronics and its applications. Twelve hours in written and oral communications, 12 hours in the humanities and social sciences, and nine hours of free electives provide the opportunity for the student to acquire a general educational background and gain the cultural attributes associated with a university education.

Because of the rapid developments in the field of electronics, the curriculum is continually reviewed and upgraded to reflect technological advances. Currently enrolled students are expected to modify their programs to take advantage of such revisions. Students who do not maintain continuous progress toward either of the degrees

through enrollment in applicable course work will be considered as new students upon re-entering the electronics engineering technology curricular sequence and will be subject to the requirements of the program current at the time of their re-entry. Certain courses may not be valid as prerequisites or as credit toward the degree after two academic years; the student's academic adviser should be consulted regarding applicability.

The department maintains a high standard of excellence in meeting its objective of providing the student with extensive experience in the field of digital/microprocessor and related electronics. The development of both microprocessor hardware and software and the knowledge of the interrelationship of these areas is culminated through the use of microprocessor development laboratory systems. The digital/microprocessor electronics course sequence is required of all students because of the universal application of the content to electronics in industry. Course work in the technical specialty (major) area, in mathematics, and in physical science must be of "C" grade-level or higher to be credited toward graduation requirements or to be valid as a prerequisite for another course. Courses taken under Credit/No Credit (C/NC or S/U) enrollment may not be used to satisfy prerequisite or degree requirements in the curricular areas of mathematics, science, or technical specialties nor in other curricular areas for courses specifically designated as requirements. (See college policy for humanities and social sciences) The applicability of transfer course work as credit toward the degree requirements is determined by the department.

## Senior Thesis

The capstone Senior Thesis requirement provides a unique and challenging opportunity for the undergraduate student to demonstrate his/her ability to apply the knowledge gained in the course work sequence to the planning, design, execution, testing and reporting of a significant project in the applications of engineering principles. The initiative and responsibility expected of the student executing the Senior Thesis parallel the expectations of the employer of the program graduate. After faculty approval of the thesis topic proposal, each student is assigned to a faculty Senior Thesis adviser who will supervise the execution of the work.

## Electives

Electronics engineering technology courses which are described in the catalog but are not shown as requirements in the semester sequences are offered as the need arises to provide co-interest areas wherein the students may broaden their background in the applications of electronics. In addition, appropriate courses of the level of CSCI 1610 (Introduction to Computer Science) and above may be selected from the computer science curriculum for credit as technical special electives. The applicability of transfer course work with electronics or computer science content toward credit in the technical specialty area is determined by the department.

The credit hours in the curriculum designated as free electives are those courses that the student may choose to enhance knowledge and personal objectives in either the technical specialty field or in another area. Free electives may not duplicate the content of curricular requirements nor be of a remedial nature. The choices of electives must be such that the general education requirements of the campus are met.

## **Special Interest Areas**

### Technical Specialty Course Work

Opportunities are provided for the development of areas of special interest through enrollment in the technical specialty courses EET 3360, Individual Study in Electronics, and EET 4520, Special Topics in Electronics. EET 3360 is offered for the student who may wish to develop a topic under the guidance of a department faculty member. Enrollment is by permission after approval of a written proposal by the department chairperson. EET 4520 is offered by the department as the need arises to cover topics needing emphasis as a result of the rapidly developing technology in electronics. Academic advisers should be consulted regarding the particular topics to be covered and the necessary prerequisites for each offering of this course.

### Curriculum Enhancement

It is recommended that students who expect to continue their education at the university level after the award of the baccalaureate degree consult their adviser regarding course selections that would enhance that objective. It is recommended that such students consider additional math/physical science course work.

### Professional Development

The development of professional and leadership potential through participation in student chapters of related professional organizations and in University extracurricular activities is encouraged. Participation in the University Honors Program is recommended for those who qualify.

### Research Participation

The involvement of faculty members in applied research and development activities both within the University and in the community is an expanding area of the department's activity. Participation with the faculty members in that activity by capable, motivated students provides a unique opportunity for a valuable addition to their undergraduate academic records.

### Minor Fields of Study

Enrollment in course sequences in computer science, mathematics or physics recognized by the respective University departments as meeting the requirements of academic minors may be carried out while completing the requirements for the B.S.E.T. Early planning and careful use of the available electives in the electronics engineering technology curriculum can result in the completion of all or most of the minor course work within the 133 credit hour EET baccalaureate program. Minor course selections must be approved by both the electronics engineering

technology department and the University department offering the minor field.

### Wayne F. Bolton Grants

One or more grants of \$1500 each are awarded annually to students majoring in electronics engineering technology by the Greater Omaha Chapter, Armed Forces Communications and Electronics Association. Qualifications are based upon academic performance and demonstrated interest in the career field. Further information on this grant and other financial assistance is available from the UNO Office of Financial Aid.

### **For more information...**

please call (402) 554-2288.

## **INDUSTRIAL SYSTEMS TECHNOLOGY DEPARTMENT**

### **Purpose of the Department**

The purpose of this department is to offer undergraduate education in the rapidly emerging fields of manufacturing engineering technology and industrial technology. The primary thrust of the department is directly related to the "high-tech" areas of modern manufacturing, such as Computer-Aided Manufacturing, Computer Graphics, Numerical Control, and Manufacturing Systems Management.

The Industrial Systems Technology (IST) Department offers two programs: Manufacturing Engineering Technology (MET: associate and baccalaureate) and Industrial Technology (IT: baccalaureate). These two UNL-based programs are offered on the Omaha campus and are available through both daytime and evening attendance.

The IST Department offices and its Glenn L. Martin Shop are housed in the Engineering Building on the Omaha campus.

### **Manufacturing Intern Program**

The department of industrial systems technology, in coordination with industrial manufacturing firms in the Omaha area of the Midwest, offers a manufacturing intern program for students enrolled in departmental programs of study.

The purpose of this program is to provide students with exposure to their chosen professional field and give them an opportunity to obtain a sound experiential base for their future career prior to graduation.

### **Humanities-Social Science Electives**

Both the MET and IT baccalaureate programs require the completion of six credit hours of general humanities electives and six credit hours of general social science electives, for a minimum of 12 credit hours excluding cultural diversity electives. All humanities-social science electives require the approval of a departmental adviser. Normally, humanities-social science electives must be selected from one or more of the following areas: anthropology, art, black studies, broadcasting, dramatic arts, economics, English, foreign languages, geography, gerontology, history, humanities, international studies, journalism, music, philosophy, political science, psychology, religion, social science, sociology, speech,



and women's studies. A list of specific courses that meet the general humanities-social science requirements for the MET and IT programs may be obtained through the industrial systems technology department office. In addition, general humanities-social science electives must meet the general education guidelines of the Omaha campus.

## Cultural Diversity Electives

A minimum of six credit hours of cultural diversity electives are required in the MET and IT baccalaureate programs. At least three credit hours must be in U.S. racial or hispanic minority groups. In addition, at least three of the six credit hours must be in the humanities area, and at least three of the six credit hours must be in the social science area. All MET and IT cultural diversity electives require the approval of a department adviser. A list of specific courses that meet the cultural diversity requirements for the MET and IT programs may be obtained through the industrial systems technology department office.

## Graduate Placement

Graduates of the baccalaureate programs have entered careers involving technological applications in manufacturing, such as production, plant facilities, quality control, process control, project development, operations planning, materials handling and control, safety programming, cost estimating and reduction, productivity and efficiency improvement, capital equipment procurement, tooling and die design and development, and similar areas related to industrial plant operations. Baccalaureate graduates have also entered careers in technical marketing, capital equipment sales, field support services, and product testing. Associate-level MET graduates tend to enter similar career fields, but normally serve their initial entry position at the level of a two-year technician.

## Manufacturing Engineering Technology (MET) Requirements

### *Bachelor of Science in Engineering Technology* 133 Credit Hours

The 133 credit-hour program outlined below leads to the degree of Bachelor of Science in engineering technology, with a major option in manufacturing engineering technology. Also, the degree of Associate of Science in Engineering Technology is offered upon completion of 73 credit hours of course work. This Associate of Science degree may be pursued as either:

- a two-year terminal degree, or
- a significant educational milestone on the way toward earning the baccalaureate degree.

The primary thrust of the manufacturing engineering technology program is toward building strong proficiencies in modern manufacturing techniques. The baccalaureate degree is designed to impart an awareness of automated manufacturing techniques, such as numerical control, quality control, computer-aided manufacturing, computer graphics, and similar emerging high-technology career areas. Graduates are prepared to enter a wide range of

manufacturing industries, such as automotive, aerospace, electrical/electronic equipment, food processing and consumer goods.

## Terminal Capstone Courses and Planned Sequences

Both the associate and baccalaureate degrees feature terminal capstone courses which serve to pull together the related knowledge for their respective degrees. For the associate degree, the capstone course is IST 2160 - Metals Technology II. For the baccalaureate degree, the capstone course is IST 4610 - Manufacturing Plant Management. Four planned sequences of technical specialties are offered in the baccalaureate program: quality control, metals computer-integrated manufacturing, and manufacturing systems management.

## Program Changes, Revisions and Accreditation

It should be noted that the following program listings are subject to continuing changes and revisions. In addition, the department insists on high standards of academic performance by its students. As part of this standard, a grade of "C" or higher is required in all courses credited toward degree requirements except under approved cultural diversity electives and approved humanistic and social science electives. Any preparatory and/or remedial course work will not count toward fulfillment of degree requirements. In addition, each student must meet general education requirements of the university campus upon which their program of study resides. To obtain the most current approved listing of program courses, academic standards and program requirements, interested persons should consult an academic adviser or the chairman of the industrial systems technology department.

The manufacturing engineering technology program listed below is accredited at the two-year and four-year levels by the Technology Accreditation Commission of the Accreditation board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202. Phone (210) 347-7700.

## Curriculum Overview

Students in the bachelor's program will complete course work in these areas:

### Manufacturing Engineering Technology

Technical sciences and specialties .....	66
Technical electives.....	6
Mathematics and natural sciences.....	31
Communications, humanities/social sciences.....	24
Approved cultural diversity electives .....	6

### Specific Program of Study

#### First Year

##### *First Semester*

IST 1180 Mfg. Inspec. and Meas. ....	3
IST 1210 Engineering Graphics .....	3
GET 1010 Tech. Problems Analysis I .....	3
ENGL 1160 English Composition.....	3
SPCH 1110 Public Speaking Fundmtls.....	3
Approved social science elective .....	3
Total Hours First Semester .....	18

<i>Second Semester</i>	
IST 1160 Metals Tech. ....	3
IST 1190 Mfg. Comp. ....	3
GET 1020 Tech. Problems Analysis II ....	4
GET 1030 Computer Techniques ....	3
CHEM 1140 Fundamentals of College Chem. ....	4
CHEM 1144 Fundamentals of College Chem. Lab ....	1
Total Hours Second Semester .....	18

## Second Year

### *First Semester*

IST 1170 Mfg. Matls. and Processes .....	3
IST 2200 Welding Technology .....	3
IST 2370 Stat. Qual. Control .....	3
GET 2010 Tech. Problems Analysis III .....	3
GET 2120 Statics .....	3
PHYS 1110 General Physics .....	4
Total Hours First Semester .....	19

### *Second Semester*

IST 316 Tooling Design and Production .....	3
IST 2670 Quality Management .....	3
GET 2130 Strength of Matls. ....	3
GET 2140 Technical Report Writing .....	3
PHYS 1120 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
PHYS 1164 General Physics Lab II .....	1
Total Hours Second Semester .....	18

*NOTE: Students in this program may apply for the degree of Associate of Science in Engineering Technology (MET) after the satisfactory completion of the above listed course work and consultation with their academic adviser.*

## Third Year

### *First Semester*

IST 3230 Computer Graphics Seminar. ....	3
IST 283 Computer Num. control .....	3
GET 3710 Thermodynamics .....	3
IST 2900 Industrial Electricity.....	3
Approved cultural diversity (humanities) elective .....	3
Total Hours First Semester .....	15

### *Second Semester*

IST 3620 Plant Layout and Matls. Hndlg.....	3
IST 3610 Industrial Safety .....	3
IST 3640 Auto Prod. Technqs. ....	3
IST 3820 Cntrl. Devices .....	3
Approved speech elective chosen from SPCH 2010, 2410, 3120, 3130 .....	3
Total Hours Second Semester .....	15

## Fourth Year

### *First Semester*

IST 4170 Computer-Aided Dsgn. and Mfg. ....	3
IST 4600 Mfg. Cost Anal. & Control .....	3
Approved social science elective .....	3
Approved technical elective .....	3
Approved humanities elective .....	3
Total Hours First Semester .....	15

### *Second Semester*

IST 4610 Mfg. Management.....	3
GET 4710 Fluid Mechanics.....	3
Approved technical elective .....	3
Approved humanities elective .....	3
Approved cultural diversity (social science) elective ....	3
Total Hours Second Semester .....	15

TOTAL CREDIT HOURS REQUIRED .....133

## INDUSTRIAL TECHNOLOGY (IT)

### Requirements

#### *Bachelor of Science in Industrial Technology*

#### *133 Credit Hours*

A degree of Bachelor of Science in industrial technology is awarded upon completion of the four-year program outlined below. This degree offers a variety of career leadership opportunities in industry. The curriculum is designed to prepare the industrial technologist to become associated with the technical, supervisory and managerial activities in the industrial field. Graduates are oriented to management as well as technology in their approaches toward technical, scientific or human relations problems. Graduates find numerous career opportunities in various divisions of business and industry.

### **Technical Specialty Options**

The program has predefined technical specialty options in aviation, manufacturing, chemistry, computer science and construction. In addition, with departmental guidance and approval, students may develop a specialty in the area specific to their needs. The outline shown below is a general guide. Specific courses, credit hours and sequences will vary slightly between specialties. Students are required to select and declare their specialty to their assigned adviser. A list of the written specialty requirements is available in the industrial systems technology office.

### **Program Changes, Academic Standards and Revisions**

It should be noted that the following program listings are subject to continuing changes and revisions. In addition, the department insists on high standards of academic performance by its students. As part of this standard, a grade of "C" or higher is required in all courses credited toward degree requirements except under approved cultural diversity electives and approved humanistic and social science electives. Any preparatory and/or remedial course work will not count toward fulfillment of degree requirements. In addition, each student must meet general education requirements of the university campus upon which their program of study resides. To obtain the most current approved listing of program courses, academic standards and program requirements, interested persons should consult an academic adviser or the chairman of the industrial systems technology department.

## Curriculum Overview

In general, students in this program will complete course work in these areas:

### Industrial Technology

Required technology .....	18
Technical specialty concentration .....	30
Management .....	24
Math and natural sciences .....	31
Communication, humanities, social sciences.....	24
Approved cultural diversity electives .....	6
<b>TOTAL CREDIT HOURS REQUIRED .....</b>	<b>133</b>

However, depending upon which of the technical specialty options chosen, the specific program of study will vary slightly from the following overall outline. See an academic adviser or chairman of the IST department for details.

### General Program of Study

#### First Year

##### *First Semester*

IST 1180 Mfg. Insp. and Meas. ....	3
IST 1210 Engineering Graphics .....	3
GET 1010 Tech. Problems Analysis I .....	3
ENGL 1160 English Composition .....	3
SPCH 1110 Public Speaking Fundmtls.....	3
Approved social science elective .....	3
<b>Total Hours First Semester .....</b>	<b>18</b>

##### *Second Semester*

IST 1160 Metals Tech. I .....	3
IST 1190 Mfg. Computations .....	3
GET 1020 Tech. Problems Analysis II .....	4
GET 1030 Computer Techniques .....	3
CHEM 1140 Fundamentals of College Chemistry .....	4
CHEM 1144 Fundamentals of College Chemistry Lab I .....	1
<b>Total Hours Second Semester .....</b>	<b>18</b>

#### Second Year

##### *First Semester*

IST 1170 Mfg. Matls. and Processes .....	3
PHYS 1110 General Physics .....	4
PHYS 1154 General Physics Lab I .....	1
Concentration elective .....	3
Concentration elective.....	3
Concentration elective.....	3
<b>Total Hours First Semester .....</b>	<b>17</b>

##### *Second Semester*

IST 316 Tooling Design and Production .....	3
GET 2010 Tech. Problems Analysis III .....	3
GET 2140 Technical Report Writing .....	3
PHYS 1120 General Physics .....	4
PHYS 1164 Gen. Physics Lab .....	1
Concentration elective.....	3
<b>Total Hours Second Semester .....</b>	<b>17</b>

#### Third Year

##### *First Semester*

ACCT 2010 Prin. of Acctg. I .....	3
Management elective .....	3
Concentration elective.....	3
Concentration elective.....	3
Approved cultural diversity (humanities) elective .....	3
<b>Total Hours First Semester .....</b>	<b>15</b>

##### *Second Semester*

IST 3610 Industrial Safety .....	3
IST 3620 Plant Layout and Matls. Hndlg.....	3
Approved speech elective chosen from SPCH 2010, 2410, 3120, 3130 .....	3
Management elective .....	3
Concentration elective.....	3
Concentration elective.....	3
<b>Total Hours Second Semester .....</b>	<b>18</b>

#### Fourth Year

##### *First Semester*

IST 4600 Mfg. Cost Anal. and Control .....	3
IST 3150 Operations Analysis.....	3
Approved social science elective .....	3
Approved humanities elective .....	3
Concentration elective.....	3
<b>Total Hours First Semester .....</b>	<b>15</b>

##### *Second Semester*

IST 4610 Mfg. Management.....	3
IST 4680 Prod. Cntrl. Techniques .....	3
Approved humanities elective .....	3
Approved cultural diversity (social science) elective ....	3
Concentration elective.....	3
<b>Total Hours Second Semester .....</b>	<b>15</b>

**TOTAL HOURS REQUIRED .....**133

### For more information...

please call (402) 554-2531.

### DEPARTMENT OF CIVIL ENGINEERING

The department of civil engineering offers a complete undergraduate program on both the Lincoln and Omaha campuses. Course offerings in the department are identical on the two campuses. Those courses outside the department are very similar.

As a professional discipline, civil engineering is closely related to the total environment. In all professional endeavors, the civil engineer must consider ecological effects as well as the social, economic and political needs of people. The civil engineer designs systems to control and manage our water resources to provide for power, irrigation, flood control, recreation, and water supplies for our urban and industrial needs.

The civil engineer plans and constructs our transportation systems including highways, railroads, waterways and airports to link the rural, urban and industrial areas. The civil engineer also designs and constructs housing and more functional facilities for recreational, industrial and commercial complexes, which make up the urban environment. Minimizing air, water and land pollution is another responsibility of civil engineers.

The goal of the civil engineering program is to prepare students for entry into the civil engineering profession. The program is designed to prepare the individual for employment immediately after graduation or for graduate-level work.

Emphasis in civil engineering instruction is on fundamental engineering principles rooted in the physical and chemical sciences, the basic engineering sciences, and mathematics. These principles are applied to practical design problems in the upper level undergraduate courses.

Courses in the basic engineering sciences, such as statics, dynamics and fluid mechanics, provide a sound background for subsequent civil engineering courses in structures, soil mechanics, water supply and wastewater disposal, hydraulics, hydrology, water resources, and transportation, which all students take. Problem solutions involve the use of modern computer techniques.

Instructional laboratories in environmental engineering, hydraulics, soil mechanics, structures, surveying, and transportation provide each student with the opportunity to learn, through individual participation, the operation of the testing equipment used to establish engineering design criteria and to monitor and model engineering facilities such as water and wastewater plants, highway systems, river control systems and structural systems.

## CIVIL ENGINEERING DEGREE REQUIREMENTS

Students must have completed the equivalent of the third semester before applying for admission to the civil engineering program. Transfer students must have all transfer hours accepted before applying to the degree program.

### *Bachelor of Science in Civil Engineering* 132 Credit Hours

#### *First Semester*

MATH 1950 (Calc. I)	5
CHEM 1180 (Gen. Chem.)	3
CHEM 1184 (Gen. Chem. Lab)	1
CE 112 (Intro. to Civil Engr.)	1
CS 1610 (Intro. to Comp. Science)	3
English proficiency	0
Humanities/social science elective	3
Total Hours First Semester	16

#### *Second Semester*

MATH 1960 (Calc. II)	5
PHYS 2110 (Gen. Phys.)	4
PHYS 1154 (Phys. Lab)	1
SPCH 1110 (Fund. of Speech Comm.)	3
Humanities/social science elective	3
Total Hours Second Semester	16

#### *Third Semester*

MATH 1970 (Calc. III)	4
PHYS 2120 (Gen. Phys.)	4
CE 221 (Geometric Control Sys.)	3
ENGL 3980 (Technical Writing)	3
EM 2230 (Engr. Statics)	3
Total Hours Third Semester	17

#### *Fourth Semester*

MATH 3350 (Dif. Eq. I)	3
CE 361 (Intro to Trans. Engr.)	4
EM 3250 (Mech. of Elastic Bodies)	3
EM 3730 (Engr. Dynamics)	3
CE 370 (Mech. of Materials Lab)	1
Humanities/social science elective	3
Total Hours Fourth Semester	17

#### *Fifth Semester*

STAT 3800 (Prob. and Stat.)	3
CE 310 (Fluid Mechanics)	3
CE 319 (Hydraulics Lab)	1
CE 326 (Intro. to Env. Engr.)	3
CE 327 (Env. Engr. Lab)	1
CE 341 (Intro. to Structural Engr.)	4
Total Hours Fifth Semester	15

#### *Sixth Semester*

Computer Methods	3
CE 378 (Materials of Construction)	3
CE 334 (Intro. Geotechnical Engr.)	4
CE 352 (Intro. Water Res. Engr.)	4
Design elective I	3
Total Hours Sixth Semester	17

#### *Seventh Semester*

CE 490 (Issues in Civil Engineering)	1
Technical electives	3
Design electives I	3
Design electives II	3
Humanities/social science electives	6
Total Hours Seventh Semester	16

#### *Eighth Semester*

CE 495 (Senior Design Project)	3
Technical electives	12
Humanities/social science elective	3
Total Hours Eighth Semester	18

\*PHYS 1164 is an acceptable substitute if taken parallel with PHYS 2120.

\*CHEM 1190 & 1194 are acceptable substitutes.

\*Computer Methods must be selected from CE 401 (Civil Engineering Systems), EM 4800, or MATH 3300.

\*Technical electives will be selected by the student in consultation with his/her adviser to formulate a coherent program in civil engineering.

Two technical electives (up to six credits) can be taken from ME 2000, EE 2110, IE 2060 or any 2000 or 3000 level course in science, mathematics, or other engineering areas approved by the department. The department has an approved list.

\*Six (6) credits must be taken from the list of courses designated design elective I.

\*Three (3) credits must be taken from the list of courses designated design elective II.

#### **Design Electives I**

CE 422	Flow Systems Design (3)
CE 436	Foundation Engineering (4)
CE 441	Steel Design I (3)
CE 460	Highway Design (3)

#### **Design Electives II**

CE 425	Environmental Engineering Process Design (3)
CE 440	Reinforced Concrete Design (3)
CE 464	Traffic Engineering Design (3)

## Civil Engineering Technical Electives

CE 421	Hazardous Waste Management
CE 424	Solid Waste Management Engineering
CE 430	Principles of Water Quality
CE 455	Nonpoint Source Pollution Control Engineering
CE 475	Water Quality Strategy
CE 434	Soil Mechanics II
CE 468	Portland Cement and Asphalt Concrete Laboratory
CE 469	Pavement Design and Evaluation
CE 443	Advanced Structural Analysis
CE 444	Structural Design and Planning
CE 452	Water Resources Development
CE 454	Hydraulic Engineering
CE 456	Surface Water Hydrology
CE 458	Groundwater Engineering
CE 461	Urban Transportation Planning
CE 462	Airport Planning and Design
CE 463	Highway Geometrics Design
CE 464	Traffic Engineering Design

### For more information...

please call (402) 554-2462.

## PRE-ENGINEERING

Two years of course work applicable to Bachelor of Science degrees in agricultural engineering, biological systems engineering, chemical engineering, electrical engineering, industrial engineering management systems, and mechanical engineering are provided at the University of Nebraska at Omaha.

The courses listed below are similar in content to equivalent courses at the University of Nebraska-Lincoln, allowing for maximum transferability of credit.

Students should select courses at UNO that meet degree requirements as stated in the Catalog of the institution to which they plan to transfer.

### Pre-Agricultural Engineering

Agricultural engineering (AgE) involves the design, analysis, manufacture and management of machines, structures and systems for plant and animal production. AgE is one of the most flexible engineering programs at the University of Nebraska. Students choosing the pre-agricultural engineering program on the Omaha campus should be aware that there are two sophomore agricultural engineering courses, AGEN 218 and AGEN 225, (six total credit hours) not offered on the Omaha campus. These courses can be taken during the junior year on the Lincoln campus, or by commuting during the sophomore year.

#### First Year

##### First Semester

MATH 1950 Calculus I .....	5
MENG 1300 Introduction to CAD .....	3
CHEM 1180 Gen. Chem. and Qual. Anal. ....	3
CHEM 1184 Gen. Chem. and Qual. Anal. Lab .....	1
Humanities/social science elective .....	3
Total Hours First Semester .....	15

#### Second Semester

MATH 1960 Calculus II .....	5
CSCI 1610 Intro to Comp. Science .....	3
PHYS 2110 Gen. Physics (Calculus Level) .....	4
Humanities/social science elective .....	3
GET 2140 Technical Report Writing .....	3
Total Hours Second Semester .....	18

#### Other courses available:

CIVE 3100 Fluid Mechanics .....	3
CIVE 3190 Hydraulics Lab .....	1
EMEC 3730 Engr. Dynamics .....	3
EMEC 4800 Dig. Computer Methods in Engr. Analysis .....	3
STAT 3800 Applied Engr. Probability and Statistics .....	3

#### Second Year

##### First Semester

MATH 1970 Calculus III .....	4
PHYS 2120 General Physics .....	4
SPCH 2010 Interpersonal Skills .....	3
EMEC 2230 Engr. Statics .....	3
ISMG 2060 Introduction to Engr. Management .....	3
Total Hours First Semester .....	17

##### Second Semester

MATH 3350 Differential Equations .....	3
MENG 2000 Thermodynamics .....	3
EMEC 3250 Mech. of Elas. Bodies .....	3
ELEC 2110 Elements of Elec. Eng. ....	3
Humanities/social science elective .....	6
Total Hours Second Semester .....	18

## Pre-Biological Systems Engineering

Biological systems engineering (BioSysE) is a new and rapidly developing discipline of engineering. Biological systems engineers are trained to solve engineering problems in food and biochemical engineering, in bioengineering, or in environmental engineering. Students choosing to start the pre-biological systems engineering programs on the Omaha campus should be aware that there are only two sophomore BioSysE courses, BSEN 218 and BSEN 225, (six total credit hours) not offered on the Omaha campus. These courses can be taken during the junior year on the Lincoln campus, or by commuting during the sophomore year.

#### First Year

##### First Semester

MATH 1950 Calculus .....	5
CSCI 1610 Intro to Comp. Science .....	3
CHEM 1180 Gen. Chem. and Qual. Anal. ....	3
CHEM 1184 Gen. Chem. and Qual. Anal. Lab .....	1
Humanities/social science elective .....	3
Total Hours First Semester .....	15

##### Second Semester

MATH 1960 Calculus II .....	5
BIOL 1450 Biology I .....	5
CHEM 1190 Gen. Chem. and Quan. Anal. ....	3
CHEM 1194 Gen. Chem. and Quan. Anal. Lab .....	1
PHYS 2110 Gen. Physics (Calculus Level) .....	4
Total Hours Second Semester .....	18

## Second Year

### First Semester

MATH 1970 Calculus III .....	4
PHYS 2120 General Physics .....	4
CHEM 2210 Fund. of Org. Chem. ....	4
CHEM 2214 Fund. of Org. Chem. Lab .....	1
EMEC 2230 Engr. Statics .....	3
Total Hours First Semester .....	16

### Second Semester

MATH 3350 Differential Equations .....	3
SPCH 2010 Interpersonal Skills .....	3
ELEC 2110 Elements of Elec. Engr. ....	3
EMEC 3730 Engr. Dynamics .....	3
MENG 2000 Thermodynamics .....	3
Humanities/social science elective .....	3
Total Hours Second Semester .....	18

### Other courses available:

CIVE 3100 Fluid Mechanics .....	3
STAT 3800 Applied Engr. Probability and Statistics .....	3

## Pre-Chemical Engineering

Chemical engineering is that branch of engineering which involves the design and operation of chemical manufacturing processes – from large-scale petroleum refineries, chemical plants, plastics plants, food processing plants and the like – down to the smaller-scale production of high-value “wonder” drugs, space-age materials, and semiconductor computer “chips.” In such industries, chemical engineers work in research, design, process and product development, production, pollution control and waste management, marketing studies, information processing, sales and, almost invariably, throughout top management.

Students choosing to complete the following pre-chemical engineering courses on the Omaha campus meet all freshman and sophomore year requirements for the chemical engineering major. They can then transfer to the Lincoln campus for their junior and senior year courses. CHME 112 and CHME 202 are taught as Saturday morning classes on the Omaha campus.

## First Year

### First Semester

CHEM 1180 Gen. Chem. and Qual. Anal. ....	3
CHEM 1184 Gen. Chem. and Qual. Anal. Lab .....	1
MATH 1950 Calculus I .....	5
CSCI 1610 Intro. to Comp. Science .....	3
Humanities/social science elective .....	6
Total Hours First Semester .....	18

### Second Semester

CHEM 1190 Gen. Chem. Quan. Anal. ....	3
CHEM 1194 Gen. Chem. Lab .....	1
MATH 1960 Calculus II .....	5
PHYS 2110 Gen. Physics (Calculus Level) .....	4
CHME 112 Fundamentals of Chemical Engineering .....	3
Total Hours Second Semester .....	16

## Second Year

### First Semester

CHEM 2250 Organic Chem. ....	3
CHEM 2400 Quantitative Analysis .....	3
CHEM 2404 Quantitative Analysis Lab .....	1
MATH 1970 Calculus III .....	4
PHYS 2120 General Physics .....	4
CHME 202 Mass and Energy Balances .....	3
Total Hours First Semester .....	18

### Second Semester

CHEM 2260 Organic Chem. ....	3
CHEM 2274 Organic Chem. Lab .....	1
MATH 3350 Differential Equations .....	3
MENG 2000 Thermodynamics (CHME 322 substitute) .....	3
ELEC 2110 Elem. of Elec. Engr. ....	3
ENGL 3980 Technical Writing .....	3
Total Hours Second Semester .....	17

### Other required courses available:

CIVE 3100 Fluid Mechanics (CHME 332 substitute) ....	3
EMEC 2230 Engr. Statics .....	3
CHEM 3350 Physical Chem. I .....	3
CHEM 3360 Physical Chem. II .....	3

## Pre-Electrical Engineering

Students planning to transfer to Electrical Engineering on the Lincoln campus can take the first two years of course work on the Omaha campus. The students will be advised through the Computer and Electronics Engineering department. The list of courses is available from that department.

## Pre-Industrial and Management Systems Engineering

## First Year

### First Semester

CHEM 1180 Gen. Chem. and Qual. Anal. ....	3
CHEM 1184 Gen. Chem. and Qual. Anal. Lab .....	1
MATH 1950 Calculus I .....	5
MENG 1300 Intro. to CAD .....	2
Humanities/social science elective .....	6
Total Hours First Semester .....	17

### Second Semester

MATH 1960 Calculus II .....	5
PHYS 2110 Gen. Physics .....	4
CSCI 1610 Intro to Comp. Science .....	3
Humanities/social science elective .....	3
Total Hours Second Semester .....	15

## Second Year

### First Semester

MATH 1970 Calculus III .....	4
PHYS 2120 Gen. Physics .....	4
ELEC 2110 Elements of Elec. Engr. ....	3
EMEC 2230 Engr. Statics .....	3
ISMG 2060 Engineering Econ. I .....	3
Total Hours First Semester .....	17

## Second Semester

MATH 3350 Differential Equations .....	3
EMEC 3250 Mech. of Elastic Bodies .....	3
STAT 3800 Applied Math for Engineers.....	3
ENGL 3980 Technical Writing .....	3
IE 3150 Work Analysis and Mdl. ....	3
EMEC 3730 Engr. Dynamics .....	3
Total Hours Second Semester .....	18

## Pre-Mechanical Engineering

### First Year

#### First Semester

CHEM 1180 Gen. Chem. and Qual. Anal. ....	3
CHEM 1184 Gen. Chem. and Qual. Anal. Lab .....	1
MATH 1950 Calculus I .....	5
MENG 1000 Intro. to ME .....	1
SPCH 2010 Interpersonal Communication .....	3
Humanities/social science elective .....	3
Total Hours First Semester .....	16

#### Second Semester

MATH 1960 Calculus II .....	5
MENG 1300 Intro. to CAD .....	2
PHYS 2110 Gen. Physics .....	4
PHYS 1154 Gen. Physics Lab .....	1
Humanities/social science elective .....	3
Total Hours Second Semester .....	15

### Second Year

#### First Semester

MATH 1970 Calculus III .....	4
PHYS 2120 Gen. Physics .....	4
EMEC 2230 Eng. Statics .....	3
ISMG 2060 Eng. Economy I .....	3
METL 3600 Elem. Material Science .....	4
Total Hours First Semester .....	18

#### Second Semester

MATH 3350 Differential Equations I .....	3
MENG 2000 Thermodynamics .....	3
EMEC 3250 Mech. of Elastic Bodies .....	3
EMEC 3730 Engr. Dynamics* .....	3
ELEC 2110 Elements of Elec. Engineering* .....	3
ENGL 3980 Technical Writing .....	3
Total Hours Second Semester .....	18

#### Other courses available:

MENG 3000 Thermodynamics II .....	3
MENG 3300 Mech. Engr. Analysis .....	3
MENG 3700 Manuf. Methods and Processes .....	3
STAT 3800 Applied Engr. Probability and Statistics .....	3

\*Prerequisite to MECH 350 at UNL.

## For more information...

please call (402) 554-3856.

## HUMANITIES AND SOCIAL SCIENCE ELECTIVES

Engineering majors are required to complete a program of 18 credit hours (6 courses) in the social sciences and humanities. Those students completing their program on the Lincoln campus must follow the guidelines given below. At least five courses must be chosen from four of AREAS 1-5 listed below (minimum of 15 credits). No more

than one course (maximum of 3 credits) may be chosen from AREA 6 with the approval of an academic adviser. At least two courses must be taken from a single department. Course work in humanities and social sciences helps to fulfill the comprehensive education requirement in essential studies.

### AREA 1: Human Behavior, Culture and Social Organizations

Anthropology - 1050, 3210, 3220, 3910, 4210  
Speech Communication - 2010, 2410, 4510, 4530, 4550  
Economics - 2200, 2220  
English - 2280  
Geography - 1000, 1020, 3070, 3080, 3130, 3230, 3240, 3330, 4120  
History - 4430  
Management - 4040  
Political Science - 1100, 2110, 2210, 2500, 3100, 3120, 3160, 3500, 3560, 3660, 3680, 4040, 4050  
Psychology - 1010, 2500, 3070, 3450  
Sociology - 1010, 2010, 2100, 2150, 3350, 3810, 3840

### AREA 2: Historical Studies

French - 3370  
German - 3370  
History - 1110, 1120, 1510, 1520, 2020, 2510, 2520, 2610, 2620, 2710, 2720, 2810, 2820, 3120, 3170, 3530, 4120, 4400, 4430  
Philosophy - 2110, 3130  
Political Science - 2310, 3340  
Spanish - 3410, 3420

### AREA 3: The Arts

Art (History) - 1100, 1110, 3310, 3410, 3610, 4880  
Music - 1090, 1100  
Theater Arts - 1010, 4710, 4720

### Area 4: The Humanities

English (literature) - 2250, 2260, 2270, 2300, 2310, 2320, 2350, 2360, 2450, 2460, 2470, 2500, 2510, 2520, 2850, 3430, 4340  
French - 3150, 3160  
German - 3150  
History - 4120  
Horticulture - 2000, 2660  
Philosophy - 1010, 1210, 2110, 2030, 3130, 3210, 3400, 3600, 3700, 4050, 4650  
Spanish - 3170, 3180, 3210, 3220, 3420

### AREA 5: Race, Ethnicity and Gender

Anthropology - 3210, 3220  
Speech Communication - 4530  
English - 2350, 2360, 2470  
Geography - 3070, 3080  
History - 2320, 2470, 2480, 2810, 4400  
Management - 3510  
Political Science - 3120, 3660, 3680  
Sociology - 2010

AREA 6: Other

Economics - 3150, 3200, 3220, 3350, 3600, 4850

Honors Colloquium - 3000

ROTC

AERO - 1310, 1320, 2310, 2320, 3110, 3120, 4110,  
4120

MILS - 2030, 3010, 3020, 4010



## GENERAL INFORMATION

The College of Fine Arts offers the degrees of Bachelor of Arts in studio art, Bachelor of Arts in art history, Bachelor of Arts in dramatic arts, Bachelor of Fine Arts, Bachelor of Music, Master of Arts (dramatic arts) and Master of Music.

The College provides opportunities for all university students to explore the various forms of expression in fine arts disciplines as a vocation or an avocation.

For the student majoring in a fine arts discipline, curricula are designed to develop the specific skills necessary to master one's chosen field. Emphasis is placed upon the theory and practice of the discipline while simultaneously providing numerous opportunities for performance and practical experience in the particular art form. Degree programs are directed toward a high level of artistic competence combined with an understanding of the function of the fine arts in today's society.

Special courses and performance opportunities are available for the non-fine arts major who wishes to increase awareness of a specific art form, continue an avocational interest, or experience the fine arts for the first time. Most non-major courses presume no previous experience in the arts and are available to all students regardless of experience or skill.

As part of an urban-related university the College of Fine Arts is challenged to provide a sense of direction and leadership through programs which meet the needs of enrolled students as well as providing outreach programs of a credit and non-credit nature designed for broad elements of the population. Cooperative programs with existing cultural organizations in the metropolitan community and region, which utilize the talents of professional artists, give the College of Fine Arts its special character and vitality.

The curricula of the College along with a wide variety of exhibitions, plays, recitals, concerts and readings, provide the student with the enriching experiences that make the difference between obtaining a degree and having an education; between knowing and understanding.

## ADMISSION TO THE COLLEGE

Admission to programs in the College of Fine Arts follows regular admission procedures of the University outlined in the current undergraduate catalog.

Students who wish to transfer into the College from one of the Schools or Colleges within the University must request permission from the Dean's Office and the department offering the student's intended major. A minimum cumulative grade point average (GPA) of 2.0 is required to transfer into the College.

## General College Requirements and Policies

### Total Hours

Each candidate must present a total of at least 130 semester hours of college credit for the Bachelor of Fine Arts Degree (art studio and writer's workshop) and for the Bachelor of Arts in dramatic arts) and 125 semester hours for the Bachelor of Arts in art history and Bachelor of Arts in studio art degrees. Part of the total represented may be satisfied by proficiency examination. Each student must maintain close contact with an adviser to insure that there

is normal progress each semester toward fulfillment of the selected courses of study.

### Quality of Work

Each candidate for a degree must attain an average of at least "C" in all college work including work transferred from other institutions. The candidate must attain at least a "C" grade in each required course of a major field of study and meet the requirements of his major faculty. The art faculty requires a 2.5 average in all art courses, and studio majors must maintain a 3.0 average in their major studio areas. The music faculty requires a 2.5 average in all music courses, and performance majors must maintain a 3.0 average in their major applied field. All grades reported by the faculty to the Registrar become a part of the student's permanent record and are included in computation of the grade point average even though some of these grades may be for work done in excess of the 130 hours required for graduation.

### Residence

Thirty of the last 36 hours required for the degree must be registered for and carried at the University of Nebraska at Omaha.

### University General Education Requirements

The curricula of the College of Fine Arts articulate with the University General Education Requirements. Some departments require additional hours beyond stated General Education minima. See individual descriptions of majors for particular requirements.

### Fundamental Academic Skills

#### English and Writing

The requirement in English/writing is a minimum of nine semester hours of credit in courses to be determined by the relevant department of the College of Fine Arts in consultation with the department of English. Except for transfer students transferring at least six semester credit hours of verified credit in composition, all students must take the Department of English Diagnostic Test. Upon completion of this test, the following course sequences are possible based upon the results of the EDT:

- English 1050, 1150, and 1160;
- English 1150 and 1160;
- English 116 and any English courses at the 2000-level or above.
- One additional 3-hour writing course relevant to the student's major is required. (See under individual majors).

MATH 1310 or equivalent, 3 hours.

Public Speaking (to be satisfied by Speech 1110, 1120, 3120, 3130, 3140)

### Distribution Requirements\* - minimum total 30 hours

Natural and physical sciences - minimum 8 hours

Humanities and fine arts - minimum 8 hours

Social and behavioral sciences - minimum 8 hours.

Cultural diversity - Total 6 hours (See under individual majors).

*\*For a list of courses which meet the above requirements please contact the Dean's Office.*

Fine Arts

All majors in the College of Fine Arts are required to take 6 credit hours of courses in the College of Fine Arts outside the department of the declared major. Courses in art and art history, dramatic arts, music, writer's workshop, and dance may be used to satisfy this requirement.

Maximum Hour Limits

No student may count more than 87 semester hours of credit in any one discipline toward graduation. Actual maxima are determined by faculties of the various disciplines. The additional hours beyond the maxima will increase the total hours required for graduation.

Credits Not Acceptable

Credits in any courses classified as "remedial" or courses in other colleges of the University not approved by the College of Fine Arts faculty may not be applied toward degrees offered by the College of Fine Arts.

**ART AND ART HISTORY**

A major in art affords three degree options: Bachelor of Arts in art history, a Bachelor of Arts in studio art, or a Bachelor of Fine Arts (with a concentration in one of the studio areas or the degree with K-12 endorsement).

The Bachelor of Arts in art history provides a thorough investigation of the history of art as a humanistic discipline and also prepares the student for additional post graduate study and research.

The complete curriculum for the Bachelor of Arts in art history consists of 125 credit hours.

Academic core requirements (66-71 credits)

English/writing .....	9
Humanities (including public speaking).....12	
(Humanities 1010 and 1020 not applicable)	
Fine arts .....	6
(areas other than art or art history)	
Foreign languages .....	16-20
Minimum two years college level in one foreign language. If the student is interested in graduate study in art history, additional course work is advised.)	
Social sciences (to include 6 hours history) .....	12
Natural sciences.....	9
(may include biology; chemistry; physical geography; geology; or physics with no more than 6 hours in one area.)	
Math 131 or equivalent .....	3
Cultural diversity.....	6
(Cultural diversity requirement may be fulfilled through courses in the major, humanities or social sciences.)	

Art department requirements maximum 45 credit hours.

- ART 1100 Foundations Design and Drawing I: Two Dimensional Applications
- ART 1210 Foundations Theory and Practice: Alternative Media
- ART 2050 Survey of Art History I
- ART 2060 Survey of Art History II
- ART 3760 Art History Seminar
- ART 4940 Introduction to Methodology in Art History

Choose 18 credit hours from the following

- ART 4710 or 4730
- ART 4750 or 4770 or 4780
- ART 4810 or 4830
- ART 4850 or 4880
- ART 4890 or 4900
- ART 3770 or 3780 or 4870
- ART 2040, 2070 or 2080

Electives 9 credit hours in either studio art or art history may include 4910, 4930

**Bachelor of Arts in Studio Arts**

The complete curriculum consists of 125 credits.

General Requirements (51 hours)

English/writing .....	9
Fine arts .....	6
(areas other than art and art history)	
Humanities (including public speaking).....	12
(Humanities 1010/1020 not applicable)	
Social sciences .....	12
Natural sciences.....	9
Math 131 or equivalent.....	3
Cultural diversity .....	6
(Cultural diversity requirement may be fulfilled through courses in the major, humanities or social sciences)	

Art Department Requirements (54 hours)

Art history .....	15
ART 2050 Survey of Art History I	
ART 2060 Survey of Art History II	
ART 4890 Modern Art History or	
ART 4900 Contemporary Art History	
Art History Electives (6 hours)	

Art Studio Core .....

ART 1100 Foundations Design and Drawing I: Two Dimensional Applications	39
ART 1110 Foundations Design and Drawing II: Three Dimensional Applications	
ART 1210 Foundations Theory and Practice: Alternative Media	
ART 1220 Three Dimensional Design Foundations Theory and Practice: Intermedia	
ART 2100 Lifedrawing I	
ART 3310 Elementary Sculpture	
ART 3410 Elementary Painting	
ART 3510 Intaglio or	
ART 3520 Lithography	
ART 3610 Ceramics	

Art Studio Concentration .....

The studio concentration requires a total of six hours of courses through the advanced level, three to six hours of Independent Study and a Thesis. Students may concentrate in drawing, sculpture, painting, printmaking or ceramics.

A cooperative program with Metro Community College allows students to declare a studio concentration in one of three programs: Electronic Imaging Graphics, Photography or Visual Communication Arts. A student may choose to pursue this option in one of two ways: 1) satisfactorily

complete an Associate of Arts degree at Metropolitan Community College\* and meet the current admission requirements of the University of Nebraska at Omaha to pursue the Bachelor of Arts in studio arts program; 2) enroll in Metropolitan Community College and the University of Nebraska at Omaha concurrently - completing the last thirty of the last thirty-six hours of credit in residence at UNO. Upon successful completion of the degree requirements, the student will be awarded a Bachelor of Arts in studio art degree from the University of Nebraska at Omaha. Upon completion of a Metropolitan Community College Association in Arts degree, the student will have met the requirements for:

- 12 semester credit hours at Metropolitan Community College which may be transferred to fulfill requirements in the UNO general education core.
- 27 semester credit hours which may be transferred as a major concentration to fulfill requirements toward a Bachelor of Arts in studio art degree.

Note: additional courses may be transferred to UNO not to exceed a total of 64 credit hours.

Students must complete all post-associate course work at the University of Nebraska at Omaha in accordance with the academic Standards of Progress defined in the University of Nebraska at Omaha catalog. Specific courses may have prerequisites. Students are advised to meet with an adviser at the University of Nebraska at Omaha to complete individual program assessment.

*\*as described in the 1998-99 Metropolitan Community College catalog.*

## Other Electives.....20

A foreign language is optional, but strongly recommended.

Total Hours Required.....125

## The Bachelor of Fine Arts with studio emphasis

Studio majors are required to apply for acceptance into the BFA program. Admission into the program requires the following:

1. Successfully completed core courses.
2. A portfolio which is reviewed and evaluated by the studio art faculty.

A student who has not been accepted into the BFA program may reapply after successful completion of additional studio courses.

The studio emphasis provides the serious student in visual arts with an extensive well-rounded performance oriented background in painting, printmaking, drawing, ceramics and sculpture. The degree prepares students for a professional life in fine arts and post graduate study.

The total hours required 130 credit hours.

## Academic core requirements (51 hours)

English/writing .....	9
Humanities (including public speaking) .....	12
(Humanities 1010 and 1020 not applicable)	
Fine arts .....	6
(areas other than art & art history)	
Social sciences .....	12
Natural sciences .....	9
(to include one lab from two different areas: biology; physical geography; geology; and physics)	

Math 1310 or equivalent.....	3
Cultural diversity .....	6
(Cultural diversity requirement may be fulfilled through courses in the major, humanities or social sciences)	

Art Department requirements minimum 66 credit hours, maximum 87 credit hours.

Art History .....	18
ART 2050 Survey of Art History I	
ART 2060 Survey of Art History II	
ART 4890 Modern Art History or	
ART 4900 Contemporary Art History	
Art history electives (9 hours)	

## Studio Art Core .....36

ART 1100-1110 Foundations of Design and Drawing I: Two Dimensional Applications - Foundations Design and Drawing II: Three Dimensional Applications	
ART 1210-1220 Foundations Theory and Practice: Alternative Media - Foundations Theory and Practice: Intermedia	
ART 2100-2110 Lifedrawing	
ART 3310 Elementary Sculpture	
ART 3410 Elementary Painting	
ART 2510 Intaglio or ART 2520 Lithography	
ART 2610 Elementary Ceramics	

## Studio Art Concentration.....12-15

The studio concentration requires a total of six hours of courses through the advanced level, three to six hours of Independent Study and a Thesis. Students may concentrate in drawing, sculpture, painting, printmaking or ceramics. Student must exhibit in Thesis Show.

Transfer credit for Thesis is not allowed.

Studio Electives .....	12-30
Other Electives.....	1-24
Total hours required .....	130

## The Bachelor of Fine Arts with K-12 Endorsement

This program gives students the options to teach art K-12 or the capacity to pursue graduate level work in an MFA or M.Ed. program. The degree requires 165 credit hours.

## Academic core requirements (52 hours)

English/writing .....	9
Humanities (including public speaking) .....	12
(Humanities 1010 and 1020 not applicable)	
Fine arts .....	6
(courses in College of Fine Arts other than declared major)	
Social sciences .....	12
Natural sciences.....	10
(to include one lab from two different areas: biology, chemistry, physical geography, geology and physics)	
Mathematics 1310 or equivalent .....	3
Physical education .....	1
(activities course)	

Cultural diversity.....6	(Cultural diversity requirement may be fulfilled through courses in the major, humanities or social sciences)
<b>Art department requirements (72-75 hours)</b>	
Art History .....18	ART 2050 Survey of Art History I ART 2060 Survey of Art History II ART 4890 Modern Art History or ART 4900 Contemporary Art History Art history electives (9 credit hours)
<b>Studio Art Core</b> ..... 39	ART 1100-1110 Foundations Design and Drawing I: Two Dimensional Applications - Foundations Design and Drawing II: Three Dimensional Applications ART 1210-1220 Foundations Theory and Practice: Alternative Media - Foundations Theory and Practice: Intermedia ART 1810 Watercolor ART 2100-2110 Lifedrawing ART 3310 Elementary Sculpture ART 3410 Elementary Painting ART 3510 Intaglio ART 3610 Elementary Ceramics
<b>Studio Art Concentration</b> .....12-15	The studio concentration requires a total of six hours of courses through the advanced level, three to six hours of Independent Study and a Thesis. Students may concentrate in drawing, sculpture, painting, printmaking or ceramics. Students must exhibit in Thesis Show.
Studio Electives .....3-24	
Art Education .....6	ART 3300 Introduction to Art Education ART 4300 Art in the Secondary School COMM 3110 Photography.....3
For those students seeking certification, specific requirements must be completed through the College of Education. Professional Preparation Sequence of CORE courses (25 credit hours) and 10 credit hours of student teaching.	
<b>For more information...</b> please call (402) 554-2420.	

### **DRAMATIC ARTS**

The purpose of the Bachelor of Arts in Dramatic Arts degree (BADA) is to provide a general education in all aspects of theatre and in the wider liberal arts. Through the BADA the department offers the student a broad-based liberal arts foundation in combination with vigorous and disciplined professional training. Because theatre practice occurs within a social, political and cultural milieu that requires the practitioner to be intimately familiar with such areas as history, foreign languages, and the sciences, the department requires that all students examine the broad area of human knowledge. Because, on the other hand, theatre

practice occurs by means of disciplined processes, the department strives to approach all training and production work with professional attitudes. The combination of these two approaches gives the department the opportunity to offer the BADA, a truly vigorous approach to the study of dramatic arts in a unique and exciting educational setting.

The general areas studied as a BADA student are acting, directing, design, dramatic literature, history of the theatre, and theatre technologies including stagecraft, stage lighting, scene design, make up, and costume. Beyond the general theatre core, however, students are encouraged to pursue an interest in a specialized area such as acting/directing, design/theatre technologies, or theatre scholarship.

In addition to the formal course requirements (listed below), a student major is required to participate actively and consistently in productions sponsored by the department. The department stages a minimum of four major productions during the academic year. These productions encompass the representative periods of theatre history, including forms of musical theatre. A variety of production activities are also presented in the Directing Lab, a facility which lends itself to experimentation and innovation and which is open to student-directed productions.

Requirements for the Bachelor of Arts in Dramatic Arts degree program are: minimum of 130 total credit hours.

#### **General Requirements:**

English Composition .....	6
2310-2320 English Literature .....	6
4600 Shakespeare .....	3
Writing .....	3
Fine arts courses outside the department of dramatic arts (i.e., art, art history, creative writing, dance, music) .....	12
Humanities. ....	8
Philosophy 1210 recommended	
Foreign language .....	10
may be fulfilled with 2 years high school languages	
Natural science (to include one laboratory class) .....	8
Math 1310 or equivalent.....	3
Public speaking .....	3
Social sciences .....	12
History1000 and 1010 recommended	
Cultural diversity.....	6

**Dramatic Arts Core Courses:** a minimum of 47 credit hours in dramatic arts (a maximum of 60 hours will count toward the degree)

- DART 1000 Theatre Lab (1 per semester)
- DART 1510 Stage Costume
- DART 1550 Stage Makeup
- DART 1630 Stagecraft
- DART 2060 Theatrical Design I
- DART 2310 Acting I
- DART 2320 Acting II
- DART 2810 Development of Drama I
- DART 2820 Development of Drama II
- DART 3430 Directing: Theory & Technique
- DART 3660 Stage & TV Lighting
- DART 4710 History of Theatre to 1700
- DART 720 History of Theatre Since 1700

## Elective Courses in Major .....0-13

Selected from among the following courses:

- DART 1010 Introduction to Theatre
- DART 1050 Film History and Appreciation
- DART 1090 Oral Interpretation of Literature
- DART 1210 Voice for the Actor
- DART 1220 Movement for the Actor
- DART 2000 Summer Theatre Workshop
- DART 2280 Dance for the Theatre I
- DART 2290 Dance for the Theatre II
- DART 2630 Drafting for the Theatre
- DART 3250 Stage Dialects for the Performing Arts
- DART 3510 History of Costume
- DART 3610 Rendering and Scene Painting
- DART 4000 Summer Theatre Workshop
- DART 4010-4020 Advanced Projects in Dramatic Arts
- DART 4060 Children's Theatre Production
- DART 4310 Advanced Acting Studio I: Characterization and Analysis
- DART 4320 Advanced Acting II: Historical Periods and Styles
- DART 4330 Advanced Acting Studio III: Ensemble Play Production
- DART 4340 Advanced Acting Studio IV: Auditioning
- DART 4440 Directing: Rehearsal & Performance
- DART 4500-4510 Costume Design
- DART 4610 Scene Design
- DART 4730 Seminar in Theatre History
- DART 4750 Theatre and Social Change
- DART 4830 Seminar in Dramatic Literature

A student may earn certification to teach dramatic arts on the high school level in one of three ways: 1) earn a Bachelor of Arts in dramatic arts degree and complete the certification requirements in the College of Education; 2) complete the program in speech education (certification in Speech Communication and Theatre as First Teaching Subject); 3) earn a Bachelor of Science in education and complete the following courses in dramatic arts (a grade of "C" or better in DART 1010 is required for admission to the program): 1000 (6 hours), 1510, 1630, 2060, 2310, 2320, 2810, 3660, and 4430. Communication 1500 and 1510 are also required. DART 4440 is suggested but not required.

In addition, to be endorsed the student must participate in theatre production activities sponsored by the department of dramatic arts. The student is encouraged to participate in as many of these activities as possible, but will be programatically involved through the Theatre Lab Class.

Theatre Lab (DART 1000) is a one hour course required for majors each semester for a maximum total of 8 semesters. Students who transfer into the program may request up to 2 hours of this requirement be waived, but those who transfer in with fewer than 6 semesters anticipated residency will need to enroll in more than one hour of Lab in some semester to meet requirements.

The Department of dramatic arts does not discourage students from participating in production activities sponsored outside the department, however all students are required through the Lab requirement to make their

commitment to the UNO program their top priority. Credit may be earned in off-campus activities in exceptional circumstances, but only if approved in advance by the dramatic arts faculty.

Each student major is advised by the faculty adviser, who works closely with the student in planning the appropriate curriculum for fulfillment of the requirements for graduation. New students are encouraged to meet with the Chair of the department as soon as possible to be interviewed.

### For more information...

please call (402) 554-2406.

### THE FINE ARTS PRESS

The Fine Arts Press has two reciprocal pursuits. One of these is to produce, from foundry type hand printed on fine papers in the traditional way, limited first editions of new literature, mostly verse. The books are issued under the imprint "Abattoir Editions," and have won international recognition for both literary and typographic excellence.

Its coordinate concern is to educate students in the rudiments of this kind of book production. Students majoring in studio art may elect a book arts major concentration in the department of art and art history. The book arts concentration requires a minimum of 6 hours in the BASA degree track and 15 credit hours in the BFA degree track. Introductory courses in the book arts are also available to other students who may wish to enroll for their personal enjoyment. These courses makes available to them for realizing their own original projects the facilities of the pressroom fonts of type, hand printing presses, and elementary gear for hand bookbinding. In addition, two seminars in the history of books, one for manuscript and the other print, endeavor to elicit the traditions upon which an intelligent evaluation of book design must be based.

### MUSIC

The department of music has programs which fall into two general areas under the Bachelor of Music degree:

- music education
- professional degree programs.

Students enrolled in the music education tracks are trained to teach music at the elementary, junior high, and secondary levels. Within each program there are three components which are designed to help the student develop expertise as a performer, scholar (including music theorist and historian), and music educator. Students who graduate with degrees in the professional programs receive training which places strong emphasis on the performance aspect (including composition for those in the theory/composition curriculum).

Regardless of the degree program, the department has a primary thrust toward providing a basic foundation in the knowledge and performance of music, thus establishing the basic tools for a career in teaching, performing, composing, or writing about music. Since an undergraduate degree in music is not a terminal one, the department does not set out to develop specialization in any one of these areas, but rather, strives to achieve an intense overview of the various aspects of music leading

toward either a career specialization or graduate studies.

The Bachelor of Music degree with K-12 teacher certification (general music endorsement) and a concentration in education emphasizes either choral or instrumental areas.

The Bachelor of Music degree with concentration in performance involves intensive study and experience in a variety of performance situations.

The Bachelor of Music degree with concentration in theory-composition provides extensive theoretical work as well as opportunities for creative work and lays a strong foundation for graduate studies.

All students must pass an entrance audition on their major instrument or voice before being admitted as a music major.

All students, no matter what their concentration, are required to take a common core of courses and meet a set of other requirements as a basis for their specific concentrations.

#### General Education Requirements

English .....	6
Fine arts .....	6
WRWS 1500 Introduction to Creative Writing is required (also counts as third writing course) plus one additional three hour fine arts course in an area other than music	
Humanities .....	6
ENGL 2300: Introduction to Literature (performance majors may take any English course)	
Speech 1110	
Math 1310 or equivalent.....	3
Natural sciences.....	8
(one course must be a 5 hour lab science)	
Social sciences .....	9
Cultural diversity .....	6
(cultural diversity requirement may be fulfilled through courses in the major, humanities, or social sciences)	

#### Music Department General Requirement for All Degrees

Music Core Curriculum I (1410) .....	5
Music Core Curriculum II (1420) .....	5
Music Core Curriculum III (2410) .....	5
Music Core Curriculum IV (2420).....	5
(includes Theory, Ear Training, Sight Singing, Keyboard & Conducting)	
Music Core Curriculum V(3600) .....	5
(includes Structural Analysis, Orchestration & Counterpoint)	
History of Music I (2550) .....	2
History of Music II (2560) .....	2
History of Music III (2570) .....	2
Music of the People (1080) .....	3
Ensembles .....	8
Class Applied Voice (1670) .....	1
University Chorus or Concert Choir .....	1
Music Lab/Masterclass (8 semesters).....	0
Recital (4190) .....	1

#### Requirement for Music Education

Applied Music.....	12
Music Education Core I .....	5
(includes Woodwind Pedagogy, Elementary Instrumental Literature & Conducting, General Music Methods & Materials, & Elementary Choral Music & Conducting)	
Music Education Core II .....	5
(includes Brass & Percussion Pedagogy, Middle School Instrumental Literature, Middle School Choral Literature, Conducting, General Music & Laboratory Ensemble Experience)	
Music Education Core III .....	5
(Bowed & Fretted String Pedagogy)	
Instrumental Organization, Instruction, Administration, Conducting & Literature	
Choral Organization, Instruction, Administration, Conducting, Literature & Accompanying. (Laboratory Ensemble Experience)	
Human Growth & Learning (EDUC 2010) .....	3
Educational Foundations (EDUC 2020) .....	3
Applied Special Education (EDUC 2510) .....	3
Instructional Systems (EDUC 2520) .....	3
Reading for Secondary Teachers (TED 3690) .....	3
Human Relations (EDUC 2030) .....	3
Student Teaching .....	12

#### Requirements for all Performance Majors

Theory requirement - six hours to be selected from:	
Composition (3400)	
Advanced Composition (4400)	
Improvisation (4420)	
Arranging for Jazz Ensemble (4430)	
Music Since 1945 (4440)	
Orchestration (4450)	
Counterpoint (4470)	
Recital (4190) .....	1
20th Century Music Literature (4560).....	3
Music Literature (see listed under specific major)	

#### Voice Performance Major

Foreign Language .....	16
Voice Literature .....	3
Voice Pedagogy .....	3
Applied Voice .....	16

#### Keyboard Performance Major

Accompanying.....	2
Keyboard Literature.....	3
Piano Pedagogy .....	2
Improvisation .....	3
Applied Piano .....	16

#### Instrumental Performance Majors

Applied Instrument .....	16
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#### Composition Major

Composition .....	12
20th Century Styles .....	3
Foreign Language .....	16
Applied Instrument .....	3-8

**Music Minors**

The minor in music program consists of a number of curricular options having a total of 27-29 semester hours in music. Each of these programs is designed to address a particular a vocational or professional area that students have traditionally found of interest.

Composition

Music Core Curriculum I.....	5
Music Core Curriculum II.....	5
Music Core Curriculum III.....	5
Music Core Curriculum IV.....	5
Composition I.....	3
Composition II.....	3
Composition III.....	3

Music History

Music Core Curriculum I.....	5
Music Core Curriculum II.....	5
Music of the People (1070 or 1080).....	3

Take **three** courses from the following:

Renaissance Music Literature.....	3
Baroque Music Literature.....	3
Classical Music Literature.....	3
Romantic Music Literature.....	3
Twentieth-century Music Literature.....	3

Humanities

Music Appreciation.....	3
Music of the People (1070 or 1080).....	3
History of Jazz I.....	3
History of Jazz II.....	3
Music History I.....	2
Music History II.....	2
Music History III.....	2

Take **three** courses from the following:

Renaissance Music Literature.....	3
Baroque Music Literature.....	3
Classical Music Literature.....	3
Romantic Music Literature.....	3
Twentieth-century Music Literature.....	3

Jazz Studies

Music Core Curriculum I.....	5
Music Core Curriculum II.....	5
History of Jazz I.....	3
History of Jazz II.....	3
Applied Music.....	2
Improvisation.....	3
Jazz Ensemble.....	5
Arranging for Jazz Band.....	3

Music Theatre

Music Core Curriculum I.....	5
Music Core Curriculum II.....	5
History of Jazz I.....	3
Applied Piano.....	2
Applied Voice.....	2
Diction for Singers.....	1
History of Lyric Theatre.....	3
Acting for Music Theatre.....	3
Conducting Practicum.....	3

Performance

Music Core Curriculum I.....	5
Music Core Curriculum II.....	5
Applied Music (lower division).....	6
Applied Music (upper division).....	4
Ensembles (lower division).....	3
Ensembles (upper division).....	3
Recital - Junior & Senior.....	2

**For more information...**

please call (402) 554-3411.

**THE WRITER'S WORKSHOP**

The Bachelor of Fine Arts degree in creative writing, offered by the Writer's Workshop, is a 130 semester-hour program with intensive study in the making of either poetry or fiction. Candidates for the degree in either track must meet the following major and general requirements:

General Requirements

Fundamental Academic Skills	
English and writing.....	9
Mathematics 1310 or equivalent.....	3
Public Speaking.....	3

Distribution Requirements:

Natural sciences and physical sciences.....	8
Biology, chemistry, physics, physical geography, geology, mathematics, computer science (proficiency requirements exist for beginning math and computer science courses, and the student should consult the current catalogue or major adviser).	
Humanities/social and behavioral sciences.....	15
Black studies, economics, English (from courses not used to fulfill major requirements in literature), geography, history, political science, psychology, sociology, communications, philosophy, religion, humanities.	
Fine arts.....	12
Six hours must be outside Writer's Workshop.	
Foreign language	
The candidate must present one year of foreign language on the college level, or two years of one foreign language from high school.	
Cultural diversity.....	6

**MAJOR REQUIREMENTS**

The B.F.A. in writing requires a minimum of 68 semester hours of major course work designated by the candidate's area of emphasis in consultation with the student's program adviser. Students with a concentration in either fiction or poetry must successfully complete each of the following courses with a grade of "C" or better:

Literature & Theory.....	41
WRWS 1010 Contemporary Writers.....	3
DART 1090 or SPCH 1710 Oral Interpretation of Literature.....	3
WRWS 2050 Fundamentals of Fiction.....	3
WRWS 2060 Fundamentals of Poetry.....	3
WRWS 2100 Basic Fiction Studio.....	4
WRWS 2200 Basic Poetry Studio.....	4

ENGL 2430 Writing About Literature <b>or</b>	
JOUR 3220 Critical Writing for Mass Media .....	3
Three courses from ENGL 2310, 2320, 2450, 2460, 2500, 2510, 2520 .....	9
Six upper division literature courses from foreign language and literature (3000-level or above)	
<b>and/or</b> English (4000-level or above).....	18
WRWS 3010 Literary Magazine .....	3
WRWS 3100, 4100 and 4110 Fiction Studio.....	12
<b>or</b>	
WRWS 200, 4200 and 4210 Poetry Studio .....	12
WRWS 4300 Creative Nonfiction	
<b>or</b>	
ENGL 4700 Modern Familiar Essay.....	3

### SENIOR THESIS OPTION

Students whose work is above average and who are considering doing graduate work in creative writing may apply after their Intermediate Studio to pursue the BFA With Senior Thesis. To earn this special designation on their official transcripts, candidates for the degree must take two semesters of WRWS 4990 Senior Thesis (6 credit hours).

The Senior Thesis is a booklength manuscript of original work prepared during a student's last year of study in his or her area of concentration (e.g., a collection of poems, a collection of short stories, a novel). The work will be judged on the basis of artistic maturity and technical control. The level of excellence of the thesis should be commensurate with that expected by graduate programs; therefore, it should represent work of the highest quality the candidate has been able to achieve in the program. Students approved for thesis work need to consult regularly with their major adviser regarding their selection of courses in their degree program.

Students may apply for Senior Thesis by submitting samples of their work after they've completed their Intermediate Studio course in genre. At that time, the student may be Approved, Provisionally Approved, or Not Approved for this option. The progress of a student who is Provisionally Approved will be reviewed again after his/her first Advanced Studio for final approval or nonapproval to enroll for Senior Thesis course credit. To remain with the Thesis option, a student must receive a grade of "S" for the six hours of thesis work.

### Minor Requirements

A minor in the Creative Writing program can be fulfilled under one of three different options:

#### Prerequisite Courses:

English Composition .....	3-6
Emphasis in fiction:	
Contemporary Writers .....	3
Fundamentals of Fiction .....	3
Fundamentals of Poetry .....	3
Basic Fiction Studio.....	4
Intermediate Fiction Studio .....	4
Advanced Fiction Studio .....	4
2 upper division (3000+) literature courses in genre .....	6

#### Emphasis in Poetry:

Contemporary Writers .....	3
Fundamentals of Fiction .....	3
Fundamentals of Poetry .....	3
Basic Poetry Studio .....	4
Intermediate Poetry Studio.....	4
Advanced Poetry Studio.....	4
2 upper division (3000+) literature courses in genre .....	6

#### Combined Genres:

Contemporary Writers .....	3
Fundamentals of Fiction .....	3
Fundamentals of Poetry .....	3
Basic Poetry Studio .....	4
Basic Fiction Studio .....	
Intermediate Poetry Studio.....	4
Intermediate Fiction Studio .....	4

#### For more information...

please call (402) 554-2771.

### OTHER INFORMATION

#### Advisement

Each student enrolled in a College of Fine Arts degree program is encouraged to review the requirements for the intended degree with an assigned academic adviser. Information on assigned advisers is available in the student's relevant department office. A student's review of specific degree requirements should be conducted with an adviser at scheduled times each semester in preparation for and prior to each enrollment-registration period.

#### Honors Program

Students in the College of Fine Arts are provided an exceptional educational opportunity to participate in the University's General Honors Program. Through a series of multidisciplinary seminars offered through the Honors Program and through courses in the College available for honors credit, highly motivated students are challenged to expand their intellectual capacities. The College participates in the University General Honors Program and has an Honors Coordinator to assist students interested and those currently participating in the program.

Students entering or enrolled in good standing in the College may apply for admission to the Program, either on their own initiative or by invitation from the Program Director. Application may be made any time during a student's undergraduate matriculation, but preferably before the end of the first semester of the junior year. The Honors Program includes two categories of membership, Associate and Full. For further information about the Honors Program contact the Honors Office.

#### Amnesty Clause

For a copy of the College of Fine Arts' Amnesty Clause please contact the Office of the Dean.

#### Grade Appeals Procedure

Students in the College wanting to appeal either a grade or a charge of academic cheating or plagiarism shall first discuss the matter directly with the instructor. If a satisfactory agreement is not reached, the student may submit an appeal in writing to the chairman of the



department in which the course is offered. If the student and chairman do not reach a satisfactory agreement, the student may submit an appeal in writing to the Dean of the College at which point the appeal may be referred to the Educational Advisory Committee of the College for review. A decision at the College level is normally final. Under extenuating circumstances, a written appeal may be submitted to the University Committee on Academic Standards for a hearing and final adjudication.

### General Information

The College of Human Resources and Family Sciences (at Lincoln and Omaha) is committed to individuals, families and communities of Nebraska in the context of the larger society. The College's educational, research and outreach programs are focused on development of critical-thinking skills which reflect a concern for social responsibility.

The mission of the College is to develop the critical thinking skills of professionals whose work will be to help individuals, consumers and families provide for and maintain the three basic functions necessary for a satisfactory quality of life: economic, physical and psychosocial well-being. Departments accomplish the mission by empowering individuals, families and communities through teaching, research and outreach. Specific areas of research and education include:

### Economic Well-Being

- Selection, use, and care of goods, including services.
- Acquisition and allocation of resources.
- Interaction of individuals and families with the legal and market systems with growing emphasis on international trade and relations.

### Physical Well-Being

- Nutrition through the life cycle for optimal health.
- Nutrition in health maintenance.
- Prevention of disease.

### Psychosocial Well-Being

- Human development throughout the life span.
- Interactions within the family and between families and other groups in society.
- Coping with change, conflict and stress.

Students learn about the interaction of individuals and families within the larger society and the significance of economic, cultural and societal shifts in the economics, physical and psychosocial well-being of individuals and families. Students also develop an appreciation of public policy and international affairs as factors in the day-to-day lives of each person. The College of Human Resources and Family Sciences develops the ability of professionals to improve the interface between the household and the greater society.

All courses in the College are designed to:

1. develop competencies for professional growth;
2. contribute to the broad educational base of students in the College;
3. develop creative problem-solving skills of students; and
4. strengthen analytical and communication skills of students.

The College offers programs leading to a bachelor of science in human resources and family sciences in the following areas:

### Family and Consumer Sciences

Child Development/Early Childhood Education (dual major)  
Child Development Studies

Family and Consumer Sciences/Communication  
(Omaha only)

Family and Consumer Sciences Education

Family and Consumer Sciences and Journalism and Mass Media

Family Financial Management

Family Science

### Nutritional Science and Dietetics

Dietetics

Foods

Nutrition Science

Restaurant and Foodservice Administration

### Textiles, Clothing and Design

Merchandising

Textile and Apparel Design

Textile Science

These undergraduate programs provide students with an educational background for positions in a variety of government, business, community service, health care, and educational employment settings.

### Complete Programs on the Omaha Campus

Four major fields of study in the College can be completed entirely on the Omaha campus. These are:

- Family Science
- Family Financial Management
- Family & Consumer Sciences/Communication
- Dietetics

Course requirements for the above majors are included on the following pages. Department chairs and Omaha faculty can provide explicit counseling to students wishing to choose these options. Additionally, many courses are offered via interactive television on both the UNO and UNL campuses.

Because of different publication dates for the UNO Undergraduate Catalog and the UNL Undergraduate Bulletin, it is not possible to have the same course information in both publications. With this in mind, the students should remember to consult the UNL College of Human Resources and Family Sciences for the latest information about new courses, course requirements, new options (majors), option changes, etc. The College of Human Resources and Family Sciences administrative office on the UNO campus (Arts and Sciences Hall 108) can also provide this information.

### Full Accreditation

All baccalaureate degree programs in the College of Human Resources and Family Sciences are accredited by the American Association of Family and Consumer Sciences (AAFCS). Nationally only a small number of schools offering undergraduate programs in family and consumer sciences meet the high standards set by AAFCS for program accreditation. This accreditation requires a commitment to self-regulation and peer evaluation. Accreditation helps to ensure that graduates of these programs have had formal preparation that meets nationally accepted standards of quality and relevance. Because accreditation requires ongoing self-study, external evaluation, and regular review by the Council for Accreditation for the American Association

of Family and Consumer Sciences, the public is assured that programs reflect the development of knowledge and changes in professional practice which relate to issues in contemporary society. Accreditation is important to consumers of family and consumer sciences information and services, employers of graduates, and licensure and certification boards. The College of Human Resources and Family Sciences is the only unit in the State of Nebraska accredited by AAFCS.

#### Dietetics

The dietetics program meets the current academic requirements (Didactic Program in Dietetics) of The American Dietetic Association. As an approved program, students are eligible to take the registration examination upon completion of the experience requirements.

#### Merchandising

The program in merchandising has been approved by the American Collegiate Retail Association.

#### Teacher Education

Both the family and consumer sciences teacher education program and the early childhood/elementary education dual major are accredited through Teachers College (at UNL) by the National Council for the Accreditation of Teacher Education, and by the Nebraska State Department of Education. These accrediting agencies ensure that standards for the preparation of educators are in keeping with established guidelines leading to quality instruction in the educational setting.

#### Individual Certification

The College offers course work leading to certification in family and consumer sciences education and gerontology. Graduates of the College are eligible to sit for the AAFCS certification exam.

#### **Scholarships and Fellowships**

In addition to the scholarships awarded by the University, the College of Human Resources and Family Sciences awards a number of scholarships funded by individuals, organizations, and foundations. Criteria for awarding these scholarships vary to meet the wishes of the donors but often include financial need, academic performance, major area of study, and class standing. Sixty to seventy scholarships ranging from \$300 to \$2,000 per person are awarded each year. To be eligible for consideration for any of the scholarships listed below, both new and continuing students must annually complete the scholarship application form from the Office of Financial Aid, Eppley Administration Building 103.

#### **Honors and Awards**

All students on both campuses of the College of Human Resources and Family Sciences are eligible for the following honors and awards:

#### Week of Excellence

The College of Human Resources and Family Sciences celebrates a *Week of Excellence* each year to celebrate and honor students and faculty for their contributions during the year to excellence in academics, research, and

service. The week features outstanding speakers, career development activities, interaction with notable alumni, and a recognition/awards banquet for students, parents, and faculty. The following awards are presented annually:

#### Top Ten Students in the Respective Classes

This award is based on academic performance.

#### Outstanding Senior Awards

- Margaret Liston Outstanding Student in Family Financial Management
- Henrietta Fleck Houghton Outstanding Senior in Family and Consumer Sciences Education
- Outstanding Senior in Family Science
- Hazel Fox Outstanding Senior in Nutritional Sciences and Dietetics
- Outstanding Senior in Textiles, Clothing and Design
- Outstanding Senior in Child Development/Early Childhood Education

#### Top Senior Award

This award is presented to a senior student who has achieved the highest level of scholastic performance while in the College of Human Resources and Family Sciences. The award is sponsored by the College of Human Resources and Family Sciences Alumni Association.

#### Dean's List

The Dean's List, issued twice during the academic year, includes students enrolled in the College of Human Resources and Family Sciences who have achieved a minimum 3.75 semester GPA. Students who are on academic probation and/or are taking fewer than nine credit hours are not eligible for the Dean's List. This list is issued at the end of fall and spring semesters. Students are notified by mail.

#### **Student Organizations**

##### Kappa Omicron Nu

Promotion of scholarship, graduate study, and research are the major objectives of the honorary. Only those individuals who meet the highest scholastic standards are eligible for membership.

##### Phi Upsilon Omicron

Members are chosen based upon scholarship, leadership, service and character.

##### AAFCS

The student chapter of the American Association of Family and Consumer Sciences is an organization open to all students in the College of Human Resources and Family Sciences. A member may belong to a local chapter as well as to state and national organizations.

##### FSCEA

The Family and Consumer Sciences Education Association serves as the "education" organization for those interested in family and consumer sciences education and extension. The purposes are to provide training in leadership and development for future professional roles and to provide service to the College and the Department of Family and Consumer Sciences.

Additionally, majors in dietetics are invited to join the **Student Dietetic Association (SDA)**. The purpose is to foster the professional and education goals and interests in the field of dietetics.

### Career Opportunities

A degree in human resources and family sciences provides a broad educational background that includes strong general education and professional courses which make it possible to enter and progress through a career. The strength of the program makes it possible for professionals to change goals and adapt to the employment marketplace while continuing to serve the needs of people. Recent graduates of the College hold positions in several areas:

#### Business/Management

Careers include, among others, retailing; investment, insurance and commodities sales; public relations and finance; and marketing.

#### Health Care

Careers include dietetics, rehabilitation and gerontology, among others.

#### Journalism/Communication

Careers include broadcasting, news editorial and advertising.

#### Education

Careers include teaching in elementary, junior and senior high schools; extension education; government, business and industry.

#### Human Services

Careers include social work, administration, law enforcement, program planning and management; gerontology; human services; job, family and personal counseling.

#### Design-oriented

Careers include textile design, apparel design, fashion illustration, visual merchandising and product development.

### ADMISSION TO THE COLLEGE

#### Entrance Requirements

Admission requirements for the College of Human Resources and Family Sciences are as follows:

#### High School

- English - 4 units  
All units must include intensive reading and writing experience. Innovative interdisciplinary courses and courses in speech and journalism may be substituted if they include substantial amounts of reading and writing.
- Mathematics - 3 units  
Must include Algebra I, II and Geometry.
- Social sciences - 3 units  
At least one unit of American and/or world history and one additional unit of history, American government and/or geography; and a third unit of any social science discipline or subject.

- Natural sciences - 4 units  
At least two units selected from biology, chemistry, physics and earth sciences. One of the units must include laboratory instruction.
- Foreign language - 2 units (same language)  
Students who are unable to take two years of one foreign language in high school may still qualify for admission. Such students will be required to take two semesters of foreign language at the University of Nebraska. These students are still required to complete 16 units of academic courses for admission.
- Additional academic - 1 unit  
One unit chosen from any academic discipline.

*Note: One unit is one year of high school course work.*

#### Deficiency Removal

A student whose high school work fails to meet the admission requirements to the College must remove deficiencies by satisfactory completion of specified courses at the University or through the UNL Division of Continuing Studies. Students enrolling with deficiencies will be expected to remove deficiencies during their first year at the University.

#### Transfer Students

##### GPA Requirement

Students who transfer to the University of Nebraska at Omaha College of Human Resources and Family Sciences from other colleges (including UNL, UNO, UNK, technical schools, community colleges or universities) must meet the entrance requirements, fulfill degree requirements that exist at the time of their admission to the College, be in good academic standing, and have a minimum cumulative GPA of 2.0 and a minimum 2.0 average in the last semester of attendance at another institution or at the University of Nebraska.

##### Maximum Number of Hours for Transfer

Transfer courses are evaluated by the University and the College to determine course equivalencies. The College determines which courses will be accepted and how they will apply toward degree requirements.

- Sixty-six is the maximum number of hours that will be accepted on transfer from a two-year college.
- Ninety-five is the maximum number of hours that will be accepted on transfer from accredited four-year colleges and universities.

Courses taken 10 years before admission or readmission to the College will be evaluated by the major department to determine if it is appropriate to accept those courses for transfer and application to degree requirements. Specific family and consumer sciences courses will be reviewed in keeping with the guidelines specified by each department.

No more than 18 semester hours will be accepted in one department, and at least one-half of the professional-hour requirements must be taken in the College of Human Resources and Family Sciences.

**Acceptance of "D" Grades**

The College accepts "D" grades except in professional courses required by the major department.

**Transfer Credit from Technical, Non-Accredited and Foreign Institutions**

Students who desire to transfer from these institutions must have each course evaluated by the appropriate departmental representative. All rules stated above in reference to grades and maximum credit hours apply. For additional information and guidance in this process contact the Associate Dean at 554-3262.

**Transfer Agreements Among UNL, UNO and UNK**

Transfer agreements among the three institutions within the University System allow for a smooth transition for students interested in taking courses from UNO, UNK and/or UNL. Although restrictions noted above on grades and maximum transfer hours still apply, there are some exceptions. Grades of "D" from UNL and UNK may transfer to UNO to fulfill requirements except in professional courses required by the major department. Students planning to major in a program in the College should read the specific requirements noted with individual programs. Questions about academic transfer should be addressed to the Associate Dean (554-3262).

**Transfer Agreements with Community Colleges**

Articulation agreements and "Transfer with Ease Programs" with Nebraska community colleges indicate how courses and programs will transfer to UNO and the College of Human Resources and Family Sciences. The same guidelines noted above on the acceptance of courses, grades and hours also apply to these institutions. Students interested in transferring from a community college should consult with the school or the Associate Dean to determine which courses will transfer to fulfill specific College of Human Resources and Family Sciences requirements.

Courses from accredited two-year institutions which carry the 400-level designation will not be substituted for human resources and family sciences classes in the College. The 300-level courses will be considered on an individual basis by the respective department in the College of Human Resources and Family Sciences.

- No more than 18 semester hours in one department will be accepted.
- At least one-half of the professional hours requirements must be taken in the College of Human Resources and Family Sciences.
- Courses taken prior to course articulation agreements will be accepted contingent upon departmental validation of the credit.

**Transferring from Other Colleges at UNO**

Students transferring to the College of Human Resources and Family Sciences from other University of Nebraska at Omaha colleges or from University Division must have a minimum cumulative GPA of 2.0, be in good academic standing, and meet the freshman entrance requirements that exist at the time of their admission to the College of Human Resources and Family sciences. All admission deficiencies must be removed prior to

admission to the College. Students must fulfill degree requirements that exist at the time of their admission to the college, not at the time they enter UNO.

**Readmitted Students**

Students readmitted to the College of Human Resources and Family Sciences who previously left the College in good academic standing (minimum 2.0 cumulative GPA and not on probation) may return to the College. Students will, however, be required to follow current requirement guidelines in the College.

Students who left the College on probation or who were dismissed may seek readmission to the College after two semesters by applying to the UNO Admissions Office in the Eppley Administration Building. Readmission is not assured. However, the admissions committee is receptive to giving students a second opportunity to be successful. The committee is interested in knowing what the student has done in the intervening period that would suggest the student will be successful when readmitted. Successfully completing correspondence courses and/or community college courses is an effective way to demonstrate one's commitment to academic success.

**ACADEMIC POLICIES****Integrative Studies/Essential Studies**

The Comprehensive Education Program (CEP) is a general education program implemented on the UNL campus. It applies to all students enrolled in the College of Human Resources and Family Sciences on the UNO campus who entered the University of Nebraska for the first time in the fall semester of 1995 or after.

The CEP has been created to provide students, regardless of major or college, with a common set of educational experiences. It is designed to enhance their knowledge in a broad variety of academic areas and to help develop intellectual and social skills vital to college graduates in the 21st century.

**Essential Studies (ES)**

Each student will take a total of nine courses in essential areas of learning: communication, the social and behavioral sciences, mathematics, natural science, historical studies, the humanities, the arts, and human diversity. This requirement represents the minimum experience for an undergraduate student in the full range of university offerings. Thus, no ES course can simultaneously fulfill the requirement for two areas. The College of Human Resources and Family Sciences will require courses beyond the minimum standard set by CEP, and will recommend certain ES courses in various areas for majors. Please check with your academic adviser for specific requirements.

**Integrative Studies (IS)**

Each student will take six courses which have been reviewed and designated as Integrative Studies courses. These are standard university courses which engage students intensively in those intellectual activities which are the hallmarks of the educated person: writing, speaking, critical thinking, and the consideration of human diversity. Integrative Studies courses can be taken from the College of Human Resources and Family Sciences

with a limit of three from one department. Out of six IS courses, at least one must be a 2000-level course, one a 3000-level course, and one a 4000-level course.

*NOTE: Many IS courses will also be ES courses, so that students will be able to fulfill both requirements without adding to the hours needed for graduation.*

A complete list of Essential Studies and Integrative Studies courses will be available through your adviser. At all times it is important to ask your adviser to help tailor the Comprehensive Education program course selections to your individual needs.

### COLLEGE CORE AND COMPREHENSIVE EDUCATION REQUIREMENTS

The following requirements apply to all programs in the College:

#### Comprehensive Education .....46-53 Hours

- I. Communications (12 cr)
  - a. Composition .....6
    1. English composition (3 hrs)
    2. Intensive writing (3 hrs)
  - b. Speech .....3
  - c. Math/statistics.....3
  - d. Computer literacy .....0  
(demonstrated proficiency)
- II. Culture and Society (21-24 cr)
  - a. Social Sciences
    1. Psychology, sociology, anthropology, political science .....3-6
    2. Economics.....3-6
    3. History .....3-6
    4. Cultural diversity.....3-6
  - b. Humanities
    1. Fine and performing arts .....3-6
    2. Literature, philosophy, religion .....3-6
- III. Scientific Knowledge & Inquiry (7-8 cr)
  - a. Biological or physical science with lab biology, botany, zoology, chemistry, anatomy, geology, etc. .4
  - b. Research/field methods .....3-4
- IV. Professional and Community Applications (6-9 cr)
  - a. Internship/practicum within the major
  - b. Leadership development courses
  - c. Departmental capstone course
  - d. Integrative studies course

#### Human Resources and

#### Family Sciences Core .....14 Hours

- HRFS 1830 .....2
- FMCS 2800 .....3
- TXCD 1230 or NUTR 2530 .....3
- NUTR 1510 or TXCD 1210 .....3
- FMCS 1200 or 1600.....3

#### Professional Requirements.....53-60 Hours

#### Academic Load

A maximum of 17 credit hours may be taken each semester without special permission from the Dean's Office. A minimum of 12 credit hours must be taken each semester to be classified as a full-time student.

To complete the requirements for a degree in eight semesters, a student must earn an average of 16 credit hours each semester. Most students are advised to take 12-15 credit hours their first semester. This allows new students to make an easier transition from high school to college where course requirements are more rigorous.

Most students need a minimum of two hours of preparation for every hour in class, so a schedule of 12 credit hours is actually equivalent to a 36 hour per week job. Outside work may interfere with academic success. The student who must work should plan to take some summer session courses or an extra semester or two to complete the work required for a degree.

#### Credit/No Credit (also, Satisfactory/Unsatisfactory, or Pass/No Pass)

A passing grade for credit is interpreted to mean a grade of "C" or better.

The Credit/No Credit option is designed for students who want to study areas or topics when they may have a minimum preparation. If used for this purpose, the option can enrich the student's academic experience without lowering the student's grade point average. Not all classes can be taken under the Credit/No Credit option. **All courses in the major area, as well as professional supporting courses, must be taken for a grade unless they are specifically offered as a nongraded course (Satisfactory/Unsatisfactory).**

Free electives may be taken Credit/No Credit. Students can earn no more than 12 hours of Credit/No Credit, excluding courses offered only on a nongraded (Satisfactory/Unsatisfactory) basis.

Exceptions shall be made for courses where credit is received through challenge tests or credit by examination.

#### Grade Appeals

Any student enrolled in a course in the College of Human Resources and Family Sciences who wishes to appeal allegedly unfair and prejudicial treatment by a faculty member shall present his/her appeal in writing to the Dean of the College no later than 30 days after notice of the student's final course grade has been mailed from campus. The complaint will be forwarded to a committee consisting of faculty and student representatives. After a hearing, the committee will make a written recommendation regarding the appeal. The committee's recommendation shall be binding on the appealing student and the faculty member.

Letters of appeal should be sent to:

Dean  
College of Human Resources & Family Sciences  
105 Home Economics Building  
University of Nebraska  
Lincoln, Nebraska 68583-0800

#### Graduation Requirements

In addition to the curriculum requirements presented under Programs and Departments, the following general graduation requirements exist for the College of Human Resources and Family Sciences.

1. **Credit Hours and Grade Point Average.** A minimum of 128 semester hours of applicable credit is required to earn the bachelor of science degree in human resources and family sciences. Some programs require more than 128 credit hours. In addition, a minimum 2.0 cumulative GPA is required to graduate. Students in family and consumer sciences education must have a minimum 2.5 GPA. No more than 95 hours of credit from another college, even one of the University of Nebraska campuses, can be applied toward a degree in human resources and family sciences.
2. **Grades.** Grades of "D" satisfy requirements of the college of Human Resources and Family Sciences unless specified otherwise under the Programs and Departments section of the bulletin. Students who receive a grade of "D," however, are encouraged to retake the course, particularly if it is the major area.
3. **Requirements.** While faculty advisers assist students in planning their programs, and monitoring their progress toward the degree, it is the responsibility of the student to be informed about requirements for graduation and to see that these requirements are met.
4. **Course Exclusions and Restrictions.** Courses taken to remove high school deficiencies may not be applied toward graduation requirements.
5. **Residency Requirements and Correspondence Courses.** At least 30 of the last 36 hours of credit needed for a degree must be registered for and completed in residence at the University of Nebraska. This means that the last year of work must generally be spent at UNO and/or UNL. Half of the credit needed to graduate can be earned by means of correspondence courses; however, such credit does not count toward residence and thus cannot be among the last 30 credit hours earned.
6. **Special Requests for Substitutions or Waivers.** For special exceptions there may be a need or desire for students to request a special substitution or waiver be made to curriculum requirements. This request can be made only in unusual circumstances and cannot serve as an excuse for not following curriculum requirements. Specific instructions and procedures for consideration of exceptions are available from the student's adviser or the Dean's Office.
7. **Senior Check.** After accumulating at least 85 hours, each student is expected to request an analysis of graduation requirements (senior check). This is done by filing a request form at the Dean's Office, 108 Arts & Sciences Hall, on the UNO campus. The student will be notified when the Senior Check is completed and ready to pick up in the office. The original copy will be placed in the student's file folder and a photocopy will be given to the student.
8. **Application for Degree.** Each student who expects to receive a diploma must file an application for candidacy for the diploma in the

Registrar's Office, 105 Eppley Administration Building. Announcements regarding deadline dates are posted on campus bulletin boards and published in the *Gateway*. Deadlines are early in the semester.

Students are responsible for informing the Registrar's Office of the manner in which they are completing their requirements (i.e., by correspondence, by clearance of incompletes, by enrollment at another institution, by special examinations, etc.); and of any revision of such plans. In addition, any change in address or phone number should be specifically directed to this office if concerns or problems arise to avoid a postponement of graduation until a later semester.

## Academic Advising Responsibilities

*Students who do not know the name of their adviser should contact the HRFS dean's office on the UNO campus.*

Academic advising is important to a successful college experience. All students in the College of Human Resources and Family Sciences are advised by faculty in the department of their major. A student remains with an adviser for the duration of the educational program unless the student changes his/her major. As academic advisers, faculty assist students in assessing educational goals, planning programs of study, understanding program requirements, and knowing policies and procedures.

Department-based advisors are available to all students for assistance in assessing educational goals, planning programs of study, understanding program requirements, and knowing policies and procedures.

*Ultimately, students are responsible for fulfilling all of the requirements of the curriculum in which they are enrolled.*

The intellectual mentoring relationship between academic adviser and student is protected by confidentiality and strengthened by listening with understanding to student concerns. Intellectual mentoring by the academic adviser fosters:

- Development of an awareness of available choices, alternatives and resources;
- Guidance with decision making;
- Encouragement to expand horizons by full participation in university life; and
- Promotion of readiness to meet career, life and graduate/professional school challenges.

Students are expected to take responsibility for a successful university experience and effective advising sessions by:

- Participating in orientation/early enrollment programs;
- Scheduling appointments with advisers prior to early enrollment and at other times as needed.
- Identifying class choices from requirements of the preferred program or major;
- Identifying questions to address;
- Informing advisers of any special needs, deficiencies or barriers that might affect academic success;

- Knowing academic policies and academic calendar deadlines, procedures (e.g., registration, fee payment) and degree or program requirements;
- Remaining informed about progress in meeting academic requirements by maintaining careful academic records and seeking assistance to resolve any errors or questions; and
- Following through on recommendations to seek assistance from the various student support services provided by the university.

### International Opportunities

The College is committed to preparing students to function in a global, culturally diverse and changing society. The success of the College's graduates will be enhanced by knowledge of a foreign language and understanding of other cultures. A global perspective is developed in many of the College's courses and study abroad is encouraged. The College offers a minor in international studies which includes a study experience in another country.

The College sponsors overseas programs for the students in the College and works closely with the International Affairs Office of the University (UNL campus) to see that students are aware of the many study abroad opportunities that exist for students. The college is affiliated with The American College in London and Queen Margaret College in Edinburgh, Scotland.

Proficiency in a foreign language is not required for all international programs. Foreign language study, however, is often a part of the programs.

### Minor in International Studies

Students in the College of Human Resources and Family Sciences may minor in international studies by completing the following requirements:

Foreign language of region/country of focus .....	6
HRFS - International perspective .....	3
ANTH 421 Cultural Anthropology .....	3
Region/country specific courses .....	6
Study abroad experience .....	3
<b>TOTAL .....</b>	<b>21</b>

For region specific courses and languages, consult with your faculty adviser or obtain a copy of the International Studies minor description from Arts and Sciences Hall Room 108. Students may declare the minor by filing the minor declaration form available in the college office.

### Minors in Other Colleges

An undergraduate student with a major in human resources and family sciences who wants a minor in another college should consult with their College of Human Resources and Family Sciences adviser and prepare the list of approved courses desired for the minor.

### Course Numbers

Students should be aware that courses designated by four numbers, such as ACCT 2020, are offered on the Omaha campus. Courses using a three-number designation (ACCT 201) or three numbers plus an alpha (FACS 413B) are offered on the Lincoln campus.

### DEPARTMENT OF FAMILY AND CONSUMER SCIENCES (FMCS)

Family and consumer sciences emphasizes programs oriented to family science, child development, early childhood education, family financial management, family and consumer sciences / journalism and mass communication, and family and consumer sciences education. The department is home to three teaching/research laboratories on the UNL campus: the Ruth Staples Child Development Laboratory, the Infant Research Laboratory, and the Family Resource Center.

### Procedures on Dropout and Transfer Into Options Dropout From Option

Department majors who drop out for five successive academic years, or more, and later choose to reenter in their respective option or into another option in the department will be expected to meet the graduation requirements in effect at the time of re-enrollment.

### Transfer Into Option

Students transferring into family and consumer sciences from another institution, or from another department within the University or the College will complete the graduation and/or certification requirements in effect at the time of transfer into the option.

### Child Development Studies

The child development area provides comprehensive programs in child development theory, research, professional practice, and application. Studies lead to qualifications for a variety of child-oriented professions, including: teaching in the elementary schools, early childhood teaching, program management, child life consulting, and other child service professions. These programs offer a strong foundation for varied graduate studies. A student may select from (1) Child Development studies, and (2) early childhood education/elementary education (dual major – see next section) which leads to Nebraska State Teacher Certification.

### Comprehensive Education .....40-44 Hours

#### I. Communication (12 hrs)

Speech: SPCH 1110, 1710, 2410, 3130, or 3140 .....	3
Composition: ENGL 1150 or 1160 .....	3
Intensive writing: ENGL 1160 or 2400 .....	3
Statistics: MATH 1530, PSYC 2130, or SOC 2130 .....	3

#### II. Culture and Society (18-21 hrs)

Social Sciences – 12-15 hrs	
Psychology, sociology, anthropology, or political science electives .....	6
Economics elective .....	3
History elective .....	3
Cultural diversity .....	0-3
(Any ethnic studies is acceptable. Course may count in another area, e.g., ENGL 2360 Contemporary Black Literature)	
Humanities and Performing Arts – 6 hrs	
Art, music, dance, theatre, or photography elective .....	3
Literature, philosophy, or religion elective .....	3



# DEGREE REQUIREMENTS HUMAN RESOURCES AND FAMILY SCIENCES

## III. Scientific Knowledge and Inquiry (10-11 hrs)

Biology elective (with lab) .....	4-5
BIOL 2740 Human Physiology & Anatomy I .....	4
Research: SOC 2510, CJUS 2510, or PSYC 2140.....	3

## Human Resources & Family Sciences Core ....14 Hours

HRFS 1830 Seminar in HRFS .....	2
FMCS 1200 Individuals & Families as Consumers .....	3
FMCS 2800 Family Science.....	3
TXCD 1210 Design Essentials .....	3
NUTR 2530 Cultural Aspects of Diet & Nutrition.....	3

## Family & Consumer Sciences Core .....21 Hours

FMCS 1600 Human Development & the Family .....	3
PHIL 1210 Critical Reasoning .....	3
FMCS 2220 Intro to Family Finance .....	3
FMCS 3810 Family Consultation in Human Services ...	3
FACS 477 Admin of Early Childhood Programs .....	3
FMCS 4800 Professional Issues in FMCS .....	3
FMCS 4880 Child & Family Policy .....	3

## Professional Requirements .....64-66 Hours

### I. Basic Professional Studies (8 cr)

FACS 170 Intro to Child Development .....	1
FACS 171 Infancy .....	2
FACS 171L Infancy Lab .....	1
FACS 270 Development of the Preschool Child .....	2
FACS 270L Development of the Preschool Child Lab ..	2

### II. Child Development Studies (27 cr)

FMCS 3720 Middle Childhood & Adolescence .....	3
FACS 3820 Parenting .....	3
FACS 474 Assessment of the Young Child .....	3
FACS 476 Cognitive Processes in Young Children .....	3
FACS 482 Parent Education .....	3
HED 3080 Health Concepts of Sexual Development....	3
Special Education: EDUC 2510 or SPED 4110 .....	3
P.E. Theory: PE 2800, 3060, or 4630 .....	3
Electives in education, psychology, economics, educational psychology, business .....	6

### III. Family & Consumer Sciences Practica (12 cr)

FACS 497A Practicum in Early Childhood Education ...	9
FMCS 4970 Practicum in FMCS, <u>or</u>	
FACS 4960 Adv Ind Study (Research).....	3

## Child Development Track .....17-19 Hours

### I. Child Care Program Administration

ACCT 2010 Principles of Accounting I .....	3
FINA 360 Fin Mgmt for Non-Bus Majors .....	3
MGMT 3490 Principles of Management.....	3
MGMT 3510 Human Resource Management .....	3
VAED 325 Managerial Communication.....	3
FACS 496 Adv. Ind. Study (Child Care Prog. Admin) ...	3

### II. Child Development Studies Related Minors\*

Include a minimum of 18 hours course work in one of the following areas:

(a) International Studies Minor (21 cr)	
Foreign language of region/country of focus.....	6
HRFS - International perspective .....	3
ANTH 421 Cultural Anthropology.....	3
Region/country specific courses .....	6

Study abroad experience .....3

(b) Psychology Minor (15 cr)  
(See bulletin for requirements)

(c) Sociology Minor (18 cr)  
(See bulletin for requirements)

*\*Students may petition for acceptance of other recognized university minors.*

**TOTAL HOURS:.....135-141**

## Admission to the Child Development Studies Program

Admission into the Child Development Studies program is not automatic. To apply for admission requires:

1. Removal of all entrance deficiencies.
2. Completion of 30 or more hours with a minimum 2.5 GPA in family and consumer sciences courses and comprehensive education courses.
3. Successful completion of the basic professional studies courses: FMCS 1600, FACS 170, 171/171L, and 270/270L.
4. Successful completion of one speech course: SPCH 1110, 1710, 2410, 3130, or 3140.
5. Signatures of two faculty members (FACS 171/171L and 270/270L instructors) recommending admission to the program.

Application forms may be obtained from Family and Consumer Sciences advisers. Applications will be due September 15 or February 1 preceding the semester to be considered for admission.

## Early Childhood Education/Elementary Education with Teacher Certification (Dual Major) Option

## Comprehensive Education .....55-59 Hours

### I. Communication (18 cr)

- a. Speech: SPCH 1110, 1710, 2410, 3130, or 3140 ....3
- b. English Composition: ENGL 1150 and 1160.....6
- c. Mathematics:  
MATH 2000 Arithmetic for Elementary Teachers.....3

### II. Culture and Society (27 cr)

- a. Social Sciences – 12 cr  
American history: HIST 1110 or 1120 .....3  
American government: PSCI 1100, 2010, or 2210...3  
History of Western Civilization: HIST 1520 .....3  
Geography: GEOG 1020.....3
- b. Humanities and Performing Arts – 12 cr  
American, English, or world literature elective .....3  
Philosophy elective.....3  
ART 388 The Arts Today.....3  
TXCD 1210 Design Essentials .....

- c. Cultural Diversity .....

### III. Scientific Knowledge and Inquiry (10-14)

Select one course from each of the following three groups. Two of the courses must be taken with a lab.

Group 1: Physical Science.....	3-5
CHEM 1010/1014, 1140/1144, 1180/1184, 1190/1194	
PHYS 1050 1110/1154, 1120/1164, 1350	
NUTR 1310	

# DEGREE REQUIREMENTS

## HUMAN RESOURCES AND FAMILY SCIENCES

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Group 2: Earth Science.....3-4	MUS 2610 Fundamentals of Music for Elem Teachers.3
GEOG 1060, 2620, 3510	SPED 401A Elementary Exceptional Learner in the
GEOL 1170, 1180	Classroom .....3
Group 3: Biological Science.....4-5	IV. Elementary Education Practica (23 cr)
BIOL 1020, 1450, 1750, 2140	CURR 197 Prof Practice .....2
Other biological science course	CURR 297B (with CURR 351 & FMCS 3720).....3
<b>Human Resources &amp; Family Sciences Core ....11 Hours</b>	CURR 397A (with CURR 307, 308, 315) .....3
HRFS 1830 Seminar in HRFS .....2	CURR 397B (with CURR 311, 313) .....3
FMCS 1200 Individuals & Families as Consumers .....3	CURR 403 Elementary School Curriculum .....2
FMCS 2800 Family Science.....3	CURR 497A Student Teaching .....8
NUTR 2530 Cultural Aspects of Diet and Nutrition .....3	CURR 497Y Student Teaching Mainstream .....1
TXCD 1210 Design Essentials .....n/a	CURR 497Z Student Teaching Multicultural .....1
(already counted under Comprehensive Education II.b.)	<b>TOTAL HOURS.....177-181</b>
<b>Family &amp; Consumer Sciences Core .....18 Hours</b>	Admission into the advanced phases of the teacher
FMCS 1600 Human Development & the Family .....3	education program is not automatic and a student must
FMCS 2150 Critical Thinking Processes.....3	meet the criteria stated below. Within the Center for
FMCS 2220 Intro to Family Finance .....3	Curriculum and Instruction at UNL, admission to programs
FMCS 3810 Family Consultation in Human Services ...3	in elementary education and secondary education is
FMCS 4800 Professional Issues in FMCS.....3	competitive and enrollments may be limited.
FMCS 4880 Child & Family Policy .....3	Students wishing to pursue a degree and teaching
<b>Professional Requirements .....93 Hours</b>	certificate in elementary education must first be selected to
I. Family & Consumer Sciences Requirements (17 cr)	the Elementary Teacher Education Program (ETEP) at
FACS 170 Intro to Child Development .....1	UNL. Selections will be made two times per year, in the fall
FACS 171 Infancy .....2	and spring semesters. Application deadlines are
FACS 171L Infancy Lab .....1	September 15 and February 1.
FACS 270 Development of the Preschool Child .....2	The following minimum requirements must be met
FACS 270L Development of the Preschool Child Lab ..2	before the student is eligible to apply:
FMCS 3720 Middle Childhood & Adolescence .....3	1. Admission to Teachers College at UNL.
FMCS 3820 Parenting.....3	2. Completion of a minimum of 42 credit hours with at
FACS 476 Cognitive Processes in Children.....3	least a 2.5 GPA.
II. FMCS Professional Semester Block (15 cr)	3. Completion of EDUC 131 or CURR 311 (or
<i>Limited to students in their last year of study.</i>	approved transfer equivalent) and EDPS 261 or
FACS 474 Assessment of the Young Child .....3	FACS 270 and 270L (or approved transfer
FACS 477 Admin of Early Childhood Programs .....3	equivalent) with a 2.5 cumulative GPA in the two
FACS 497A Practicum in Early Childhood Education ...9	classes and no grade below C.
<i>Students enrolling in FACS 497A must file their</i>	4. Successful completion of CURR 197 and 297A (or
<i>application two semesters in advance of enrollment.</i>	approved transfer equivalent).
<i>Applications are available through the Child</i>	5. Completion of one speech course from
<i>Development Lab on the UNL campus.</i>	Comprehensive Education section (or approved
III. Elementary Education Professional Requirements (38	equivalent).
cr) <i>Admission to the Teacher Education Program at</i>	6. On the application form, secure the signatures of
<i>UNL is required. Many of Curriculum &amp; Instruction</i>	two UNL Faculty members recommending the
<i>(CURR) courses have UNO equivalents; however, it is</i>	student to the program. One must be from the
<i>recommended that students enroll in the UNL courses in</i>	supervisor in either CURR 197 or 297A.
<i>order to provide continuity between course work and</i>	7. Passing scores on all portions of the PPST.
<i>practica.</i>	8. Successful completion of the College technology
CURR 302 Children's Literature.....3	requirement.
CURR 306 Art in the Elementary School .....3	<b>Family Financial Management Option</b>
CURR 307 Teaching Social Studies .....3	The family financial management program prepares
CURR 308 Teaching Math: Elementary School.....3	students for interactive roles in promoting the economic well-
CURR 311 Teaching Reading.....3	being of individuals and families in relation to their values,
CURR 313 Teaching Language Arts.....3	goals, needs, and demands. Students are educated to
CURR 315 Teaching Science .....3	advise in the areas of consumer credit, employee benefits,
CURR 351 Human Technologies in Teaching .....3	medical care claims, retirement planning, and government
EDUC 131 Foundations of Modern Education .....3	programs. Upon completion of the program, students are
<i>(first year students)</i>	eligible to take the Accredited Financial Counselor
HED 2310 Healthful Living .....3	examinations. Recent graduates have been employed by
HHPT 380 Phys Ed for the Elementary School.....2	banks, credit unions and government agencies.

# DEGREE REQUIREMENTS

## HUMAN RESOURCES AND FAMILY SCIENCES

### Comprehensive Education .....52-54 Hours

- I. Communication (12 cr)  
 Speech elective .....3  
 English Composition: ENGL 1150 or 1160 .....3  
 Intensive Writing: ENGL 1160 or 2400 .....3  
 Math/Statistics: MATH 1430, 1530, or ISQA 2130 .....3

#### II. Culture and Society (24 cr)

- a. Social Sciences – 18 cr  
 PSYC 1010 Intro to Psychology .....3  
 SOC 1010 Introductory Sociology .....3  
 PSCI 1100 or 2110 .....3  
 ECON 2200 Principles of Economics (Micro) .....3  
 ECON 2220 Principles of Economics (Macro) .....3  
 History elective .....3  
 b. Humanities and Performing Arts – 6 cr  
 Art, music, dance, theatre, or photography elective .....3  
 Literature or philosophy elective .....3  
 (One of the courses in this section must meet the cultural diversity requirement, e.g., ENGL 2360 Contemporary Black Literature.)

#### III. Scientific Knowledge and Inquiry (7-8 cr)

- Biological or physical science with lab .....4-5  
 Research Design .....3  
 (Consult your adviser for acceptable course selections.)

#### IV. Professional and Community Applications (9 cr)

- FMCS 4340 Decision Making .....3  
 FMCS 4970 Practicum .....3  
 FMCS 4800 Professional Issues in FMCS .....3

### Human Resources & Family Sciences Core ....14 Hours

- HRFS 1830 Seminar in HRFS .....2  
 FMCS 1600 Human Development & the Family .....3  
 FMCS 2800 Family Science .....3  
 NUTR 1510 and TXCD 1230 or  
 NUTR 2530 and TXCD 1210 .....6

### Family & Consumer Sciences Core .....15 Hours

- PHIL 1210 Critical Reasoning .....3  
 FMCS 2220 Intro to Family Finance .....3  
 FMCS 3810 Family Consulting in Human Services .....3  
 FMCS 4160 Educational Programming .....3  
 FMCS 4880 Child & Family Policy .....3

### Family Financial Management Requirements..18 Hours

- FMCS 1200 Individuals & Families as Consumers .....3  
 FMCS 2320 Family Resource Management .....3  
 FMCS 3220 Advanced Family Finance .....3  
 FMCS 3330 Families in the Economy .....3  
 FMCS 4220 Financial Counseling .....3  
 FMCS 4380 Problems in Family Resources .....3

### Supporting Professional Courses .....18 Hours

Select from among the following courses:

- ACCT 2010 Introductory Accounting I .....3  
 ACCT 2020 Introductory Accounting II .....3  
 ECON 413 Social Insurance .....3  
 ECON 420 Employee Benefit Plans .....3  
 FNBK 3710 Principles of Insurance .....3  
 FINA 360 Fin Mgmt for Non-Business Majors .....3

- FNBK 3250 Corporate Finance .....3  
 FNBK 3400 Investment Principles & Practices .....3  
 FNBK 4350 Financial Institutions .....3  
 RELU 2410 Real Estate Principles & Practice .....3  
 FINA 407 Property & Liability .....3  
 FINA 412 Life Insurance .....3  
 FNBK 3700 International Financial Management .....3  
 FINA 463 Security Analysis .....3  
 RELU 4400 Real Estate Finance .....3

### Unrestricted Electives.....9-11 Hours

### TOTAL HOURS .....128

### Family Science Option

The family science option provides a comprehensive program grounded in family science theory, research, and professional practice and application. The distinct feature of this option is that it provides students with knowledge and intervention skills that will assist them in helping to prevent and remedy interpersonal problems experienced by individuals in their family relationships. This program of study will prepare students for graduate school (e.g., social work, counseling, psychology, law), or for employment in human services agencies or programs.

Students who enroll in upper division courses in this department must (1) declare a major or minor in family and consumer sciences; (2) have a 2.5 GPA in the following courses: FMCS 1600, 2220, 2800, and HRFS 1830; or (3) obtain special permission from the instructor.

### Comprehensive Education .....46-47 Hours

- I. Communications (12 cr)  
 Speech elective SPCH 1110, 1120 or 2410 .....3  
 English composition ENGL 1150, 1160 or 2400 .....6  
 Computer Science (proficiency) .....0  
 Statistics MATH 1530, PSYC 2130, or SOC 2130 .....3

#### II. Culture & Society (21 cr)

- a. Social Sciences – 15 credits required  
 Psychology, sociology, anthropology, and/or political science elective(s) .....6  
 Economics elective(s) .....3  
 History elective(s) .....3  
 Cultural diversity elective(s) .....3  
 b. Humanities & Performing Arts – 6 credits required  
 Fine arts elective(s) .....3  
 Literature, philosophy or religion elective .....3

#### III. Scientific Knowledge & Inquiry (7-8 cr)

- Biology or physical science with lab elective .....4-5  
 Research methods CJUS 2510, PSYC 2140  
 or SOC 2510 .....3

#### IV. Professional & Community Applications (3 cr)

- FMCS 4970 Practicum .....3

### Human Resources & Family Sciences Core ....14 Hours

- HRFS 1830 Seminar in HRFS .....2  
 FMCS 2800 Family Science .....3  
 FMCS 1600 Human Development & the Family .....3  
 NUTR 1510 and TXCD 1230 or  
 NUTR 2530 and TXCD 1210 .....6

### Family & Consumer Sciences Core .....18 Hours

PHIL 1210 Critical Reasoning .....	3
FMCS 2220 Intro to Family Finance .....	3
FMCS 3810 Family Consult. in Human Svc. Prof. ....	3
FMCS 4160 Educational Programming.....	3
FMCS 4800 Professional Issues in FMCS.....	3
FMCS 4880 Child & Family Policy .....	3

### Family Science Option Requirements 19-20 Hours

FMCS 3820 Parenting.....	3
HED 3080 Health Concepts of Sexual Development....	3

Select two:

- (1) 171/171L Infancy or  
270/270L Preschool Child .....3-4
- (2) FMCS 3700 Middle Childhood & Adolescence ...3
- (3) GERO 2000 Intro to Gerontology.....3

Select six hours from:

FMCS 4850 Contemporary Issues .....	3
FMCS 4810 Family Violence .....	3
FMCS 4830 Gender in Families .....	3

### Supporting Professional Courses .....18 Hours

Students are expected to complete a minor or a concentration of 18 hours in one of the following departments: anthropology, communications, counseling and guidance, criminal justice, educational psychology, education, ethnic studies, family and consumer sciences, health education (above 1000 level), psychology, sociology, gerontology, social work, special education, women's studies.

### Unrestricted Electives.....15-17 Hours

**TOTAL HOURS:.....128**

### Family and Consumer Science Education with Teacher Certification Option

Students enrolled in this option may select one of two tracks:

**Track A** – Teacher Certification in Schools, where requirements will be met for the Nebraska Secondary Teaching Certificate and endorsement is for vocational homemaking (family and consumer sciences).

**Track B** – Education in Other Settings, where requirements do not lead to teacher certification.

Students may also combine the certification track with other subject matter areas that will lead to teaching endorsements in other fields. One example is a combination of family and consumer sciences education and health education. A certification track (A) and a non-certification track (B) also exists when the student selects this combination.

Students wishing to be endorsed for Occupational Home Economics must complete additional course work and work experience requirements. The student's adviser will assist the student in planning to meet these requirements. Students interested in preparing for extension positions are encouraged to include FMCS 4970 Practicum in their programs.

### Procedures for Determining Admission to the Student Teaching Program in Family and Consumer Sciences

#### Minimum Grade Point Averages:

Cumulative .....	2.5
Family and consumer sciences subject matter .....	2.7
Professional education courses .....	2.8
(EDPS 261, 262; SPED 401; FACS 210, 315, 316, 318; CURR 297; VAED 424)	

#### Pre-Professional Skills Test (PPST):

Students are required to receive a passing score on all parts of the basic skills test.

#### Computer Technology Requirement:

Students are required to complete the Teachers College (UNL) Technology requirement. Obtain the details from the Family & Consumer Sciences department office at UNL, or from your adviser.

#### Review by Faculty:

Every student will be reviewed at the end of each semester. Basic skills test scores, GPA, communication skills, and personal-social adjustment will be considered in this review. Students will need faculty recommendations in order to enter the student teaching semester.

#### Communications:

Indications of how hearing, seeing, or speech disabilities, if these exist, can be accommodated to ensure effectiveness in the classroom.

#### Personal-Social Adjustment:

Where the Review Board of the family and consumer sciences education staff has reason to feel there is instability in the student's personal-social behavior, the student may be asked to conference with a counselor to determine the degree to which the student can be expected to adjust to the school and classroom environment.

#### Course Requirements:

Courses identified by number cannot be taken credit/no credit (pass/no pass; satisfactory/unsatisfactory) with the exceptions of HRFS 1830 and FACS 414A. Should a student have earned such a passing grade (e.g., "P", "Cr", or "S") in one of the courses (except those listed above) prior to starting the option, the grade will be retrieved.

### OPTION A: Family and Consumer Sciences Education

Track A – Teacher Certification

Track B – Non-certification

### Comprehensive Education .....47-57 Hours

- I. Communications (12 cr)
  - Speech elective.....3
  - English composition: ENGL 1150 or 1160 .....3
  - Intensive writing: ENGL 1160 or 2400 .....3
  - Statistics elective.....3
- II. Culture and Society (21-24 cr)
  - PSYC 1010 Intro to Psychology I.....3
  - ECON 2220 Principles of Economics (Macro) .....3
  - American Government: PSCI 1100 or 2110.....3
  - History elective.....3
  - Cultural Diversity: SOCI 217 or CURR 330.....3
  - TXCD 1210 Design Essentials.....3
  - Track A: Literature and philosophy electives .....6
  - Track B: Literature, philosophy, or religion elective .....3

# DEGREE REQUIREMENTS HUMAN RESOURCES AND FAMILY SCIENCES

Note: PHIL 1010 Intro to Philosophy is recommended.  
Literature selections may include: ENGL 2300, 2250, 2260, 2310, 2320, 2500, 2510, 2520, 2450, or 2460.

III. Scientific Knowledge and Inquiry (7-8 cr)  
BIOL 1020, 2740, or CHEM 1140/1144 .....4-5  
CJUS 2510, SOC 2510 or PSYC 2130 .....3

IV. Professional & Community Applications (6-12 cr)  
*Track A:* FACS 414A Student Teaching .....12  
*Track B:* FMCS 4970 Practicum .....6

**Human Resources & Family Sciences Core ....14 Hours**  
HRFS 1830 Seminar in HRFS .....2  
FMCS 1200 Individuals & Families as Consumers .....3  
FMCS 2800 Family Science .....3  
NUTR 1510 Intro to Nutrition .....3  
TXCD 1230 Clothing & Human Behavior .....3

**Family & Consumer Sciences Core .....15 Hours**  
PHIL 1210 Critical Reasoning .....3  
FMCS 2220 Intro to Family Finance .....3  
FMCS 3810 Family Consultation in Human Services ...3  
FMCS 4800 Professional Issues in FMCS 3  
FMCS 4880 Child & Family Policy .....3

**Professional Requirements .....41 Hours**  
*Track A – 41 Hours*

FACS 210 Orientation to FACS Education .....3  
FACS 315 Curriculum .....3  
FACS 315 Instruction .....3  
FACS 318 Evaluation .....3  
FMCS 3820 Parenting .....3  
NUTR 2410 Principles of Food Preparation .....3  
NUTR 2530 Cultural Aspects of Diet & Nutrition .....3  
ARCH 106 Environmental Studies .....3  
PSYC 3510 Educational Psychology .....3  
EDPS 362 Learning in the Classroom .....3  
CURR 297 Professional Practicum .....3  
SPED 401B Exceptional Learners in the Classroom ...3  
VAED 424 Foundations of Vocational Education .....3  
HED 2310 Healthful Living .....3

*Track B – 23-24 Hours*

FACS 210 Orientation to FACS Education .....3  
FMCS 4160 Educational Programs .....3  
ARCH 106 Environmental Studies .....3  
Educational Psychology elective .....3  
*Select two:* .....5-6  
TXCD 1034 Apparel Design & Evaluation (2 cr)  
TXCD 2060 Textiles (3 cr)  
TXCD 2220 Intermediate Design & Color Theory (3 cr)  
*Select two:* .....6  
NUTR 2410 Principles of Food Preparation  
NUTR 2510 Nutrition in the Life Span  
NUTR 2530 Cultural Aspects of Diet & Nutrition

**Unrestricted Electives**

**Track A 2-3 Hours**

**Track B 25-27 Hours**

**TOTAL HOURS .....128**

## OPTION B: Family and Consumer Sciences Education with Endorsement in Health Education

*Track A – Teacher Certification*

*Track B – Non-certification*

**Comprehensive Education .....45-57 Hours**

I. Communications (12 cr)  
Speech elective .....3  
English composition: ENGL 1150 or 1160 .....3  
Intensive writing: ENGL 1160 or 2400 .....3  
Statistics elective .....3

II. Culture and Society (21-24 cr)  
PSYC 1010 Intro to Psychology I .....3  
ECON 2220 Principles of Economics (Macro) .....3  
American Government: PSCI 1100 or 2110 .....3  
History elective .....3  
Cultural Diversity: SOCI 217 or CURR 330 .....3  
TXCD 1210 Design Essentials .....3  
*Track A:* Literature and Philosophy electives .....6  
*Track B:* Literature, Philosophy, or religion elective .....3

Note: PHIL 1010 Intro to Philosophy is recommended.  
Literature selections may include: ENGL 2300, 2250, 2260, 2310, 2320, 2500, 2510, 2520, 2450, or 2460.

III. Scientific Knowledge and Inquiry (9 cr)  
BIOL1020 Principles of Biology .....5  
BIOL 2840 Human Physiology & Anatomy II .....4

IV. Professional & Community Applications (3-12 cr)  
*Track A:* FACS 414A Student Teaching .....12  
*Track B:* FMCS 4970 or HED 4990 Practicum .....3-6

**Human Resources & Family Sciences Core ....14 Hours**  
HRFS 1830 Seminar in HRFS .....2  
FMCS 1200 Individuals & Families as Consumers .....3  
FMCS 2800 Family Science .....3  
NUTR 1510 Intro to Nutrition .....3  
TXCD 1230 Clothing & Human Behavior .....3

**Family & Consumer Sciences Core .....15-18 Hours**  
PHIL 1210 Critical Reasoning .....3  
FMCS 2220 Intro to Family Finance .....3  
FMCS 3810 Family Consultation in Human Services ...3  
FMCS 4800 Professional Issues in FMCS .....3  
FMCS 4880 Child & Family Policy .....3  
*Track B add: FMCS 1600 Human Devel  
& the Family .....3*

**Professional Requirements .....23-38 Hours**

*Track A – 38 Hours*

FACS 210 Orientation to FACS Education .....3  
FACS 315 Curriculum .....3  
FACS 315 Instruction .....3  
FACS 318 Evaluation .....3  
FMCS 3820 Parenting .....3  
NUTR 2410 Principles of Food Preparation .....3  
NUTR 2530 Cultural Aspects of Diet & Nutrition .....3  
ARCH 106 Environmental Studies .....3  
PSYC 3510 Educational Psychology .....3  
EDPS 362 Learning in the Classroom .....3  
CURR 297 Professional Practicum .....3  
SPED 401B Exceptional Learners in the Classroom ...3  
VAED 424 Foundations of Vocational Education .....3

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### Track B – 23-24 Hours

FACS 210 Orientation to FACS Education .....	3
FMCS 4160 Educational Programs.....	3
ARCH 106 Environmental Studies .....	3
Educational Psychology elective.....	3
<i>Select two:</i> .....	5-6
TXCD 1034 Apparel Design & Evaluation (2 cr)	
TXCD 2060 Textiles (3 cr)	
TXCD 2220 Intermediate Design & Color Theory (3 cr)	
<i>Select two:</i> .....	6
NUTR 2410 Principles of Food Preparation	
NUTR 2510 Nutrition in the Life Span	
NUTR 2530 Cultural Aspects of Diet & Nutrition	

### Other Health Requirements .....26 Hours

HED 2310 Healthful Living .....	3
HED 3080 Health Concepts of Sexual Development.....	3
HED 3600 Community Health .....	3
HED 4060 School Health Programs.....	3
HLTH 255E Substance Abuse .....	3
HLTH 326 Epidemiological Procedures for Comm. Health .....	5
HLTH 401 Health Behavior .....	3
HLTH 403 Physiological Foundations of Health & Disease .....	3

### Unrestricted Electives (Track B Only) .....0-2 Hours

### TOTAL HOURS .....128 - 150

### Family & Consumer Science/Communications Option

This option provides a broad-based multi-discipline exposure. The option encompasses course work in human resources and family sciences, journalism, radio and television. Career possibilities include newspapers, magazines, and radio-television as well as public relations and promotion of business and industry or government.

### Comprehensive Education .....44-47 Hours

- I. Communications (12 cr)
  - SPCH 1110, 1120, or 3140 .....
  - English composition: ENGL 1150 or 2400 .....
  - Intensive writing: ENGL 1160 or 2400 .....
  - MATH 1430, 1530, ISQA 2130, or PSYC 2130 .....
- II. Culture & Society (24-26 cr)
  - a. Social Sciences – 15-17 credits
    - Psychology, sociology, anthropology, or political science elective (two courses) .....
    - Economics: ECON 2200 or 2220 .....
    - History .....
    - Cultural Diversity .....
  - b. Humanities (9 cr)
    - Art, music, dance, photography, or theatre (two classes) .....
    - Literature, philosophy, classics, or religion.....
- III. Scientific Knowledge & Inquiry (7-8 cr)
  - Biological or physical science with lab .....
  - Research methods: CJUS 2510, PSYC 2140, or SOC 2510, .....

### Human Resources & Family Sciences Core ....14 Hours

HRFS 1830 HRFS Seminar .....	2
FMCS 1200 Indiv./Families as Consumers.....	3
FMCS 2800 Family Science.....	3
NUTR 1510 Introduction to Nutrition .....	3
TXCD 1230 Clothing and Human Behavior .....	3

### Family & Consumer Sciences Core .....21 Hours

FMCS 1600 Human Development & the Family .....	3
PHIL 1210 Critical Reasoning .....	3
FMCS 2220 Introduction to Family Finance.....	3
FMCS 3810 Family Consulting/Human Svc. Prof. ....	3
FMCS 4160 Educational Programming.....	3
FMCS 4800 Professional Issues in FACS .....	3
FMCS 4880 Family Policy .....	3

### Professional Requirements.....Choose 24 Hours

FMCS 2320 Family Resource Management .....	3
FMCS 3330 Families in the Economy .....	3
FMCS 3720 Middle Childhood & Adolescence .....	3
FMCS 3820 Parenting.....	3
FMCS 4340 Decision Making.....	3
FMCS 4810 Family Violence.....	3
FMCS 4850 Contemporary Family Issues .....	3
FMCS 4970 Practicum .....	3
GERO 2000 Introduction to Gerontology .....	3
HED 3080 Health Concepts/Sexual Developments .....	3

### Journalism Option Requirements.....33 Hours

#### Public Relations.....33 Hours

JOUR 2150 Newswriting/Reporting.....	3
JOUR 2160 News Editing.....	3
JOUR 3500 Publication Design & Graphics .....	3
JOUR 4010 History - Mass Communication.....	3
JOUR 4230 Principles of Public Relations.....	3
JOUR 4240 Public Relations - Case Studies .....	3
JOUR 4250 Public Relations - Writing .....	3
JOUR 4410 Communication Law .....	3
JOUR 4500 Mass Communication & Public Opinion .....	3
Journalism electives .....	6

#### Broadcasting.....33 Hours

BRCT 2370 Radio Production I .....	3
BRCT 3030 Radio & TV News Writing .....	3
BRCT 2320 Television Production .....	3
BRCT 3330 Television News Video .....	3
BRCT 3370 Radio Production II .....	3
BRCT 3320 Television Production II .....	3
JOUR 4010 History - Mass Communication.....	3
JOUR 4410 Communication Law .....	3
JOUR 4500 Mass Communication & Public Option .....	3
Broadcasting electives: BRCT 3390, 4310 or 4340 .....	6

#### News Editorial .....27 Hours

JOUR 2150 News Writing & Reporting .....	3
JOUR 2160 News Editing.....	3
JOUR 3110 Photography .....	3
JOUR 3270 Public Affairs Reporting .....	3
JOUR 3500 Publication Design & Graphics .....	3
JOUR 4010 History - Mass Communication.....	3

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JOUR 4410 Communication Law .....	3
JOUR 4500 Mass Communication & Public Opinion .....	3
Journalism electives .....	3

## Elective Hours - applicable toward total hours

Select two options outside primary option .....	0-6
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## DEPARTMENT OF NUTRITIONAL SCIENCE AND DIETETICS (NUTR)

There are four options in the department of nutritional science and dietetics. The dietetics option, the nutrition science option, the restaurant and food service administration option, and the foods option. Students interested in combining nutrition and journalism should speak to the department chair.

### Dietetics Option

The dietetics option is designed for students who wish to become practitioners in clinical, community, and foodservice areas of nutrition. The option is an approved Didactic Program in Dietetics which meets the academic requirements of The American Dietetic Association. Following graduation, an accredited/approved supervised practice is required before students are eligible to take the registration examination. Registered dietitians are employed by hospitals, community agencies and various government or private organizations.

### Comprehensive Education .....62 Hours

I. Communications (13 cr)	
Composition: ENGL 1150 or 1160 .....	3
Intensive writing: ENGL 1160 or 2400 .....	3
Speech: SPCH 1110 or 2010 .....	3
Mathematics: MATH 1320 or higher (trigonometry or calculus) .....	3
Computer literacy: NUTR 2720 .....	1
II. Culture and Society (27 cr)	
a. Social Sciences – 18 cr	
PSYC 1010 or SOC 1010 .....	3
ECON 2200 Principles of Economics (Micro) .....	3
ECON 2220 Principles of Economics (Macro) .....	3
PSCI 1100 or 4120, or PA 2170 .....	3
History elective .....	3
Cultural diversity: ANTH 4210 or NUTR 2530 .....	3
b. Humanities – 6 cr	
Art, music, theatre, dance or photography elective ..	3
PHIL 1020 or 2030 Intro to Ethics .....	3
c. Race/gender/ethnic studies .....	3
(Consult with your adviser for an appropriate course.)	
III. Scientific Knowledge and Inquiry (8 cr)	
CHEM 1140 Fundamentals of College Chem .....	4
CHEM 1144 Fundamentals of Chem Lab .....	1
MATH 1530 Intro Applied Prob & Statistics or STAT 3000 Statistical Methods .....	3
IV. Professional & Community Applications (6 cr)	
NUTR 4560 Community Nutrition .....	3
NUTR 4730 Org & Admin of Food Service .....	3

### Electives .....8

## Human Resources & Family Sciences Core ....14 Hours

HRFS 1830 Seminar in HRFS .....	2
FMCS 1200 Ind & Families as Consumers .....	3
FMCS 2800 Family Science .....	3
NUTR 1510 Intro to Nutrition .....	3
TXCD 1230 Clothing & Human Behavior .....	3

## Professional Requirements .....26 Hours

NUTR 1500 Intro to Dietetics .....	1
NUTR 2410 Principles of Food Preparation .....	3
NUTR 2510 Nutrition in the Life Span .....	3
NUTR 3400 Advanced Foods .....	3
NUTR 3500 Advanced Nutrition .....	3
NUTR 3700 Quantity Food Prep & Purchasing .....	3
NUTR 3710 Quantity Foods Lab .....	1
NUTR 4500 Applied Clinical Dietetics .....	3
NUTR 4520 Clinical Nutrition .....	3
NUTR 4900 Professional Prep for Careers in Dietetics .....	1
NUTR 4910 Senior Seminar .....	1
NUTR 4980 Research Experience .....	1

## Supporting Professional Courses .....26 Hours

BIOL 1020 Principles of Biology .....	5
BIOL 2440 Biology of Microorganisms .....	4
HPER 2880 Basic Physiology & Anatomy .....	5
CHEM 2210/2214 Fundamentals of Organic Chemistry/Lab .....	5
CHEM 3650/3654 Fundamentals of Biochemistry/Lab ..	4
MKT 3310 Marketing .....	3

### Foods Option

The foods option is designed for students who would like to combine a knowledge of foods with a background in nutrition and business. Students who complete this option would be suited for jobs in consumer affairs departments and research and development departments in food companies. The strong background in chemistry would also prepare the student for graduate work.

### Comprehensive Education .....59 Hours

I. Communications (13 cr)	
Composition: ENGL 1150 or 1160 .....	3
Intensive writing: ENGL 1160 or 2400 .....	3
Speech: SPCH 1110 or 2010 .....	3
Mathematics: MATH 1320 or higher (trigonometry or calculus) .....	3
Computer literacy: NUTR 2720 .....	1
II. Culture and Society (27 cr)	
a. Social Sciences – 18 cr	
PSYC 1010 or SOC 1010 .....	3
ECON 2200 Principles of Economics (Micro) .....	3
ECON 2220 Principles of Economics (Macro) .....	3
PSCI 1100 or 4120, or PA 2170 .....	3
History department elective .....	3
Cultural Diversity: ANTH 4210 or NUTR 2530 .....	3
b. Humanities – 6 cr	
Art, music, theatre, dance or photography elective ..	3
PHIL 1020 or 2030 Intro to Ethics .....	3

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c. Race/Gender/Ethnic Studies .....3 (Consult with your adviser for an appropriate course.)	II. Culture and Society (24 cr)
III. Scientific Knowledge and Inquiry (8 cr)	a. Social Sciences – 15 cr
CHEM 1140 Fundamentals of College Chem .....4	PSYC 1010 or SOC 1010.....3
CHEM 1144 Fundamentals of Chem Lab .....1	ECON 2200 Principles of Economics (Micro).....3
MATH 1530 Intro Applied Prob & Statistics	ECON 2220 Principles of Economics (Macro) .....
or STAT 3000 Statistical Methods.....3	History department elective.....3
IV. Electives (11 cr)	Cultural Diversity: ANTH 4210 or NUTR 2530 .....3
<b>Human Resources &amp; Family Sciences Core ...14 Hours</b>	b. Humanities – 6 cr
HRFS 1830 Seminar in HRFS .....2	Art, music, theatre, dance or photography elective ..3
FMCS 1200 Ind & Families as Consumers .....3	PHIL 1020 or 2030 Intro to Ethics .....3
FMCS 2800 Family Science.....3	c. Race/Gender/Ethnic Studies.....3 (Consult with your adviser for an appropriate course.)
NUTR 1510 Intro to Nutrition.....3	III. Scientific Knowledge and Inquiry (8 cr)
TXCD 1230 Clothing & Human Behavior .....3	BIOL 1020 Principles of Biology.....5
<b>Professional Requirements .....18 Hours</b>	MATH 1530 Intro Applied Prob & Statistics
NUTR 2410 Principles of Food Preparation.....3	or STAT 3000 Statistical Methods.....3
NUTR 3400 Advanced Foods .....3	IV. Professional & Community Applications (6 cr)
NUTR 3500 Advanced Nutrition.....3	NUTR 4970 Practicum in Foodservice Management....6
NUTR 3700 Quantity Food Prep & Purchasing.....3	<b>Human Resources &amp; Family Sciences Core ....14 Hours</b>
NUTR 3710 Quantity Foods Lab.....1	HRFS 1830 Seminar in HRFS .....2
NUTR 445 Experimental Foods <u>or</u>	FMCS 1200 Ind & Families as Consumers .....3
NUTR 441 Fundamental Properties of Food.....3	FMCS 2800 Family Science.....3
NUTR 4910 Senior Seminar .....1	NUTR 1510 Intro to Nutrition.....3
NUTR 4980 Research Experience .....1	TXCD 1230 Clothing & Human Behavior .....3
<b>Food Science and Technology.....11 Hours</b>	<b>Professional Requirements .....22 Hours</b>
FDST 203 Food Composition.....2	NUTR 2410 Principles of Food Preparation.....3
FDST 207 Analysis & Properties of Food Production ...3	NUTR 3400 Advanced Foods .....3
FDST 405 Food Microbiology .....3	NUTR 3700 Quantity Food Prep & Purchasing.....3
FDST 448 Food Chemistry .....3	NUTR 3710 Quantity Foods Lab.....1
<b>Supporting Professional Courses .....26 Hours</b>	NUTR 469 Foodservice Facility Planning & Design.....2
BIOL 1020 Principles of Biology.....5	NUTR 4730 Organization & Admin of Foodservice.....3
BIOL 2440 Biology of Microorganisms.....4	NUTR 474 Food & Beverage Management .....4
HPER 2880 Basic Physiology & Anatomy .....5	NUTR 476 Restaurant & Foodservice Mgmt
CHEM 2210/2214 Fundamentals of Organic	Study Tour.....1
Chemistry/Lab .....5	NUTR 4910 Senior Seminar .....1
CHEM 3650/3654 Fundamentals of	NUTR 4980 Research Experience .....1
Biochemistry/Lab.....4	<b>Supporting Professional Courses .....39 Hours</b>
MKT 3310 Marketing.....3	ACCT 2010 Principles of Accounting .....3
<b>Restaurant and Foodservice Administration Option</b>	BIOL 2440 Biology of Microorganisms.....4
This option prepares students for managerial and	CHEM 1140/1144 Fundamentals of College Chem/
administrative positions in the restaurant and foodservice	Chem Lab.....5
industries. Career opportunities can be found in hotels,	FNBK 3250 Corporate Finance.....3
restaurants, fast food restaurants, private clubs, health	LAWS 3230 Business Law.....3
care, corporations, and the armed forces. A practicum is	MKT 3310 Marketing .....3
required.	MGMT 3490 Principles of Management.....3
<b>Comprehensive Education .....51 Hours</b>	MGMT 3510 Personnel Management .....3
I. Communications (13 cr)	Management electives .....6
Composition: ENGL 1150 or 1160 .....3	SPCH 2140 Small Group Comm & Leadership .....3
Intensive writing: ENGL 1160 or 2400 .....3	Speech electives (except SPCH 1110 or 3140).....3
Speech: SPCH 1110 or 2010.....3	<b>Electives .....2 Hours</b>
Mathematics: MATH 1320 or higher (trigonometry or	<b>Nutrition Science</b>
calculus) .....3	The nutrition science option is designed for students
Computer literacy: NUTR 2720 .....1	who wish to combine an emphasis in nutrition with a strong
	science background. This major provides an appropriate
	vehicle for pre-medical, pre-dental, nursing, physical
	therapy, and laboratory technology majors who may be



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able to obtain a degree in nutrition and simultaneously meet entrance requirements for a professional program. It is a suitable avenue for students interested in nutrition research and graduate study since it provides an opportunity to emphasize the basic sciences.

## **Comprehensive Education .....70 Hours**

- I. Communications (13 cr)
  - Composition: ENGL 1150 or 1160 .....3
  - Intensive Writing: ENGL 1160 or 2400.....3
  - Speech: SPCH 1110 or 2010.....3
  - Mathematics: MATH 1320 or higher (trigonometry or calculus) .....3
  - Computer Literacy: NUTR 2720 .....1
- II. Culture and Society (27 cr)
  - a. Social Sciences – 18 cr
    - PSYC 1010 or SOC 1010.....3
    - ECON 2200 Principles of Economics (Micro).....3
    - ECON 2220 Principles of Economics (Macro) .....3
    - PSCI 1100 or 4120, or PA 2170 .....3
    - History department elective.....3
    - Cultural Diversity: NUTR 2530 .....3
  - b. Humanities – 6 cr
    - Art, music, theatre, dance, or photography elective .6
  - c. Race/Gender/Ethnic Studies .....3  
(Consult with your adviser for an appropriate course.)
- III. Scientific Knowledge and Inquiry (8 cr)
  - BIOL 1020 Principles of Biology.....5
  - MATH 1530 Intro Applied Prob & Statistics  
or STAT 3000 Statistical Methods.....3
- IV. Professional & Community Applications (3 cr)
  - NUTR 4560 Community Nutrition.....3
- V. Electives (19 cr)
  - Select courses from the following courses/areas of study: physics, health and human performance, management, chemistry, speech language and pathology, computer science, mathematics, statistics, biological sciences, food science and technology; NUTR 299, 3400, 3700/3710, 441, 445, 451, and 496.

## **Human Resources & Family Sciences Core ....14 Hours**

- HRFS 1830 Seminar in HRFS .....2
- FMCS 1200 Ind & Families as Consumers .....3
- FMCS 2800 Family Science.....3
- NUTR 1510 Intro to Nutrition.....3
- TXCD 1230 Clothing & Human Behavior .....3

## **Professional Requirements .....17 Hours**

- NUTR 2410 Principles of Food Preparation.....3
- NUTR 2510 Nutrition in the Life Span.....3
- NUTR 3500 Advanced Nutrition.....3
- NUTR 4500 Applied Clinical Dietetics.....3
- NUTR 4520 Clinical Nutrition .....3
- NUTR 4910 Senior Seminar .....1
- NUTR 4980 Research Experience .....1

## **Supporting Sciences .....27 Hours**

- BIOL 2440 Biology of Microorganisms.....4
- HPER 2880 Basic Physiology & Anatomy .....5

- CHEM 1140/1144 Fundamentals of College Chem/  
Chem Lab.....5
- CHEM 2210/2214 Fundamentals of Organic Chem/  
Lab .....5
- CHEM 2400/2404 Quantitative Analysis/Lab .....4
- CHEM 3650/3654 Fundamentals of Biochemistry/  
Lab .....4

## **TEXTILES, CLOTHING AND DESIGN DEPARTMENT (TXCD)**

The department provides the educational framework for careers in the global textile and apparel industry. Students have the opportunity to specialize in areas of textile and apparel design, merchandising, and textile science.

Courses are planned for students with professional interests in one of the three areas of specialization. Lower level courses serve students from other disciplines with interest in this area. Selected courses serve as professional support for related disciplines and background for graduate study. Please note the following requirements:

1. No required course work in the textiles, clothing and design options can be taken credit/no credit (or pass/no pass; satisfactory/unsatisfactory) by textiles, clothing and design majors. Should a student have earned non-graded credit in one of the courses prior to starting the option, the grade will be retrieved.
2. Substitution and waiver forms must be processed prior to the semester of graduation and must be processed prior to enrolling in the substituted course. All course prerequisites must be met prior to enrollment.
3. All students are required to participate in either an internship or study tour experience, or both, during their program. Textiles, clothing and design majors have the opportunity to study abroad at institutions such as the American College in London, in both the summer and semester study abroad programs.

## **Options**

There are three options in the textiles, clothing and design department.

All undergraduate students in the textiles, clothing and design department take the following:

- College and university comprehensive education requirements
- Human resources and family sciences core
- Textiles, clothing and design introductory courses in years 1 and 2; specialization courses in one of the three options in years 3 and 4
- Textiles, clothing and design common completion courses in years 3 and 4

## **All Textiles, Clothing and Design Specializations:**

### **Comprehensive Education .....48-52 Hours**

- I. Communications (12 cr)
  - a. Statistics .....3
  - Textile Science and Merchandising Options:*
    - MATH 1530 Intro to Applied Prob & Statistics
  - Textile & Apparel Design Options:*
    - MATH 1430 or MATH 1530

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b. Speech elective .....	3
c. English composition elective .....	3
d. Intensive writing course requirement met by IS course in literature, philosophy, history or sociology .....	3
e. Computer literacy demonstrated	
<b>II. Culture and Society (24 cr)</b>	
a. Humanities – 9 cr	
ART 2050 Survey of Art History I .....	3
ART 2060 Survey of Art History II .....	3
Literature or philosophy must be an IS or ES course Area .....	3
b. Social Sciences – 15 cr	
ECON 2200 Principles of Economics (Micro) .....	3
ECON 2220 Principles of Economics (Macro) .....	3
History department elective .....	3
PSYC 1010 or SOC 1010 .....	3
Cultural diversity* requirement met by ES Area H, see literature, history or economics .....	3
<b>III. Scientific Knowledge and Inquiry (8 cr)</b>	
a. <b>Textile Science take:</b>	
CHEM 1180/1184 (4); CHEM 1190/1194 (4)	
<b>OR</b>	
<b>Textile Apparel Design and Merchandising</b>	
<b>Specializations take:</b>	
CHEM 1140/1144 (4); Select 4-6 credits from the following: BIOL 1020 (5); CHEM 1180/1184 (4); PHYS 1050 (4);	
b. Research Methods: *Res. Meth. CHEM 106 or 110 fulfills this.	
<b>IV. Professional and Community Applications (6-9 cr required)</b>	
Requirements met by these courses:	
<i>Note: does not increase credit hours needed.</i>	
Internship TXCD 498 or 422F .....	1-6
(see common completion courses)	
Leadership Dev. course .....	3
fulfilled as follows:	
<b>Merchandise:</b>	
TXCD 314 (see specialization years 3 & 4)	
<b>Textile &amp; Apparel Design:</b>	
TXCD 426, 174 (see specialization years 3 & 4)	
<b>Textile Science:</b>	
ALEC 202 (free elective)	
Dept. Capstone TXCD 413+ [I] .....	3
(see common completion courses)	
Integrative studies .....	3
Choose one from the following:	
TXCD 407, 408	
(see common completion courses/specialization years 3 & 4)	
<b>Human Resources and Family Sciences Core 14 Hours</b>	
HRFS 1830 Seminar in HRFS .....	2
FMCS 2800 Family Science .....	3
FMCS 1200 or 1600 .....	3
TXCD 1210 Design Essentials .....	3
NUTR 2530 Cultural Aspects of Diet & Nutrition .....	3

<b>Introductory Courses – Years 1 and 2.....</b>	<b>11 Hours</b>
TXCD 1034 Apparel Design & Evaluation .....	2
TXCD 2060 Textiles .....	3
TXCD 2130 Textile and Apparel Industry Processes .....	3
TXCD 2220 Intermediate Design & Color Theory .....	3

### Notations:

*High school entrance requirements:*

*English/language arts - 4 years; math - 2 years (algebra, geometry, advanced math); science - 2 years; social sciences - 2 years*

*\*These requirements may be met without additional course hours through UNL approved courses listed in these categories.*

Students select specialization (textile and apparel design, merchandising, or textile science) by the time the introductory courses are completed.

### Please select one of the following specializations: Textile and Apparel Design

The textile and apparel design option emphasizes basic design and textiles with an understanding of fashion theory, textile and apparel construction, computer-aided design, and basic skills and techniques in production of textiles and apparel. Professional support is provided in business and in art and art history, theatre arts and dance, or history. The program is planned for students with professional interest in fashion illustration, visual merchandising, product development, textile and apparel design, and fiber arts.

### Specialization Textile and Apparel .....28 Hours

TXCD 216 Apparel Design by Flat Pattern .....	3
TXCD 2250 Surface Design on Textiles .....	3
TXCD 323 Fashion Illustration .....	3
TXCD 325 Woven & Nonwoven Textile Design .....	3
TXCD 403 App Des by Draping .....	3
TXCD 407 History of Costume .....	3
TXCD 426 Advanced Apparel & Textile Design .....	6
(3 cr max per semester)	
TXCD 416 Apparel and Market Analysis .....	2
TXCD 416L Adv Apparel Design .....	2

### Common Completion Courses.....13-15 Hours

TXCD 405 Advanced Textiles .....	3
TXCD 408 History of Textiles .....	3
TXCD 410 Socio-Psychological Aspects of Clothing .....	3
TXCD 413 Textiles & Apparel Merchandising .....	3
TXCD 498 Internship <u>and/or</u>	
TXCD 422F Professional Study Tour .....	1-3

### Professional Supporting Courses .....15 Hours

ART 1100 Drawing I .....	3
ACCT 2010 Introductory Accounting I .....	3
MKT 3310 Marketing <u>or</u>	
MGMT 4040 Organizational Behavior .....	3
Select 6 credit hours from any one of the following areas:	
Art; History; or Theatre Arts and Dance (Dramatic Arts at UNO) .....	6

### Free Electives .....6-8 Hours

### TOTAL HOURS .....130

## Merchandising

The merchandising option is planned for those students interested in the buying and selling of textile and apparel products at the manufacturing and retail levels, as well as product development, promotion and visual merchandising. The program emphasizes textiles, basic design, and provides understanding of fashion theory, as well as basic skills and techniques in production and distribution of textiles and apparel in a global society.

### Specialization Merchandising .....19-20 Hours

TXCD 3130 Theory & Practice in Merchandising.....	3
TXCD 3140 Visual Merchandising .....	3
TXCD 323 Fashion Illustration .....	3
TXCD 407 History of Costume .....	3
TXCD 416 Apparel & Market Analysis (lecture only) ....	2

Select two:

TXCD 1230, 216, 2250, 323, 325, 403, 406, 416L (2 cr), 426 (3-6 cr), 428 .....	5-6
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### Common Completion Courses.....13-15 Hours

TXCD 405 Advanced Textiles .....	3
TXCD 408 History of Textiles.....	3
TXCD 410 Socio-Psychological Aspects of Clothing ....	3
TXCD 413 Textiles & Apparel Merchandising.....	3
TXCD 498 Internship <u>and/or</u> TXCD 422F Professional Study Tour.....	1-3

### Professional Supporting Courses .....21 Hours

ACCT 2010 Principles of Accounting I .....	3
MKT 3310 Marketing .....	3
MGMT 4040 Organizational Behavior .....	3
MRKT 346 Market Channels .....	3
MKT 3360 Advertising .....	3
MRKT 425 Retailing .....	3
Select six hours from: MKT 3320, 3380, 4320, 4340 ....	6

### Free Electives .....5-8 Hours

## Textile Science

The textile science option emphasizes textiles, textile production, and issues concerning the global textile industry. Professional support in related sciences and business is required. The program is planned for students interested in sales, research, or management in the textile industry. It is also recommended for students who plan to go on to graduate school in either textile or related sciences.

### Specialization Textile Science .....19-20 Hours

TXCD 406 Textile Testing & Evaluation .....	3
TXCD 409 Textile Conservation.....	3
TXCD 416 Apparel & Market Analysis (lecture only) ....	2
TXCD 428 Textile Dyeing.....	3
TXCD 499 Undergraduate Research .....	3

Select 5-6 hours from:

TXCD 1230, 216, 2250, 3130, 323, 325, 403, 407, 416L (2 cr), 426 (3-6 cr) .....	5-6
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### Common Completion Courses.....13-15 Hours

TXCD 405 Advanced Textiles .....	3
TXCD 408 History of Textiles .....	3
TXCD 410 Socio-Psychological Aspects of Clothing ....	3
TXCD 413 Textiles & Apparel Merchandising.....	3
TXCD 498 Internship <u>and/or</u> TXCD 422F Professional Study Tour.....	1-3

### Professional Supporting Courses .....22 Hours

CHEM 2400/2404 Quantitative Analysis/Lab .....	4
CHEM 251 or 261 .....	3
CHEM 252 or 262 .....	3
CHEM 253 or 263 .....	1-2
CHEM 254 or 264 .....	1-2
Select 6 hours from: business <u>or</u> chemistry <u>or</u> physics <u>or</u> computer science <u>or</u> math.....	6

### Free Electives .....11-17 Hours

### TOTAL HOURS .....130

### For more information...

please call (402) 554-2351.

## GENERAL INFORMATION

The College of Information Science and Technology was established on July 1, 1996, following a study by business leaders and academic representatives that identified the need for the college. It is committed to the integration of scholarship, teaching, service and industry outreach in a way that is responsive and relevant to the needs of business and industry, students, government and the community.

The principle goal of the college is to produce the next generation of information specialists. These individuals are technically prepared to enter the information industry, communicate and apply technology in organizational environments, embrace life-long learning and contribute to their community. To achieve this goal, the college is building bridges with the business community. Outreach efforts include establishing student internships, providing for faculty and company specialist exchanges, sharing expensive information systems and tools, sharing real problems with faculty and students, working with industry to set college directions, and identifying future needs.

The college is actively integrating existing programs in computer science, Information Systems and Quantitative Analysis (ISQA), and the Center for Management of Information Technology (CMIT). New programs in information technology and telecommunications are being planned. Further, enhanced opportunities for graduate education and distance learning are under development.

As of January 1997, the specific degrees in the college are in the approval process. For specific information regarding degrees, please contact the Computer Science office at (402) 554-2423 and the Information Systems and Quantitative Analysis office at (402) 554-3770.

## Computer Science

Computer science is concerned with the study of all aspects of computing, including hardware, software, algorithms and contemporary applications. Conceptually it appears in the spectrum of computing-related disciplines between computer engineering and management information systems (information systems and quantitative analysis at UNO). The undergraduate degree programs in computer science provide students with a solid background in the fundamentals of computing, and prepares them for employment in a wide variety of positions and for graduate study in computer science.

The content of the department's courses is continually monitored to ensure they are consistent with the fast-changing developments in the discipline. Courses are offered in day and evening sections for the convenience of the students. Courses also are offered at the Peter Kiewit Conference Center and at Offutt Air Force Base. Appropriate university and departmental computing resources are available to students taking computer science courses.

Degree programs in computer science are in transition as a result of the department's move in July 1996 from the College of Arts and Science to the College of Information Science and Technology. Students already majoring in computer science may elect to complete their degrees by satisfying the previous degree requirements. New

computer science majors, and those electing to move to the College of Information Science and Technology, should anticipate gradual changes as the college and department degree requirements are adjusted. The degree requirements shown here are those for existing computer science majors.

## Bachelor of Arts

A bachelor of arts degree with a major in computer science requires 61 hours of courses in computer science and mathematics in addition to the general college requirements. The specific courses required for the degree are:

- Computer Science 1610, 1620, 2710, 2720, 3320 4220, 4350, 4500 and 4830
- One of the courses numbered 18x0
- Mathematics 1950, 1960, 2030 and 2050
- Five additional courses selected by the student from all computer science courses numbered 3000 and above, Mathematics 3740 and 4750.

## Bachelor of Science

A bachelor of science degree with a major in computer science requires the same courses in computer science and mathematics as does the bachelor of arts degree. There is, however, no foreign language requirement. Instead, the student is required to complete a selection of courses in a cognate area related to computer science. Each student selects courses comprising the cognate area in conjunction with their adviser prior to obtaining the required approval of the department's undergraduate program committee. Forms for obtaining this approval are available in the department office. Some example cognates appear on the department's web page at <http://www.cs.unomaha.edu>.

## Third Writing Course

The college's third writing course requirement may be satisfied with GET 2140 (Technical Writing), ENGL 2400 (Advanced Composition), or English 3980 (Special Topics in Composition/Technical Writing). The student may petition the department's undergraduate program committee to meet this requirement with some other course for which English 1160 is a prerequisite.

## Minor in Computer Science

A minor in computer science may be earned by completing 18 hours of computer science courses consisting of Computer Science 1610, 1620, 2710, 2720, 3320 and Mathematics 2030. A minor may also be earned by completing 18 hours of computer science courses including Computer Science 1620 and 12 hours at the 2000 level or above (of which at least six hours must be at the 3000 level or above).

## For more information...

please call (402) 554-3818 or (402) 554-2423.

## Information Systems and Quantitative Analysis

The Information Systems and Quantitative Analysis department is in the process of obtaining University of Nebraska Board of Regents approval for a Bachelor of Science degree in Management Information Systems (BSMIS). The proposed degree described below replaces the Bachelor of Science in Business Administration with a Specialization in Management Information Systems. For current information on the status of the degree, you are invited to contact the College of Information Science & Technology Office of Advising at (402) 554-3819 or via e-mail at [istadvis@cs.unomaha.edu](mailto:istadvis@cs.unomaha.edu). You may also call the Information Systems and Quantitative Analysis department at (402) 554-2813 or e-mail at [jstolen@unomaha.edu](mailto:jstolen@unomaha.edu).

The study of Information Systems and Quantitative Analysis involves application of computers, mathematics, statistics, and other quantitative techniques in the solution of a wide variety of business problems. While computer science often concentrates on building the computer tools which make computers useful, it is information systems and quantitative analysis which specifically focuses on effectively applying these tools in the solution of everyday business problems.

The management of information systems includes the acquisition, employment and management of information systems resources. This encompasses the development, implementation and management of computers, communications and data for organization-wide systems as well as departmental and individual technology systems. It also includes the responsibility for new acquiring new information technology and incorporating it in the organization's strategy, planning and practices.

It also includes the development and evolution of organization infrastructure and systems for use in organization processes. There are methods, techniques and technology to accomplish these processes. The creation of these systems requires innovative and quality human machine systems and interfaces as well as recognition of socio-technical design issues and change management.

## Bachelor of Science in Management Information Systems

The Bachelor of Science in Management Information Systems (BSMIS) degree will provide the students with the educational background for pursuing an exciting career in applying computers in business and government to process data and solve a wide variety of business problems. The computer is an important tool, which processes information for management decision-making. Managers can be more effective and efficient when assisted by computer-based information systems.

The student will learn how the computer can be used to produce information both for controlling the day-to-day operations of a business and for planning for the future of that business. Information systems and quantitative

analysis produces the educational background appropriate for pursuing career opportunities in business data processing, management information systems, information centers, systems analysis, systems design, decision support systems and other related areas.

To obtain a BSMIS a student must fulfill certain University, College and departmental requirements listed below.

## General University Requirements for the BSMIS Degree

A minimum of 45 credit hours presented for the degree must be earned in upper-division courses (3000 and 4000 level).

A minimum of 125 credit hours is required for the degree.

Thirty of the last 36 hours required for the degree must be registered for and carried at (the University of Nebraska at Omaha).

Registration in courses without having taken the stated prerequisites could result in administrative withdrawal.

Courses such as English 1050, 1090, and 1100 and orientation courses in other colleges or divisions may not be counted as part of the minimum 125 credit hours in the degree program. University Division 1010 may be applied as an elective if taken in the first 30 hours of the degree program.

## Specific University Requirements for the BSMIS Degree

### Fundamental Academic Skills (15 hours)

All freshmen students must take the English Diagnostic test.

English and Writing - (nine hours) including English 1150 and 1160 or equivalent. To satisfy the third course the student must take GET 2140 - Technical Writing or ENGL 3980 - Special Topics in Composition/Technical Writing. ENGL 2400 - Advanced Composition will also be accepted.

For students testing into ENGL 1150, the six-hour requirement is satisfied by completing ENGL 1150 and ENGL 1160. For students testing into ENGL 1160, the six-hour requirement is satisfied by completing ENGL 1160 and any three additional hours of English at the 2000 level or above. For students testing proficient on the English Diagnostic Test, the six-hour requirement is satisfied by completing six hours of English at the 2000 level or above.

Mathematics - (three hours) which must be fulfilled by MATH 1320 Pre-Calculus Algebra.

Public Speaking - (three hours) which must be fulfilled by SPCH 1110, 1120, 3120, 3130, or 3140.

### Distribution Requirement (30 hours)

Natural and Physical Sciences (eight hours minimum, including one laboratory course) - which may be fulfilled by courses from any level in biology, chemistry, physics and any of the following courses: GEOG 1030, 1060, 1070, 3510, 4250, 4320, 4630; or GEOL 1010, 1170, 1180, 2750, 2760, 3700, 4260, and FSCI 1310.

Humanities and Fine Arts (eight hours minimum) which may be fulfilled by courses from any level in art, English

(other than those used to fulfill the English and writing requirement), foreign languages, music (other than laboratory courses), philosophy, religion, HUMN 1010 and 1020, INST 2140, and speech (other than SPCH 1110, 1120, 3120, 3130, 3140). Skill and technique courses may not be used to meet the humanities and fine arts requirement.

Social and behavioral sciences (eight hours minimum) which must include ECON 2200 and ECON 2220. The remaining course(s) may be fulfilled by courses from any level in history, political science, sociology, psychology and geography (except those geography courses listed in natural and physical sciences). The first of two international studies courses completed, INST 2130 and 2140, would apply toward the social and behavioral science requirement, and the second of two courses completed applies toward the humanities requirement.

## Cultural Diversity (6 hours)

U.S. Racial or Hispanic minority groups (3 hours) - three hours must come from the United States racial or Hispanic minority groups. Courses which satisfy this requirement as humanities are: BLST 1100, 1260, 2260, 2350, 2360, 2510, 2730, 2830, 3850, 3920, 3950, 4500; ENGL 2230, 2260, 2350, 2360, 3100, 4180, GDRH 1100, HUMN 1100, MUS 1070, RELI 2110 or SPAN 4180.

Courses which satisfy this requirement as social sciences are: ANTH 3220, 4220; BLST 1000, 1220, 1400, 1950, 2000, 2210, 2410, 2420, 3000, 3120, 3200, 3220, 3650; HIST 4420, PSCI 3100, 3120; SOC 3900.

Minority Studies, Women's Studies, or International Focus (3 hours) - three hours must come from minority studies, women's studies, or course work with an international or foreign focus. Courses which satisfy this requirement as humanities are: BLST 1050, 4700; ENGL 2470, 4250, 4860; HUMN 2020, MUS 1080, PHIL 2110, 3500; RELI 1010, 2190, 3050, 3060, 3150, 3200, 4020; SPAN 4160.

Courses which satisfy this requirement as social sciences are: ANTH 1050, 3210, 4210; BLST 1340, 2120, 2130, 2900, 3030, 3140, 3500; GEOG 1020, 3030, 3060, 3070, 3080, 3090, 3230, 3240; HIST 1000, 1010, 1050, 2190, 2470, 2480, 2510, 2520, 2560, 2580, 2610, 2620, 2660, 2710, 2720, 2810, 2820, 2900, 2920, 3530, 3640, 3710, 3910, 4060, 4560, 4610, 4780; PSCI 2500, 2560, 3220, 3500, 3560, 3580, 3640, 3660, 3680, 4200, 4210, 4280, 4360, 4370, 4500, 4520; SOC 2010, 2190, 3220, 4220, 4300, 4530.

## International Dimension (3 hours)

Students must include at least 3 hours with an international emphasis (i.e. history, political science, literature or geography of foreign countries, foreign languages, etc.). Students may apply these hours toward satisfaction of the humanities, social sciences and cultural diversity requirements.

Courses which satisfy the requirements as humanities are: ART 2050, 2060, 3150, 3260, 3270; SPCH 4430, 4530; DART 1010, 2810, 2820, 4710, 4720; ENGL 2280, 2520, 3430, 4150, 4170, 4180, 4580, 4860; FAPR 4300, 4310; INST 2140, 3000; MUS 1070, 1080, 2550, 2560,

2570, PHIL 2110, 3130, 3510; RELI 1010, 2150, 2160, 3050, 3060, 3150, 3200, 4150.

Courses which satisfy the requirement as social sciences are: ANTH 1050, 3260, 4210; BLST 1340, 2110, 2120, 2130, 3030, 3140, 3500; GEOG 1000, 1020, 3030, 3060, 3070, 3080, 3090, 3130, 3230, 3240, 3330, 3930; HIST 1000, 1010, 2470, 2480, 2560, 2580, 2610, 2620, 2630, 2650, 2660, 2710, 2720, 2810, 2820, 3330, 3640, 4510, 4520, 4550, 4780; INST 2130, PSCI 2210, 2500, 3220, 3500, 3560, 3580, 3640, 3660, 3680, 4200, 4210, 4280, 4360, 4370, 4500, 4520, SOC 4530.

## **College requirements for the BSMIS Degree**

CIST 1010	Foundations of IS&T
CIST 1100	Introduction to Personal Computing
CIST 1400	Introduction to Computer Programming
CIST 1410	Introduction to Computer Programming Laboratory
CIST 1500	Quantitative Foundations of IS&T
CIST 2010	Computer and Communication Systems
CIST 2110	Organizations, Applications and Technologies

## **Department Requirements for the BSMIS Degree**

For this degree, the student completes a minimum of 30 credit hours. There are 15 hours of required courses and at least 15 hours of elective courses. In addition there are certain co-requisite courses which are to be taken from the College of Business Administration. The department also suggests that the student consider taking free electives from among the courses listed below.

It is suggested that the student try to complete CSCI 1810 as early as possible. CSCI 2810 can then be completed any time afterwards. ISQA 3300 and ISQA 3310 should be completed as a junior, and 4110 and 4120 should be completed as a senior.

The student must also complete the 24 hours of co-requisite courses listed below. The student is also encouraged to select courses from the list of "free electives" for other courses.

## Required Courses

CSCI 2810	Advanced COBOL Programming
ISQA 3300	File Structures for Information Systems
ISQA 3310	Managing the Data Base Environment
ISQA 4110	Information Systems Analysis
ISQA 4120	Systems Design and Implementation

## Elective Courses

ISQA 3150	Principles of Quantitative Analysis
ISQA 3210	Personal Computers in Business
ISQA 3250	Intermediate Quantitative Analysis
ISQA 3400	Business Data Communications
ISQA 3520	Graphical User Interface Design
ISQA 4000	Special Topics in Information Systems and Quantitative Analysis *
ISQA 4010	Information and Decision Making
ISQA 4150	Case Studies in Applied Statistics
ISQA 4200	Applications in Service Operations
ISQA 4350	CASE Technologies
ISQA 4380	Managing the Client/Server Environment

# DEGREE REQUIREMENTS INFORMATION SCIENCE AND TECHNOLOGY

ISQA 4500	Special Problems
ISQA 4510	Internship
ISQA 4730	Decision Support Systems
ISQA 4880	Systems Simulation and Modeling

*\*Note that there are different topics covered in ISQA 4000. Check the class schedule for specific topics offered during a particular semester.*

## Co-requisite Courses from the College of Business

The management information systems area is cross-disciplinary in nature. A student needs statistics, economics and business knowledge. These areas are covered by the following co-requisite required courses:

ACCT 2010	Principles of Accounting I
ACCT 2020	Principles of Accounting II
BSAD 2130	Principles of Business Statistics*
BSAD 3140	Intermediate Business Statistics*
ECON 2200	Principles of Economics (Micro)
ECON 2220	Principles of Economics (Macro)
FNBK 3000	Financial Reporting & Analysis
MGMT 3490	Principles of Management

*\*ISQA 2010 - Statistics for Information Systems may be substituted for BSAD 2130 and BSAD 3140.*

## Suggested Fee Electives

CSCI 3320	Data Structures
CSCI 4760	Stochastic Modeling
Courses taken from the College of Business	
Administration in an area of interest to the student.	

## Suggested Course Sequence

### Bachelor of Science in Management Information Systems

#### First Year

##### First Semester

CIST 1010	.....	2
MATH 1310	.....	3
CIST 1100	.....	3
English	.....	3
Public Speaking	.....	3
Humanities *	.....	3
Semester Total	.....	17

##### Second Semester

MATH 1320	.....	3
CIST 1400	.....	3
CIST 1410	.....	1
English	.....	3
Humanities *	.....	6
Semester Total	.....	16

#### Second Year

##### First Semester

CIST 2010	.....	3
ACCT 2010	.....	3
BSAD 2130	.....	3
CSCI 1810	.....	3
CIST 1500	.....	3
Semester Total	.....	15

##### Second Semester

CIST 2110	.....	3
ACCT 2020	.....	3
BSAD 3140	.....	3
CSCI 2810	.....	3
ECON 2200 **	.....	3
Semester Total	.....	15

#### Third Year

##### First Semester

English	.....	3
FNBK 3000	.....	3
ISQA 3300	.....	3
ISQA Elective	.....	3
Natural Science	.....	5
Semester Total	.....	17

##### Second Semester

MGMT 3490	.....	3
ECON 2220 **	.....	3
ISQA 3310	.....	3
ISQA Elective	.....	3
Minor and/or Electives	.....	3
Semester Total	.....	15

#### Fourth Year

##### First Semester

ISQA 4110	.....	3
ISQA Elective	.....	6
Natural Science	.....	4
Minor and/or Electives	.....	3
Semester Total	.....	16

##### Second Semester

ISQA 4120	.....	3
ISQA Elective	.....	3
Social Science *	.....	3
Minor and/or Electives	.....	6
Semester Total	.....	15

**Total Hours for BSMIS Degree.....126 hours**

*\*Some humanities and social science courses may also fulfill the cultural diversity and international dimension requirements.*

*\*\*ECON 2200 and ECON 2220 should be taken to satisfy the social science requirement.*

## Minor in Management Information Systems

A minor in management information systems may be obtained by completing ISQA 3320 and ISQA 4110, plus six hours of upper-division information systems and quantitative analysis courses in management information systems from the list of suggested free electives below.

A grade of "C" or better is required in each course applied toward this minor in management information systems.

### Required Courses

ISQA 3320	Introduction to Business Application Development
ISQA 4110	Information Systems Analysis

*\*These courses also count toward the major in management information systems.*

Suggested Free Electives

ISQA 3210 Personal Computers in Business  
ISQA 3310 Managing the Data Base Environment  
ISQA 3400 Business Data Communications  
ISQA 4120 Systems Design and Implementation  
ISQA 4150 Applied Business Statistics  
ISQA 4730 Decision Support Systems

**Minor in Management Information Systems for  
Accounting Majors**

The departments of ISQA and accounting are developing a minor in management information systems specifically designed for accounting students. Please see your adviser for details.

**Second Baccalaureate Degree**

A student who has met the degree requirements for a BS in MIS at the University of Nebraska at Omaha, must complete a minimum of 30 additional semester hours at the university for a different (second) degree. In particular, students interested in also obtaining a Bachelor of Science in Business Administration degree should check early in their academic career with an adviser. This can significantly reduce the number of hours needed to accomplish this task. ISQA, in conjunction with the College of Business Administration is developing a set of courses, which can satisfy requirements in each college. The two baccalaureate degrees may be awarded simultaneously when the student becomes eligible to receive them.

The Information Systems and Quantitative Analysis department is in the process of obtaining University of Nebraska Board of Regents approval for a Bachelor of Science degree in Management Information Systems (BSMIS). The proposed degree described above replaces the Bachelor of Science in Business Administration with a Specialization in Management Information Systems. For current information on the status of the degree, you are invited to contact the College of Information Science & Technology Office of Advising at (402) 554-3819 or via e-mail at [istadvis@cs.unomaha.edu](mailto:istadvis@cs.unomaha.edu). You may also call the Information Systems and Quantitative Analysis department at (402) 554-2813 or e-mail at [jstolen@unomaha.edu](mailto:jstolen@unomaha.edu).



## GENERAL INFORMATION

The College of Public Affairs and Community Service (CPACS) offers undergraduate course work leading to the Bachelor of Science degree in criminal justice, public administration/aviation area of specialization, social work, and urban studies.

In addition to its four undergraduate degree programs, CPACS offers courses in the field of aviation, gerontology and public administration; the Goodrich program, a specialized scholarship program for students with marked financial need; and credit for specialized areas of independent study which may be developed in conjunction with other UNO Colleges or governmental units.

The College also offers graduate programs in aviation, criminal justice, gerontology, public administration, social work and urban studies.

The goal of CPACS is to make available to the student an interdisciplinary program based on classroom learning, research, and community service. Students will be expected to participate in each of these activities.

## ADMISSION TO THE COLLEGE

Students who have been admitted to the University may apply for entrance to the College of Public Affairs and Community Service during initial registration by indicating their preference in the appropriate place on the University Application for Admission form.

Students who wish to transfer into the College from one of the Schools or Colleges within the University must request permission from the Dean's Office and the department offering the student's intended major. A minimum cumulative grade point average (GPA) of 2.5 is required to transfer into the College.

The College does not accept undeclared students. Exceptions to this rule are made where the student can demonstrate by written request substantial reasons for undeclared status. Permission must be granted by the Dean of the College.

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE

- Total hours: each candidate must present a total of at least 125 credit hours of college credit to meet graduation requirements.
- Quality of work: each candidate for the degree must attain a cumulative GPA of at least 2.0 ("C") in all college work, including work transferred from other institutions. A grade of at least "C" must be earned in all required courses within the major. All grades reported by the faculty to the Registrar become a part of the student's permanent record and are included in the computation of the grade point average, even though some of these grades may be for work done in excess of the 125 hours required for graduation.
- Residence: thirty of the last 36 hours required for the degree must be registered for and carried within the University of Nebraska System.
- Area requirements: each department is responsible for determining the required number of credit hours in the areas of English, humanities, natural

sciences, social sciences, mathematics and oral communications.

- English Proficiency Exam: Students transferring English composition courses equivalent to the University of Nebraska at Omaha's English 1150 or 1160 to the College of Public Affairs and Community Service from other accredited institutions of higher education with a grade of "C" or better will be given credit for their transfer hours and will not be required to take the English Placement Examination. Students entering College for the first time, transfer students with no English composition transfer hours, and transfer students who earned grades of "D" or lower in English composition courses will be required to take the English Placement Examination. Students who transfer six hours of English course work (equivalent to English 1150 and 1160) with a grade of "C" or better will be considered to have fulfilled the UNO freshman English requirements and will be considered proficient in English. This policy does not replace, but is supplemental to specific English requirements of the individual units of the College of Public Affairs and Community Service.  
**NOTE:** Because the above described English policy is a unique offering through the UNO English department, academic programs of the College based on a campus other than Omaha are currently excepted from this policy.
- Major Field: each student must present a major including at least 15 credit hours of upper division work designated as appropriate by the faculty of the department in which enrolled. A candidate meeting the requirements of each of two fields may present a double major in these fields. Individual departments should be consulted for the number of upper division hours required.
- Acceptability of Credits: the student should refer all questions concerning the acceptability of credits earned in programs such as Cooperative Education and Credit by Examination to the department in which enrolled. Credit earned in courses below the 1000 level may not be applied toward the degree offered by the College of Public Affairs and Community Service.
- Each student must satisfy the UNO general education core requirements.
- Prerequisite Courses: completion of a course within the major with a grade below a "C" will not be considered as having fulfilled prerequisite requirements for additional courses taken in the major field of study.

## AVIATION INSTITUTE

The University of Nebraska at Omaha Aviation Institute (UNOAI) is committed to providing undergraduate students with a quality education in aviation. This dedicated effort is to be directed toward aiding the United States in retaining its world aviation leadership. In addition, the Aviation Institute strives to maintain and support local and national aviation/aerospace systems, promote the development of

improved systems, and increase the awareness and knowledge of aviation among the general public. Faculty and students are provided the opportunity to participate in research and community service that will contribute to the accomplishment of this mission.

The demand for well trained people will increase as the aviation industry undergoes major expansion in the years ahead. The Aviation Institute is responding to these local, state, regional, national and international aviation needs by offering a comprehensive aviation education. The aviation curriculum consists of "top flight" courses in airline operations, aviation meteorology, airport master planning, aviation safety, aviation administration, aviation law, aviation history, air traffic control, numerous flight courses and more. The UNOAI program will prepare students to receive a specialized degree in aviation that will qualify them for several different positions in areas such as airline management/marketing and administration, meteorology, airport planning and administration, commercial pilot, environmental and regional planning, airline education and training, etc. In addition, transfer programs exist with many regional colleges and include the opportunity for avionics airframe, powerplant (aircraft maintenance) certification, and helicopter flight training.

The Aviation Institute is a division of the department of public administration in the College of Public Affairs and Community Service (CPACS). Please refer to the CPACS general requirements. It is important for all students to review the "Core Curriculum of All Colleges" section in this catalog for the University's general education requirements.

Students will be classified as pre-aviation until they have completed 61 credit hours or are in junior standing. Once this requirement has been met, the student will choose between aviation administration or aviation flight as their major.

### Accreditation

The UNO Aviation Institute is accredited by the Council on Aviation Accreditation in the areas of aviation studies and flight. The specialization programs are listed below.

### **AVIATION ADMINISTRATION SPECIALIZATION**

The aviation administration area of specialization/major field of study is conferred under the Bachelor of Science in Public Administration (BSPA) degree program. This option is oriented toward the public/private sector interface. Individuals looking for administrative careers with the FAA, state aviation departments, the National Transportation Safety Board or non-profit organizations such as the Aircraft Owners and Pilots Association, the Experimental Aircraft Association, or any private sector aviation firm, such as airlines or other aviation related businesses, operating within this highly regulated environment should choose the BSPA aviation administration option for their course of study.

### **Aviation Administration Specialization Model Program** First Year

#### *First Semester*

AVN 1000 Intro. to Aviation and Aerospace Studies.....	3
AVN 1020 Private Pilot Theory .....	3
ENGL 1150 English Composition.....	3
SPCH 1110 Public Speaking Fundamentals.....	3

Elective.....	3
Total first semester.....	15

#### *Second Semester*

AVN 1040 History of Aviation and Aerospace.....	3
CSCI 1500 Computer Literacy/Programming.....	3
ENGL 1160 English Composition.....	3
MATH 1320 Precalculus Algebra .....	3
Elective.....	3
Total second semester .....	15

Total First Year .....30

### Second Year

#### *First Semester*

AVN 1050 Aviation Meteorology .....	3
AVN 1160 Aviation Safety .....	3
PSCI 1100 Intro. to American National Government .....	3
MATH 1930 Calculus for the Managerial, Life, Social Science.....	3
Physical science lab (physics or chemistry).....	4
Total first semester.....	16

#### *Second Semester*

AVN 2020 Airline Operations .....	3
AVN 2510 Diversity in Aviation .....	3
PA 2000 Leadership and Administration.....	3
Humanities (recommended U.S. racial minority).....	3
Elective.....	3
Total second semester .....	15

Total second year .....31

### Third Year

#### *First Semester*

AVN 3090 Airport Master Planning .....	3
ECON 2200 Principles of Economics (Micro) .....	3
PA 2170 Intro. to Public Administration.....	3
Humanities .....	3
Elective.....	3
Elective.....	3
Total first semester.....	18

#### *Second Semester*

ECON 2220 Principles of Economics (Macro) .....	3
AVN 3040 Human Factors in Aviation.....	3
AVN 3060 Writing for Aviation.....	3
Humanities .....	3
Elective.....	3
Total second semester .....	15

Total third year .....33

### Fourth Year

#### *First Semester*

AVN 3150 Aviation Law .....	3
AVN 4100 Aviation Marketing .....	3
PA 3000 Applied Statistics and Data Processing in the Public Sector .....	3
PA 4300 Seminar in Public Policy <b>or</b> PA 4900 Special Topics in Public Administration.....	3
Elective.....	3
Elective.....	1
Total first semester.....	16

## DEGREE REQUIREMENTS PUBLIC AFFAIRS AND COMMUNITY SERVICE

### Second Semester

AVN 3050 Air Transportation .....	3
AVN 4050 General Aviation Services .....	3
PA 4390 Public Budgeting .....	3
Elective.....	3
Elective.....	3
Total second semester.....	15

Total fourth year.....31

**TOTAL HOURS FOR DEGREE .....125**

*Summer can be used to accelerate program. Free electives could be used for flight program or minor.*

### AVIATION FLIGHT SPECIALIZATION

The Aviation Institute offers flight training from private pilot to certified flight instructor. Flight training is conducted at Eppley Airfield in Omaha, Millard Airport and, for students who qualify for membership, the Offutt Air Force Base Aero Club. Students who successfully complete any of the training courses will receive appropriate academic credit. Students who plan on enrollment in a flight training course must be able to successfully complete an aviation medical examination conducted by a Federal Aviation Administration designated Aviation Medical Examiner. This medical examination must be of the appropriate class for a given flight course in accordance with Federal Aviation Regulation Part 67, *Medical Standards and Certification*. Flight costs are not included in the registration fees and are in addition to regular University tuition and fees. Quoted costs for each training phase are based on the minimum number of hours required by the FAA for that particular phase. If a student requires additional flying or ground training to complete a particular training phase course, the student will be obligated to pay for the extra training. Additional financial aid is available for flight training, but does not cover 100% of flight training costs.

Flight training schedules are arranged by the student and flight instructor at each flight center. Students are responsible for contacting the center and establishing a schedule that will allow for completion of course requirements within the time allowed. It is suggested that students plan to fly three times a week. Instructors are available day, night, and weekends.

Flight program students have several degree options to choose from. Flight program hours may contribute toward the fulfillment of graduation requirements in aviation administration, or aviation flight. Consult with an aviation faculty adviser to determine which option is best suited for your individual needs.

### Aviation Flight Specialization Model Program

#### First Year

##### First Semester

AVN 1000 Intro. to Aviation.....	3
AVN 1020 Private Pilot Theory .....	3
AVN 1024 Private Pilot Lab.....	1
ENGL 1150 English Composition.....	3
SPCH 1110 Public Speaking .....	3
Total first semester.....	13

### Second Semester

AVN 1030 Private Pilot Certificate .....	2
AVN 1040 History of Aviation .....	3
ENGL 1160 English Composition.....	3
MATH 1320 Precalculus Algebra .....	3
Humanities (recommended U.S. racial minority).....	3
Total second semester.....	14

Total first year.....27

#### Second Year

##### First Semester

AVN 2160 Commercial Pilot Theory .....	3
AVN 2164 Professional Pilot I .....	2
CSCI 1500 Computer Literacy/Programming.....	3
PSCI 1100 Intro. to American National Government ....	3
MATH 1930 Calculus for the Managerial, Life, Social Science.....	3
ECON 2200 Principles of Economics (Micro) .....	3
Total first semester.....	17

##### Second Semester

AVN 1050 Aviation Meteorology .....	3
AVN 1160 Aviation Safety .....	3
AVN 2170 Instrument Flight Theory .....	3
AVN 2174 Professional Pilot II .....	2
ECON 2220 Principles of Economics (Macro) .....	3
Total second semester.....	17

Total second year.....34

#### Third Year

##### First Semester

AVN 2180 Professional Pilot III .....	2
AVN 2510 Diversity in Aviation .....	3
AVN 3050 Air Transportation .....	3
PA 2000 Leadership and Administration .....	3
Physical Science Lab (physics).....	4
Total first semester.....	15

##### Second Semester

AVN 3040 Human Factors in Aviation Safety .....	3
AVN 3060 Writing in Aviation .....	3
PA 2170 Intro. to Public Administration.....	3
PA 3000 Applied Statistics and Data Processing in the Public Sector .....	3
Humanities .....	3
Elective.....	3
Total second semester.....	18

Total third year.....33

#### Fourth Year

##### First Semester

AVN 3090 Airport Master Planning and Management ..	3
AVN 3190 Certified Flight Instructor Theory .....	3
AVN 3194 Certified Flight Instructor I .....	3
PA 4300 Seminar in Public Policy <b>or</b> PA 4900 Special Topics in Public Administration .....	3
Humanities .....	3
Elective.....	1
Total first semester.....	15

##### Second Semester

AVN 3150 Aviation Law .....	3
AVN 3400 Multi-Engine.....	1

AVN 4010 Advanced Aerodynamics and Aircraft Performance.....	3
AVN 4020 Advanced Aircraft Systems.....	3
PA 4390 Public Budgeting .....	3
Elective.....	3
Total second semester .....	16
Total fourth year .....	31
<b>TOTAL HOURS FOR DEGREE .....</b>	<b>125</b>
<i>Summer can be used to accelerate program.</i>	

### MINOR IN AVIATION

An aviation minor is available to students who are interested in achieving an associated aviation background to supplement their major area of study. The aviation minor has been developed as an interdisciplinary program to broaden the educational opportunities for UNO students. Consistent with the current and future demands of the aviation industry is the need for quality educated and trained professionals from a variety of disciplines. This program will provide the aviation foundation to prepare a student from any major to meet those needs as a professional in an aviation-related field.

There are three available options in the minor program. Students can minor in aviation administration, aviation safety or the general option. A minor in aviation requires a minimum of 18 credit hours, including at least nine hours of upper-level aviation courses. A minimum grade of "C" is required in each course. The minor can complement any major at the University of Nebraska at Omaha and has been a popular choice among students in criminal justice, computer science, international studies, geography, public administration, management and marketing. For the minor to appear on the student's transcript, it must be declared by completing the minor application at the Aviation Institute. In order to obtain additional information about the minor options and to develop a plan of study, students should contact a faculty adviser from the Aviation Institute, Room 422, Allwine Hall, (402) 554-3424.

### FOR NON-TRADITIONAL AND TRANSFER STUDENTS

As an alternative for non-traditional and transfer students 21 years of age or older, the College of Continuing Studies offers the aviation administration and aviation studies areas of concentration in the Bachelor of General Studies (BGS) degree program. This program provides maximum opportunity for the acceptance of transfer credits. Students entering this program with Federal Aviation Administration pilot or maintenance certificates or qualified military training courses may receive academic credit for prior experience. It is important for all students to review the "Core Curriculum of All Colleges" section in this catalog for the university's general education requirements. See an Aviation Institute faculty adviser to determine if this option is best suited for your needs. A specialized transfer program in avionics, aircraft maintenance, pre-aviation and helicopter flight is available through agreements with Western Nebraska and Iowa Western Community Colleges.

### NASA NEBRASKA SPACE GRANT CONSORTIUM

The Nebraska Space Grant Consortium (NSGC) is part of the NASA Space Grant College and Fellowship Program. The NSGC awards funds to develop research infrastructure and enhance the quality of aerospace research and education throughout the state. Furthermore, the NSGC strives to provide national leadership in applied aspects of aeronautics.

One of the main goals of the National Space Grant College and Fellowship Program is to assist students pursuing high education. NASA provides funds to the NSGC for distribution to undergraduate and graduate students pursuing research or course work in the aerospace and aeronautics fields. Since the program began in 1991, over \$350,000.00 in scholarships and fellowships has been awarded to over 200 students in Nebraska. Applications are available by contacting the Nebraska Space Grant Consortium at the UNO Aviation Institute.

### NASA Experimental Program to Stimulate Competitive Research Program

UNO's Aviation Institute is one of four sites chosen nationwide to administer a new NASA EPSCoR grant. "The Nebraska Initiative for Aerospace Research and Industrial Development," totals \$3.5 million and is designed to enable Nebraska colleges and universities to further develop aeronautics, technology and space science programs. The grant provides research scholarships and fellowships for UNO students.

NASA EPSCoR is designed to assist states in developing an academic research enterprise directed toward a long-term, nationally competitive capability that will help contribute to the state's economic viability in the future. UNO's proposal focuses on aeronautics, remote sensing, earth data systems and space environment protection. The grant also provides funding for education outreach programs, research infrastructure and faculty research.

### GENERAL ADMISSION REQUIREMENTS

Students accepted for admission to any of the University's colleges may enroll in the Institute's aviation courses.

#### Language Fluency

International and other students enrolling in the Aviation Institute for whom English is not their primary language will be required to be sufficiently fluent in English as a second language. This requirement is particularly critical for successfully completing the flight training portion of the Institute's curriculum.

#### Attendance

Aviation students are expected to attend regularly all academic aviation classes in accordance with university policy. Attendance is mandatory in order to satisfy ground school requirements as established by the FAA.

#### Advising Services

Faculty members of the Aviation Institute are available to assist students in meeting their degree requirements and to interpret Institute policies regarding academic requirements. Students are encouraged to contact their adviser whenever questions arise concerning their

academic programs. As a minimum, students should see an adviser before registering for the next semester and review their academic progress, when choosing an area of specialty, and prior to registering for their senior year. Informal academic advising is considered an on-going faculty responsibility.

## Off-Campus Programs

The Aviation Institute offers its classes at the University of Nebraska-Lincoln and at the Offutt Aero Club, and on the World Wide Web through distance education. Students interested in these programs should contact the Aviation Institute for further information. Students living in Iowa may receive in-state tuition for enrolling in classes at the Peter Kiewit Conference Center and Offutt Air Force Base. The Institute offers a BGS degree in its entirety through distance learning opportunities. Contact the Aviation Institute for additional details.

## Scholarship Opportunities

Scholarships available to aviation students include the David L. LaMar Memorial Scholarship, Patrick Chambers Memorial Scholarship, Omaha Optimist Club of Aviation Scholarship, NASA Nebraska Space Grant Consortium scholarships and fellowships, the general UNO undergraduate scholarships, Non-Resident Scholarship, Student Ambassador Service Scholarships, Durham Scholarship, Alpha Eta Rho, Omaha Chapter Scholarships, Omaha 99s Scholarships, and others. To receive information on scholarship opportunities stop by the Aviation Institute in Allwine Hall Room 422.

## Financial Aid

Students should apply for financial aid immediately upon acceptance to UNO and the beginning of each calendar year thereafter. Priority is given to applicants who apply early. Additional financial aid may be available to qualified students to pay for the added cost of flight training. Flight training is optional and not required for an aviation degree.

## Graduate Programs

The Aviation Institute offers a graduate program at the master's and doctoral levels. Please contact the aviation graduate adviser to review curriculum options. Refer to the UNO graduate catalog for more information and contact the Aviation Institute for a copy of the Aviation Graduate Student Handbook.

## Further Information

Additional information is available in the Aviation Institute Undergraduate Student Handbook. If you would like further information or would like to meet with an adviser, contact the Aviation Institute at 554-3424 or 1-800-3-FLY-UNO. The Aviation Institute is located at Allwine Hall, Room 422. The Aviation Institute may be contacted by electronic mail at [unoai@unomaha.edu](mailto:unoai@unomaha.edu) or on the World Wide Web at <http://cid.unomaha.edu/~unoai>.

## CRIMINAL JUSTICE

The Bachelor of Science in Criminal Justice degree requires the completion of 125 credit hours of credit with an overall GPA of 2.0. The first 45 hours of course work is

defined as the Pre-Criminal Justice Curriculum. Entering Freshmen who declare criminal justice as their major must complete all of the 45 hour Pre-Criminal Justice Curriculum with an overall grade point average of 2.5 and no grade lower than "C" in their criminal justice courses. These courses must include:

English 1150 and 1160 (6 hours)  
Math 1310, 1314 or 1320 (3 hours)  
Criminal Justice 1010 (3 hours)  
Criminal Justice 2510 (3 hours)  
Criminal Justice 2030, 2210 or 2110 (3 hours)  
(Must complete two of three. If a student wishes to complete all three, hours will count toward criminal justice credit.)

Students are encouraged to fulfill the remaining 24 hours with course work from their general distribution requirements.

Students seeking entrance into the Upper Division Criminal Justice Program must apply to the Admissions Committee of the department of criminal justice. Students may apply with fewer than 45 hours if they are enrolled for the remaining hours during the semester in which they make application. In such cases, students may be granted admission contingent upon completion of the hours with a cumulative grade point average of 2.5 and no grade lower than a "C" in their criminal justice courses.

Students wishing to transfer from another institution or department within the University of Nebraska must have a 2.5 cumulative grade point average. They also must complete required courses stipulated above and apply for admission to the Admission Committee of the department of criminal justice before being admitted to the Upper Division Criminal Justice Program. Students wishing to transfer are encouraged to contact the department for more details on the transfer policy.

Students must fulfill program requirements in effect during the academic year they are admitted to the Criminal Justice Program.

The policies set out above are intended to apply to all students who seek admission to the Upper Division Criminal Justice Program. For good cause shown, the Admissions Committee has the discretion to make exceptions to the admission policy.

Application forms may be obtained at the criminal justice department office. Application deadline for Fall admission: last working day of July. Application deadline for Spring admission: last working day of October.

The BSCJ degree requires the completion of 125 semester hours of credit. A minimum of 30 of the last 36 hours must be earned by the student in residence in the College of Public Affairs and Community Service at either the Omaha or Lincoln campus. Summer reading courses are not considered in residence. At least 18 hours of criminal justice must be taken at the University of Nebraska, at either the Omaha or Lincoln campus. No less than 45 credit hours must be earned in upper division courses. At least 15 of these upper division hours must be taken in the department of criminal justice. A maximum of 25 credit hours from correspondence courses may be applied toward the BSCJ degree. No more than 12 credit

hours of independent study courses may be applied toward the BSCJ degree. Of these, no more than 6 hours can be from UNO and no more than 6 hours can be from another institution.

A maximum of 45 hours in criminal justice and 30 hours from any other department may be applied toward the BSCJ degree. A maximum of 24 hours may be taken pass/no pass and none of the 36 hours required for the criminal justice major may be taken pass/no pass (excluding CJUS 397 Internship).

Criminal justice course work is offered on both the Omaha and Lincoln campuses of the University of Nebraska. The BS/CJ degree can be earned in its entirety on the Lincoln campus; however, the degree is conferred by the University of Nebraska at Omaha. All of the departmental policies and requirements applicable to students seeking the BS/CJ degree are the same on both campuses.

## Course Requirements - BS/CJ Degree

### Core Requirements

English composition .....9

Omaha students may complete the English requirement in one of the following ways:

- those students who place into ENGL 1150 are required to take nine hours of English composition (1150, 1160, and 2400 or another 2000- to 4000-level course approved by the criminal justice adviser);
- students who test out of ENGL 1150 and are placed in 1160, will be required to take six hours of English Composition (1160, and 2400 or another 2000- to 4000-level course approved by the criminal justice adviser); and
- those students testing out of both 1150 and 1160, will be required to take three hours of English composition (2400 or another 2000- to 4000-level course approved by the Criminal Justice adviser). Lincoln students will be required to take nine credit hours of division five English courses (see UNL Arts and Sciences catalog); three credit hours must be at the 2500 level or above.

Social science .....12

Courses may be selected from black studies, economics, geography (except physical geography and geology), gerontology, history, political science, psychology, public administration, sociology, social work, urban studies and SPED 4510, TED 4600 or 4630. No more than six credit hours from any one department may be used to meet this requirement.

Natural science and mathematics .....12

Students must complete MATH 1310 or its equivalent (Math 100 UNL). Courses may be selected from biology, chemistry, computer science (CSCI 1500 and above), geology, physical geography, mathematics, physics, botany, zoology, meteorology and astronomy. Each student will be required to complete one laboratory course from one of the above listed disciplines.

Humanities .....12

Courses may be selected from art, communication, dramatic arts, English literature, foreign languages, humanities, music, philosophy, journalism and religion. Each student must complete at least three credit hours of oral communication. No more than eight credit hours may be applied from any one department.

Statistics .....3

Each student must complete one three-hour course in basic statistics. CJUS 3000 may be used to satisfy this requirement but does not apply toward the 36 hours of required criminal justice courses.

Cultural Diversity .....two 3-hour courses

Each student must complete three credit hours of course work in U.S. racial or Hispanic minority groups. The remaining three hours can be satisfied with another three-hour course in minority studies, women's studies, or course work with an international or foreign focus. CJUS 3380 meets three hours of this requirement. These courses can be used to fulfill other degree requirements.

### Criminal Justice 36 hours

All candidates for the BSCJ degree must complete CJUS 1010, Survey of Criminal Justice, CJUS 2030, Policy and Society, CJUS 2210, Survey of Corrections, CJUS 2110, The Criminal Court System (2 of 3), CJUS 2510, Research Methods, CJUS 3350, Criminology, CJUS 3510, Criminal Procedure, plus 18 hours of CJUS electives. The following sociology courses may be substituted for equivalent criminal justice courses and applied toward the 36-hour major: SOC 2050 for CJUS 2510, SOC 2090 for CJUS 3350 and SOC 4740 for CJUS 4130. Credit toward the degree will not be allowed for both courses which are considered equivalent.

### Grade Point Average

Students must achieve a grade of "C" or better in each criminal justice course used as part of the 36-hour requirement (except for the Internship where a "credit" is required).

### Minor or Area of Emphasis 18 hours

The minor or area of emphasis must contain at least 12 credit hours of upper division work chosen in consultation with the student's adviser.

### Maximum Hour Limit

No more than 45 hours of criminal justice may be counted toward the BSCJ degree. Thirty hours is the maximum from any other department which may be applied toward the BSCJ degree.

### Credit/No Credit

A student may not take any of the 36 hours required for the criminal justice major on a Credit/No Credit basis.

### Electives 23 hours

### Senior Assessment

During the semester in which they plan to graduate, students must complete the senior assessment. This

instrument is designed to assess student learning, monitor department performance and identify changes needed.

## For more information...

please call (402) 554-2610.

## BACHELOR OF SCIENCE IN PUBLIC ADMINISTRATION (BSPA)

The Bachelor of Science in Public Administration provides students with basic skills in administration and management to prepare them for careers in the public service and not-for-profit sectors. Students are required to have a minor field that relates to their career goals. These may include social work, criminal justice, gerontology, business, political science, urban studies or aviation.

Graduates may work in a variety of administrative or professional positions in national, state or local government. BSPA graduates may also be employed in community or human service agencies in the not-for-profit sector. Job titles may include the following: policy analyst, budget officer, city administrator, case worker, planner, program manager, human resources assistant, economic developer administrative assistant and researcher.

### Course Requirements for the BSPA

The BSPA requires that students complete 27 hours of public administration course work. Requirement courses include:

- PA 2000 Leadership and Administration
- PA 2170 Introduction to Public Administration
- PA 3000 Applied Statistics/Data Processing in the Public Sector
- PA 4300 Seminar in Public Policy
- PA 4390 Public Budgeting
- 12 hours of public administration electives

The BSPA degree also requires:

- 18 hours of minor field\*
- 9 hours of English (including 3 hours upper level writing)
- 15 hours of humanities
- 16 hours of natural/physical science  
(including computer concepts, math and one lab course)
- 15 hours of social/behavioral sciences  
(in a minimum of three of the following fields:  
anthropology, black studies, economics,  
geography, history, international studies,  
political science, psychology, sociology)
- 25 hours of electives\*\*

*\*Specific courses determined in consultation with the minor field's department.*

*\*\*The 6-hour cultural diversity requirement may be satisfied by course work in the major or by elective course work.*

## THE DEPARTMENT OF PUBLIC ADMINISTRATION

The mission of the department of public administration is to strengthen the public service in a democratic and diverse society through offering premiere educational programs, generating distinctive original research, and delivering quality community, university and professional service. It does this by:

1. educating students at the bachelor's and master's level to manage and lead public and

nonprofit institutions effectively, ethically and democratically;

2. educating the next generation of public affairs scholars and senior practitioners through the doctoral program;
3. advancing basic and applied research through discovery, integration and application of ideas to societal problems;
4. serving the state of Nebraska, the United States and other nations through professional education, training, applied research and outreach that will enhance performance of public and nonprofit organizations.

## SOCIAL WORK

The undergraduate social work education program leads to the B.S.W. degree. This major is designed to meet the professional requirements for baccalaureate-trained social workers. It also prepares students for advanced graduate social work education and contributes to basic knowledge of the social services of students who are preparing for careers in the helping professions.

The undergraduate social work program is accredited by the Council on Social Work Education to prepare students for generalist practice as baccalaureate-trained social workers.

An undergraduate student who selects a social work major follows the preprofessional core program during the freshman and sophomore years. Social work majors who desire to pursue the professional Bachelor of Science degree in social work must make formal application to the Admissions Committee of the School of Social Work for admission to the professional undergraduate social work program.

### Requirements for Provisional Admission to the B.S.W. Professional Program

Application should be made for admission to the professional B.S.W. program during the second semester of the sophomore year or during the semester in which the student completes 60 hours. Minimum GPA for application is 2.50. Admission is competitive and is based on a combination of admission criteria including:

- GPA;
- references;
- a personal statement; and
- evidence of successful human services work or volunteer experience.

Students may not enroll in SOWK 3010, the initial junior year professional course, without having been granted admission to the professional program. The following core prerequisites must also be completed prior to starting the professional program: ECON 2010, PSCI 1000 or 1100, PSYCH 1010, SOC 1010, BIOL 1020, SOWK 1000 and SOWK 1500.

Admission packets may be obtained from an academic adviser or the admissions secretary of the School of Social Work. A total of 125 credit hours must be earned to receive the degree, and the student must remain in good standing to complete the program. Of this, 50 hours of social work and CPACS courses are required.

**Course Requirements - B.S.W. Degree**

Core Requirements

- English composition and speech .....9-12  
Placement determined by English Placement Exam, or completion of two English composition courses with a grade of "C" or above, and ENGL 3980 or 2400 or 2420. Public Speaking, three credit hours (may be satisfied by SPCH 1110, 1120, 3120, 3130 or 3140).
- Social and behavioral science.....21  
Psychology, six credit hours, three hours of which must be upper division; Sociology, six credit hours, three hours of which must be upper division or SOC 2150 (UNO); Macro Economics, three credit hours; political science, three credit hours; Recent U.S. History, three credit hours.
- Humanities .....12  
Courses selected from humanities, art, English literature, black studies, journalism, music, philosophy, religion, literature, or foreign language.
- Natural science and mathematics .....11-14  
Must include BIOL 1020 with a lab or any accredited human biology or physiology course, as long as the student has one science course with a lab, MATH 1310 or equivalent or test out; and one of the following statistics courses: MATH 1530, PSYCH/SOC 2130 or SOWK/PA/CJUS 3000. Those who test out of mathematics may select one other natural sciences or mathematics course from: biology, zoology, botany, chemistry, geology, physical geography, mathematics or physics. Social work majors must successfully complete BIOL 1020 before being allowed to take SOWK 3010, Human Functioning and Social Systems I.

Social Work 50 hours

The following social work courses are required: SOWK 1000, Social Work and Social Welfare, three hours; SOWK 1500, Volunteer Experience, three hours; SOWK 3010 and 3020, Human Functioning and Social Systems I and II, six hours; SOWK 3110, Social Welfare Policy I, three hours; SOWK 4120, Social Welfare Policy II, three hours; SOWK 3320, Practice I, three hours; SOWK 3350, Practice II, three hours; SOWK 4360, Practice III, three hours; SOWK 4400, Research Methods in Social Work Practice, three hours; SOWK 4410 and 4420, Practicum I and II, 10 hours; SOWK 4450, Senior Seminar, 1 hour; three hours in minority/cultural diversity; three hours of social work elective, and a three hour CPACS or social work elective.

Each candidate for the Bachelor of Social Work degree must earn a grade of "C" or better in all social work courses.

A student handbook with more detailed information is available from the School of Social Work.

**For more information...**

please call (402) 554-2832.

**URBAN STUDIES**

The degree of Bachelor of Science in urban studies will be awarded to students who complete the program requirements. The major in urban studies consists of 45 hours (see below for details). University/department requirements are as follows: English and Writing, 9 hours (to include English, 6 hours, including ENGL 1160 or equivalent) and one additional 3 hour writing course; MATH 1310 or equivalent, 3 hours; public speaking, 3 hours (one of the following speech courses will satisfy this requirement: SPCH 1110, 1120, 3120, 3130, or 3140); natural and physical sciences, minimum of 8 hours, including one laboratory course; social sciences, 12 hours; humanities and fine arts, minimum of 8 hours; cultural diversity, 6 hours (a course on U.S. racial/ethnic groups, minimum of 3 hours, with the remaining 3 hours in minority studies, women's studies, or a course with an international/foreign focus).

Additionally, the urban studies major is required to take the following courses: urban studies, 18 hours; two concentrations of 12 hours each; and a social research course of 3 hours (total: 45 hours).

The student must maintain at least a "C" average in all Urban Studies courses. Required courses with less than a "C" grade may not be applied to the major.

The minor in aviation is available to urban studies majors. See Aviation Institute listing for further information or contact an adviser in 422 Allwine Hall, (402) 554-3424.

**For more information...**

please call (402) 554-2958.

**GERONTOLOGY**

Students may earn a Certificate in gerontology by completing 15 hours of specified course work including GERO 2000, Introduction to Gerontology, plus a one-semester, full-time field placement. Although a major in gerontology is not offered, the Certificate Program may be used as a minor or a concentration within several degrees earned through other University departments. Students who wish to work toward the Certificate must apply directly to the department of gerontology.

Courses that meet the gerontology requirement are taught by gerontology faculty as well as related faculty in other departments. Students should consult the gerontology adviser for the appropriate selection of courses.

In addition to undergraduate and graduate courses, the department of gerontology conducts research, community service and technical assistance, and provides non-credit educational programs for older people.

**For more information...**

please call (402) 554-2272.

**THE GOODRICH SCHOLARSHIP PROGRAM**

The Goodrich Scholarship Program was started in 1972 with funds from the Nebraska State Legislature. It is designed to provide scholarship funds and supportive services for students with substantial financial need.



The overall intent of the Program is to provide a college education for persons who otherwise could not afford it while offering them a broad and meaningful experience in general education. The program reaches out to multicultural students of African, Asian, Latino, and Native descent, as well as to students of Euro-American backgrounds. Students in the program display a wide range of academic ability, from those who, in spite of strong motivation, have yet to realize their full academic potential, to those who are already highly skilled and can help create a stimulating learning environment for their fellow students. The Program has a three-pronged approach. It provides:

- financial aid in the form of tuition and fees toward a bachelor's degree;
- a specialized curriculum emphasizing the humanities and the social sciences via a multicultural perspective; and
- a comprehensive program of academic support, counseling and other related student services.

## Application Procedures

In order to be considered for the Goodrich Scholarship Program, a candidate must meet each of the following requirements by March 1:

- The applicant must be admitted to the University of Nebraska at Omaha. In order to be admitted to the University of Nebraska at Omaha, an applicant must:
  - submit an admission application, an official high school transcript, along with a \$25.00 application fee to the UNO Admissions Office, and
  - take the American College Test (ACT) and have scores sent to the UNO Admissions Office (554-2393).
- The applicant must complete a Goodrich application and submit it to the Goodrich Program Office.
- The applicant must ask two different individuals to complete and submit the Personal Reference Form to the Goodrich Program Office.
- The applicant must undergo a financial analysis by completing the Free Application for Federal Student Aid (FAFSA). (The FAFSA should be mailed to Iowa City, Iowa, between January 1 and March 1.)
- The applicant must take the English Placement/Proficiency Exam (EPPE) administered by the UNO Testing Center (554-4800).
- The applicant must arrange for a photocopy of the high school or GED transcript to be sent to the Goodrich Program Office. (GED transcripts may be ordered from the Nebraska State Department of Education.)
- The Applicant must also have ACT scores sent to the Goodrich Program.
- Only after applicants have completed all of the above steps will the Goodrich Program Office consider their files complete. Applicants with complete files will undergo a screening process.

The screening process will determine which applicants will be scheduled for personal interviews. Final selection of Goodrich scholars will then be made on a competitive basis. No interviews will be scheduled prior to the March 1 deadline.

## For more information...

please call (402) 554-2274.

## CENTER FOR PUBLIC AFFAIRS RESEARCH

The Center for Public Affairs Research (CPAR) is the major research component of the College of Public Affairs and Community Service. The Center has a full-time professional staff conducting research on a broad range of current community problems and issues of local, regional, state and national concern.

CPAR also administers a program of student research internship in conjunction with the departments of the College. CPACS students are invited to serve research internships at the Center in order to gain applied research experience.

Students find CPAR a valuable resource for class projects and papers on urban and public affairs topics.

## OTHER INFORMATION

### Academic Advisement

The aim and purpose of academic advising is to assist students in meeting the requirements of the degree program and in interpreting College policy regarding academic requirements. In CPACS, academic advising is conducted at the departmental level.

Students should see an adviser whenever questions arise concerning their academic programs. Students are encouraged to seek advisement with their assigned academic adviser prior to registering each semester. At a minimum, students should seek advisement with their assigned academic adviser at least one time each year; in particular when registering for the senior year.

### Academic Amnesty Policy

Students after one full year of successful work at UNO (at least two consecutive semesters of 12 hours each with a 2.5 GPA) or four consecutive semesters (may include summer semester) with a total of 24 or more hours and with at least a GPA of 2.5 or better may petition the CPACS Committee on Academic Standards and Curriculum for removal of all work taken during either or both of the first two semesters. This petition is subject to the following stipulations:

- The student shall be at least three years removed from the semester or year to be deleted.
- The student is responsible for initiation of the petition.
- This petition is to come through the student's counselor or academic adviser, to the Committee on Academic Standards and Curriculum and then to the Dean for final action.
- Individuals who apply under this rule may not be considered for degrees with honor at graduation.
- There shall be no physical obliteration of any part of the student's record.

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**Choice of Catalog Policy**

A student registering in the College of Public Affairs and Community Service for the first time may, except for the limitations described below, complete work for the degree according to the requirements of:

- the catalog in effect the year the student enters the College; or
- the catalog current at the time the student applies for the degree.

Students entering the College for the first time in the summer will be subject to the catalog for the academic year immediately following.

Failure to complete the requirements for the degree within seven years after the date the student first enters the College will subject the student to graduation under the requirements of a later catalog to be approved by the Dean.

The College reserves the right to institute and make effective, after due notice, during the course of a student's work toward a degree, any new ruling which may be necessary for the general good of the College and to substitute courses currently offered for those no longer offered.

**Grade Appeals Procedure**

Students who wish to appeal a grade which they feel was capriciously or prejudicially given shall first discuss the matter with the instructor. If the matter is not resolved, the student must meet with the department Chairperson. If a satisfactory agreement cannot be reached the students must appeal, in writing, to the department curriculum committee. If a satisfactory agreement cannot be reached, the student may submit a written appeal to the Office of the Dean within 20 working days of the exhaustion of the departmental procedures.

The Committee on Academic Standards and Curriculum for the College of Public Affairs and Community Service is the official body for handling the appeal.

In the event the instructor is unavailable for handling a grade complaint, the student will meet with the department Chair and the Dean to determine the most appropriate course of action agreeable to all parties.

Copies of the CPACS Procedures for Student Grades and Suspension Appeals are available from the Chair of the Committee on Academic Standards and Curriculum for the College and the Office of the Dean.

**Honors Program**

The CPACS Honors Program provides expanded educational opportunities for highly motivated students who have demonstrated outstanding academic achievement. All students entering or enrolled in any undergraduate program within CPACS may apply for membership to the CPACS Honors Program. Honors credits are earned by contracting courses with instructors; such courses require additional assignments. All existing CPACS courses may carry honors credit by means of contract. If interested please contact the CPACS Honors Coordinator or see an academic adviser.

**Dean's List**

Students enrolled in the College of Public Affairs and Community Service who maintain a GPA of 3.5 or better while carrying 12 hours or more of graded course work will earn the distinction of being placed on the Dean's Honor List at the end of each semester. These students are honored by the University and the College annually at the Honors Day Program, which is usually held during the spring semester.

## RESERVE OFFICERS TRAINING CORPS (ROTC) AIR FORCE ROTC

### Aerospace Studies

The department of aerospace studies is a regular instructional department of the University of Nebraska at Omaha and functions according to the rules and policies of the University and those of the USAF. The Air Force ROTC program is open to both men and women and is designed to develop the skills and attitudes vital to the career professional Air Force officer. Upon successful completion of the Air Force ROTC program and graduation from the University, cadets are commissioned Second Lieutenants, USAF. Instruction includes a two-year basic course (General Military Course-GMC) and a two-year advanced course (Professional Officer Course-POC).

To enroll in the POC course, applicants must complete either the college GMC program or a six-week Field Training (FT) program at an Air Force base. Applicants for the six-week FT must arrange for such training prior to completing their sophomore year. A number of Air Force ROTC college scholarships are available to outstanding cadets. For complete information on the Air Force ROTC program contact the Professor of Aerospace Studies (PAS), 554-2318.

Aerospace Studies, on all levels, are presented to AFROTC students as professional courses, designed to enrich their overall academic experience in the University. The academic curriculum of Air Force ROTC consists of two distinct general courses. The General Military Course is a continuing freshman-sophomore course of two academic years. The Professional Officer Course is a junior-senior-graduate course of two academic years. Air Force ROTC leadership laboratory activities, which are a part of each course, offer students many opportunities for practical leadership training. The GMC curriculum emphasizes the potential of aerospace power. Courses are designed to acquaint the student with aerospace power and the Air Force mission in support of our national defense. The courses are open to all full-time University students. Textbooks and uniforms are furnished at government expense. All students are provided leadership experience through participation in leadership laboratory activities.

The GMC courses also include voluntary trips to various Air Force installations throughout the United States. Students enrolled in GMC courses are not in the military service and assume no military obligation. Students with prior military service or high school ROTC experience may receive credit for portions of the GMC program. Entering freshmen should register for AS 1310 and AS 0010 during registration.

The POC curriculum emphasizes communicative skills, civil-military relations, leadership, human relations, problem solving, and decision making. Courses are open to students who have either

- completed the GMC program, or
- attended a six-week summer field training course at an Air Force base in lieu of the GMC program.

Students not enrolled in the GMC program should contact Air Force ROTC by February to be tested and processed for the fall semester. POC cadets enlist in the Air Force Reserve and receive approximately \$2,000 for

their two year participation. POC cadets manage all leadership laboratory activities.

### For more information...

call (402) 554-2318

## ARMY ROTC

### Military Science Studies

Military science is an elective managerial training program designed to develop college men and women for positions of leadership and responsibility as junior officers in the U.S. Army, Army Reserve or Army National Guard, or for subsequent managerial careers in civilian industry. Its curriculum encourages reflective thinking, goal setting, and problem solving through an interdisciplinary study of leadership and managerial principles. Specifically the program is structured to develop skills in the following areas: interpersonal-motivation, decision making, communication and general supervision. Compatible with any academic major, the program enhances the student's development in college and is open to undergraduate and graduate students.

The Army ROTC Program offers two-, three- and four-year programs of instruction. The program itself is essentially divided into two parts: the basic course (1000- to 2000-level courses) and the advanced course (3000- to 4000-level courses). The basic course, normally taken during the freshman and sophomore years, is designed to familiarize the student with the military, the role of an Army officer and the fundamentals of effective leadership. It is open to all students, and incurs no obligation whatsoever. Thus, it affords an opportunity to see what ROTC is all about, at the same time qualifying one to enter the advanced course.

It is the advanced course, however, which represents the real officer development portion of ROTC. While the basic course provides fundamental knowledge in leadership, the advanced course refines and further develops managerial talents through leadership seminars and extensive practical application. Additionally, the student develops basic military skills common to the Army. Students successfully completing the advanced course will be commissioned as Second Lieutenants in the U.S. Army, Army Reserves or Army National Guard. Students desiring active duty must first complete their baccalaureate degree. Admission into the advanced course is by Military Science Department approval.

Students with prior military service, Reserve/National Guard service or four years of high school JROTC, however, may be given equivalency credit for the basic course and allowed to proceed directly into the advanced course. Likewise, other students are afforded the same opportunity for the two-year program through an accelerated six-week summer program in lieu of the basic course. All ROTC students are eligible to compete for two- and three-year scholarships. Advanced course students receive \$150 a month for a living allowance.

Prior to commissioning, all contracted cadets must complete at least one undergraduate course from each of the following three fields of study: written/oral communication, military history and computer literacy. (See the military science department for a list of UNO courses which satisfy this requirement.)

**Army ROTC**

The Army Reserve Officer Training Corps Program was established at the University of Nebraska at Omaha in July 1975, when an agreement between Creighton University, the University of Nebraska at Omaha and the Department of the Army was signed. This agreement affords UNO students the opportunity to participate in the Army ROTC Program at Creighton University.

The department of military science, an accredited instructional department of the College of Arts and Sciences at Creighton. The department functions in accordance with the academic standards and policies of Creighton University and the Department of the Army, and adheres to the rules of the University of Nebraska at Omaha in the administration of the program for UNO students.

**Army Reserve/Army National Guard Program**

Students who are members of the Army Reserve or National Guard and who have attained sophomore status may enroll in the ROTC advanced course without taking any basic course classes. They must graduate not later than eight months after commissioning.

Those students qualifying for this two-year program may receive \$150 per month for a living allowance and will also receive 50 percent tuition assistance if in the Army National Guard.

**For more information...**

please call (402) 280-1160, (402) 280-1155 or (402) 554-3321.

**UNIVERSITY HONORS PROGRAM**

The mission of the University of Nebraska at Omaha Honors Program is to create an enhanced and supportive learning environment responsive to the educational needs of highly able and/or exceptionally motivated undergraduate students. This will be accomplished through participation of faculty noted for excellence in teaching in small honor sections of regular courses, interdisciplinary Honors colloquia, special seminars, collaborative projects with faculty, and through increased opportunity for undergraduate research and creative activity. The University Honors Program's director is responsible to the Vice Chancellor for Academic Affairs through the Associate Vice Chancellor for Academic Affairs. The director works closely with the faculty and student University Honors Committee to establish and review policies and procedures for the University Honors Program.

Consistent with University Honors policies, the University Honors Program shall: distribute information about Honors requirements, benefits, awards and special opportunities to prospective students and other interested persons; admit students to the Honors Program, maintain students' records, and note students' completion of requirements to the Registrar; provide Honors advising; work with relevant programs to increase Honors Program participation of students of color; promote Honors students' involvement in undergraduate research/creative activity which will culminate in a senior thesis or project;

facilitate communication in the community at large and within the UNO community among students, faculty, staff and administration regarding Honors matters; equip and maintain the Honors Program Study Lounge; and participate fully in the activities of the National Collegiate Honors Council and the Great Plains Honors Council.

While the Honors Program is University wide, each college specifies its requirements for entry into the Honors Program and for completion of the Program; and each college has its own Honors Program coordinator/adviser. Colleges on the UNO campus with Honors Programs are Arts and Sciences, Business Administration, Continuing Studies, Education, Engineering and Technology, Fine Arts, Human Resources and Family Sciences, Information Science and Technology, and Public Affairs and Community Services. Students in the University Division may also participate in the University Honors Program.

Students are admitted to the Honors Program as entering first year students with ACT scores of 26 and above and/or SAT scores of 1250 and above or by special recommendation from their high school principal or counselors. Students already enrolled at UNO are admitted to the Honors Program if their overall GPAs range from 3.25 to 3.50, depending upon their respective colleges. Transfer students from other universities' Honors Programs will be eligible if they were members in good standing in their previous programs and complete the UNO Honors program requirements. Students meet the requirements of the University Honors Program by successfully completing 30 hours of credit in Honors courses and by meeting their college's grade point requirements. The thirty credit hours of Honors work are part of the student's overall program, not additional hours. Students may fulfill these required hours of Honors credit by taking Honors sections of general education requirements, interdisciplinary Honors Colloquia, Honors Internships, special seminars, experiential classes, contracting for Honors credit, and by participating in the Senior Honors Thesis/Project. Students may also participate in the National Collegiate Honors Council National Honors Semesters. Honors credit is limited to members of the Honors Program.

Further information on the University Honors program can be obtained by contacting the University Honors Office by mail: Allwine Hall 418, UNO; by phone: (402) 554-2696; by FAX: (402) 554-3781; by e-mail: saltzman@unocdc.unomaha.edu; by webpage: <http://www.unomaha.edu/~wwwhonor>; or through the UNO home page (academics to UNO Honors Program).



### GENERAL INFORMATION

The College of Agricultural Sciences and Natural Resources (CASNR) at the University of Nebraska-Lincoln offers a variety of courses on the University of Nebraska at Omaha campus. These courses are designed to meet the demands of an urban population in better understanding the food processing, horticulture and landscape architecture industries. The College has initiated a sequence of courses in food science and horticulture (see course descriptions).

Contact Assistant Professor Steven Rodie, Pre-Horticulture Program, University of Nebraska at Omaha (402/554-3752); and/or contact the Dean's Office, CASNR, University of Nebraska-Lincoln (1/800/742-8800, ext. 2541).

### Food Science and Technology (FSCI)

**1310 Science of Food** (3) A basic and applied science, general education course emphasizing scientific concepts in biology, chemistry and physics using food as a model. Students will study food from its chemical and nutritional perspectives and the fate of food from production to consumption.

**3960 Food Safety/Sanitation** (3) This course is designed to give students an understanding of the biological, chemical and physical factors that influence the safety of food. Factors to be considered include food allergy, bacterial intoxications and infections, parasites, naturally occurring toxins, food additives and chemical contaminants. Prereq: BIOL 1020; CHEM 1180, 1184, 1190 and 1194.

### Horticulture (HORT)

**1300 Introduction to Horticulture** (4) An introductory course in horticulture that offers a hands-on approach to science. Students will discuss the scientific factors affecting the growth of vegetables, bedding plants and cut flowers; and will propagate plants in laboratory sessions using a variety of techniques from seeding and grafting to cloning.

**2000 Landscape and Environmental Appreciation** (3) This course prepares students to see and critically examine values and processes resulting in human landscapes and natural environments. Concepts and tools presented in the course allow students to understand the context of local and global environments and significant historical landscapes. Emphasis will be placed on landscape as an indicator of aesthetic quality; design principles and processes as integrators of humans and nature; and the garden as a model for creating sustainable landscapes.

**2120 Landscape Plant I** (3) Identification of plants using botanical and common names for herbaceous annuals, perennials, grasses, ground covers, vines, trees and shrubs commonly found in Great Plains gardens, parks and landscapes is stressed through field visits.

**2130 Landscape Plants II** (3) This is a continuation of Horticulture 2120 stressing site requirements, landscape uses and maintenance issues for herbaceous ornamentals, grasses, groundcovers, vines, trees and shrubs commonly found in Great Plains gardens, parks, and landscapes. Common cultivars and additional species not covered in HORT 2120 also receive attention.

**2210 Plant Propagation** (3) Principles and practices involved in sexual and asexual propagation of horticultural plants. Laboratory exercises will provide practical applications of physiological principles (and an understanding of structures of the different methods of propagating plants).

**2660 Introduction to Landscape Design** (4) This course covers graphic techniques for landscape design; analysis and process for design of the landscape; studio problems on value, texture, form and space; and explorations of design characteristics of plants, landforms and their combination.

**Architecture** (ARCH)

**1060 Introduction to Design** (3) Cross-listed with ID 1060. Investigations into architecture, interior design and related design fields. The forces that shape these fields and the process of production they rely upon.

**1200 Architectural Graphics** (3 credits, Lect 1, Studio 6) Introduction to the fundamentals and systems of graphic expression. Exercises in lettering; orthographic projection; descriptive geometry; shade and shadows; perspective; and principles of construction drawing. Pre-architecture and pre-interior design majors only.

**2100 Basic Design** (3 credits, Lect 1, Studio 6) Exploration of the controls that determine abstract form. Exercises in two- and three-dimensional composition. Introduction to the design vocabulary and elements of visual organization. Prereq: Pre-architecture and pre-interior design majors only, and ARCH 1200, or by permission. Parallel: ARCH 2200

**2110 Elements of Architectural Design** (3 credits, Lect 1, Studio 6) Basic design concepts as applied to the design of architectural space and form. Human scale, natural light, and structure as for determinants. Design parameters initially considered as isolated entities and then synthesized into mutually reinforcing totalities. Prereq: Pre-architecture and pre-interior design majors only, or by permission and ARCH 2100, 2200. Parallel: Arch 2210.

**2200 Visual Communication I** (2 credit, Lect/Studio 6) Representation of depth, movement, and structure through use of line, tone, and transparency. Perspective drawings of interior and exterior architectural space. Projects emphasizing pencil and pen and ink as presentation tools. Prereq: Pre-architecture and pre-interior design majors only, and ARCH 1200 or by permission. Parallel: Arch 2100.

**2210 Visual Communication II** (2 credit, Lect. 1, Studio 6) Introduction to theory and effects of color. Representation of depth, movement, and structure through use of color. Perspective drawing interior and exterior architectural space in color. Prereq: Pre-architecture and pre-interior design majors only, and ARCH 2100, 2200, or by permission. Parallel: Arch 2110.

**2230 Computer Applications in Architecture** (3) The architecture student will be provided with a basic understanding of the wide range of man-machine relationships that apply to the profession of architecture. Emphasis will be directed toward introducing the student to the operational procedure and usage of computer programs that exist in the architecture computer program library. Upon completion of this course, the student should be able to make effective use of the computer facilities. Prereq: Pre-architecture and pre-interior design majors only.

**2400 History of Architecture** (3) Survey of the development of architecture and its expression as an artifact of material culture from prehistory to the present. Prereq: Sophomore.

**Community and Regional Planning** (CRP)

**4000 Introduction to Planning** (3) The field of community and regional planning is introduced and is studied in relation to the history of cities, urbanization and regionalization. The course explores the origins and evolutions of American urban and regional planning practice. The planning process as a response to social, political, physical, and economic factors is analyzed. The course introduces the community comprehensive planning process, plan implementation, and functional areas of planning. Prereq: Senior.

**4500 Social Planning and Policy** (3) The area of social planning and policy is introduced and studied through a historical presentation of U.S. social welfare policy, an exploration of models utilized by government and human service agencies in the planning of social programs, and an analysis of contemporary social policy issues. Areas to be covered include privatization, universalism vs. selectivity, race and ethnicity, homelessness, and poverty. Prereq: Senior.

**4600 Planning and Design in the Built Environment** (3) The course introduces principles and practices of planning, design, and implementation for multiple-structure built environments. The influences of physical, social, environmental, and economic factors upon planned and designed environments are studied. Various planning and design methods, processes, and products are introduced. Means of project implementation are explored, and examples of existing and proposed projects are studied. Prereq: Senior.

**4700 Environmental Planning and Policy** (3) The course introduces environmental planning, including its history and origins. Major environmental issues throughout the world, and the roles of planning in addressing these problems, are discussed. The environmental planning process and environmental legislation are studied. Prereq: Senior.

**4800 Economic Development and Regional Planning** (3) This course introduced the theory and principles of economic development planning and regional planning involving multiple jurisdictions. Concepts, analytical approaches, and theories of economic growth of local communities and multijurisdictional regions are introduced. The course includes consideration of local economic development plans for small communities, as well as regional plans for multijurisdictional areas. International perspectives of economic development and regional planning are also discussed. Prereq: Senior.

**4970 Selected Topics, Community & Regional Planning** (1-6) Group investigation of a topic in community and regional planning and development. Prereq: Permission.

**Interior Design** (ID)

**1060 Introduction to Design** (3) Cross-listed with ARCH 1060. Investigations into architecture, interior design and related design fields. The forces that shape these fields and the process of production they rely upon.

## Biology (BIOL)

**1000 Introduction to Careers in the Health Field** (1) A course designed to introduce students to the many diversified opportunities in the health field, the personal and educational requirements for the various careers, and selected experiences to assist the student in deciding on a health field career.

**1010 Introduction to Medical Technology** (1) Aims and career opportunities in medical technology.

**1020 Principles of Biology** (5) An intellectual, esthetic and scientific approach to the complexities of living things and their interrelationships in nature.

**1030 Understanding Common Drugs** (2) This course describes the action and therapeutic use of commonly used drugs and the actions and effects of specific illicit drugs. The course will provide biology and non-biology major students with the general knowledge of how drugs work and their effects on the body. Prereq: None. High school biology and high school chemistry are recommended.

**1330 Environmental Biology** (3) Study of human ecology with emphasis on the effects of human populations on the earth's resources and on the environment.

**1450 Biology I** (5) General principles of biology including consideration of structure, function, reproduction, genetics, and classification. Examples will be drawn from the bacteria, fungi, protists and plants, with a special emphasis upon the seed plants. Prereq: Intended as the first course for Biology majors. Recommended: High school biology and chemistry.

**1730 Introduction to Human Physiology** (3) An exploration of human function designed for any student interested in physiology. This comprehensive survey of functions carried on by major systems within the human body provides students with a better understanding of normal and abnormal functions in their own bodies. Recommended: High school biology and chemistry.

**1750 Biology II** (5) A study of the biology of the animal kingdom, and of the principles of plant and animal ecology and evolution. Prereq: BIOL 1450.

**2140 Genetics** (4) A survey of the principles of genetics including those of both classical transmission genetics and molecular genetics as they apply to organisms ranging from bacteria and viruses to humans. Lecture and discussion. Prereq: BIOL 1020 or 1450, CHEM 1140 or 1180 or the equivalent.

**2440 The Biology of Microorganisms** (4) A comparative study of microorganisms, principles and applications with emphasis on bacteria. Prereq: BIOL 1020 or permission of instructor.

**2740 Human Physiology and Anatomy I** (4) Structure and function of the cell, and the nervous, skeletal, muscle systems and special senses as well as necessary aspects of chemistry, physics, embryology and histology. Prereq: High school or college biology or zoology and high school or college chemistry.

**2840 Human Physiology and Anatomy II** (4); Structure and function of the circulatory, respiratory, digestive, excretory, endocrine, reproductive systems and embryology. Prereq: BIOL 2740 or permission of instructor.

**3020 Molecular Biology of the Cell** (3) A study of cell structure in terms of molecular components. Topics to be covered include membrane structure and function, metabolism and cell homeostasis, macromolecules and information flow, and cellular differentiation. Prereq: BIOL 2140 and at least one semester of inorganic chemistry.

**3100 Invertebrate Paleontology** (3) An introduction to the development of life through the study of the morphology, evolution and geological distribution of fossils. Must be taken concurrently with BIOL 3104 for one credit hour. Prereq: GEOL 1180 or permission.

**3104 Invertebrate Paleontology Lab** (1) An examination of representative specimens of groups of organisms important in the fossil record and an introduction to analytical techniques in paleontology. Must be taken concurrently with BIOL 3100. Prereq: GEOL 1180 or permission.

**3150 Writing and Communication in the Biological Sciences** (3) This is a course in writing for students majoring in the biological sciences. It is designed primarily to prepare students to report results of original research in biology. Topics will include the scientific literature, the organization and presentation of data in biological reports, and the preparation of posters and oral presentations for scientific meetings. Prereq: Biology major, junior or senior standing, ENGL 1150 and 1160 or equivalent.

**3230/8235 Microtechnique** (3) A course in the techniques of fixation, dehydration, staining, cleaning and mounting biological material in the manufacture of microscope slides. Prereq: Two years of biological sciences.

**3240 Introduction to Immunology** (3) An introduction to the fundamentals of immunology including the immune system, the immune response, humoral and cellular immunity, and antibodies. In addition, immunoassay, immunopathology, cancer immunology, and histocompatibility will be considered. Prereq: BIOL 1450, 1750 and 2140; junior. Recommended: BIOL 2440 or CHEM 3650 or organic chemistry.

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

**3530/8535 Flora of The Great Plains** (3) The classification, identification, and recognition of common vascular plants, including weeds, ornamentals and indigenous plants, found in the Great Plains. Prereq: BIOL 1450, 1750 and junior-senior.

**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 and junior-senior.

**3730/8735 Fauna of The Great Plains** (3) A survey of the common animal groups found in the Great Plains, including their evolution, ecology, distribution and specific adaptations to the environment of the temperate North American grasslands. Prereq: BIOL 1450, 1750 and junior-senior.

**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, junior-senior. Prereq: BIOL 1750.

**3830 Biology of Pathogenic Microorganisms** (3) A study of the biology, epidemiology and pathogenicity of bacteria and viruses, with emphasis on human pathogens. Prereq: BIOL 3240 and BIOL 2440.

**4030 Special Topics in Biology** (1-3) A variable credit lecture and/or laboratory course for biology majors pertaining to a specific biological topic not available in the regular curriculum. Topics will be developed by individual faculty members reflecting their special interests and expertise. The course may be repeated for credit. Prereq: Junior-senior.

**4040 Directed Readings in Biology** (1-3) A faculty directed study of a biological subject through selected readings, oral reports and a final written report. May be repeated up to a total of six hours for 4040 and 4050 combined. Prereq: Junior-senior and written permission of instructor.

**4050 Supervised Research in Biology** (1-3) Completion of a faculty supervised research project involving experimental design, data collection and analysis, and a final written report. May be repeated up to a total of six hours of BIOL 4040 and 4050 combined. Prereq: Junior-senior and written permission of instructor.

**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/GEOL 3100 or BIOL 3100, junior-senior.

**4120/8126 Conservation Biology** (3) Directed study in preservation, conservation and management of native and reestablished ecosystems and biota. One two-day field trip may be scheduled. Prereq: Junior-senior in biology or permission of instructor. Recommended: BIOL 3340/8345.

**4130/8136 Molecular Genetics** (4) Examination of current topics in molecular genetics including DNA perpetuation and packaging, gene structure and regulation, and gene cloning methods and their application. Lecture, discussion and laboratory. Prereq: BIOL 2140, 3020 and CHEM 2210 or 2260 or their equivalents.

**4140/8146 Cellular Biology** (4) This course is a comprehensive study of the structure and function of plant and animal cells. Prereq: BIOL 1450, 1750, and organic chemistry, or permission of instructor, junior-senior.

**4180/8186 Limnology** (4) A study of the physical, chemical, and biotic relationships that serve to establish and maintain plant and animal communities in a freshwater environment. Prereq: BIOL 1450, 1750, organic chemistry, and junior-senior.

**4210/8216 Fire Ecology** (3) Study of fire in ecosystems including characteristics of fire, effects on flora, fauna, and the abiotic environment, and use in maintaining native ecosystems. May include two weekend fieldtrips. Prereq: BIOL 3340, junior-senior and 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.

**4230/8236 Organic Evolution** (3) A study of organic evolution in terms of evidences which support the theory and the mechanisms involved in the process. Lecture and discussion only. Prereq: BIOL 2140, junior-senior.



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

**4280/8386 Laboratory Research in Biology: Animal Behavior** (3) Laboratory and field studies of animal behavior with an ethological emphasis. Classical laboratory experiences and independent study will be conducted. Prereq: BIOL/PSYCH 4270/8276. (Same as PSYCH 4280).

**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.

**4320/8326 Microcomputers in Biology Laboratory** (2) An individualized laboratory course in which the student will complete selected biocomputing projects. Prereq: BIOL 4310/8316 or concurrent enrollment or written permission of instructor.

**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, junior-senior.

**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, chemosystematics, and modern herbarium techniques for lichens and other cryptograms. Prereq: BIOL 1450, 1750, junior-senior or permission.

**4370/8376 Phycology** (3) A survey of the algae dealing with their ecology, morphology, physiology, taxonomy and evolution. Prereq: BIOL 1450, 1750, junior-senior or permission of instructor.

**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, junior-senior.

**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, junior-senior.

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

**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 Virology** (4) This course will examine the morphology, genetics, pathogenesis and molecular biology of viruses. The course will emphasize the application of viral systems to molecular biology research. Current topics in virology, such as HIV and prions, will also be examined. Prereq: CHEM 2260 and 2274 or CHEM 2210 and 2214, BIOL 3020 and 2140. Recommended: Biochemistry.

**4540 Principles of Systematics** (3) A study of the science of classification of living organisms with particular emphasis on evolutionary relationships among groups. Prereq: BIOL 1450 and 1750, junior-senior.

**4550 Biotechnology Internship** (3) Practical laboratory experience for students in the bachelor's of science program in biotechnology. In consultation with the biotechnology adviser and principal investigators, students will select a research laboratory where they will carry out an independent investigation for one semester. Most placements will be at UNMC or UNO. Prereq: Biotechnology major, at least one 4000 level BIOL laboratory course. Recommended: Biochemistry.

**4640/8646 Microbial Physiology** (4) Examination of physiological diversity found among microorganisms with an emphasis on experimental procedures and practical applications. Lecture and laboratory. Prereq: BIOL 3020.

**4610 Environmental Field Methods** (3) Field methods in geography, geology and ecology. A systematic investigation of techniques in environmental assessment, including natural physical and biological characteristics and human modifications. Course is organized to accommodate variable needs of students with different backgrounds and career choices. Prereq: Permission of instructor.

**4650 Biochemistry I** (3) A study of the structure and function of biomolecules and biochemical reactions with an emphasis on enzymes and carbohydrate metabolism. Prereq: CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020. BIOL 4654 must be taken concurrently. (Same as CHEM 4650)

**4654 Biochemistry I Laboratory** (1) A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills. Prereq: CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020. BIOL 4650 must be taken concurrently. (Same as CHEM 4654)

**4660 Biochemistry II** (3) A continuation of the study of the structure and function of biomolecules and biochemical reactions with an emphasis on metabolism of carbohydrates, lipids, amino acids and nucleotides, and the chemistry of signal transduction and genetic information transfer. Prereq: CHEM 4650 and 4654 or BIOL 4650 and 4654. BIOL 4664 must be taken concurrently. (Same as CHEM 4660)

**4664 Biochemistry II Laboratory** (1) A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills, and to gain practical experience in experimental design. Prereq: CHEM 4650 and CHEM 4654 or BIOL 4650 and BIOL 4654. BIOL 4660 must be taken concurrently. (Same as CHEM 4664)

**4720/8726 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 4730 or permission of instructor, junior-senior.

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

**4740/8746 Animal Physiology** (4) Detailed study of the functions of selected organ systems emphasizing the integrative and homeostatic roles of each system. Prereq: BIOL 1450, 1750, and physics. Recommended: BIOL 3020, organic chemistry.

**4780/8786 Vertebrate Zoology** (4) A study of the general biology of the subphylum vertebrata including the morphology, anatomy, physiology and ecology of vertebrate representatives. Prereq: BIOL 1750, junior-senior.

**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 1750, junior or senior standing.

**4800 Internship in Environmental Management and Planning** (1-3) Internship with local agencies enabling students to gain knowledge and experience in comprehensive regional planning or environmental planning and management. Prereq: Senior, permission in consultation with cooperating faculty members.

**4820/8826 Introduction to Environmental Law and Regulations** (3) Seminar on environmental law and regulations. Addresses federal regulations, implementing instructions, legal principles and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation are discussed. (Same as GEOG 4820/8826) Prereq: Junior-senior and permission.

**4840/8846 Herpetology** (4) The biology of amphibians and reptiles, including their evolution, classification, anatomy, physiology, ecology, distribution and identification, with emphasis on North American groups. Prereq: BIOL 1750.

**4850/8856 Developmental Biology** (4) A study of the principles of development of multicellular organisms. Current concepts of interactions at the biochemical, cellular and tissue levels will be included. Prereq: BIOL 1450, 1750, 3020 and junior-senior or permission of instructor.

**4880/8886 Invertebrate Zoology** (4) A comprehensive study of the invertebrate animals. Prereq: BIOL 1750.

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

**4920/8926 Parasitology** (4) Taxonomy, morphology, physiology, life history, dissemination and control of the parasitic protozoans, 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, junior-senior.

**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.

**4960/8966 Advanced Genetics** (3) An in-depth consideration of topics in genetics, including the conceptual and molecular definition of a gene, cytogenetics, mutation, population genetics, developmental genetics, gene regulation and the application of genetics to other areas of biology. Prereq: BIOL 2140 and 3020

**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, junior-senior.

## Black Studies (BLST)

**1000 Introduction to Black Studies** (3) An overview: origins of black people. African civilization in the western hemisphere. Folklore, mythology and customs. Rise of black nationalism. Role of black consciousness. Present day alternatives. Suggested for all majors and minors.

**1050 Ancient African Civilization** (3) Investigates the development of the civilization of ancient Egypt and its influences on the cultural development of other African and Mediterranean states, including ancient Greece. Emphasis is on religion/philosophy, archaeology/art and history.

**1100 Black American Culture** (3) Informal discussions of cultural patterns developed by Afro-Americans with special emphasis on music.

**1220 Law in The Black Community** (3) Justice relative to the black community experience; the sociology of crime, enforcement and penology, including attention to the political prisoner.

**1260 Survey of Black Literature** (3) This course will give students a general background in black literature and will encourage them to take advanced courses in this field. It consists of black literature not only in the U.S. but also in the West Indies and Africa. The main themes common to the black experience will be analyzed through an interesting study of some of the major works of some important black writers.

**1340 Introduction to Contemporary Africa** (3) A survey of the geography, population and cultural traditions of contemporary Africa. Economic, political, cultural and social changes in the second half of the 20th century, including the problems and the struggle for national integration and economic adjustments will also be examined.

**1400 Issues in Black Communities** (3) Focusing primarily on urban areas, this course will analyze the roles of municipal, state, and federal governments in black neighborhoods. Political, educational, economic, cultural and social aspects of black community problems will be analyzed. Data from specific communities throughout the U.S. will be examined, and strategies for the solution of problems will be explored.

**1950 Black Women in America** (3) Examines the contributions that black women have made historically to the development of this nation. It reviews the evolution of the social, economic and political status of the black woman in this society, with special emphasis on her struggle for freedom and equality.

**2000 The Black Experience in Society** (3) Review, analysis and evaluation of the research literature oriented toward the field of black studies. Special attention will be given to historical, theoretical and methodological considerations.

**2120 History of Modern Africa** (3) This course covers the era of the beginning, development and decline of European colonialism in Africa. The movement for decolonization, the emergence of independent sovereign nations and the strategic role that Africa plays in the forum of industrialized and developed nations, is investigated. It examines the impact of alien cultures on traditional Africa, and the struggle for a resolution of the conflict between the three major traditions on the continent — the Islamic, Western and Indigenous.

**2130 Patterns of African Government** (3) The course will deal with the profiles of selected African and African-American leaders, their personalities, backgrounds, ideologies and political strategies for ruling their countries or movements.

**2210 The Black Family in the United States** (3) Analysis of historical, institutional and comparative elements of family life in the United States experienced by the largest racial minority with particular emphasis on social science theory. Prereq: BLST 1000 or permission of instructor.

**2260 Black Short Story** (3) A study of short stories written by black American and/or black African authors as literature and as experience. Explains and defines cultural terms and practices, and attempts to prepare students for multicultural living.

**2360 Contemporary Black Literature** (3) This course traces the development of the literary contribution that black Americans have made from 1940 to the present. Included will be a study of four genres: poetry, short story, novel, and drama. Trends to be studied include the movement toward literary assimilation in the 1940s-1950s and the subsequent movement toward black art in the 1960s to the present.

**2410 Afro-American History to 1865** (3) The course examines the history of the earliest Africans in the Americas, treating briefly traditional African societies. It covers the transatlantic slave trade and its effects on Europe, Africa and the Americas, and analyzes the development of Afro-American culture and the struggle for freedom.

**2420 Afro-American History Since 1865** (3) A survey of Afro-American history from the Civil War to the present. Covers Reconstruction and its overthrow, including the new methods of control which replaced slavery. Discusses the development of black ideologies and institutions. Traces urban migration and its impact on black society and culture. Follows black progress through World War II, the 1954 Supreme Court Decision, and rising militancy.

**2510 Music and the Black Experience** (3) The course will examine the origin and deeper meanings of black music as cultural history of Africans and people of African descent.

**2730 Religion and Theology in Afro-America** (3) Examines the development of the black church in America from the period of the First Great Awakening and investigates and analyses the theological foundation, the nature and source of Afro-American religious expression.

**2830 Contemporary Novel (Emphasis On Black Writers)** (3) A study of some of the most important ideas and techniques of the novel as genre, using primarily the black-authored novel.

**2900 African Civilization — The Middle Period** (3) This course traces the development of African History from the beginning of the Civilization of Ghana (800 B.C.) to the period of European exploration of Africa (mid 15th century). It examines the main achievements, events and individuals in the Empires of Ghana, Mali, Songhay, Zimbabwe, etc.

**3000 Survey of Black Education** (3) History of black education starting from its early origins in Timbuktu, Egypt and Ethiopia through the American black experience. Impact on western civilization. Black colleges and universities: the black scholar and the community. Contributions of black scholars to general knowledge. Myth of black intellectual inferiority. From interest to disenchantment. Role of educational institutions in American society. Proposed models for coping with urban education. Prereq: BLST 1000 or permission of instructor.

**3030 Geography of Africa** (3) The political, physical, economic and demographic features of Africa with emphasis on the effect of these factors in development. The major features of the broad geographical regions of Africa. Prereq: junior.

**3120 The Black Experience in American Politics** (3) A survey of the African-American quest for liberation within and outside the orthodox political system of the United States with a focus on the institutional and structural arrangements which have denied liberation and prescriptions for meaningful change. (Same as PSCI 3120). Prereq: BLST 1000 or junior.

**3140 Apartheid in South Africa** (3) A study of South Africa from pre-European settlement to the present, with emphasis on the interaction among the different ethnic groups and their respective social, economic and political evolution. Prereq: BLST 1000 or junior.

**3200 Black Nationalism and Pan Africanism** (3) A study of the development of movements for self-determination in Afro-America and an analysis of various nationalistic conceptual frameworks in the Diaspora and on the Continent. Prereq: BLST 1000, 2410, or permission of instructor.

**3220 Afro-American History Since 1954** (3) This course is divided into three main parts: the Civil Rights Phase (1954-1963), during which the dominant mood was optimism over the possibilities of integration; the Black Power Phase (1963-1974), when militant separatism was popular; and the Pragmatist Phase (1972-present), characterized by attempts to preserve and maintain gains already won. Prereq: Junior or permission of instructor.

**3500 Economic Development in Africa** (3) This course traces the evolution of modern African economic systems. Methods of production, distribution, and exchange are examined. There will also be a survey of the processes and problems of colonial economic exploitation to post-independence underdevelopment. The nature of economic development, planning, regional cooperation, international trade and foreign aid will be critically analyzed. Prereq: BLST 2130, BLST/GEOG 3030 or junior.

**3650 Slavery and Race Relations in the Americas** (3) This course focuses on the black experience in the Americas outside of the U.S. Four major geographical areas are studied: Canada, Central America, the Caribbean and South America. Black life is considered with regard to historical background and geographical factors, and in comparison to white and Native American experience. An effort is made to trace common themes by using the cross-cultural approach. Prereq: Junior or permission of instructor.

**3750 Issues in Black Literature** (3) This course is designed to provide a forum for consideration of critical issues in black literature. An examination of some of the theoretical issues in black aesthetics will be undertaken, including: the role of the black artist as purposeful agent and guardian of image; the role of literature in the black community; and the audience. Recent trends in the black novel will be studied, especially the emergence of contemporary African writers as modern technicians of language and literary form through the development of new forms from old narrative ones. Prereq: BLST 1260, 2360, or permission of instructor.

**3850 Black Oratory** (3) This course is intended to be an appreciation of African and African-American oratory, aesthetics, and cultural tradition through a critical study of representative orations/speeches of past and contemporary black leaders in their socio-historical and political contexts. It will investigate the nature of their oratory and assess its role in the fight against slavery, colonialism, fascism and oppression. Prereq: BLST 1260 or permission of instructor.

**3920 Black Aesthetics** (3) This is a critical study of the theories of artistic beauty and their application in the poetic, fictional and dramatic works of Afro-Americans from the 18th century to the present. Special attention will be paid to the role of the black artist in American society. Prereq: BLST 1260 or permission of instructor.

**3950 Philosophy of Afro-Americans** (3) Examines both Afro-American philosophy proper, and the philosophical concerns of Afro-Americans generally through a treatment of their works. Prereq: BLST 1000, 1100, PHIL 1010 or permission of instructor.

**3980 Special Topics in Black Studies** (3) Intensive research into specific but unrelated topics germane to the black experience. Since the topics are of a variable nature, this course may be repeated for credit as long as the topics are different. Prereq: Junior or permission of instructor.

**3990 Community Study Project** (3) Designed for the student to do field work in a community-based project in the areas of housing, education or social services. Prereq: Junior or above, or permission of instructor.

**4000 Special Topics Seminars: Humanities and the Black Experience** (3-6) The special topics: Humanities and the black experience would be a group of seminars presented by scholars of various disciplines related to black studies. Prereq: Junior or permission of instructor.

**4090/8096 Black Studies Oral History** (3) The focus of this course is to examine the methods, procedure, transcription and use of oral history in black studies research. Emphasis will be directed toward describing and evaluating the variables of memory, history and cultural authority to produce written source materials collected from oral interviews. Prereq: BLST 1000, 1100, 3220 or permission of the instructor.

**4260 Women of Color Writers** (3) Women of Color Writers is designed to introduce students to the multicultural, literary experience and contributions of women of color writers. The course will elucidate the multi-ethnic and feminist/womanist perspectives reflected in literary works by examining the themes, motifs and idioms used to portray woman. The course examines critically the implications and conceptual grounds of literary study which have been based almost entirely on male literary experiences. Prereq: Black studies major or permission of instructor.

**4500 Philosophy and Theology of Martin L. King Jr. and Malcolm X** (3) Critical study and analysis of the major ideas and doctrines that formed the conceptual frameworks of these two men: Cultural Pluralism, Self-determination, Pan Africanism, personalism, Satyagraha, Non-Violence, Civil Disobedience, Reform and Revolution. Prereq: BLST 2420, 3200, or permission of instructor.

**4700 African Philosophy** (3) Explores ancient, traditional and contemporary philosophical/theological concepts and doctrines of Africans through an investigation of their cosmological, metaphysical, ontological and ethical world view. Prereq: BLST 1000, 1050, PHIL 1010 or permission of instructor.

**4900 Independent Study** (1-3) This course is designed for those students who are capable of pursuing, independently, an area of Black Studies that is not covered under the existing curriculum. The student will be supervised by a member of the BLS department. All course assignments, requirements, and expectations will be clearly indicated in advance. May be repeated for credit, up to six hours, under a different topic. Prereq: Permission of instructor.

## Chemistry (CHEM)

**NEW POLICY, effective spring 1996. To assure more class openings for students making regular academic progress, each student will be allowed to enroll for a given chemistry course in a maximum of three separate semesters.**

*NOTE: All courses cited as prerequisites for enrollment in Chemistry must be completed with a grade of "C" or better.*

**1010 Chemistry in The Environment and Society** (3) A survey of the relationship of chemistry to current problems in environmental control, medicine, technology and energy production. May be used to partially meet the natural science requirement. Prereq: MATH 1310 or equivalent.

**1014 Chemistry in the Environment and Society Laboratory** (1) Laboratory to be taken concurrently with CHEM 1010.

**1140 Fundamentals of College Chemistry** (4) A comprehensive introduction to the basic principles of chemistry. This course is intended for all students needing a one-semester introductory course with laboratory including allied health students, and for students seeking a stronger background before enrollment in Chemistry 1180. This course may be used to meet the science requirement for the core curriculum. CHEM 1144 to be taken concurrently. Prereq: MATH 1310 or equivalent or UNO math placement score of 2, and satisfactory score on the math section of the chemistry placement exam. (*Fall, spring, summer*).

**1144 Fundamentals of College Chemistry Laboratory** (1) Laboratory explorations of chemical measurements, modeling, reactions and analyses. Must be taken concurrently with CHEM 1140. (*Fall, spring, summer*)

**1180 General Chemistry I** (3) A comprehensive survey of chemical principles primarily for students planning a professional course of study. It is assumed that all students will have a good background in elementary chemical principles. CHEM 1184 normally to be taken concurrently. Prereq: High school chemistry or CHEM 1140 and MATH 1310 or equivalent. Recommended: High school physics or one semester of college physics. (*Fall, Spring, Summer*)

**1184 General Chemistry I Laboratory** (1) General chemistry laboratory normally to be taken concurrently with CHEM 1180. (*Fall, Spring, Summer*)

**1190 General Chemistry II** (3) A study of acid-base theory, ionic equilibria, complexation, oxidation-reduction, thermodynamics and kinetics. CHEM 1194 to be taken concurrently. Prereq: CHEM 1180, 1184. (*Fall, Spring, Summer*)

**1194 General Chemistry II Laboratory** (1) Quantitative analysis laboratory to be taken concurrently with CHEM 1190. Includes statistics as applied to quantitative analysis. Prereq: CHEM 1180, 1184 or department recommendation of advanced placement. (*Fall, Spring, Summer*)

**2210 Fundamentals of Organic Chemistry** (4) Lecture three hours and discussion one hour. Chemistry of carbon compounds. A one-semester course designed primarily for students in biology, elementary science education, home economics, nursing and allied health fields. CHEM 2214 to be taken concurrently. Prereq: CHEM 1140, 1144 or CHEM 1190, 1194.

**2214 Fundamentals of Organic Chemistry Laboratory** (1) Elementary organic chemistry laboratory to be taken concurrently with CHEM 2210. Prereq: CHEM 1140, 1144 or CHEM 1190, 1194.

**2250 Organic Chemistry I** (3) The fundamental chemistry of carbon compounds. Prereq: CHEM 1190, 1194. (*Fall, Spring*)

**2260 Organic Chemistry II** (3) A continuation of the study of the compounds of carbon. CHEM 2264 or 2274 to be taken concurrently. Prereq: CHEM 2250. (*Fall, Spring*)

**2274 Organic Chemistry Laboratory** (2) A laboratory course in the skills and techniques of experimentation in organic chemistry, to be taken concurrently with CHEM 2260. Prereq: CHEM 1194. (*Fall, Spring*)

**2400 Quantitative Analysis** (3) Theory of quantitative analysis applied to gravimetric and volumetric analysis; theory of error and evaluation of analytical data; introduction to instrumental analysis and separation methods. CHEM 2404 to be taken concurrently. Prereq: CHEM 1190, 1194 or equivalent. (*Fall*)

**2404 Quantitative Analysis Laboratory** (1) Laboratory application of principles of quantitative analysis and experience with its unit operations. Use of reaction chemistry, separations, potentiometry and spectrophotometry in determinations. Introduction to quality control. CHEM 2400 to be taken concurrently. Prereq: CHEM 1190, 1194. (*Fall*)

**2500 Introduction to Inorganic Chemistry** (3) A survey of descriptive inorganic chemistry including atomic and molecular properties and reactivities of metallic and non-metallic species. To be taken concurrently with NSCI 2500. CHEM 2260 normally taken concurrently. Prereq: CHEM 1190. (*Spring*)

**3250 Advanced Organic Laboratory** (1) Advanced course in laboratory practices. Prereq: CHEM 2260, 2264 or 2274, and permission. (*Offered on demand*)

**3350/8355 Physical Chemistry I** (3) A presentation of selected topics from the areas of classical thermodynamics and electrochemistry. Prereq: CHEM 2260, 2264 or 2274, 2400, 2404, PHYS 2120, MATH 1960. (*Fall*)

**3354/8359 Physical Chemistry I Laboratory** (1) Physical chemistry laboratory to be taken concurrently with CHEM 3350 and NSCI 3354. Prereq: CHEM 2260, 2264 or 2274, 2400, 2404, PHYS 2120, MATH 1960. (*Fall*)

**3360/8365 Physical Chemistry II** (3) A presentation of selected topics from the areas of quantum mechanics, spectroscopy, kinetics and statistical mechanics. Prereq: CHEM 3350, 3354. (*Spring*)

**3364-8369 Physical Chemistry II Laboratory** (1) Physical chemistry laboratory to be taken concurrently with CHEM 3360. Prereq: CHEM 3350, 3354. (*Spring*)

**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: CHEM 2400 and 2404. (*Fall, Spring*)

**3424 Spectrometric Characterizations** (1) Laboratory course involving the use of spectrometric instrumentation for the identification of compounds containing organic functional groups. Prereq: CHEM 2260, 2274, 2400 and 2404. (*Fall, alternate years*)

**3514/8519 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. (*Fall, alternate years*)

**3640 Biomedical Metabolism** (2) Study of the role of chemistry in maintenance of health and treatment of disease. This course brings together aspects of general, organic and biochemistry in an intensive application of principles of chemistry to solution of biomedical problems. This course does not fulfill requirements for the chemistry major. Prereq: BIOL 2740 and 2840, and CHEM 3650 and 3654, or CHEM 4610 and 4614.

**3650 Fundamentals of Biochemistry** (3) An introduction to the components and reactions of living matter. To be taken concurrently with CHEM 3654. Prereq: CHEM 2210, 2214 or 2260, 2274. (*Fall, Spring, Summer*)

**3654 Fundamentals of Biochemistry Laboratory** (1) Elementary biochemistry laboratory to be taken concurrently with CHEM 3650. Prereq: CHEM 2210, 2214 or 2260, 2274. (*Fall, Spring, Summer*)

**4230/8236 Advanced Organic Chemistry** (3) An advanced lecture course in modern theories and special topics in organic chemistry. Prereq: CHEM 2260 and physical chemistry, or graduate. (CHEM 3350, 3360 may be taken concurrently.) (*Fall, alternate years*)

**4240/8246 Advanced Organic Chemistry** (3) An advanced lecture course in organic chemical reactions. Prereq: CHEM 2260 and CHEM 3350, 3360, or graduate. (CHEM 3350, 3360 may be taken concurrently.) (*Fall, alternate years*)

**4400/8406 Instrumental Analysis** (3) Study of instrumentation for use in quantitative and trace analysis. Advanced instrumental methods and electronics for instrumentation are included. CHEM 4404/8409 to be taken concurrently. Prereq: CHEM 3360, 3364, 3414. (*Spring*)

**4404/8409 Instrumental Analysis Laboratory** (1) Use of instrumentation in quantitative and trace analysis. Advanced instrumental methods and electronics for instrumentation are included. CHEM 4400/8406 to be taken concurrently. Prereq: CHEM 3360, 3364, 3414. (*Spring*)

**4500/8506 Advanced Inorganic Chemistry** (3) Theories of chemical bonding, the determination of chemical structures and the application of modern chemical theory to classical and recent problems in inorganic chemistry. Prereq: CHEM 2500, CHEM 3350, 3360. (CHEM 3350, 3360 may be taken concurrently.) (*Spring*)

**4540 Geochemistry** (3) This course will cover the application of chemical principles to geologic systems. Specific topics covered will include the origin of elements and their distribution in the earth, geochronology, stable isotope systems, aqueous geochemistry and crystal chemistry. These topics will be integrated to the study of igneous, metamorphic and sedimentary rocks and ore deposits. Prereq: GEOL 1170, MATH 1950, CHEM 1190 and GEOL 2750 or CHEM 2500 (*Every third semester*) (*Same as GEOL 4540*)

**4650 Biochemistry I** (3) A study of the structure and function of biomolecules and biochemical reactions with an emphasis on enzymes and carbohydrate metabolism. Prereq: CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020. CHEM 4654 must be taken concurrently. (Same as BIOL 4650)

**4654 Biochemistry I Laboratory** (1) A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills. Prereq: CHEM 2260 and 2274; and either CHEM 3350 or BIOL 3020. CHEM 4650 must be taken concurrently. (Same as BIOL 4654)

**4660 Biochemistry II** (3) A continuation of the study of the structure and function of biomolecules and biochemical reactions with an emphasis on metabolism of carbohydrates, lipids, amino acids and nucleotides, and the chemistry of signal transduction and genetic information transfer. Prereq: CHEM 4650 and 4654 or BIOL 4650 and 4654. CHEM 4664 must be taken concurrently. (Same as BIOL 4660)

**4664 Biochemistry II Laboratory** (1) A laboratory course to help integrate the concepts learned in biochemistry lecture with the development of biochemical laboratory skills, and to gain practical experience in experimental design. Prereq: CHEM 4650 and CHEM 4654 or BIOL 4650 and BIOL 4654. CHEM 4660 must be taken concurrently. (Same as BIOL 4664)

**4810 Chemistry Internship** (1-6) Application of chemical skills in a non-academic laboratory or workplace through part-time employment or contracted work; written report required. Grading will be "S" or "U" only. Prereq: Major in chemistry, CHEM 2260, 2274, 2400, 2404 and permission of department chair.

**4930/8936 Special Topics in Chemistry** (1-3) Selected special topics in chemistry. Prereq: CHEM 2260, 2400. Some topics will require more advanced prerequisites and will be accepted for advanced course work in chemistry.

**4950 Chemistry Projects** (1) Initiation of an independent student research project, and communication of the results. Prereq: Permission of instructor.

**4960/8966 Chemistry Problems** (1-3) Independent student research and communication of results. To be taken concurrently with NSCI 4960. Prereq: CHEM 4950 and permission of instructor.

## Natural Sciences (NSCI)

**2010 Natural Science I** (5) An interdisciplinary course designed for students wishing to explore topics in the natural sciences emphasizing an integrated, problem-solving model. Although general themes will vary from semester to semester, the course will provide both theoretical and laboratory experiences exploring fundamental concepts from biology, chemistry, physics and the earth sciences. Prereq: None. Recommended: MATH 1310 and ENGL 1160.

**2020 Natural Science II** (5) An interdisciplinary course designed for students wishing to explore topics in the natural sciences emphasizing an integrated, problem-solving model. Although general themes will vary from semester to semester, the course will provide both theoretical and laboratory experiences exploring fundamental concepts from biology, chemistry, physics and the earth sciences. Prereq: None. Recommended: MATH 1310 and ENGL 1160.

**2500 Effective Chemical Writing** (1) Introduction to technical report writing in chemistry. Partially fulfills the third writing course requirement for chemistry majors. Prereq: ENGL 1160. To be taken concurrently with CHEM 2500.

**3354 Writing in Physical Chemistry** (1) Instruction in reporting chemical laboratory results. Partially fulfills the third writing course requirements for chemistry majors. Prereq: ENGL 1160 or permission. Must be taken concurrently with Chemistry 3354. NSCI 2500 is recommended.

**3930 Chemical Communication** (1) Instruction in the basic skills in oral and written communication of scientific results to peer and lay communities. Partially fulfills the third writing requirement for the chemistry major. Prereq: Chemistry major, CHEM 2260, NSCI 2500 and ENGL 1160 or permission. Other majors may enroll with instructor permission.

**4960 Research Report** (1) A writing course which may be used to partially fulfill the third writing course requirement for chemistry majors. Prereq: ENGL 1160 or permission. Must be taken concurrently with CHEM 4960. NSCI 2500 and 3354 are recommended.

## Communication Broadcasting (BRCT)

*NOTE: All courses listed 2000 and above in Journalism and Broadcasting require a 2.25 GPA.*

**2310 Film History and Appreciation** (3) Aesthetic values of the motion picture; history of the film and survey of the elements involved. Prereq: ENGL 1160, sophomore. (*Same as DART 1050*)

**2320 Television Production I** (3) A basic course in the techniques and theory of television production including the skills necessary for writing and producing television programs. Prereq: ENGL 1160, sophomore, BRCT 2370

**2370 Radio Production I** (3) The basic techniques of contemporary radio production and broadcast operation. Utilization of radio equipment, directing, writing and speaking. Prereq: JOUR 2150, sophomore.

**3030 Radio and TV News Writing** (3) The theory and practice of writing and editing news for broadcast journalism. Prereq: JOUR 2150.

**3320 Television Production II** (3) Advanced course in the techniques and theory of television production emphasizing writing, directing and production skills in the execution of various types of television productions. Prereq: JOUR 2320 and junior.

**3330 Television News Video** (3) Theories and techniques of shooting and editing TV news video. Prereq: BRCT 2320 and JOUR 3030.

**3370 Radio Production II: Multimedia Audio** (3) Use of audio editing techniques in multimedia digital production. The course uses computer-based audio production systems to create interactive media. Prereq: BRCT 2370 and permission of instructor.

**3390 Electronic Media Management** (3) A study of radio and television station operations. Topics include programming, promotions, audience research and personnel management. Economic structures of American commercial and public broadcasting, new technologies and international systems are studied. Prereq: Junior, ENGL 1160.

**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: Junior, ENGL 1160.

**4340/8346 Telecommunication Regulation** (3) A study of the 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. Prereq: Junior, ENGL 1160.

**4350/8356 Mass Communication Research** (3) Field and lab quantitative research methods. Students develop and conduct a mass media research project. Prereq: Senior, or completion of Communication Department 4000-level approved theory course, or instructor permission.

**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 1050, junior, ENGL 1160.

**4450 Broadcast Journalism** (3) This course will take the previously learned skills in broadcast writing, news video and editing and combine them with news gathering, radio reporting and introduction to TV reporting. There will be heavy emphasis on field work. Prereq: JOUR 2150, and BRCT 2320, 2370, 3030, and 3330; or permission of instructor based on previous professional experience.

**4460 Advanced Broadcast Journalism** (3) This course will take the previously learned skills in broadcast news writing, news video and editing and radio news reporting and combine them with television news gathering, television news reporting and television field producing. There will be a heavy emphasis on field work. Prereq: BRCT 4450.

**4980 Independent Study in Communication** (1-3) Specialized studies in communication supplementing regular courses: readings; research; tutorial. Prereq: Junior, at least nine credits in area of communication in which student will work, and permission.

**4990 Advanced Communication Practicum** (1-3) Special practicum experience in an area of communication. Prereq: Junior, at least nine credits in area of communication in which student will work, and permission.

## Journalism (JOUR)

**1500 Introduction to Mass Communication** (3) A survey of the history, organization and social significance of the mass media, including newspapers, radio, television, books, magazines, advertising, public relations and films. Prereq: Not intended for journalism or broadcasting majors.

**2150 News Writing and Reporting** (3) Theory and practice of writing and reporting for mass audiences, with emphasis on the print media. Prereq: ENGL 1160, sophomore, typing ability.

**2160 News Editing** (3) The evaluation, editing and production of news for print media. Also includes headline writing, picture selection and editing, publication design and layout. Prereq: JOUR 2150.

**3110 Photography** (3) The theory, techniques and application of basic photographic operations of exposure, development and printing. Prereq: ENGL 1160, sophomore.

**3220 Critical Writing for the Mass Media** (3) Theory and practice of writing criticism of the arts and other forms of interpretative, feature and editorial writing. Prereq: Junior, ENGL 1160.

**3270 Public Affairs Reporting** (3) Proper and effective procedures used in covering such activities as trials, conventions, addresses, council meetings and other public affairs. Prereq: JOUR 2150 and 2160 or permission of instructor.

**3280 Advanced Public Affairs Reporting** (3) Investigative reporting and writing of interpretative stories on metropolitan problems, business and industry, labor, law, politics, health and science. Prereq: JOUR 2150 and 3270.

**3400 Magazine Article Writing** (3) The writing and marketing of non-fiction articles for magazines. Prereq: Junior, JOUR 2150, or permission of instructor.

**3410 Magazine Editing** (3) A survey of the magazine as an area of specialization involving editorial objectives and content, production processes and planning, business management and layout design. Prereq: Junior, ENGL 1160.

**3500 Publication Design and Graphics** (3) An advanced course concerned with the concepts of publication design and graphics using computer and related software programs. Students will learn the principles of design for a variety of publications including newspapers, magazines, book and related public relations ancillary publications, and create examples of the above by manipulating text and graphics electronically. Prereq: JOUR 2160, junior. *Lab fee required.*

**3620 Principles of Creative Advertising** (3) An introduction to advertising principles in all media, including the psychology of advertising; the creative, production and marketing aspects; and practical exercises in both print and broadcast media. Prereq: Junior, ENGL 1160.

**3630 Advanced Creative Advertising** (3) Theory and practice of advertising campaigns, including creation and production of campaigns for a variety of goods and services. Prereq: JOUR 3620.

**3970 Applied Journalism/Broadcasting** (1) For work on the campus student newspaper or radio or TV station. Prereq: Permission of editor or station supervisor. May be taken for Credit/No Credit only.

**4010/8016 History of Mass Communication** (3) The American press from 1690 up to and including the mass media of today with emphasis on the history of newspapers, magazines and broadcast journalism. Prereq: Junior, ENGL 1160.

**4220/8226 Literary Journalism** (3) Survey of the journalistic works of pertinent American writers through readings, lectures, discussions plus creative writing assignments. Prereq: Junior, ENGL 1160.

**4230/8236 Principles of Public Relations** (3) This basic course combines the communication theories and management practices of public relations and its multi-faceted role in today's society, including historical perspectives, ethical and legal issues, and the process and planning of campaign development.

**4240/8246 Public Relations Case Studies** (3) The course is designed to enable the student: 1) to integrate issue-management and decision-making theoretical models with the communication theory and research techniques presented in JOUR 4230/8236 and 2) to apply professional judgment to the public relations problem-solving process through the development of structured analysis of historical cases. Prereq: JOUR 4230 or permission.

**4250 Public Relations Writing** (3) This is a broad writing course combining theory and practice in writing for public relations. Students will prepare strategies for and executions of specific public relations tactics as they apply to "real world" situations. Prereq: Junior, JOUR 2160 or permission of instructor.

**4370/8376 Communication Workshop** (3) A workshop to explore communication theory and processes and to develop skills in their application. Prereq: Junior, ENGL 1160.

**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. Prereq: Junior, ENGL 1160.

**4410/8416 Communication Law** (3) A discussion of laws, court decisions, constitutional issues and regulations that affect the mass media, with emphasis on libel, privacy, confidentiality of reporters' sources, prior restraint, obscenity regulation, free press/fair trial, commercial speech and broadcast regulation. Prereq: Junior, ENGL 1160.

**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, junior, ENGL 1160.

**4430 International Communications** (3) A comparative study of the mass communication systems, print and broadcast, in the world today. Prereq: Junior, ENGL 1160.

**4500/8506 Mass Communication and Public Opinion** (3) A study of the philosophy, process and effects of mass communication; the relationship between the mass media and public opinion and propaganda, and the nature, function and measurement of public opinion. Prereq: Junior, ENGL 1160.

**4900/8906-4910/8916 Seminar in Mass Communication** (3) A senior seminar applying historical and theoretical perspective to current issues and developments in mass communication. Prereq: Junior and six hours of journalism, ENGL 1160.

**4960 Public Relations, Organizational Communication and Advertising Internship** (2) Professional experience under supervision with a commercial, governmental or non-profit organization. May be repeated once. Prereq: Journalism or speech communication major, JOUR 3620 or JOUR 4230 or SPCH 4170, Junior, ENGL 1160, and permission of the instructor. May be taken for credit/no credit only.

**4970 Journalism/Broadcasting Internship** (2) Professional journalism experience under supervision with a newspaper, radio station, television station, etc. May be repeated once. Prereq: Journalism or broadcasting major, junior, ENGL 1160, and permission of instructor. May be taken for credit/no credit only.

**4980 Independent Study in Communication** (1-3) Specialized studies in communication supplementing regular courses: readings; research; tutorial. Prereq: Junior, at least nine credits in area of communication in which student will work, and permission.

**4990 Advanced Communication Practicum** (1-3) Special practicum experience in an area of communication. Prereq: Junior, at least nine credits in area of communication in which student will work, and permission.

## Speech (SPCH)

*NOTE: All courses listed 3000 and above in speech require a 2.25 GPA*

**1110 Public Speaking Fundamentals** (3) Basic principles of audience adaptation, invention, organization, development of ideas and presentation of speeches and the critical analysis of oral presentations. Each student will design and present a minimum of four public speeches. **(Special "Speaking Confidently" sections are available for the students with excessive levels of fear about public communication. Contact the department of communication for applications.)**

**1120 Argumentation and Debate** (3) Theory and practice of effective argumentation and debate. Students will participate in a variety of speaking activities involving practical application of argumentation principles to current political and social issues.

**1710 Oral Interpretation of Literature** (3) Analysis and oral reading of various types of literature. (Same as DART 1090).

**2010 Interpersonal Communication** (3) Investigation of the theories and concepts in the field of interpersonal communication. The course will include field and laboratory experiences in applying these theories and concepts to relevant social contexts.

**2410 Small Group Communication and Leadership** (3) A balance of theory and practice focused on small groups; leadership, leader functions and techniques; guided practice in various types of discussion situations.

**2420 Parliamentary Procedure and Meeting Management** (2) Theory and practice of parliamentary procedure; forming organizations and drawing up constitutions and by-laws.

**3120 Persuasive Speaking** (3) Instruction and practice in preparation, delivery and evaluation of persuasive speaking. For non-communication majors, and in addition for communication majors as an alternative.

**3130 Speech-Communication in Business and the Professions** (3) Development of speaking-listening skills in various organizational settings. Emphasis on informative and persuasive communication principles and practices in one-to-many presentational situations. Group communication and interviewing principles are also addressed. Prereq: SPCH 1110 or permission of instructor.

**3140 Advanced Public Speaking** (3) Theory, techniques and practice in the composition and presentation of public speeches. Prereq: SPCH 1110 or permission of instructor.

**3150-3160 Intercollegiate Forensic Activities** (1-3) For those communication, pre-law, and other interested students who desire to participate in intercollegiate debate and forensics (informative, persuasive, impromptu, extemporaneous, and after-dinner speaking; oral interpretation, solo and/or duet acting, rhetorical criticism, and discussion). Prereq: Permission of the Director of Forensics only.

**3520 Interviewing** (3) A course devoted to the understanding and application of the process of two-person communication. The course will deal with interviewing and other face-to-face interactions. Prereq: SPCH 1110.

**3600 Special Topics in Speech Communication** (3) A variable topic course in speech communication. Topics to be covered may include marital and family communication, instructional communication, conflict, relational communication, communication competence, health communication, communication research or theory, communication between the sexes, social movements, political communication, communication and the aged, listening, etc. (May be repeated for credit as long as the topic is not the same.) Prereq: Junior.

**3700 Interpersonal Conflict** (3) Discusses basic dimensions and themes that characterize conflictual situations; explores the functional and dysfunctional aspects of conflict; identifies communicative patterns that help develop, sustain and change conflicts; and assesses communicative strategies and styles of conflict management. Prereq: Junior and SPCH 2010 or permission of instructor.

**3750 Gender and Communication** (3) A survey of literature on communication about, by, and between women and men in society, personal relationships, and organizations. Students develop an understanding of how a society's notion of "gender" both shapes and is shaped by communication. Prereq: Junior and SPCH 2010 or permission of instructor.

**4110 Rhetorical Theory and Criticism** (3) Rhetorical theory and criticism, emphasizing ways of evaluating oral communication. Prereq: Six hours of speech communication and junior.

**4140 /8146 Communication and Human Relationships** (3) This course applies theories of interpersonal processes and communication principles to the study of relationships. Discussion focuses on the communication in different types of relationships and relational stages, e.g., strangers, acquaintances, friendship and intimate. Prereq: Junior and SPCH 2010 or permission of instructor.

**4170 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: Junior and SPCH 1110.

**4510 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: Six hours of speech communication and junior standing.

**4520 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 permission of instructor. (Same as PSYCH 4520/8526).

**4530 Cross-Cultural Communication** (3) The intent of this course is to examine the concepts of cross-cultural communication. Theory and research are integrated with application and necessary skills are identified and developed.

**4540 Contemporary Systems of Communication** (3) An adaptation of General Systems Theory concepts to the study of human communication processes with emphasis on systems analysis of contemporary interpersonal communication perspectives. Prereq: Junior, SPCH 1110, three hours of mathematics and three hours of natural sciences; or permission of instructor.

**4550 Nonverbal Communication** (3) This course is designed to familiarize the student with current theory and research about nonverbal communication and to provide a variety of practical experiences through which the student can analyze and evaluate his or her own nonverbal behavior and that of others. Prereq: Junior and SPCH2010 or permission.

**4620 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 forensics program. Prereq: Junior and SPCH 1120 or permission.

**4980 Independent Study in Communication** (1-3) Specialized studies in communication supplementing regular courses: readings, research, tutorial. Prereq: Junior, at least nine credits in area of communication to be studied, and permission.

**4990 Advanced Communication Practicum** (1-3) Special practicum experience in an area of communication. Prereq: Junior, at least nine credits in area of communication in which student will work, and permission.

**English** (ENGL)

**1050 Reading Improvement** (2) Beginning course designed to help students improve comprehension and retention, establish proper study techniques, develop vocabulary and increase reading speeds.

**1090 English as a Second Language I** (4) Lecture/classroom three credits (three contact hours) and lab one credit (one and one-half contact hours). Intermediate study of the reading, writing, speaking, and listening skills required for successful completion of American university work by speakers of English as a foreign language. Lab required. (NOTE: Students who complete this course are not eligible to take ENGL 1050 for credit.)

**1100 English as a Second Language II** (4) Lecture/classroom three credits (three contact hours) and lab one credit (one and one-half contact hours). Advanced study of the reading, writing, speaking and listening skills required for successful completion of American university work by speakers of English as a second language. Lab required. (NOTE: Students who complete this course are not eligible to take ENGL 1050 for credit.)

**1150-1154 English Composition** (3) Instruction and practice in narrative and explanatory writing. 1154 employs computers regularly. Prereq: ENGL 1150 placement by Department of English Diagnostic Examination or permission.

**1160-1164 English Composition** (3) Instruction in rhetorical processes and basic techniques of investigative writing. 1164 employs computers regularly. Prereq: ENGL 1160 placement by Department of English Diagnostic Examination, successful completion of ENGL 1150 or permission.

**2000 Topics in Language and Literature** (1-3) A variety of topics primarily for the non-major. (For example, this course might study the image of the American businessman in American literature.) One or two such topics may be offered each term, depending upon current student interest and available faculty. Students should consult each term's class schedule in order to determine the specific topics for that term. Prereq: Variable according to topic.

**2160 (Honors) Honors Composition: Reasoning and Research** (3) Instruction in the conventions of formal research and the nature of critical thinking and reasoning in the written mode. Prereq: Honors Program student and placement by Department of English Diagnostic Exam or Distinguished Scholarship Essay Exam, ACT composite 26+.

**2230 Ethnic Literature** (3) An introduction to the literature of Native Americans, black Americans, Hispanic Americans (Chicanos, Puerto Ricans or Cubans), and Asian Americans (Chinese and Japanese). Explains and defines cultural terms and practices, and attempts to prepare students for multicultural living. Prereq: ENGL 1160 or permission.

**2250 The Short Story** (3) Readings in the modern short story with particular attention to literature as a reflection of life and to form as an outgrowth of content. Prereq: ENGL 1160 or permission.

**2260 Black Short Story** (3) A study of short stories written by black American and/or black African authors as literature and as experience. Explains and defines cultural terms and practices, and attempts to prepare students for multicultural living. Prereq: ENGL 1160 or permission.

**2270 Introduction to Poetry** (3) An analysis of the poetic art from a variety of periods and a variety of poets, proceeding from analysis of techniques to critical judgment of many different types of poems. Prereq: ENGL 1160 or permission.

**2280 Introduction to Language** (3) A study of the nature of language and its role in human affairs. Prereq: ENGL 1160 or permission.

**2300 Introduction to Literature** (3) An introduction to the study of at least three literary genres (fiction, drama, and poetry) selected from English, American, and world literature. Prereq: ENGL 1160 or permission.

**2310 Introduction to English Literature** (3) A survey of English literature from Beowulf to the end of the 18th century. Prereq: ENGL 1160 or permission.

**2320 Introduction to English Literature** (3) A survey of English literature from the Romantic period to the present. Prereq: ENGL 1160 or permission.

**2350 Black Literature in America 1746-1939** (3) This course traces the development of black literature from 1746 to 1939. Included will be a study of four genres: poetry, short story, novel and drama. Trends to be studied will include early black writers, neoclassic and romantic traditions, and the Harlem renaissance and Depression era schools of thought. Prereq: ENGL 1160 or permission. (*Same as BLST 2350*).

**2360 Contemporary Black Literature** (3) This course traces the development of the literary contribution that black Americans have made from 1939 to the present. Included will be a study of four genres: poetry, short story, novel and drama. Trends to be studied include the movement toward literary assimilation in the 1940s-1950s and the subsequent movement toward black art in the 1960s to the present. Prereq: ENGL 1160 or permission. (*Same as BLST 2360*).

**2400 Advanced Composition** (3) A study in the principles of rhetoric, expository modes, research techniques, consistency in grammatical structure, and variety of usage with attention to audience adaptation and writer's style. Prereq: ENGL 1160 or permission.

**2430 Writing About Literature** (3) An introduction to research and writing about literature; includes reading literary works and a variety of critical interpretations of those works, specialized library research, and writing synopses, poetry explications, prose analyses, reviews, essay exams and research papers. Not open to students who have taken ENGL 2400. Prereq: ENGL 1160 or permission.

**2450 American Literature** (3) A survey of American literature to the Civil War. Prereq: ENGL 1160 or permission.

**2460 American Literature** (3) A survey of American literature since the Civil War. Prereq: ENGL 1160 or permission.

**2470 Native American Literature** (3) An introduction to the literature of the oral tradition among the Native American peoples and to the written literature of post-contact and contemporary times. Prereq: ENGL 1160 or permission.

**2480 The American Language** (3) A study of the historical development, current condition and variety, and possible future of the English language in America. Prereq: ENGL 1160 or permission.

**2500 Literature of Western Civilization: The Ancient World** (3) A study of European literature in English translation. Includes the works of such writers as Homer, Sophocles, Sappho, Virgil, Horace, Ovid and St. Augustine. Prereq: ENGL 1160 or permission.

**2510 Literature of Western Civilization: Middle Ages to Age of Enlightenment** (3) A study of European (excluding English) literature in English translation. Includes the works of such writers as Dante, Chretien de Troyes, Christine de Pisan, Petrarch, le Rabelais, Calderon and Voltaire. Prereq: ENGL 1160 or permission.

**2520 Literature of Western Civilization: The Modern World** (3) A study of the modern period in European literature (exclusive of English literature) from the 18th century Romantic movement to recent 20th century developments, including writings from Rousseau through Solzhenitsyn. Prereq: ENGL 1160 or permission.

**2830 Contemporary Novel** (3) Readings in the contemporary novel and a discussion format for criticism and interpretation. A study in breadth of the present state of the novel. Prereq: ENGL 1160 or permission.

**2850 Contemporary Drama** (3) Readings in contemporary drama since 1940 (with some background extending to 1900); emphasis on problems of form and content rather than historical development. Prereq: ENGL 1160 or permission.

**3000 Special Topics in Literature** (1-3) A study of designated specific topics in literature. (May be repeated for credit as long as the topic is not the same.) Prereq: Variable according to topic.

**3100 Native American Literature: Major Figures** (3) An in-depth study of elements of Native American literature or of particular poets, novelists, biographers or short story writers. Prereq: ENGL 1160 or permission.

**3430 Irish Literature** (3) A survey of Irish literature from the Celtic myths to the present. Prereq: ENGL 1160 or permission.

**3980 Special Topics in Composition** (3) A study of designated, specific topics in composition. (May be repeated for credit as long as the topic is not the same.) Prereq: ENGL 1160 or permission.

**4040/8046 The History of Literary Criticism** (3) Primarily a study of the history of English, American, and continental literary criticism, with emphasis on modern theory and methods. Prereq: ENGL 2320 or 2460.

**4050 Great Characters** (3) Great Characters is a study of literary characters in fiction and drama from the standpoint of temperament theory. The course uses Keirsey's model of temperament to focus on conflict and conflict resolution between characters as this constitutes the dynamics of plot. Prereq: Six hours of 4000 level English.

**4180/8186 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: Permission of instructor.

**4250/8256 Introduction to Women's Studies in Literature** (3) A critical study of literature by and about women in which students learn about contributions of women to literature, ask what literature reveals about the identity and roles of women in various contexts, and evaluate standard interpretations from the perspectives of current research and individual experience. Prereq: ENGL 1160 and one additional course in literature or permission.

**4260 Women of Color Writers** (3) Women of Color Writers is designed to introduce students to the multicultural, literary experience and contributions of women of color writers. The course will elucidate the multi-ethnic and feminist/womanist perspectives reflected in literary works by examining the themes, motifs and idioms used to portray women. The course examines critically the implications and conceptual grounds of literary study which have been based almost entirely on male literary experiences. Prereq: English major or permission of instructor.

**4320/8326 Middle English Literature** (3) A survey of the principal writings in English, excluding those of Chaucer, from 1100 to 1500. Prereq: ENGL 2310 or permission.

**4330/8336 Sixteenth Century Literature** (3) Poetry and prose of the English Renaissance, from its continental origins to the end of the Elizabethan age. Prereq: ENGL 2310.

**4340/8346 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: ENGL 2310 or permission.

**4480/8486 Seventeenth Century Literature** (3) A study of English poetry and prose from 1600 to 1660 with emphasis on Milton. Prereq: ENGL 2310.

**4500/8506 Shakespeare's Contemporaries** (3) A study of the development of the English drama, exclusive of Shakespeare, from the beginning to 1642. Prereq: ENGL 2310.

**4530 Cross-Cultural Communication** (3) The intent of this course is to examine the concepts of cross-cultural communication. Theory and research are integrated with application, and necessary skills are identified and developed. Prereq: Permission. (Same as SPCH 4530/8536)

**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 learnings. Prereq: Junior or permission.

**4600/8606 Shakespeare** (3) A critical study of selected comedies, histories and tragedies by Shakespeare. Prereq: ENGL 2310.

**4620/8626 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: ENGL 2310 or permission.

**4640/8646 The Eighteenth Century English Novel** (3) Readings in the English novel from Daniel Defoe to Jane Austen. Prereq: ENGL 2310.

**4650/8656 The Nineteenth Century English Novel** (3) Readings in the English novel from Jane Austen to Thomas Hardy. Prereq: ENGL 2320.

**4660/8666 The Twentieth Century English Novel** (3) Readings in the English novel from Joseph Conrad to the present. Prereq: ENGL 2320

**4680/8686 History of English** (3) A study of the structural development of the English language. Prereq: Junior or permission.

**4700 Modern Familiar Essay** (3) A study of the modern familiar essay, with an emphasis on writing the informal essay. Prereq: ENGL 2000 (Personal Writing), 2400 or 2430. (Same as WW 4300)

**4750/8756 Rhetoric** (3) A study of contemporary theories of invention, form, and style and their application in written discourse. Prereq: Any 2000 or above writing course or permission.

**4760/8766 Composition Theory and Practice** (3) Students will review and evaluate 20th century theories with an emphasis on theories developed since 1968. Students will investigate current research practices and design and execute their own research projects. Prereq: 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: ENGL 4580 or permission.

**4810/8816 Literature of the Romantic Period** (3) Poetry and prose (excluding the novel) of England from 1798 to 1830. Prereq: ENGL 2320.

**4820/8826 Literature of the Victorian Period** (3) English poetry and prose (excluding the novel) from 1830 to 1900. Prereq: ENGL 2320 or permission.

**4850/8856 Twentieth Century English Literature** (3) Readings in English literature from Shaw and Yeats to the present. Prereq: ENGL 2320.

**4880/8886 Sociolinguistics** (3) An exploration of interconnections between language, culture, and communicative meaning, stressing interactional, situational, and social functions of language as they take place and are created within social contexts. Prereq: ENGL 4580 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: ENGL 2270 or 2320 or 2460 or 2520.

**4930/8936 American Poetry** (3) The practice and theory of American poetry from the colonial period up to the contemporary period. Prereq: ENGL 2450 or 2460.

**4940/8946 Studies in Language and Literature** (3) Specific subjects (when offered) appear in class schedules. Complete syllabi available in English Department. Prereq: Will vary depending on what the topic is.

**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: ENGL 2460 or 2320 or permission.

**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, ENGL 4580/8586, or permission of instructor.

**4970/8976 The American Novel** (3) A critical and historical study of the work of twelve or more significant American novelists of the 19th and 20th centuries. Prereq: ENGL 2450 or 2460.

**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: ENGL 1160 or junior.

**4990 Independent Study** (1-3) Specially planned readings in a well-defined field of literature or language, carried out under the supervision of a member of the English 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: Permission of the instructor, junior or senior, and no "incompletes" outstanding.

## Foreign Languages and Literature (FLNG)

**2530 Special Topics in Language and Culture I** (1-3) A variety of topics primarily for the lower division, non-major. Students in this course will study topics not usually included in the curriculum, such as Russian civilization and culture. Prereq: None.

**3000 Travel Study in Foreign Languages** (1-3) A course designed to give undergraduate students outside-classroom training in a specific area of culture and/or literature. Prereq: Second semester freshman or above.

**3530 Special Topics in Language and Culture II** (1-3) A variety of topics primarily for the upper division, non-major. Students in this course will study topics not usually included in the curriculum, such as Russian culture and civilization. Prereq: None.

## Chinese

**1000 Practical Mandarin Chinese Conversation I** (3) Pronunciation and oral practice involving everyday situations. Introduction to reading and writing Chinese characters. Not applicable to the foreign language requirement in the College of Arts and Sciences. Prereq: None.

**1010 Practical Mandarin Chinese Conversation II** (3) A continuation of Chinese 1000, the emphasis is on communicating orally in Chinese in a basic, practical manner and on writing basic Chinese characters and sentences. Prereq: Chinese 1000 or permission.

## French (FREN)

**1000 Practical French Conversation** (3) Pronunciation, oral practice involving everyday situations. Not applicable to the foreign language requirement of the College of Arts and Sciences. Prereq: None.

**1110 Elementary French I** (5) Pronunciation, listening, comprehension, speaking, and reading. Prereq: none.

**1120 Elementary French II** (5) Pronunciation, listening, comprehension, speaking, and reading. Prereq: FREN 1110 or three years of high school French.



**2050 French Intensive Language** (16) This summer course covers the material offered in FREN 1110-2120 but does so in only eight weeks and satisfies the foreign language requirement of the College of Arts and Sciences. Class meets six and one-half hours per day, five days a week. Students must complete the entire course of study to receive credit. Prereq: Permission.

**2110 Intermediate French I** (3) Grammar review, continued oral practice, and introduction to literary readings. Prereq: FREN 1120 or four years of high school French.

**2120 Intermediate French II** (3) Grammar review, continued oral practice, and introduction to literary readings. Prereq: FREN 2110.

**3030 French Conversation** (3) Practice in a variety of conversational situations and levels. Prereq: FREN 2120 or permission.

**3040 French Grammar and Composition** (3) Review of grammatical principles, practice in written composition. Prereq: FREN 2120, or permission.

**3050 Traduction Littéraire** (3) Grammar review and introduction to techniques of translation for general literature. Prereq: FREN 3040 or permission.

**3150 Introduction to French Literature I** (3) Readings of French authors from the Middle Ages to 1800. Lectures, reports, collateral readings. Prereq: FREN 3030 or 3040.

**3160 Introduction to French Literature II** (3) Readings of French authors from 1800 to the present. Lectures, reports, collateral readings. Prereq: FREN 3150 or permission. For majors, 3150 and 3160 are prerequisites to all other literature courses but may be taken concurrently with such courses.

**3370 French Civilization** (3) A historical view of France through its political, artistic, musical, literary, architectural and philosophical development from prehistory to the present. Prereq: FREN 2120 or permission.

**4030/8036 Advanced French Conversation** (3) Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings. Prereq: FREN 3030 or permission.

**4040/8046 Advanced French Composition and Stylistics** (3) Advanced grammatical principles, composition, and stylistics. Prereq: FREN 3040 or permission, and ENGL 1160.

**4050/8056 Seminar in the Culture and Civilization of Quebec** (3 or 6) Resident study in Quebec City, Quebec, with emphasis on total immersion in the language, homestays, intensive classroom instruction and cultural activities. Summer, 5-week term, 5 hours daily. Prereq: FREN 2120 or permission, and ENGL 1160.

**4150/8156 Contemporary French Novel** (3) Selected contemporary French novels are analyzed and discussed. Prereq: FREN 3150 and 3160, or permission.

**4160 French Theater (17th to 19th Centuries)** (3) An introduction to French theater and its development in the 17th, 18th and 19th centuries. Plays will be discussed and analyzed. Prereq: FREN 3150 or 3160.

**4170/8176 Contemporary French Theater** (3) Selected contemporary French plays are analyzed and discussed. Prereq: FREN 3150 or 3160, or permission.

**4200 Literature noire d'expression française** (3) Writers from the West Indies and West Africa and some literary Black movements will be studied. Prereq: FREN 3030 and 3040, or permission. Satisfies three credit hours of foreign focus for French majors and minors.

**4580/8586 Introduction to Linguistics** (3) An introduction to the concepts and methodology of the scientific study of language; includes the language description, history, theory, variation and acquisition as well as semantics, lexicography and foreign language learning. Prereq: Junior status or permission.

**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 those works. Prereq: FREN 3150 or 3160, or permission.

**4900/8906 Independent Study** (1-3) Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once. Prereq: Permission of the instructor, junior or senior and no incompletes outstanding.

**4960/8966 Pro-Seminar** (1-3) Detailed study of narrower phases of literature, language, or culture. Prereq: Permission.

### German (GERM)

**1000 Practical German Conversation** (3) Oral practice involving everyday situations. Not applicable to the foreign language requirement in the College of Arts and Sciences. Prereq: None.

**1110 Elementary German I** (5) Pronunciation, listening comprehension, speaking and reading. Prereq: None.

**1120 Elementary German II** (5) Pronunciation, listening comprehension, speaking and reading. Prereq: GERM 1110 or three years of high school German.

**2050 German Intensive Language** (16) This summer course completes the material offered in German 1110-2120 but in only eight weeks and satisfies the foreign language requirement of the College of Arts and Sciences. Class meets six and one-half hours per day, five days a week. Students must complete the entire course to receive any credit. Prereq: Permission.

**2110 Intermediate German I** (3) Grammar review, continued oral practice, and introduction to literary readings. Prereq: GERM 1120 or four years of high school German.

**2120 Intermediate German II** (3) Grammar review, continued oral practice, and introduction to literary readings. Prereq: GERM 2110.

**3030 German Conversation** (3) Practice in a variety of conversational situations and levels. Prereq: GERM 2120 or permission.

**3040 German Grammar and Composition** (3) Review of grammatical principles, practice in written composition. Prereq: GERM 2120 or permission.

**3150 Introduction to German Literature** (3) Introduction by genre to the literature of Germany, Austria and German-speaking Switzerland. Students will read selections from the 18th, 19th and 20th centuries. Prereq: GERM 2120 or permission.

**3250 Contemporary Culture in German Speaking Countries** (3) The study of political, social, economic and cultural life in Germany, Austria, and Switzerland. Prereq: GERM 2120 or permission.

**3370 German Civilization** (3) History, art, architecture, customs, philosophy, and literature. Prereq: GERM 2120 or permission.

**3500 Special Topics in German** (3) Detailed study of narrower phases of literature, language or culture. Prereq: GERM 2120 or permission.

**4030/8036 Advanced German Conversation** (3) Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings. Prereq: GERM 3030 or permission.

**4040/8046 Advanced German Composition and Stylistics** (3) Advanced grammatical principles, composition and stylistics. Prereq: GERM 3040 or permission, and ENGL 1160.

**4310/8316 German Literature of the 19th Century** (3) Survey of the literature of the nineteenth century from romanticism to naturalism. Prereq: GERM 3150 or permission.

**4320/8326 German Literature of the 20th Century** (3) Survey of literature of the twentieth century from expressionism post-World War II. Prereq: GERM 3150 or permission.

**4380/8386 German Civilization from the 18th Century to the Present** (3) Detailed analysis of German art, architecture, literature, music and philosophy. The influence of the sciences and of technology upon modern German civilization and culture. Prereq: GERM 3370 or permission.

**4400/8406 German Novelle** (3) Survey of the German short story, its historical origin, and characteristics. Prereq: GERM 3150 or permission.

**4440/8446 German Drama** (3) History of drama development, study of several of the more important dramas. Prereq: GERM 3150 or permission.

**4500/8506 German Literature of the 18th Century** (3) A study of representative authors from the Enlightenment, storm and stress, and German classicism: Lessing, Herder, Schiller, and Goethe. Prereq: GERM 3150 or permission.

**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: Junior or permission.

**4900/8906 Independent Study** (1-3) Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once. Prereq: Permission of the instructor, junior or senior and no incompletes outstanding.

**4960/8966 Pro-Seminar (1-3)** Detailed study of narrower phases of literature, language, or culture. Prereq: Permission.

## Hebrew

**1110 Elementary Hebrew I (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: none.

**1120 Elementary Hebrew II (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: HEBR 1110.

**2110 Intermediate Hebrew I (3)** Grammar review, continued oral practice, more advanced readings. There is a strong emphasis on Biblical Hebrew with some Rabbinic texts studied. Prereq: HEBR 1120.

**2120 Intermediate Hebrew II (3)** Grammar review, continued oral practice, more advanced readings. There is a strong emphasis on Biblical Hebrew with some Rabbinic texts studied. Prereq: HEBR 2110.

## Italian

**1110 Elementary Italian I (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: none.

**1120 Elementary Italian II (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: ITAL 1110.

**2110 Intermediate Italian I (3)** Grammar review, continued oral practice, and introduction to literary readings. Prereq: ITAL 1120.

**2120 Intermediate Italian II (3)** Grammar review, continued oral practice, and more advanced readings. Prereq: ITAL 2110.

## Japanese (JAPN)

**1000 Practical Japanese Conversation I (3)** Pronunciation and oral practice involving everyday situations. Not applicable to the foreign language requirement in the College of Arts and Sciences. Prereq: None.

**1010 Practical Japanese Conversation II (3)** A continuation of Japanese 1000; the emphasis is on communicating orally in Japanese in a basic, practical manner and on writing basic Japanese characters and sentences. Prereq: Japanese 1000 or permission.

**1110 Elementary Japanese I (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: none.

**1120 Elementary Japanese II (5)** Pronunciation, listening comprehension, speaking, and reading. Prereq: JAPN 1110.

**2050 Japanese Intensive Language (16)** This summer course covers the material offered in Japanese 1110-2120 but does so in only eight weeks and satisfies the foreign language requirement of the College of Arts and Sciences. Class meets six and one half hours per day, five days a week. Students must complete the entire course of study to receive any credit. Prereq: permission.

**2110 Intermediate Japanese I (3)** Grammar review, continued oral practice, and introduction to literary readings. Prereq: JAPN 1120.

**2120 Intermediate Japanese II (3)** Grammar review, continued oral practice, and introduction to literary readings. Prereq: JAPN 2110.

## Russian (RUSS)

**1110 Elementary Russian I (5)** Pronunciation, listening, comprehension, speaking, and reading. Prereq: none.

**1120 Elementary Russian II (3)** Pronunciation, listening, comprehension, speaking, and reading. Prereq: RUSS 1110 or three years of high school Russian.

**2050 Russian Intensive Language (16)** The course covers the same material offered in RUSS 1110-2120 but in only eight weeks and satisfies the foreign language requirement for the College of Arts and Sciences. Class meets six and one half hours per day, five days a week. Students must complete the entire course of study to receive any credit. Prereq: Permission.

**2110 Intermediate Russian I (3)** Grammar review, more advanced readings. Prereq: RUSS 1120 or four years of high school Russian.

**2120 Intermediate Russian II (3)** Grammar review, more advanced readings. Prereq: RUSS 2110.

**3030 Russian Conversation (3)** Practice in a variety of conversational situations and levels. Prereq: RUSS 2120 or permission.

**3040 Russian Grammar and Composition (3)** Review of grammatical principles, practice in written composition. Prereq: RUSS 2120 or permission.

**3150 Introduction to Russian Literature I (3)** Introduction to the principal authors and works of 19th century Russian literature. Prereq: RUSS 3030, 3040 or permission.

**3370 Russian Culture and Civilization 93)** A historical view of Russia through its political, literary, musical, religious and philosophical development from the 10th to the 20th centuries. Prereq: RUSS 3030, 3040 or permission.

## Spanish (SPAN)

**1000 Practical Spanish Conversation (3)** Oral practice involving everyday situations. Not applicable to the foreign language requirement in the College of Arts and Sciences. Prereq: None.

**1110 Elementary Spanish I (5)** Pronunciation, listening, comprehension, speaking, and reading. Prereq: none.

**1120 Elementary Spanish II (5)** Pronunciation, listening, comprehension, speaking, and reading. Prereq: SPAN 1110 or three years of high school Spanish.

**2050 Spanish Intensive Language (16)** This summer course completes the material offered in Spanish 1110-2120 but in only eight weeks and satisfies the foreign language requirement of the College of Arts and Sciences. Class meets six and one-half hours per day, five days a week. Students must complete the entire course of study to receive any credit. Prereq: Permission.

**2110 Intermediate Spanish I (3)** Grammar review, continued oral practice, and introduction to literary readings. Prereq: SPAN 1120 or four years of high school Spanish.

**2120 Intermediate Spanish II (3)** Grammar review, continued oral practice, and introduction to literary readings. Prereq: SPAN 2110.

**3030 Spanish Conversation (3)** Practice in a variety of conversational situations and levels. Prereq: SPAN 2120 or permission.

**3040 Spanish Grammar and Composition (3)** Review of grammatical principles, practice in written composition. Prereq: SPAN 2120 or permission.

**3170 Survey of Spanish Literature I (3)** 3170: Introduction to the principal authors and works of Spanish literature from *El Cid* to the 18th century. Prereq: SPAN 3030, 3040, or permission.

**3180 Survey of Spanish Literature II (3)** Major Spanish writers and works of the 18th, 19th and 20th centuries. Prereq: SPAN 3030, 3040, or permission.

**3210 Survey of Latin American Literature I (3)** Spanish American literature from the colonial period to modernism. Prereq: SPAN 3030, 3040, or permission.

**3220 Survey of Latin American Literature II (3)** From modernism to contemporary works and writers. Prereq: SPAN 3030, 3040, or permission.

**3410 Spanish Civilization (3)** History, geography, national economy, education, art, music and literature of Spain. Prereq: SPAN 3030, 3040, or permission.

**3420 Latin American Civilization (3)** History, architecture, painting, music, education, religion, and literature of Latin America. Prereq: SPAN 3030, 3040, or permission.

**4030/8036 Advanced Spanish Conversation (3)** Oral practice employing complex and sophisticated conversational structures in formal speeches and discussions of readings. Prereq: SPAN 3030 or permission.

**4040/8046 Advanced Spanish Composition and Stylistics (3)** Advanced grammatical principles, composition and stylistics. Prereq: SPAN 3040 or permission, and ENGL 1160.

**4050/8056 Seminar in Mexican Culture and Civilization (3)** Resident study in Cuernavaca, Mexico, with emphasis on total immersion in the language; homestays, intensive classroom instruction, and cultural activities. Summer, 4 week term, six to eight hours daily. Prereq: SPAN 2120 or permission.

**4090 Literature of the Golden Age (3)** Foremost Spanish works of the 16th and 17th centuries with emphasis on *Lazarillo de Tormes*, *La Celestina*, *Don Quixote* and a selection of the great dramas produced by Lope de Vega and Calderon. Prereq: SPAN 3170 or permission.

**4160/8166 Latin American Literature of the 20th Century (3)** Critical and analytical study of Spanish-American dramatists, poets, and essayists from modernism to the present. Prereq: SPAN 3220 or permission.

**4180/8186 Latino Literature and Culture (3)** A study of representative works of Mexican-American, Puerto Rican, and Cuban-American writers, along with their cultural and historical antecedents. Prereq: SPAN 3030, 3040, or permission. Satisfies three credit hours of the cultural diversity requirement for Spanish majors and minors.

**4200/8206 The Structure of Spanish (3)** Study of major Spanish grammatical structures that are problematic to students of Spanish as a second language. Topics cover the following areas: syntax, semantics, morphology and phonology. Prereq: SPAN 3040 or SPAN, FREN, GERM, ENGL 4580/8586, or permission.

**4240/8246 Generation of 1898** (3) Examination of the ideology, philosophy and literary techniques of Unamuno, Martinez Ruiz, Valle-Inclan, Baroja and Antonio Machado. Prereq: SPAN 3180 or permission.

**4350/8356 Latin American Short Story** (3) Representative stories of the 19th and 20th centuries, from Romanticism to the present. Prereq: SPAN 3210 and 3220 or permission.

**4440 Spanish-American Theater** (3) An introduction to 20th Century Spanish-American Theater, from Modernism to contemporary works: 1905-1970. Plays will be discussed and analyzed in Spanish. Prereq: Spanish 3210, 3220 or permission.

**4550/8556 Modern Drama of Spain** (3) Ideologies, techniques, trends and influences of modern dramatists of Spain. Prereq: SPAN 3180 or permission.

**4560/8566 Modern Novel of Spain** (3) Literary movements, influences and techniques of modern novelists from Fernan Caballero to Cela. Prereq: SPAN 3180 or permission.

**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: Junior status or permission.

**4900/8906 Independent Study** (1-3) Specially planned readings in a well-defined field of literature, carried out under the supervision of a member of the foreign language faculty. Designed primarily for the student who has need of work not currently available in the departmental offerings and who has demonstrated capability of working independently. May be repeated for credit once. Prereq: Permission of the instructor, junior or senior and no incompletes outstanding.

**4960/8966 Pro-Seminar** (1-3) Detailed study of narrower phases of literature, language or culture. Prereq: Permission.

## Geography/Geology

### Geography (GEOG)

**1000 Fundamentals of World Regional Geography** (3) An introductory course designed to acquaint students with the basic concepts of geography and to examine the interrelationships between people and their environments.

**1020 Introduction to Human Geography** (3) An introductory course which studies the geography of human activity through a topic by topic coverage of cultural traits and complexes that characterize different societies in the world. Major cultural topics of focus are the geography of population, agricultural systems, settlement, language, religion, political patterns, and man's ways of occupying urban and industrial space, among others.

**1030 Introduction to Earth and Environmental Science** (5) Designed to acquaint the student with those processes active in shaping the surface of the earth and their relationship to one another. Includes the study of the atmosphere, soils, water, vegetation, geology and landforms. Includes weekly laboratory and discussion sessions. One half-day field trip is included.

**1060 Physical Geography: Climate and Waters** (4) Position of the earth, the weather, climate, waters and natural vegetation are important factors in man's physical environment. These environmental factors are presented in terms of originating processes, spatial distribution and interaction among them, and their effects upon man's habitat. Construction of maps related to weather elements, stream flow and water budgets form a part of the exercises in the laboratory. The course offers a more thorough treatment of the principles of physical geography for the beginning student. Not recommended to students who have had GEOG 1030.

**1070 Physical Geography: Soils and Landforms** (4) An examination of the role of soils and landforms in man's natural habitat. Aspects of origin, form native processes, area distribution and the impact upon man's physical environment are stressed. Case studies from the American Midwest and other regions are also included. Construction of maps related to soil and landform types form a part of the exercises in the laboratory. The course offers a more thorough treatment of the principles of physical geography for the beginning student. Not recommended to students who have had GEOG 1030.

**2500 Special Topics in Geography-Geology** (1) This course will provide for an in-depth study of a geographical or geological subject (as specified in the course subtitle). Various classes will be offered as sections of GEOG/GEOL 2500, but will be separate from one another. Students may repeat GEOG/GEOL 2500 as often as they like as long as no specific subject is duplicated. Prereq: Variable.

**2620 Aerial Photographic Interpretation** (3) A practical application of various types of air photographs to the interpretation and analysis of both physical and cultural landscapes. Provides a fundamental tool for those interested in geography, geology, ecology and the environment. Recommended: Three hours in geography or geology.

**3000 Travel Study in Geography** (1-3) A course designed to give undergraduate students outside-the-classroom training in a specific area in the techniques of arriving at field study problems in the discipline of geography. Prereq: Undergraduate; second semester freshman or above.

**3030 Geography of Africa** (3) The political, physical, economic and demographic features of Africa with emphasis on the effect of these factors in development. The major features of the broad geographical regions of Africa. Prereq: Junior.

**3060 Geography of Middle America** (3) A survey of the physical and cultural landscapes of the Caribbean, Mexico, and Central America. Attention is directed toward the impact of old world culture upon that of the new world, development of plantation economies, settlement of the frontier regions and the evolution of middle America as it exists today. Prereq: Junior.

**3070 Geography of South America** (3) A survey of the physical environments as modified by man on the continent of South America. Emphasis is placed upon the persistence of cultural factors in man's use of land and on the difficulty in developing the various areas of South America for man's use. Offered infrequently, on demand. Prereq: Junior.

**3080 East and Southeast Asia** (3) An introduction to the physical and cultural landscape of East (China, Japan, et al.), and Southeast Asia. Emphasis is placed upon the sequence of occupancy of the land, agrarian traditional economies and contemporary problems of development. Offered infrequently, on demand. Prereq: Junior.

**3130 Economic Geography** (3) A comprehensive study of production, consumption and exchange in primary, secondary and tertiary economic activities as related to spatial factors. Prereq: Junior. (Same as ECON 3130)

**3230 Europe's Land and Peoples** (3) The first part of the course includes a systematic study of the physical, historical-cultural and economic background of Europe as a whole. In the second part, emphasis is placed on selected presented case studies which illustrate some of the problems related to man's highly diversified environment in Europe. Prereq: GEOG 1000, 1020, or 1060 or 1070, and junior.

**3240 Russia and Former Soviet Republics** (3) A regional geography course designed as an integrated survey of the landscapes and environments of the old Soviet Union. Prereq: GEOG 1000 or 1020 or 3130 and junior, or permission of instructor.

**3330 United States and Canada** (3) A consideration by regions of the economic life from a geographic viewpoint. Prereq: Junior.

**3510 Meteorology** (3) A course designed to acquaint the student with the atmospheric environment. The course deals with atmospheric processes, their relationship and variation in both time and space, and their effect on the overall environment of the earth. Prereq: Junior or senior. Recommended: GEOG 1030 or 1060 or AVN 1050.

**3530 Introduction to Cartography** (2) Examines the concepts and techniques of map construction. Topics include map projections coordinate systems, choropleth mapping, isarithmic mapping, three-dimensional mapping, use of color and map printing techniques. Particular attention is given to the processing, compilation, data classification, and symbolization of various types of spatial data. Prereq: GEOG 1000 or 1020 and 1060 or 1070 and MATH 1530 or equivalent.

**3540 Cartographic Drafting and Design Lab** (2) An introduction to the methods and techniques of map construction. Topics include drafting techniques, map layout, map balance and map design. Particular attention is given to spatial data symbolization techniques in geography. This course is a lab component of GEOG 3530. Prereq: Concurrent or previous registration in GEOG 3530.

**3930 Political Geography** (3) An analysis of the relationship between geography and political events with an emphasis on the evolution of contemporary political problems and geographical patterns. Topics will be drawn from both American and international politics. Prereq: Junior.

**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 topics 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 1530 or equivalent.

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

**4050 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 bases. Prereq: GEOG 3530 or GEOG 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: For 4100, BIOL 1750 or GEOL 3100, junior-senior. For 8106, BIOL 1750, GEOL 3100, graduate. (Same as BIOL 4100/8106)

**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.

**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: Nine hours of sociology including SOC 1010 or 4030 or permission of instructor. (Same as SOC 4140/8146)

**4150/8156 Geography, Gender and Work** (3) This is an advanced undergraduate and graduate level seminar which focuses on the linkages among geography, gender and work. The course considers theoretical and methodological issues in addition to empirical perspectives. We begin by considering the nature of space, of gender, and of work, and progress through topics including the gendering of work and the geography of occupational segregation. Prereq: Junior, senior, or graduate standing in a social science, or permission of instructor.

**4160/8166 The American Urban Landscape** (3) Investigation of the morphological and architectural character of the American city as a cultural form. Emphasis is placed on the evolution of urban form and land use patterns and on the development of the structures that comprise the building fabric of the cityscape. Prereq: Junior.

**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. Prereq: GEOG 1070 or GEOL 1170.

**4260/8266 Process Geomorphology** (3) Primarily a lecture and laboratory course. Emphasis on methodology and modern process-oriented geomorphology. Prereq: GEOG 1070 or GEOL 1170.

**4320/8326 Climatology** (3) A study of climatic processes and their effect on shaping the physical landscape. Emphasis on physical and applied aspects of the field. Prereq: GEOG 1030, 1060 or 3510.

**4330/8336 Soil Genesis, Morphology and Classification** (3) This course is designed to familiarize students with soil genesis, morphology and classification. The course focuses on relationships between soils and environmental factors, especially climate and vegetation. Soil-landform relationships also are examined. Prereq: GEOG 1030, or 1070 or 1170 and junior or permission.

**4340/8346 Water Resources** (3) A study of the applied principles of hydrology, water systems modeling, river basin development, and water management issues and practices in the United States and other parts of the world. Prereq: GEOG 1060 and Junior standing.

**4530/8536 Historical Geography of the United States** (3) An analysis of historical circumstances behind contemporary patterns of American cultural geography. Prereq: Junior and HIST 1110 and 1120 or GEOG 1020 or 3330.

**4600 Independent Research** (1-3) (May be repeatable up to a maximum of 3 hours) Advanced study in the form of a major paper to give the senior student knowledge of and experience in using government documents, professional and primary materials concerned with a region. Must be under the supervision of the instructor who is particularly qualified for the topic chosen. Prereq: Permission of department chair. (Same as GEOL 4600).

**4610/8616 Field Methods in Geography and Geology** (3) Field methods in geography and geology. 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. Course is organized to accommodate variable needs of students with different backgrounds and career choices. Prereq: Permission.

**4620/8626 Advanced Field Course** (6) Six weeks of advanced study on selected field problems. Conducted in a geologically classic area where all the major rock types and structures may be studied in a variety of geologic situations. Reports, which integrate the geology, surface processes and literature of the studied areas, is required. Recommended to follow the junior year. Prereq: GEOL 1170, 1180, 2750, 2760, 3300: 3450 recommended.

**4630/8636 Environmental Remote Sensing** (3) Introduction to remote sensing science and technology. Emphasis on multispectral data sets, matter/energy interactions, sensor system characteristics, photogrammetry, air photo and image interpretation, digital image processing, and environmental applications. Laboratory exercises will provide students with hands-on experience in basic interpretation and computer processing procedures for environmental information extraction. Prereq: CSCI 1500 or 1610, GEOG 1070 or GEOL 1170, knowledge of basic statistics required or permission.

**4660/8666 GIS Science and Technology** (4) Introduction to Geographic Information System (GIS) science and technology. Emphasis on data acquisition, GPS technology, data models and structures, GIS hardware, GIS software, GIS algorithms and programming, spatial analysis, and future advances in GIS. Laboratory exercise assignments will provide students with hands-on experience, software system expertise and problem solving skills. Prereq: GEOG 4050/8056.

**4800 Internship In Environmental/Regional Planning/Earth Science** (1-6, repeatable up to 6 hours) Internship with local agencies or corporations enabling students to gain knowledge and experience in comprehensive regional or environmental planning or environmental science. Prereq: Senior, major or area of concentration in geography or environmental science. Permission.

**4820/8826 Introduction to Environmental Law and Regulation** (3) Seminar on environmental law and regulation. The course will address federal regulations, implementing instructions, legal principles and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation will be discussed. Prereq: Junior and permission. (Same as BIOL 4820/8826).

**4900/8906 Urbanization in Developing Areas** (3) The functions and morphology of various types of cities found in presently developing areas of the world. Emphasis will be upon contrasting the cities of the developed and developing areas. Prereq: For 4900; six hours of geography, or junior and GEOG 4120. For 8906, six hours of geography and GEOG 8126.

**4950 Senior Thesis** (3) An independent research project undertaken by geography majors during their final year. Topics will be selected in consultation with two appropriate faculty formally approved in writing by them before student registers for the course. Research will be field work, laboratory work and/or library sources. Prereq: Senior geography major.

## Geology (GEOL)

**1010 Environmental Geology** (3) This is an introductory course for non-majors designed to make students aware of their physical environment and those factors that should influence where we site our home and communities. Topics will include hazards associated with volcanoes, earthquakes, landslides, floodplains and the problems associated with toxic waste disposal.

**1170 Introduction to Physical Geology** (4) Basic fundamentals of geology. The study of the internal geologic processes and external and erosional and depositional processes which create the subsurface and surface features of the earth. Fundamentals of contour mapping, topographic map interpretation and identification of common minerals and rocks will be covered in a required laboratory period. One field trip required.

**1180 Introduction to Historical Geology** (4) Basic fundamentals for interpretation of earth history. Deduction of history of earth-moon system through interpretation of geologic phenomena using principles of stratigraphy, sedimentation, structure and fossil content. Global tectonics, encompassing theories of sea-floor spreading and continental drift are presented. Fundamentals and interpretation of geologic environments and geologic maps, coupled with identification of fossils will be covered in a required laboratory period. One Saturday field trip required. Prereq: GEOL 1170 or 1070 or permission of Geography-Geology Department.

**2014 Environmental Geology Lab** (1) Basic topics such as geohydrology, water quality, waste management (including landfill siting and design), flood frequency, slope stability and earthquake hazards are covered via labs and field trips at a detailed introductory level. Local sites and associated data are used where possible to illustrate fundamental principles and commonly used analytic techniques. Prereq: GEOL 1010 or 1170 or GEOG 1030 or permission of instructor.

**2100 Regional Geology and Geomorphology of Eastern North American Plate** (3) A study of the geological history and evolution of the basic rock age, type, structure and landforms of the eastern part of the North American plate. Emphasis is on surficial geology and reasons for distribution of different landscapes. Prereq: GEOL 1170.

**2110 Regional Geology and Geomorphology of Western North American Plate** (3) A study of the geological history and evolution of the basic rock age, type, structure and landforms of the western part of the North American plate. Emphasis is on surficial geology and reasons for distribution of different landscapes. Prereq: GEOL 1170.

**2500 Special Topics in Geography-Geology** (1) This course will provide for an in-depth study of a geographical or geological subject (as specified in the course subtitle). Various classes will be offered as sections of GEOL 2500, but will be separate from one another. Students may repeat GEOL 2500 as often as they like as long as no specific subject is duplicated. Prereq: Variable.

**2600 Geohydrology** (3) A course dealing with geology, chemistry and hydraulics of groundwater. Designed mainly for Geology majors but can be helpful to other disciplines where ground water is involved. Prereq: MATH 1950 and a computer course.

**2750 Mineralogy** (3) Introduction to crystallography and mineralogy. Crystallography section is a study of crystal structure, symmetry and crystal systems. Mineralogy section is devoted to the description, identification and classification of minerals based on their crystal forms, physical properties, chemical composition and occurrence in nature. Must be taken concurrently with GEOL 2754. Prereq: GEOL 1170. (Fall)

**2754 Mineralogy Laboratory** (1) A systematic investigation of minerals and the techniques of studying minerals to be taken concurrently with GEOL 2750. (Fall)

**2760 Igneous and Metamorphic Petrology** (3) A study of the nature of igneous and metamorphic rocks. Topics include genesis and crystallization of magmas, phase equilibria of mineral assemblages, and pressure and temperature conditions of metamorphism. One weekend field trip will be required. Must be taken concurrently with GEOL 2764. Prereq: GEOL 2750. (Spring)

**2764 Igneous and Metamorphic Petrology Laboratory** (1) Petrology Laboratory is an introduction to the methods of petrology with emphasis on hand specimen identification and use of the petrographic microscope. Must be taken concurrently with GEOL 2760. (Spring)

**3100 Invertebrate Paleontology** (3) An introduction to the development of life through the study of the morphology, evolution and geological distribution of fossils. Must be taken concurrently with GEOL 3104. Prereq: GEOL 1180 or permission. (Spring)

**3104 Invertebrate Paleontology Laboratory** (1) An examination of representative specimens of groups of organisms important in the fossil record and an introduction to analytical techniques in paleontology. Must be taken concurrently with GEOL 3100. Prereq: GEOL 1180 or permission. (Spring)

**3300 Structural Geology** (3) A study of the deformation of rocks in the earth's crust. Analysis of stress and strain in rocks under physical conditions occurring in the earth's crust. Recognition and interpretation of structural features. Must be taken concurrently with GEOL 3310. Prereq: GEOL 2760 and MATH 1950 or permission of instructor.

**3310 Structural Geology Field Methods** (1) A course to accompany GEOL 3300. Field trips are included. Emphasis will be on collection and presentation of field data. Must be taken concurrently with GEOL 3300. Prereq: MATH 1950, GEOL 2760.

**3450 Sedimentology** (3) The study of sediments and sedimentary rocks. Includes description and discussion of sedimentary rocks and the processes involved in their formation. Must be taken concurrently with GEOL 3454. Prereq: GEOL 1170, 1180 and 2750.

**3454 Sedimentology and Sedimentary Petrology Lab** (1) A laboratory course to be taken concurrently with GEOL 3450. Prereq: GEOL 1170, 1180 and 2750.

**3460 North American Stratigraphy** (3) The fundamentals of the study of the spatial and temporal relationships of layered rocks, and a survey of the stratigraphic framework of North America. Prereq: GEOL 3450.

**3700 Plate Tectonics** (3) An introduction to and analysis of the all-embracing concept that has revolutionized the Earth Sciences, the theory of plate tectonics; paleomagnetic data, polar wandering and magnetic reversals; structure and life cycle of the oceanic crust, origin of the major structural features of the earth, ice-age form distribution, island arcs, crustal rejuvenation, continental collisions, mineral deposits. Prereq: GEOL 1170, 1180 and upper division standing.

**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: For GEOL 4100; BIOL1750 or GEOL 3100, junior-senior. For GEOL 8106; BIOL 1750 GEOL 3100, graduate. (Same as BIOL 4100/8106)

**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. Prereq: GEOG 1070 or GEOL 1170.

**4260/8266 Process Geomorphology** (3) Primarily a lecture and laboratory course. Emphasis on methodology and modern process-oriented geomorphology. Prereq: GEOG 1070 or GEOL 1170.

**4400 Geophysics** (3) A study of geophysical techniques used to understand the earth and in resource exploration. Seismic, gravity, heat flow, magnetic and other methods will be presented. The insights from these methods into earthquake events, stress distributions, rock rheology and plate tectonics will also be addressed. Interpretive skills will be emphasized. Prereq: GEOL 1170, PHYS 1110 and MATH 1950, 1960 or permission of instructor. (Same as PHYS 4400) (Every 3rd semester)

**4540 Geochemistry** (3) This course will cover the application of chemical principles to geologic systems. Specific topics covered will include the origin of elements and their distribution in the earth, geochronology, stable isotope systems, aqueous geochemistry and crystal chemistry. These topics will be integrated to the study of igneous, metamorphic and sedimentary rocks and ore deposits. Prereq: GEOL 1170, MATH 1950, CHEM 1190 and either GEOL 2750 or CHEM 2500. (Every third semester)

**4600 Independent Research** (1-3) (May be repeated up to a maximum of 3 hours) Advanced study in the form of a major paper to give the senior student knowledge of and experience in using government documents, professional and primary materials concerned with a region. Must be under the supervision of the instructor who is particularly qualified for the topic chosen (same as GEOG 4600). Prereq: Permission of department chair.

**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. Course is organized to accommodate variable needs of students with different backgrounds and career choices. Prereq: Permission.

**4620/8620 Advanced Field Course** (4) Six weeks of advanced study on selected field problems. Conducted in a geologically classic area where all the major rock types and structures may be studied in a variety of geological situations. Reports, which integrate the geology, surface processes and literature of the studied areas, is required. Recommended to follow the junior year. Prereq: GEOL 1170, 1180, 2750, 2760, 3300; 3450 recommended.

**4800 Internship in Environmental/Regional Planning/Earth Science** (1-6; repeatable up to 6 hours) Internship with local agencies or corporations enabling students to gain knowledge and experience in comprehensive regional or environmental planning or environmental science. Prereq: Senior, major or area of concentration in geography or environmental science and permission.

**4950 Senior Thesis** (3) An independent research project undertaken by all geology majors during their final year. Topics will be selected in consultation with appropriate faculty and researched through field work, laboratory work and/or library sources. Prereq: Senior.

## History (HIST)

**1000 World Civilizations I** (3) An examination of selected traditional and pre-industrial civilizations in the context of their regional, cultural and historical roots.

**1010 World Civilizations II** (3) An examination of selected societies since the beginning of the modern era.

**1050 Ancient African Civilization** (3) Investigates the development of the civilization of ancient Egypt and its influences on the cultural development of other African and Mediterranean states, including ancient Greece. Emphasis is on religion/philosophy, archaeology/art and history. (Same as BLST 1050)

**1110 American History to 1865** (3) A history of the creation and development of the United States from the beginning of English colonization to the end of the American Civil War.

**1120 American History since 1865** (3) A general survey of the basic forces shaping American life since the Civil War.

**1510 Western Civilization: 1453-1789** (3) A factual and interpretative treatment of the major political, economic, and cultural movements in Europe terminating just prior to the French Revolution and Napoleon.

**1520 Western Civilization: 1789-the Present** (3) A study of the forces shaping modern Europe with particular emphasis on republican, national, anticlerical and socialistic developments.

**2020 History of Science since 1650** (3) A survey of the historical and intellectual development of modern science and its relation to technology, society and social thought.

**2190 The Modern Middle East** (3) An interdisciplinary study of the social, religious and historical dimensions of contemporary issues and events which make the Middle East cultural and geographic region a crucible of global tensions. (*Same as RELI 2190 or SOC 2190*)

**2470 Latin America: Mexico and the Caribbean** (3) A history of Mexico and the Caribbean nations from the pre-Columbian Indian cultures to the present time.

**2480 Latin America: South America** (3) A history of the nations of South America from the pre-Columbian Indian cultures to the present time.

**2510 Ancient History: Greece** (3) A study of ancient civilizations in the Near East, Mesopotamia and Greece with emphasis upon their contributions through Greece to the development of Western civilization.

**2520 Ancient History: Rome** (3) A study of the growth and development of the Roman Empire with emphasis on the unique contributions of Rome to the modern world.

**2560 Modern France** (3) A study of the role of France in the development of modern democracy, and her successes and failures in the practice of that theory. (*Same as PSCI 2560.*)

**2580 Modern Germany** (3) A study of the institutions and problems of modern Germany with an emphasis on the achievements of German thought in the nineteenth century as well as German unification and rise to world power by 1914. The post-1914 period will be concerned with the rise of totalitarianism and the subsequent emergence of the two Germanies.

**2610 England to 1688** (3) The development of British society and institutions from prehistoric times to the Glorious Revolution.

**2620 England since 1688** (3) The development of British society and institutions from 1688 to the present.

**2630 History of Canada** (3) A survey of Canadian development from the early explorations to the present time.

**2660 The Peoples of East Central Europe Since 1815** (3) A survey of social, political and cultural developments with emphasis upon Poland, Czechoslovakia, Hungary and the Balkan states. Principal themes include 19th century movements for national liberation and social reform, the struggle for national unity and independence during World War I, problems and achievements of the independent East European states to 1938, at the Second World War and Nazi occupation, the era of Communist rule, and post 1989 efforts to establish democracy and a market economy. (*Same as PSCI 2660*)

**2710 Russia to 1855** (3) An interpretative analysis of the development of Russian culture and society from their Kievan beginnings through the establishment of autocracy and serfdom to the end of the reign of Nicholas I.

**2720 Russia since 1855** (3) An interpretative analysis of Russian culture and society under the last three Tsars, the Bolshevik Revolution, the USSR and post-communist Russia and neighboring states.

**2810 East Asia: Traditional and Modern China** (3) A study of traditional Chinese society with special emphasis upon those traits which in large part shaped China's response to the impact of the west in the 19th century and conditioned her search for a new political structure in the 20th century.

**2820 East Asia: Traditional and Modern Japan** (3) A study of the development of traditional Japan and the ensuing transition in the 19th and 20th centuries to a major world power.

**2900 African Civilization - The Middle Period** (3) This course traces the development of African history from the beginning of the Civilization of Ghana (800 B.C.) to the period of European exploration of Africa (Mid 15th C.) It examines the main achievements, events and individuals in the Empires of Ghana, Mali, Songhay, Zimbabwe and other states. Prereq: None. (*Same as BLST 2900*)

**2920 History of Modern Africa** (3) This course covers the era of the beginning, development and decline of European colonialism in Africa. The movement for decolonization, the emergence of independent sovereign nations and the strategic role that Africa plays in the forum of industrialized and developed nations is investigated. It examines the impact of alien cultures on traditional Africa, and the struggle for a resolution of the conflict between the three major traditions on the continent - the Islamic, Western and Indigenous. (*Same as BLST 2120*)

**2990 People and Issues in History** (1) An in-depth investigation of a topic as announced in the course subtitle. Meets three hours per week for one-third of the semester. Students may enroll for different sections as long as no specific subject is duplicated.

**3000 United States Military History: Civil War to the Present** (3) A survey of the development of the American armed forces as instruments of national policy at home and abroad and as organizations reflecting American society. Topics to be examined include military organization and operations, the transformation of warfare by technology and the effect of war and preparation for war on politics and society.

**3420 History of Omaha** (3) An examination of major themes in the history of Omaha and its immediate environs from the early 19th century through the 1970s.

**3520 History of the Roman Empire** (3) This course will consider the history of the Roman Empire from the founding of the Principate to the division of the Empire in the fourth century A.D. with an emphasis on assessing the Empire's importance for its contemporary as well as subsequent civilizations. Prereq: Junior or permission of instructor.

**3580 Queens and Mistresses of Early Modern Europe** (3) This course will consider the historical impact of women who occupied roles of potential influence in early modern Europe. Attention will be given to social, cultural and intellectual influences as well as any political influence which any of them may have had. Prereq: Junior or permission of instructor.

**3930 Historical Research** (3) The critical method in collecting, organizing and presenting historical material. Prereq: ENGL 1160 and permission of department chair or chair's designee. Note: Students who drop HIST 3930 will not, in subsequent semesters, be allowed to register unless there are spaces available after seniors have had the opportunity to register during regular registration.

**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 a non-political approach to American history, this course will examine significant topics in American thought and society. Prereq: 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: Junior or permission of instructor.

**4140/8146 American Colonial History** (3) A study of the background settlement, and development of the English colonies. Prereq: Junior or permission of instructor.

**4160/8166 The U.S. : Early National Period** (3) An interpretive study of the middle period of American history. Prereq: Junior or permission of instructor.

**4170/8176 The American Frontier: 1800-1900** (3) The Trans-Mississippi West from the Rocky Mountain Fur Trade days to the disappearance of the frontier around 1900. Prereq: 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: Junior or permission of instructor.

**4240/8246 The Emergence of Modern America** (3) A study of a transitional period in American history, this course considers the importance of industrialization, urbanization, immigration and the emergence of the United States as a significant world power. Prereq: 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: 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: Junior or permission of instructor.

**4330/8336 U.S. Constitutional History to 1860** (3) A history of constitutional theory and practice to 1860. Prereq: Junior or permission of instructor.

**4340/8346 U.S. Constitutional History since 1860** (3) A history of constitutional theory and practice since 1860. Prereq: Junior or permission of instructor.

**4350/8356 American Diplomatic History** (3) A history of the foreign relations of the United States. Prereq: Junior or permission of instructor.

**4400/8406 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: Junior or permission of instructor.

**4410/8416 History of Nebraska** (3) From the earliest known records to the present. Prereq: 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: Junior or permission of instructor.

**4440/8446 History of the South** (3) Economic, social and political development of the South as a region. Prereq: Junior or permission of instructor.

**4460 American Immigration History** (3) A study of American immigration from the colonial era to the present. Topics covered include Old World origins of migration, the old immigrants from western Europe, the new immigrants from southern and eastern Europe, non-European immigrants, native-born American responses to immigrants, the periods of immigrant adjustment in the new physical environment, and the contemporary revival of ethnicity. Prereq: Junior or permission of instructor.

**4470/8476 American Medicine and Public Health** (3) Analysis of the relationship and interaction of medical thought and practice, public health problems and institutional development, and the changes in American society and culture from the 17th to the 20th century. Prereq: 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 setting. Prereq: Junior or permission of instructor.

**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: Junior or permission of instructor.

**4530/8536 The Age of the Renaissance-Reformation** (3) A study of the politics and economics of the 15th and the 16th centuries as well as the achievement of Renaissance culture and the emergence of the Protestant churches and Trentine Catholicism. Prereq: Junior or permission of instructor.

**4540/8546 Medieval Europe** (3) An examination of medieval European history with emphasis upon social and economic developments. Prereq: 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: Junior or permission of instructor.

**4560/8566 The French Revolution and the Napoleonic Era, 1789-1815** (3) Particular attention is given to the development of democratic practice concurrently with the development of modern authoritarianism. Prereq: Junior or permission of instructor.

**4570/8576 Europe: 1815-1890** (3) A study of reform and reaction which resulted in the Balkanization of Europe. Prereq: Junior or permission of instructor.

**4600 Anglo-American Legal History** (3) The development of the English structure of government and its impact outside the United Kingdom. Prereq: Junior or permission of instructor.

**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: Junior or permission of instructor.

**4620/8626 England: From Empire to Welfare State** (3) A study of the change and development in Great Britain from the late 18th century to 1918. Prereq: Junior or permission of instructor.

**4640/8646 British Empire and Commonwealth** (3) Britain in America, Africa, India and the Pacific. The development of a dependent empire and the transformation into independent nations. Prereq: Junior or permission of instructor.

**4710/8716 Europe and America in the Two World Wars** (3) A military, social and political history analyzing the causes, conduct and consequences of each war, the wartime transformation of European and American society, and the emergence of the United States as the strongest world power. Prereq: Junior or permission of instructor.

**4770/8776 Europe: 1890-1932** (3) A study of the conditions and forces immediately precedent to World War I, the war itself, the peace following the war and the rise of the modern dictatorships. Prereq: Junior or permission of instructor.

**4780/8786 Europe: 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: Junior or permission of instructor.

**4900 Problems in History** (1-3) Project arranged individually with undergraduate students. May be repeated as long as the subject differs, to a maximum of six hours. Prereq: Written permission of instructor.

**4910/8716 Topics in History** (3) A course on a selected topic offered on a one-time or occasional basis. May be repeated as long as the topic is different each time. Prereq: Junior or permission of instructor.

## Humanities (HUMN)

**1010 Introduction to the Humanities** (5) An attempt to see how art, music, literature and the history of ideas in Western culture contribute to the understanding of human existence. The first semester explores classical Greek, medieval and Renaissance views of the meaning of life.

**1020 Introduction to the Humanities** (5) A survey of the interrelationship of arts and ideas in the modern world, and their impact on the question of the meaning of being human.

**1100 Introduction to Native American Studies** (3) This course introduces the myths, arts, rituals, life-ways and world-views which compose the diverse cultural traditions of Native American peoples, and includes both historical and contemporary experience. Prereq: None.

**1200 Introduction to Chicano(a)/Latino(a) Studies** (3) This course follows a largely topical presentation of issues and concepts in Chicano(a) and Latino(a) cultures emphasizing Mexican and Chicano(a) materials. To accomplish this end, we will read and consider the assigned materials in a variety of formats and from several perspectives. Prereq: None.

**2100 Human Experience I** (5) An interdisciplinary, topical approach to the methods and views of the humanities. Topics will vary, but topics offered under HUMN 2100 will be different from those offered under HUMN 2200. Prereq: Completion of the freshman English requirement.

**2200 Human Experience II** (5) An interdisciplinary, topical approach to the methods and views of the humanities. Topics will vary, but topics offered under HUMN 2200 will be different from those offered under HUMN 2100. Prereq: Completion of the freshman English requirement.

**2300 Human Values in Medicine** (3) An opportunity for pre-medical students and students preparing for other health professions to confront questions of meaning and value that arise in the context of medical research and practice.

## International Studies and Programs (INST)

**2130 International Studies I** (3) An interdisciplinary, team-taught course which introduces the student to the range of interdependent factors and forces that influence international affairs. The topical approach combines the expertise of numerous social humanistic disciplines in each class session. This course may be taken for honors credit.

**2140 International Studies II** (3) An interdisciplinary team-taught course which focuses upon case studies of the interplay of domestic and international factors that influence the role and position of the Third World nations in the global community. There are generally three case studies. This course may be taken for honors credit.

**3000 Perspectives in International Studies** (1-3) Topical and/or general analysis of selected countries and regions offered in conjunction with possible study tours in those areas under investigation. Internships and/or study abroad experiences usually form the basis for the course. Can be repeated up to 12 hours. This course may be taken for honors credit. Prereq: Permission of instructor.

## Mathematics (MATH)

**1310 Intermediate Algebra** (3) Properties of real numbers, linear equations and graphing, systems of equations, linear inequalities, quadratic equations, polynomials, algebraic fractions, exponents and radicals, and logarithms. Prereq: One year of high school algebra and satisfactory score on the MPE within the last two years.

**1320 College Algebra** (3) Preparatory course for those planning to enroll in calculus. Review of algebraic operations, functions, graphs, linear and quadratic equations, matrices and determinants, systems of equations, inequalities, mathematical induction, binomial theorem, complex numbers, theory of equations, exponentials, logarithms. Prereq: Two years of high school algebra and satisfactory score on the MPE within the last two years, or MATH 1310 with a grade of "C" or better within the last two years.

**1330 Trigonometry** (3) Elements of plane trigonometry, including trigonometric and circular functions, inverse trigonometric functions, solutions of triangles, identities and conditional equations, vectors, complex numbers. Prereq: Two years of high school algebra and one of geometry and satisfactory score on the MPE, or one year of high school geometry and MATH 1310 or MATH 1320. (Geometry deficiencies can be covered through self-study by the student.)

**1340 Algebra and Trigonometry for Calculus** (4) A combined algebra and trigonometry course for science and engineering students planning to enroll in Calculus I (MATH 1950). Topics include: fundamental algebra, systems of equations, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions and their inverses, trigonometric identities and applications, conic sections, complex numbers and polar coordinates, elementary combinatorics, sequences and series. Credit for both MATH 1320/1324 and MATH 1340, or both MATH 1330 and MATH 1340 will not be given. Prereq: Two years of high school algebra and satisfactory score on the MPE within the last two years, or MATH 1310.

**1430 Elementary Topics in Mathematics** (3) A topical study of mathematics to acquaint non-mathematics majors with the nature of mathematics as part of our culture. Includes basic concepts from logic, set theory, probability, statistics and other selected topics.

**1530 Introduction to Applied Probability and Statistics** (3) An elementary introduction to the basic concepts of probability, descriptive statistics and statistical inference, including point estimation, confidence intervals and hypotheses testing. Extensive use of electronic calculators and an introduction to statistical packages are included in the course. Prereq: One year of high school algebra and satisfactory score on the MPE or permission of instructor.

**1600 Computer Algebra** (1) An introductory course to computer algebra systems such as MAPLE or MATHEMATICA. The course will discuss files and their management, the package interface, and the basic package commands. Emphasis will be placed on solving equations, systems of equations, sets, lists, tables, and matrices. The graphing capabilities of the package will be explored. Prereq: MATH 1320 or equivalent.

**1930 Calculus for the Managerial, Life and Social Sciences** (3) Basic ideas of calculus are surveyed with applications: functions, limits, derivatives, integrals, partial derivatives. Trigonometry is not required. May not be used as a prerequisite for MATH 1960. Credit will not be granted for both MATH 1930 and 1950. Prereq: Four years of high school mathematics and satisfactory score on the CRE (Calculus Readiness Exam) or a grade of "C" or better in MATH 1320 within the last two years.

**1950 Calculus I** (5) Plane analytic geometry, theory of limits, derivatives and applications, integrals. An honors section is offered in the fall semester for students in the honors program, or by permission. Prereq: Four years of high school mathematics including trigonometry or equivalent and satisfactory score on the CRE (Calculus Readiness Exam) within the last two years, or MATH 1320 and 1330, or MATH 1340 with a grade of "C" or better within the last two years.

**1960 Calculus II** (5) Techniques of integration, conic sections, infinite series and applications of integration. A computer algebra package, e.g., MAPLE, is introduced with required assignments. Prereq: MATH 1950.

**1970 Calculus III** (4) Vector functions, parametric equations, solid analytic geometry, partial differentiation, multiple integration and an introduction to vector calculus. A computer algebra package, e.g., MAPLE, is introduced with required assignments. Prereq: MATH 1960.

**2000 Mathematics for Elementary School Teachers** (3) A course for prospective elementary school teachers that involves formulating proofs based upon definition and logic, mathematical reasoning, conjecturing, problem-solving, and connecting mathematical thought to its applications. Topics include number theory, real numbers, probability and statistics, and geometry. Prereq: "C" or better in MATH 1310 and passing the PPST.

**2030 Discrete Mathematics** (3) Logic, sets, relations, functions, basic combinatorics. Introduction to discrete probability. Graphs, trees, recursion, and algorithm analysis. Prereq: MATH 1950 and CSCI 1610.

**2050 Applied Linear Algebra** (3) Matrix algebra, simultaneous equations, vector spaces. Application of linear algebra and computational considerations. A computer algebra package, e.g., MAPLE is introduced with required assignments. Prereq: MATH 1950 and CSCI 1610.

**2230 Introduction to Abstract Mathematics** (3) This course provides a transition from the calculus to more abstract mathematics. Topics include logic, sets and functions, an introduction to mathematical proof, mathematical induction, relations. Important prerequisite material for a number of more advanced abstract mathematics courses is studied. Credit will not be given for both MATH 2030 and 2230. Prereq: MATH 1960 or permission.

**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 2030 or 2230. (Same as CSCI 3100/8105)

**3230/8235 Introduction to Analysis** (3) Provides a theoretical foundation for the concepts of elementary calculus. Topics include real number system, topology of the real line, limits, functions of one variable, continuity, differentiation, integration. Prereq: MATH 1970 and 2230 or equivalent.

**3250/8255 Vectors and Tensors** (3) Vector and Tensors: Review of Vector algebra and Vector calculus. The integral theorems of Green, Gauss and Stokes. Applications to geometry and physics. Tensor algebra. The metric tensor and Riemannian curvature. Christoffel symbols and the Ricci tensor. Tensor in Euclidean geometry. Geodesics, applications to geometry and mechanics. Prereq: MATH 1970.

**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 and 2050.

**3350/8355 Differential Equations I** (3) Solutions of linear and first order non-linear differential equations with applications. Also power series solutions, Fourier series, and Laplace transform. Prereq: MATH 1960.

**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 1970 and 3350/8355.

**3400 Theory of Interest** (3) A study of the measurement of interest, annuities, amortization schedules and other miscellaneous topics. Prereq: MATH 1970.

**3500/8505 Selected Topics in Mathematics** (1-6) This is a variable content course with selected topics in the mathematical sciences which may be of interest to students in other disciplines such as mathematics education, psychology and business. The course may be taken more than once for credit provided topics differ, with a maximum of nine hours. Mathematics majors may apply no more than three hours of MATH 3500 toward the minimum major requirements. 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 2230 or 2030, or equivalent mathematical maturity.

**4030/8036 Applied Modern Algebra** (3) Review of sets, relations and functions. Semigroups, groups, rings and fields, lattices and Boolean algebra. Applications may include coding theory, linear machines and finite automata. Prereq: MATH 2230 or MATH 2030. Recommended: MATH 2050 and MATH/CSCI 3100/8105.

**4050/8056 Linear Algebra** (3) The theory of vectors, vector spaces, inner product spaces, linear transformations, eigenvalues, canonical forms, complex vectors and matrices and orthogonality. Unlike MATH 2050, this course emphasizes the theoretical aspects of linear algebra. Prereq: MATH 2030 or 2230; or permission.

**4110/8116 Abstract Algebra I** (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 4030/8036 or permission of instructor.



**4150/8156 Graph Theory & 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: MATH 2030 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 ordered fields and the real number system, basic properties of complex numbers, metric space topology, sequences and series in  $\mathbb{R}^k$ , limits and continuity in a metric space, monotonic functions. Prereq: MATH 3230/8235 or equivalent.

**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 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: MATH2050, MATH/CSCI 4300/8306. *(Same as CSCI 4310/8316)*

**4330/8336 Introduction to Partial Differential Equations** (3) Heat conduction, vibrating membranes, boundary value problem, Sturm-Liouville systems, Fourier series, Fourier integrals, Bessel functions, Legendre polynomials. Prereq: MATH 1970 and 3350/8355.

**4510/8516 Theory of Numbers** (3) Congruences, quadratic reciprocity, diophantine equations, continued fractions and prime number distribution. Prereq: MATH 2030 or 2230; junior or senior standing.

**4600/8606 Differential Geometry** (3) Tensor algebra, differential forms, Lie groups, surface theory, curvature, symplectic geometry. Applications to classical mechanics and relativity. Prereq: MATH 1970 and 3350/8355.

**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 Transform Methods and Applications** (3) Laplace transform and the inversion integral. Fourier transform. Other transforms and special techniques. Application to differential equations, boundary value problems of mathematical physics and signal analysis. Prereq: MATH 3350/8355 and 4270/8276.

**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 2030. Recommended: CSCI 3320. *(Same as CSCI 4660/8666.)*

**4740/8746 Introduction to Probability and Statistics I** (3) A mathematical introduction to probability theory including the properties of probability; probability distributions; expected values and moments; specific discrete and continuous distributions; and transformations of random variables. Prereq: MATH 1970 and either MATH 2230 or MATH 2030.

**4750/8756 Introduction to Probability and Statistics II** (3) Theory and methods of statistical inference including estimators, statistical hypotheses, multivariate estimation, chi-square tests, linear models, analysis of variance and statistical software. Prereq: MATH 4740/8746.

**4760/8766 Topics in Modeling** (3) Selection of such topics as formulation and analysis of various models involving Markov chains, Markov processes (including birth and death processes), queues, cellular automata, difference and differential equations, chaotic systems and fractal geometries. Prereq: MATH 3350/8355 and 4740/8746. *(Same as CSCI 4760/8766)*

**4900 Independent Studies** (1-3) A variable credit course for the junior or senior who will benefit from independent reading assignments and research-type problems. Independent study makes available courses of study not available in scheduled course offerings. The student wishing to take an independent study course should find a faculty member willing to supervise the course and then submit, for approval, a written proposal (including amount of credit) to the MATH/STAT Undergraduate Curriculum Committee at least one week prior to registration. Prereq: Junior and permission of the chair.

**4980 Seminar** (1-3) A seminar in mathematics. Prereq: At least one math course numbered 3000 or above. Prereq: At least one math course numbered 3000 or above (not including MATH 3500) and permission.

## Statistics (STAT)

**3000/8005 Statistical Methods I** (3) Distributions, introduction to measures of central value and dispersion, population and sample, the normal distribution, inference: single 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 3000/8005.

**3800 Applied Engineering Probability and Statistics** (3) An introduction to the application of probabilistic and statistical techniques to the solution of engineering and industrial design problems. Credit for both MATH 3740 and STAT 3800 will not be given. Prereq: MATH 1970.

**3810 Applied Statistical Analysis for Industrial Problems** (3) A study of the applications of curve-fitting techniques, analysis of variance and non-parametric statistics for industrial processes. Credit for both MATH 4750 and STAT 3810 will not be given. Prereq: STAT 3800.

## New Start

**1010 New Start** (1) This is a general course for older, beginning students in which study skills, library usage, etc., are stressed in order to allay concerns of non-traditional students. Prereq: At least three years out of high school or college and at least 25 years of age.

## Philosophy and Religion

### Philosophy (PHIL)

**1010 Introduction to Philosophy** (3) A first course in philosophy designed to introduce students to the major philosophic positions.

**1020 Contemporary Moral Problems** (3) Introduction to the application of basic moral concepts, values and theories to contemporary moral issues. Topics to be discussed from among: abortion, euthanasia, racism, sexism, preferential treatment, sexual morality, capital punishment, privacy, world hunger, surrogate mothering, reproductive technology, civil disobedience, nuclear disarmament and environmental ethics. Prereq: None.

**1210 Critical Reasoning** (3) A first course in symbolic logic designed to introduce students to formal systems of propositional and predicate logic.

**2010 Symbolic Logic** (3) A study of the principles of correct reasoning: induction, deduction, formal and informal fallacies.

**2030 Introduction to Ethics** (3) A critical study of basic moral concepts and problems contained in ethical theories of important western philosophers: relativism, egoism, happiness, obligation, justice, freedom, conscience, love, religious precepts, moral rules, moral attitudes and moral language.

**2110 History of Ancient Philosophy** (3) A survey of philosophy from its beginning to the Middle Age: pre-Socratics, Sophists, Plato, Aristotle, Epicureans, Stoics, Skeptics.

**3010 Philosophy of Justice** (3) A philosophical examination of justice and its public administration. Prereq: Junior or three credits in philosophy. *(Same as CJUS 3010)*

**3020 The Justification of Punishment** (3) The course examines the major philosophical arguments concerning the conditions under which punishment is justifiable, and provides a background of ethical theory in order to make these arguments comprehensible. Prereq: Junior, or three credits in philosophy, or one course in criminal justice.

**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 PHIL 3050; junior or permission of instructor. For PHIL 8055; graduate or permission of instructor. *(Same as PHYS 3050/8055)*

**3130 History of Modern Philosophy** (3) An examination of the leading philosophical ideas of the 17th and 18th centuries: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant. This course also fulfills the writing requirements for philosophy majors. Prereq: 6 hours in Philosophy or permission.

**3140 Nineteenth Century Philosophy** (3) An examination of major views in 19th century philosophy including the development of German idealism, British empiricism and Marxism. Special attention will be paid to the origins of existentialism, pragmatism and modern empiricism as reactions to 19th century positions. Prereq: Junior or permission of instructor.

**3150 Philosophy of History** (3) An introduction to representative problems of historical interpretation including theories of historical facts, history and values, periodization of history, history and political actions. The course will emphasize certain major philosophies of history such as Christianity, idealism, positivism and Marxism. Prereq: Junior or three credits in philosophy.

**3170 Ethics in Business** (3) An application of ethical concepts and principles to moral issues arising in business: corporate responsibility, discrimination, advertising, competition, whistle-blowing, trade secrets, multinationals, environmental protection, workers' rights, government regulation, investment, bribes, product liability and consumerism. Prereq: None. (Same as LAWS 3170)

**3180 Environmental Ethics** (3) Analysis and evaluation, from ethical viewpoints, of such topics as: animal rights, intrinsic value of animals, plants and ecosystems; pollutions of nature; preservation of historic structures and rare species; environmental law and politics; obligations to future generations; cost/benefit analysis of natural resources; agribusiness; hazardous technologies and wastes; and the worth of wilderness. Prereq: Junior or three hours of philosophy.

**3200 Philosophy of Religion** (3) A study of the major arguments for and against the existence of God, religious knowledge, miracles, morality without religion and immortality. Prereq: Junior or three credits in philosophy.

**3210 Social Philosophy** (3) An examination of the problems and concepts of social and political philosophy. Prereq: Three credits in philosophy or junior or permission of instructor.

**3220 Philosophy of Art** (3) A philosophical examination of art from the standpoint of the creative activity of the artist, the work of art and the reception of art by the public. Prereq: Junior or three credits in philosophy.

**3260 History of American Philosophy: 20th Century** (3) A study of the thinkers and movements in 20th century American thought: pragmatism, critical realism, new realism; along with selected readings from contemporary American thinkers. Prereq: Junior or three credits in philosophy.

**3300 Analytic Philosophy** (3) An examination of the 20th century movement in philosophy called philosophical analysis. Prereq: Three credits in philosophy or permission of instructor.

**3370 Concepts of Nature** (3) An examination of key philosophical conceptions of nature from the Greeks through the 20th century.

**3400 Philosophy of Natural Science** (3) An examination of the history, method and presuppositions of scientific inquiry; concept formation, scientific laws and scientific theories. Prereq: Three credits in philosophy and junior, or permission of instructor.

**3410 Philosophy of the Social Sciences** (3) An examination of the nature and scope of social science with emphasis on the extent to which the methods of the social sciences resemble those of the natural sciences.

**3490 Problems in Feminist Philosophy** (3) Seminar on specialized topics in feminist philosophy. Topics to be arranged. Prereq: Junior or six hours in philosophy.

**3500 Problems in Philosophy** (3) Seminar on specialized topics in philosophy. Topics to be arranged. Prereq: Junior or six hours in philosophy.

**3510 Existentialism and Phenomenology** (3) A historical and critical examination of existentialism with special emphasis on 20th century European thinkers (e.g., Husserl, Heidegger, Sartre, Merleau-Ponty) and their influence on other fields such as literature, psychology and religion. Prereq: Junior or three credits in philosophy.

**3520 Criticism, Interpretation and Deconstruction** (3) An introduction to some key thinkers and movements in Continental philosophy in the 20th century. The focus will be on approaches to understanding and critical evaluation in modern culture, such as: Hermeneutics; the Frankfurt School and Critical Theory; Deconstruction and other post-modern approaches. Emphasizes topics and things not covered in PHIL 3510. Prereq: Three hours in philosophy, junior or permission of instructor.

**3570 Understanding Self-Deception** (3) This course is designed to introduce students to a variety of problems associated with the special issue of self-deception. Conceptual and linguistic issues concerning the paradox of self-deception, as well as epistemological issues concerning self-deception are considered. Prereq: Junior or six hours in philosophy or permission.

**3600 Theory of Knowledge** (3) An examination of the nature and limits of human knowledge and related issues such as skepticism, certainty, rationality and perception, and the problem of other minds. Prereq: Six hours of philosophy or permission of instructor.

**3610 Philosophy of Language** (3) A course dealing with classical philosophical problems about language such as meaning and reference as well as with conceptual issues raised by contemporary linguistics and psycholinguistics. Prereq: Six hours philosophy or background in linguistics or psycholinguistics or permission of instructor.

**3700 Metaphysics** (3) This course introduces students to the critical study of selected philosophical theories of reality. Some representative views from the history of philosophy will be covered as well as contemporary debates. The course includes examination of the relation of metaphysical positions to other areas of knowledge and belief and the critical evaluation of metaphysics as an intellectual enterprise. Prereq: Six hours of philosophy or permission of instructor.

**3960 Readings in Philosophy** (1-3) Readings in specialized areas or individual problems in philosophy. Prereq: Permission of instructor.

**4050 Contemporary Ethical Philosophy** (3) An examination of traditional moral theories from the perspective of contemporary critiques, including those of Alasdair MacIntyre, Stuart Hampshire, Carol Gilligan and Bernard Williams. Prereq: PHIL 2030 or six hours in philosophy or permission of instructor.

**4650/8656 Philosophy of Mind** (3) A discussion of various accounts of the nature of minds which focuses upon philosophical problems such as whether the mind is identical with the brain, the extent of similarities between human minds and computers, the nature of personal identity, and the relationship of mental activity to behavior. Prereq: Six hours of philosophy or permission of instructor.

## Religion (REL)

**1010 Introduction to World Religions** (3) A first course in religious studies, designed to introduce students to ways of understanding religion as a phenomenon in human culture.

**2150 Old Testament** (3) A literary and historical approach to the study of the Hebrew Bible in the light of recent scholarship. This course also fulfills the writing requirement for religion majors.

**2160 New Testament** (3) An introduction to the literature of the New Testament from a historical perspective.

**2190 The Modern Middle East** (3) An interdisciplinary study of the social, religious and historical dimensions of contemporary issues and events which make this cultural and geographic region a crucible of global tensions. (Same as HIST 2190 or SOC 2190)

**2200 Introduction to Christian Ethics** (3) An introduction to the main types of ethical thought in the history of Christianity (with special attention to current approaches) and the relation of Christian ethics to contemporary moral problems.

**2300 Introduction to Jewish Ethics** (3) An introduction to the main types of ethical thought in the history of Judaism (with special attention to contemporary approaches) and the relation of Jewish ethics to other religious and non-religious moral systems. The following issues will be examined: truth-telling, self-sacrifice, political ethics, sexual ethics, abortion, suicide, euthanasia and others. Prereq: None.

**2400 Religion in America** (3) The role of religion in American culture, seen in the interaction between the inherited religious traditions and the crucial events in American experience and how this affects American identity - past and present. Prereq: Sophomore or permission of instructor.

**3010 Phenomenology of Religion** (3) After a consideration of various attempts to define what religion is, the course will concentrate on a study of characteristic phenomena in the religious life of man (religious ideas, activities, institutions, customs and symbols) as they occur in various religious traditions and cultures. Prereq: Junior, three hours in religion, or permission of instructor.

**3020 Native American Religions** (3) Study of the sacred stories, symbols, ceremonies, and belief systems of selected Native American peoples, representing the major cultural regions of North America. Prereq: Junior, or HUMN 1100, or three hours in religion.

**3030 Shamanism** (3) Study of the forms and techniques of shamanic experience from its Paleolithic and Neolithic origins to its contemporary practice among indigenous peoples, including its role in the development of human religious traditions and systems of healing.

**3050 Religions of the East** (3) A study of the major religions which considers their histories and contemporary forms. Included are the religions of Hinduism, Buddhism, Taoism, Confucianism and Shintoism. Prereq: Junior, three hours in religion, or permission of instructor.

**3060 Religions of the West** (3) A study of Judaism, Christianity and Islam, with an introduction to their ancient predecessors. Prereq: Junior, three hours in religion, or permission of instructor.

**3120 The Hebrew Prophets** (3) A critical survey of the messages and roles of the Hebrew prophets in light of their historical, cultural and theological background in Israel and the Ancient Near East. The course will include an examination of prophecy in the Biblical literature. Prereq: Junior or three hours in religion.

**3150 The Judaic Tradition** (3) A study of the Judaic understanding of God, man and world in three stages: (1) The early Hebraic understanding of law and history; (2) The Rabbinical tradition and development of Jewish mysticism and philosophy; and (3) Contemporary Judaism and movements such as Hasidism, reconstructionism and Zionism. Prereq: Junior or RELI 1010, 2300, 2150 or permission.

**3170 History of Christian Thought** (3) The development of Christian thought from the beginnings of Christianity through the Reformation. Prereq: Junior, three hours in religion, or permission of instructor.

**3180 Modern Christian Thought** (3) The history of Christian thought from the Enlightenment to Vatican II. Prereq: Junior, three hours in religion, or permission of instructor.

**3200 Islam** (3) A study of history, beliefs, and practices of Islam, including both Sunni and Shi'i traditions as well as the role of Sufism and contemporary movements. Prereq: Junior, three hours in religion, or permission of instructor.

**3220 Religion and Reason** (3) A critical study of the dialogue between philosophical reason and religious belief. Reason is seen historically in the various roles of enemy, ally and servant of religion. Consideration of contemporary options for applying intellect to faith. Prereq: Junior, three hours in religion, or permission of instructor.

**3250 The Feminine in Mythology** (3) The course will acquaint students with (1) the images of the feminine in the earliest strata of human culture, (2) the symbols of the feminine in the myths of the primary religious traditions of the world, and (3) the role of feminine image-making within contemporary religious consciousness. Prereq: Junior, or three hours in Religion, or permission.

**3310 Contemporary Religious Thought** (3) A survey of recent developments in religious thought, emphasizing central themes and basic issues in current discussion. Prereq: Junior, three hours in religion, or permission of instructor.

**3330 Roman Catholic Theology Today** (3) An investigation of differences and developments in Roman Catholic theology in last decades of the 20th century, with consideration of the bases in the tradition for the progressive and conservative theologies of today. Prereq: Junior, three hours in religion, or permission of instructor.

**3500 Special Topics in Religion** (3) The content of this course varies from semester to semester, giving instructor and students an opportunity to investigate various subjects of interest in religious studies. (May be repeated for credit as long as the topic is different.) Prereq: Junior, three hours in religion, or permission of instructor.

**3960 Readings in Religion** (1-6) Individual research in selected areas or particular questions in religious studies. Prereq: Nine hours in religion and permission of instructor.

**4020 The Buddhist Tradition** (3) A study of the Buddhist understanding of man's religious circumstances, including the life and teachings of Gautama the Buddha, the development of Theravada tradition, the philosophy of Nagarjuna, and the major Mahayana movements with special attention to Zen and Tantrism. Prereq: Senior or permission of instructor.

**4150/8156 Judaism in the Modern Age** (3) A critical investigation of Judaism since the Enlightenment emphasizing historical, intellectual and religion-legal developments. Pivotal movements (e.g., Hassidism, Reform, Historical/Conservative Judaism, Modern Orthodoxy, Zionism) and major historical events (e.g., the American and French Revolutions, Tsarist oppression, the Holocaust, and the establishment of the State of Israel) will be analyzed for their ongoing impact. Prereq: Junior, three hours in religion, or permission of instructor.

**4300/8306 Existentialism and Religious Thought** (3) A study of existentialism in its theistic (e.g., Kierkegaard) and atheistic (e.g., Sartre) forms, and its impact on recent Jewish and Christian thought. Prereq: Junior.

## Physics (PHYS)

**1030 Physics of Life** (3) A conceptual course in the principles of physics and their relationship to man and his environment. Topics included relate the basic laws of physics and recent developments in science to their effects on man. This course is intended for students not majoring in the sciences and may be used in partial fulfillment of the natural science requirement. Prereq: MATH 1310 or the equivalent.

**1034 Physics of Life Laboratory** (1) A physics laboratory consisting of a series of concise experiments which relate man directly to his physical environment. Prereq: High school algebra or equivalent, prior or concurrent.

**1050 Introduction to Physics** (4) A terminal one-semester course covering major topics in mechanics, heat, sound, electricity, magnetism, light and modern physics. Designed particularly for non-science liberal arts majors or others for whom such a one-semester coverage might be deemed adequate. (Does not count towards physics requirement for chemistry, physics and engineering majors.) Prereq: High school algebra or equivalent.

**1054 Introduction to Physics Laboratory** (1) Prereq: PHYS 1050, prior or concurrent.

**1110 General Physics** (4) First part of a two-semester continuing course designed for students with no prior background in physics. Mechanics, heat and sound are covered in this semester. Prereq: High school algebra and geometry.

**1120 General Physics** (4) Second part of a two-semester continuing course designed for students with no prior background in physics. Electricity and magnetism, light, and a little modern physics are covered. Prereq: PHYS 1110 or permission.

**1154 General Physics Laboratory I** (1) One-semester laboratory course for students enrolled in PHYS 1110 or 2110. First semester covers experiments in mechanics, wave motion and heat. Prereq: PHYS 1110 or 2110, prior or concurrent.

**1164 General Physics Laboratory II** (1) One-semester laboratory course for students enrolled in PHYS 1120 or 2120. Second semester covers experiments in electricity and magnetism, optics, and modern physics. Prereq: PHYS 1120 or 2120, prior or concurrent.

**1350 Principles of Astronomy** (3) An introductory course that satisfies divisional requirements in natural science. Topics discussed include the night sky, gravity, telescopes, atoms and radiation, the solar system, the sun and stars; and if time permits, black holes, galaxies and cosmology. Prereq: High school algebra or equivalent.

**1354 Introductory Astronomy Lab** (1) Laboratory sessions acquaint students with basic phenomena, methods and data acquisition in astronomy. By use of the experiments, students will be able to explore and add to what has been discussed in lecture. Several night observing sessions will also be available for students to use telescopes. Prereq: PHYS 1350 prior or concurrent.

**1750 Fundamental Physics of Sound** (4) A course designed for music and communication majors. It covers transmission of sound, wave motion, pitch, quality, sound synthesis, acoustics, resonance, interference, musical scales, string and wind instruments, recording and reproduction of sound. Three lectures and one discussion per week. Prereq: High school algebra or equivalent.

**1754 Fundamental Physics of Sound Laboratory** (1) A laboratory that accompanies PHYS 1750. The experiments are coordinated with the music-related portions of lecture course. The laboratory is designed for music majors. Prereq: PHYS 1750 prior or concurrent and music major or permission of instructor.

**2110 General Physics - Calculus Level** (4) First part of a two-semester continuing course for students majoring in some area of science, mathematics or engineering. Mechanics, molecular properties of matter and heat are covered in the first semester. Prereq: High school physics and MATH 1950 or permission.

**2120 General Physics - Calculus Level** (4) Second part of a two-semester continuing course for students majoring in some area of science, mathematics or engineering. Wave motion, electricity, magnetism and light are considered during the second semester. Prereq: PHYS 2110 and MATH 1960 or permission.

**2130 Modern Physics** (4) The course is composed of introductions to relativity theory and quantum theory with applications to atomic and nuclear structure. Topics include: Planck radiation law; Compton Effect; photoelectric effect; the Rutherford experiments and Bohr model of the atom; the Schrodinger electronic structure of atoms; nuclear reactions, nuclear models, radioactive decay, fission, fusion and elementary particles. Prereq: PHYS 2110-2120, 2150-2160, and MATH 1950, 1960, or permission.

**2150 Calculus-Based General Physics Supplement I** (1) This 1 hour course combined with PHYS 1110 is equivalent to PHYS 2110. Derivations and problems which involve the use of calculus or the more intense application of algebra and trigonometry than is customary in PHYS 1110 constitute the subject matter of this course. The topics covered correspond to those of PHYS 2110. Prereq: Completion of PHYS 1110 with at least a "C" and MATH 1950.

**2160 Calculus-Based General Physics Supplement II** (1) This 1 hour course combined with PHYS 1120 is equivalent to PHYS 2120. Derivations and problems which involve the use of calculus or the more intense application of algebra and trigonometry than is customary in PHYS 1120 constitute the subject matter of this course. The topics covered correspond to those of PHYS 2120. Prereq: Completion of PHYS 1120 with at least a "C" and MATH 1960.

**3010/8015 Elements of Electronics** (3) The topic covered will include DC and AC circuit theory, principle of operation of electronic devices such as diodes and transistors, and application of these devices in electronic circuitry. Both analog and digital circuitry will be studied. Prereq: PHYS 1120 or 2120 and MATH 1970.

**3020/8025 Optics** (3) The behavior of electromagnetic radiation as disclosed by studies of geometrical, wave and quantum optics. Topics include reflection and refraction, matrix methods in paraxial optics, lasers and holography, the human eye, interference, coherence, polarization, 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)

**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.

**3250 Mathematical Methods of Physics** (3) Training in the use of mathematical techniques applicable to physics problems encountered in upper-level physics courses. Vector operators, Fourier analysis, frequently used differential equations (ordinary and partial), orthogonal functions, and matrix methods of coordinate transformation are included. Emphasis is given to solving problems from mechanics such as vectorial mechanics, oscillatory systems, wave motion, potential theory, etc. Prereq: MATH 1950, 1960, 1970 and PHYS 2160 or 2120 or permission.

**3260 Computer Tools for Physicists** (1) This course will introduce the student scientist to a selection of computer tools for doing physics. The course will prepare students to use computers in upper level physics courses. It is not a programming course, rather the philosophy is to use existing packages in the manner of a research scientist. Prereq: PHYS 1120 or 2120 and MATH 1960.

**3450/8455 Classical Mechanics** (3) Statics and dynamics of particles and rigid bodies including the equations of Lagrange and Hamilton. Prereq: MATH 1970, PHYS 3250 or permission.

**3504 Experimental Physics I** (1) A set of experiments designed to complement PHYS 3750 and PHYS 4200. Prereq: PHYS 2160 or 2120.

**3524 Experimental Physics II** (1) A set of experiments designed to complement PHYS 3760 and PHYS 4210. Prereq: PHYS 2160 or 2120.

**3544 Experimental Physics III** (1) A set of experiments designed to complement PHYS 3450, PHYS 3850, and PHYS 4200. Prereq: PHYS 2160 or 2120.

**3564 Experimental Physics IV** (1) A set of experiments designed to complement PHYS 3020 and PHYS 4220. Prereq: PHYS 2160 or 2120.

**3750/8755 Electricity and Magnetism I** (3) An advanced discussion of electrostatics and magnetostatics. Prereq: MATH 1950, 1960, 1970, PHYS 3250, or permission.

**3760/8765 Electricity and Magnetism II** (3) A course in electrodynamics. Topics include Maxwell's equations and methods for their solution, boundary conditions, as well as energy, momentum and transformations of the fields. Prereq: PHYS 3750.

**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.

**4200/8206 Introduction to Quantum Mechanics** (3) This course provides an introduction to the historical development of modern physics and to the Schrodinger formulation of quantum mechanics. Specific topics will include square wells potential barriers, the simple harmonic oscillator potential and the hydrogen atom. Characteristics of multi-electron atoms, including angular momentum coupling schemes, spectra and transition rules will also be included. Prereq: PHYS 3250 or permission.

**4210/8216 Quantum Theory** (3) The matrix operator formalism is covered along with philosophical implications of this approach. The methods developed will be applied to simple harmonic oscillator and hydrogen atom potentials. Raising and lowering operators, creation-annihilation operators, and first and second order perturbation theory will be discussed. 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 4200 or permission.

**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. Fission and fusion discussed as time permits. Prereq: PHYS 4200 or permission.

**4350/8356 Astrophysics** (3) This course introduces the fundamentals of astrophysics to students with a prior knowledge of physics and mathematics. A review will be given of light and telescopes, classical and quantum mechanics and special relativity. Basic laws of physics will be applied to various topics such as: the sun, nuclear fusion and particle physics, evolution and end state of stars, interstellar medium, galaxies and cosmology. Prereq: PHYS 2130 or 4200 and MATH 1970. Recommended: PHYS 1350.

**4400 Geophysics** (3) A study of geophysical techniques used to understand the earth and in resource exploration. Seismic, gravity, heat flow, magnetic and other methods will be presented. The insights from these methods into earthquake events, stress distributions, rock, rheology, and plate tectonics will also be addressed. Interpretive skills will be emphasized. Prereq: GEOL 1170, PHYS 1110 and MATH 1950, 1960 or permission of instructor. (Same as GEOL 4400) (Every third semester)

**4950-4960/8956-8966 Problems in Physics** (Each 1-3) Individual laboratory and/or library work in some field of physics. Prereq: For PHYS 4950; PHYS 2120 or 2160.

## Political Science (PSCI)

**1000 Introduction to Political Science** (3) A basic course dealing with the ideas, institutions and issues of political life. It introduces students to the concerns and concepts of political science.

**1100 Introduction to American National Government** (3) An introduction to the foundational principles, organization, major institutions and functioning of American national government.

**2000 Introduction to Political Inquiry** (3) An introduction to the creation of political knowledge in preparation for upper division PSCI courses. Using experiential learning, students will be introduced to using the library, data, computers and statistics to answer research questions and to clearly write research papers. Prereq: PSCI 1100 or 1000.

**2010 Urban Politics** (3) A course concerned with the development of cities, their forms of government, powers, functions and problems in an industrialized and urbanized society.

**2100 Politics of the 50 States** (3) A comparative analysis of the structure and function of the 50 American state governments. Institutional aspects will be examined, but primary emphasis will be placed on the policy determination process and the significant variables which pattern this process.

**2110 Issues in American Politics** (3) A study of cooperative federalism. This course examines what the various levels of governments do as opposed to structure. Prereq: PSCI 1100.

**2210 International Relations** (3) The nature of the international political environment, in terms of the forces, influences and problems involved in the relations between nation-states and the means of conducting these relations. Prereq: Sophomore.

**2310 Introduction to Political Theory** (3) An introduction to some of the major Western political philosophers, their views, how they have been interpreted, and their possible application today. Prereq: Sophomore or permission.

**2500 Introduction to Comparative Politics** (3) An introduction to comparative political analysis, with application to a broad and representative range of countries. Prereq: None.

**2560 Modern France: 1789 to the Present** (3) A study of the role of France in the development of modern democracy, and her successes and failures in the practice of that theory. (Same as HIST 2560)

**2660 The Peoples of East Central Europe Since 1815** (3) A survey of social, political and cultural developments with emphasis upon Poland, the Czech Republic, Slovakia, Hungary and the Balkan states. Principal themes include 19th century movements for national liberation and social reform, the struggle for national unity and independence during World War I, problems and achievements of the independent East European states to 1938, and Second World War and Nazi occupation, the era of Communist rule, and post-1989 efforts to establish democracy and a market economy. (Same as HIST 2660)

**3000 Applied Statistics & Data Processing in Political Science and Public Administration** (3) A course in the basic statistics of political research and public administration decision-making. The emphasis is on the data processing techniques whereby raw data are turned into usable information and on understanding the proper use of statistics. Prereq: MATH 1430, department major or permission.

**3020 Political Socialization** (3) An examination of the institutions and processes of political learning in the United States. Prereq: Junior.

**3040/8045 Government and Politics of Nebraska** (3) A survey of the political life of Nebraska including its political culture, political institutions, recent political history and recurring issues and policy concerns. Prereq: Sophomore or above.

**3100 Minority Politics** (3) Designed to develop in the student both awareness and understanding of the roles, functions and contributions of minorities (religious, ethnic, national and racial) in the development and operation of the American and other political systems. This is a departmental course; therefore, emphasis and content may change from semester to semester. With departmental permission, the course may be taken more than once. Prereq: Sophomore or above.

**3120 Afro-American Experience in American Politics** (3) A survey of the African-American's quest for liberation within and outside the orthodox political system of the United States with a focus on the institutional and structural arrangements which have denied liberation and prescriptions for meaningful change. (Same as BLST 3120)

**3130/8135 Women and Politics** (3) Women and Politics provides an overview of women's political participation including holding elective office, socialization, the feminist movement and its opposition, and public policies with particular impact on women. The focus is on contemporary perspectives on women in American political ideas and behavior.

**3160/8165 Political Parties** (3) A study of the organization and operation of the American party system. Prereq: Junior.

**3170/8175 Interest Groups** (3) A study of the activities of the basic interests and their efforts to influence both the opinion and policy of the public sector of American government. Prereq: Junior.

**3220 International Organization** (3) The efforts made and the problems involved in providing international institutions capable of peacefully reconciling the differences and advancing the mutual interests of nation-states. Prereq: Junior.

**3260 United States Foreign Policy** (3) The conduct and control of United States foreign policy in terms of the influences, processes and machinery of foreign policy formulation and the instruments of implementation. Prereq: None.

**3340 American Political Thought** (3) An overview and analysis of the dominant political thoughts and ideas that have been present in American thinking from the days of the Puritans to today, and the individuals who held them. Prereq: Junior.

**3500 Politics in Western Europe** (3) The government and politics of the states of Western Europe, including Great Britain, France and Germany. Prereq: None.

**3560 Government and Politics of East Central Europe** (3) A comparative analysis of the governmental and political processes operating in East Central Europe.

**3580 Government and Politics of East Central Eurasia** (3) An analysis of structure and processes of government in Russia, Belarus, Ukraine, the Caucasus and Central Asia. Prereq: Junior or permission of instructor.

**3640 Politics of the P.R.C. and the Pacific Rim** (3) Political background, governmental institutions and political dynamics of the People's Republic of China as one of the few remaining communist countries and several selected immediate neighboring countries in the Pacific Rim region as a single economic and geopolitical block, and the fundamental information necessary to respond to the realities of global interdependence as we approach the beginning of the 21st century. Prereq: Junior or permission of instructor.

**3660 Politics of Japan and the Pacific Rim** (3) Political background, governmental institutions and political dynamics of post-industrial Japan and several other selected countries in the Pacific Rim region as a single economic and geopolitical block, and the fundamental information necessary to respond to the realities of global interdependence as we approach the beginning of the 21st century. Prereq: Junior or permission of instructor.

**3680 Latin American Politics** (3) The problems and political processes of the states of Latin America, including the structure and operations of their governments and dynamics of their political systems. Prereq: Junior.

**3920 Topics in Political Science** (3) A pro-seminar on selected topics based upon analysis of the literature of political science and/or primary source materials. Prereq: Junior or permission of instructor.

**4000 Concepts of Political Behavior** (3) An analysis of the historical development of political science and its major concepts in the Twentieth Century. Concepts, theories and models that guide contemporary political science are compared in regard to their utility for research on various political issues and concerns. Prereq: Six hours of social science or permission of instructor.

**4030/8036 The Presidency** (3) The rise of the institution from Washington to the present, 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 PSCI 4030; PSCI 1100 and junior.

**4040/8046 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 PSCI 4040; PSCI 1100 and junior.

**4050/8056 The Judicial Process** (3) This is a course in the administration of justice. It examines the federal and state courts with respect to their powers, judicial selection, the bar and the reform movements in the most basic of all of man's objectives, the pursuit of justice. Prereq: For PSCI 4050; PSCI 1100 and junior.

**4120/8126 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: None.

**4170/8176 Constitutional Law: Foundations** (3) Examination of the principles, design and intended operation of the American constitutional system. Analysis of the Declaration of Independence, the Articles of Confederation and the Constitutional Convention. Major emphasis on *The Federalist*. Prereq: PSCI 1100 (or equivalent), junior, or permission of instructor.

**4180/8186 Constitutional Law: The Federal System** (3) Analysis of American constitutional law regarding federalism (the relation of the nation and the states) and separation of powers (the relation of the three branches of the national government). Prereq: PSCI 1100 (or equivalent), junior, or permission of instructor.

**4190/8196 Constitutional Law: Civil Liberties** (3) Analysis of the leading amendments in the Bill of Rights. Prereq: PSCI 1100 (or equivalent), junior or permission of instructor.

**4200/8206 International Politics of the Pacific Rim** (3) Analysis of contemporary relations among the Pacific Rim nations with an emphasis on Japan and China and their immediate neighbors as well as their relations with other great powers which influence the international system of Asia. Prereq: For PSCI 4200; junior.

**4210/8216 Foreign Policy of Russia** (3) A study of the foreign policy of Russia, with emphasis on developments since 1985. Internal and external influences on Russian foreign policy, the processes of foreign policy making, and the relations among members of the Commonwealth of Independent States also will be considered. Prereq: For PSCI 4210; junior.

**4280/8286 Inter-American Politics** (3) Analysis of the role of Latin American states in the international political arena. Emphasis upon developing, applying and testing an explanatory theory of international politics through the study of the inter-American system: the regional, institutional and ideological environment, power relations, policies and contemporary problems. Prereq: For PSCI 4280; junior.

**4310/8316 Political Philosophy I** (3) Textual analysis of leading works of classical political philosophy: Plato and Aristotle. Prereq: For PSCI 4310; junior.

**4320/8326 Political Philosophy II** (3) Textual analysis of leading works of early modern political philosophy: Machiavelli, Hobbes, Locke. Prereq: For PSCI 4320; junior.

**4330/8336 Political Philosophy III** (3) Textual analysis of leading works of later modern political philosophy: Burke, Mill, Rousseau. Prereq: For PSCI 4330; junior.

**4350/8356 Democracy** (3) A basic study of theory, practice and practitioners of political democracy, its roots, development, present application and problems and future. Prereq: For 4350; junior.

**4360/8366 Dictatorship** (3) An analysis of the most prevalent form of government in the world. The distinguishing characteristics of authoritarianism are examined and its various forms identified and compared. Prereq: For PSCI 4360; junior.

**4370/8376 Comparative Socialist Systems** (3) A comparative examination of Marxist-inspired political movements, political parties and political systems, with particular emphasis upon contemporary transitions. Prereq: For PSCI 4370; junior.

**4500/8506 Government and Politics of Great Britain** (3) A comprehensive study of British politics and government. Emphasis will be focused on the formal institutions and informal customs and practices of the British political system. Prereq: For PSCI 4500; junior.

**4520 Politics in France** (3) An examination of the French political heritage, contemporary political institutions and problems, and political and policy responses to these problems. Prereq: None.

**4900 Readings and Independent Studies in Political Science** (1-3) A course designed to permit students to engage in independently directed research or readings. In consultation with the department, the student may design a program of reading or a research project. Prereq: Permission of instructor.

**4910 Government Internship** (1-6) Internships in governmental service, augmented by seminars and individual instruction, to learn directly the politics and processes of policy making and/or policy execution at the national, state or local level. Prereq: Permission of instructor.

**4950 Senior Seminar in Political Science** (3) The senior seminar examines a topic involving a wide range of political science theories, methods and fields to provide political science majors a sense of how the elements of political science fit together to form a coherent discipline. The senior seminar satisfies the third writing requirement; a student can take it only once. Prereq: Junior or beyond, field requirements completed, political science major and ENGL 1160.

## Psychology (PSYCH)

**1010 Introduction to Psychology I** (3) An introductory course fundamental to all subsequent courses in the department.

**1020 Introduction to Psychology II** (3) A discussion of selected points of view within psychology emphasizing behaviorism, brain functioning, cognitive psychology and psychodynamic approaches to psychology, designed primarily as a second course for potential majors and students in related fields. Prereq: PSYCH 1010.

**1024 Laboratory: Introduction to Psychology II** (1) Laboratory work coordinated with PSYCH 1020 including experimentation with human and animal subjects. Prereq: PSYCH 1020 (may be taken concurrently) or permission of instructor.

**2130 Statistics for the Behavioral Sciences** (3) An introduction to statistics with particular emphasis on models and hypothesis testing covering analysis of variance, chi-square, F and t tests, first-order regression and correlation. Prereq: Three hours of math.

**2140 Methods of Psychological Inquiry** (3) An introduction to the methods by which psychologists attempt to create, disseminate and integrate knowledge about behavior. Prereq: PSYCH 2130 or STAT 3000.

**2500 Life Span Psychology** (3) A life span approach to development focusing on the biological/psychological changes in development occurring from infancy through old age. The impact of these changes on the individual's behavior and interactions with society will be emphasized. Applied aspects of developmental psychology will be emphasized in the course. Prereq: PSYCH 1010.

**2600 Applied Psychology** (3) A broad survey of psychology as an applied science. Course will introduce students to the practice of psychology in the context of applied settings. The areas to be covered may include industrial, engineering, environmental, consumer, clinical, community, counseling, educational, medical and forensic psychology. Prereq: PSYCH 1010. This course is NOT intended for students who have taken PSYCH 3410, 3510, 3620 or 4060.

**3010 Learning** (3) A comprehensive coverage of the experimental literature and theories on human and animal learning. Prereq: PSYCH 1020.

**3014 Laboratory in Psychology: Learning** (3) Laboratory work coordinated with Psychology 3010 emphasizing a systematic presentation of techniques used to assess behavior changes associated with the learning process. Prereq: PSYC 2140, PSYC 3010 and permission of instructor.

**3070 Cognitive Psychology** (3) An exploration of historical and contemporary research and theory concerned with cognitive processes including attention, memory, problem solving and concept formation. PSYCH 1010.

**3074 Laboratory in Psychology: Cognition** (3) Laboratory work coordinated with PSYCH 3070, emphasizing a presentation of methods of research assessing human attention, memory and problem-solving processes. Research, design, data analysis and research report writing are also emphasized. Prereq: PSYCH 2140 and 3070.

**3210 Sensation and Perception** (3) Reading and discussion concerning psychophysical methods, sensory physiology, phenomenology of various sensory systems and theories of the perceptual process. Prereq: PSYCH 1010.

**3214 Laboratory Research in Psychology: Sensation and Perception** (3) Laboratory work coordinated with PSYCH 3210 which is designed to increase comprehension of psychology as a laboratory science in general and the experimental study of the perceptual process in particular. Emphasis will be placed on the development of skills involved in the design of experiments, data collection, data analysis, reasoning about experimental results and scientific report writing. Prereq: PSYCH 2140 and 3210.

**3230 Behavioral Neuroscience** (3) A comprehensive study of the relationship of the nervous and other organ systems to behavior. Research on both human and other animal species is considered. Prereq: PSYCH 1010.

**3234 Laboratory in Psychology: Behavioral Neuroscience** (3) Laboratory course designed to introduce the students to the techniques and procedures of physiological psychology. Scientific report writing, problems of research design and data analysis also will be emphasized. Prereq: PSYCH 2140 and 3230.

**3410 Clinical Psychology** (3) A broad survey of problems and practices in the diagnosis and treatment of behavioral disorders. Prereq: PSYCH 1010.

**3430 Personality and Adjustment** (3) The study of persons in a social context and their resultant effective and ineffective behavior, with emphasis on types of adjustment. Prereq: PSYCH 1010.

**3450 Social Psychology** (3) Social interaction studied in situations of (1) social influences on individuals, (2) dyads or face-to-face groups, and (3) larger social systems. The concepts, theories, data, research methods and applications of varied substantive topics are examined. Prereq: SOC 1010 or PSYCH 1010. (Same as SOC 3450)

**3510 Educational Psychology** (3) A study of the capacities and interests of children and their individual differences. Factors that influence learning and an evaluation of learning and classroom procedures are included. Prereq: PSYCH 1010.

**3520 Child Psychology** (3) A study of the physical, social, emotional and cognitive development of the child emphasizing infancy and childhood. Prereq: PSYCH 1010.

**3540 Adolescent Psychology** (3) A review of theory and available evidence useful in understanding changes and problems in the physical, intellectual, social and emotional adjustment of individuals in adolescence. Prereq: PSYCH 1010.

**3630 Organizational Psychology** (3) This is a survey course which will cover the major concepts, theories and empirical research related to organizational psychology. Specific topics will include: work motivation, leadership, decision making and job satisfaction as well as more recent trends such as cultural diversity, work teams, work-family and quality issues. Prereq: PSYC 1010.

**3640 Personnel Psychology** (3) A survey of psychological principles, theories and research related to personnel issues. Course includes discussion of personnel selection, performance appraisal, recruitment, training and health and safety. Prereq: PSYC 1010.

**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: Junior.

**4060/8066 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: PSYCH 1010.

**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.

**4270/8276 Animal Behavior** (3) A study of 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: None for 4270. Permission of instructor for 8276. (*Same as BIOL 4270/8276*)

**4280/8286 Laboratory in Psychology: Animal Behavior** (3) Laboratory and field studies of animal behavior with an ethological emphasis. Classical laboratory experiences and independent study will be conducted. Prereq: BIOL/PSYCH 4270/8276 and PSYCH 2140. (*Same as BIOL 4280*)

**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.

**4430/8436 Psychoanalytic Psychology** (3) This course is for either non-majors or majors. It focuses on Freud and psychoanalytic psychology. The course attempts to impart many insights into human nature and includes such topics as sex, aggression, narcissism and greed. Prereq: None.

**4440/8446 Abnormal Psychology** (3) A course designed to examine the aberrant 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.

**4460 Psychology of Adult Development and Aging** (3) The focus of this course is on the major social and psychological changes that occur as a function of aging. Both normal and abnormal patterns of developmental change are examined, along with their implications for behavior. Prereq: PSYC 1010 or GERO 2000. (*Same as GERO 4460*).

**4480/8486 Eastern Psychology** (3) Theory and techniques of Eastern psychology with emphasis on experiential understanding. Daily practice of meditation required. Prereq: For 4480, junior and 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: For 4520, senior or graduate or permission of instructor. (*Same as ANTH 4520 and COMM 4520*)

**4570/8576 Behavior Analysis and Interventions** (3) Introduction to the experimental methodology, rationale and research literature of changing behavior through behavior modification techniques. Particular attention will be paid to methodological concerns regarding single subject design, ethical considerations and ramifications of behavioral intervention with children and youth. Prereq: PSYCH 1010, 3010 and permission of instructor.

**4590/8596 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.

**4600/8606 Developmental Psychopathology Research and Practice** (3) A consideration of basic psychological theories, principles, models and research as they apply to youth, especially focusing on the psychology of exceptionality. The focus is upon teaching/learning in the society and culture. Prereq: Junior-senior or permission.

**4610 Human Factors Engineering** (3) An overview of the field of applied experimental and engineering psychology that is sometimes called ergonomics or human engineering. Psychological factors involved in the design of displays, controls, the work environment, and complex systems are studied. Strong emphasis is placed on applications in technological fields. Prereq: PSYCH 1010.

**4900 Readings in Psychology** (1-6) A faculty-supervised project involving readings and/or library work and written and oral reports. May be repeated up to a total of six hours for 4900 and 4960 combined. Prereq: Written permission of instructor and the Psychology Undergraduate Program Committee.

**4920 Special Topics in Psychology** (1-3) A discussion of specific topics which will be announced whenever the course is offered. May be repeated as topics change, but six hours is the maximum that may be applied toward a psychology major. Prereq: Variable according to topic.

**4960 Research Problems in Psychology** (1-6) A faculty-supervised project involving empirical research and appropriate oral and written reports. May be repeated for a total of six hours for 4900 and 4960 combined. Prereq: Fifteen hours of psychology courses and written permission of instructor and the Psychology Undergraduate Program Committee.

**4990 Senior Thesis** (6 or 3 per semester for two semesters) The course is designed to provide the student with the opportunity to initiate, design, analyze, and write-up an original experimental study in an area of interest to the student. Although the course is intended primarily for students who need to satisfy the requirement of a second experimental/laboratory course in the Bachelor of Science degree program, all students interested in this course will be considered on an individual basis. Prereq: PSYC 2140 and/or Experimental Psychology Lecture/Lab with a "B" or better; "B" average in major; signed statement from faculty member of Psychology Department who is willing to serve as adviser; written approval from chair of undergraduate program committee. Student may register for this course no earlier than second semester of the junior year.

## Social Science

**2000 Social Science Issues I** (5) An interdisciplinary course which explores the nature and scope of social science, and seeks an integrated understanding of selected international issues. The course may be repeated for credit when a different issue is considered.

**2100 Social Science Issues II** (5) An interdisciplinary course which explores the nature and scope of social science, and seeks an integrated understanding of selected minority and/or gender issues confronting society and its members. The course may be repeated for credit when a different issue is considered.

## Sociology and Anthropology

### Anthropology (ANTH)

**1050 Introduction to General Anthropology** (3) About humanity; our achievements, potential, place in nature and how we came to be. An introduction to the techniques and methods used in the scientific study of ourselves.

**2000 Ethnography** (1-4) (Repetition of course does not imply duplication.) This is a self-paced course in which the student views films and reads books and articles regarding a specific culture. Each culture will be a one (1) credit hour module. The intent is to acquaint the student in some depth with other cultures in the world. Prereq: One course in the social sciences and the instructor's permission.

**2990 Guided Reading** (1-6) The course is designed to allow the student enrolled in an anthropology course to pursue a specialized interest or topic in greater depth than is or was possible for the other course as a whole. Prereq: Concurrent enrollment in an anthropology course or enrollment in an anthropology course in the immediately preceding semester and permission of instructor.

**3210 Cultures of African People** (3) An introduction to cultures and societies of Africa. Analysis of kinship systems; political, economic and religious institutions; social change. Emphasis on the dynamics of social organization of African people. Prereq: Sophomore or above with one three-hour introductory social science course, or permission of instructor.

**3220 Indians of North America** (3) A survey of the Indians of North America, their culture past and present. Analysis of the economic, political, religious, technological and kinship systems of selected Indian groups. Prereq: Sophomore or above with one three-hour introductory social science course, or permission of instructor.

**3260 World Cultures and Peoples (Area Ethnography)** (3) An introduction to the ethnography of a to-be-specified area of the world. The intent is to examine the cultures and societies of that part of the world, how they are interrelated with their neighbors and how they change. The specific area will be announced each time the course is offered. Prereq: Sophomore with one three-hour introductory course in a social science or permission of instructor.

**3910 Introduction to Physical Anthropology** (3) An introduction to physical anthropology through an examination of theories and techniques used to investigate human origins; the relationship between humans and their physical environment; human variation, growth and development; and the evolution of human diseases. Prereq: ANTH 1050 or permission of the instructor.

**4200/8206 Urban Anthropology** (3) The course is intended to examine the city from an anthropological point of view. Included will be an overview of its history and the processes by which cities are formed and grow as well as the internal structure and processes within the city. The course is intended to be comparative geographically and temporally. Topics covered will include urbanization and cities in both the so-called "third-world countries" as well as in the developed, industrialized ones. Graduate students will be required to do a substantive term paper on a topic mutually acceptable to both the instructor and the student. In addition to the written work, the student will also be required to make a presentation in class of the research done and the major findings. Prereq: For ANTH 4200, junior or senior with a minimum of six hours of social science courses or permission of instructor. For ANTH 8206, permission of instructor.

**4210/8216 Cultural Anthropology** (3) Art, economics, family, kinship, politics, religion, subsistence, technology, war and world view approached as parts of an integrated whole, a way of life in human society. Illustrations will be drawn from a number of societies, anthropological theories and methods of study. Prereq: Junior or senior with a minimum of six hours of social science or 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 their impact on core areas of village-farming in the continental United States; introduction to archaeological investigation techniques, dating methods and taxonomic concepts. Prereq: For ANTH 4220; ANTH 1050 or 4210. For ANTH 8226, permission of instructor.

**4260 Topics in Ethnology** (3) The comparative study of cultures in a particular behavior realm. Each semester the course is offered, one topic will be selected from substantive topics in ethnology, such as: Applied Anthropology, Medical Anthropology, Economic Anthropology, Political Anthropology, Psychological Anthropology (culture & personality), Comparative Analysis of Kinship, or the Anthropology of Religion. Since the topic will vary, students may elect to take this course more than once. Prereq: Junior or senior with six hours in any of the social sciences or 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 and COMM 4520*)

**4900 Anthropological Research** (1-6) Supervised experience in anthropological research. The student either (1) joins an ongoing research project undertaken by a member of the faculty and gains experience and competence in anthropological research, or (2) the student has a research project that is suitable for academic credit and that the student wishes to undertake under the aegis of a faculty member. Prereq: Permission of instructor. Since course is individualized and changing, the course number may be repeated in a student's program without implying duplication. The total credits in anthropological research not to exceed nine hours.

**4920/8926 Seminar in Anthropological Problems** (3) The seminar will cover a specific topic which will be announced each time the course is offered. The students will work with the instructor on projects designed to increase the student's depth of knowledge in specific areas. Prereq: Permission of instructor.

## Sociology (SOC)

**1010 Introductory Sociology** (3) An introduction to the study of human social behavior presenting the fundamental concepts and point of view of sociology.

**2000 Introduction to Gerontology** (3) An introduction to social gerontology and human development in later life; emphasis on important elements of aging, such as socialization, family interaction, retirement, physical and psychological aging, and perceptions of older persons in contemporary society. (*Same as GERO 2000*)

**2100 Social Problems** (3) An analysis of the origins of social problems in American society. Attention is given to the nature, consequences and solutions of selected social problems. Prereq: Three hours of social science.

**2130 Basic Statistics** (3) Descriptive statistics techniques and the principles of inferential statistical thinking. The emphasis is on the basic statistical techniques employed in analysis of social data. This course does not count as social science credit. Prereq: MATH 1310 or permission of instructor.

**2150 Marriage and the Family** (3) A description and analysis of the contemporary American family with special attention to change and choice. A life-cycle perspective traces the development of marriage and family life from getting acquainted through the early and middle years to later life. Prereq: SOC 1010.

**2180 Occupations and Careers** (3) Examines changing job market, meaning of work and job satisfaction, career stages from aspirations to retirement, the effects of occupational discrimination and segregation, and the impact of work on family and leisure. Prereq: SOC 1010.

**2190 The Modern Middle East** (3) An interdisciplinary study of the social, religious and historical dimensions of contemporary issues and events which make the Middle East cultural and geographic region a crucible of global tensions. (*Same as HIST 2190 or RELI 2190*)

**2510 Research Methods** (3) A basic introduction to the principles, methods and techniques of empirical social research. Prereq: SOC 1010 or permission of instructor. (*Same as CJUS 2510*)

**2800 Major Social Issues** (3) The course examines a major social issue with readings and required materials designed for non-majors. The specific topic will vary from semester to semester. Students may take the course more than once. Prereq: SOC 1010 or permission of instructor.

**3100 Social Aspects of Sport and Leisure** (3) A critical examination of the function and significance of sport within the overall leisure behavior patterns of Western society. Recreational sport, sport spectatorship, and competitive athletics are considered from the dominant theoretical perspectives within sociology. Prereq: Six hours of social science or permission. (*Same as HPER 3100*)

**3140 American Society** (3) The origins of American behavior patterns and institutions and their influence on values, thinking and social character are stressed. A sociological perspective of contemporary American life styles and social organization is developed from a variety of sources. The influences of contemporary social change and diversity in American society are unifying themes. Prereq: Sophomore or above.

**3450 Social Psychology** (3) Social interaction studied in situations of (1) social influences on individuals, (2) dyads or face-to-face groups, and (3) larger social systems. The concepts, theories, data, research methods, and applications of varied substantive topics are examined. Prereq: SOC 1010 or PSYCH 1010. (*Same as PSYCH 3450*)

**3610 Social Organization** (3) Comparative analysis of small groups, formal organizations and territorial communities. Patterns of communication, power, authority, goals, norms, stratification, social change, and environmental relations. Prereq: SOC 1010 and sophomore.

**3630 Comparative Social Institutions** (3) An examination of the interlocking network of institutions in society with particular stress on social institutions not covered in other department of sociology courses, e.g., political, economic, religious institutions, and science as an institution. A comparison among societies with differing institutional arrangements. Prereq: SOC 1010 and ANTH 1050 and sophomore or permission of instructor.

**3690 Social Stratification** (3) Social classes and social mobility in America. Other systems of distributing rewards, honors and power on the basis of hierarchical rank and the principles underlying their operation. Prereq: SOC 1010 and sophomore.

**3800 Work and Society** (3) Examines work in the societal context. Focuses on major changes in the quality of working life and the labor force, and the power and influence of professions, bureaucracies and unions. Examines the impact of technology, education and government in producing and coping with these changes. Historical and cross-cultural comparisons will be made. Prereq: SOC 1010 and sophomore.



**3810 Sociology of Education** (3) An examination of education from a sociological perspective. Particular attention is given to educational attainment and its consequences for occupation and income; enlarging access to educational opportunities; student subcultures, teacher recruitment; alternatives and changes in education; relationships of sociology and education. Prereq: SOC 1010 and sophomore or permission.

**3820 Medical Sociology** (3) The sociology of health and the health professions providing an examination of the social aspects of medicine and of processes of health and illness. The effects of the norms, values and roles of medical professionals and their clients on the treatment process. Prereq: SOC 1010 and sophomore or permission.

**3840 World Population and Social Issues** (3) Basic knowledge of demographic methods and U.S. and world population data. Includes census and other data sources; demographic theory and population change; fertility, mortality and migration; age and sex structure; race, ethnicity, income; marital status and family indicators; urbanization; and population policies. Connects population dynamics to world economic development; poverty; refugee and immigration issues; decisions about childbearing; the status of women; intergenerational competition; population pressure on food and environment; and urban and rural life. Prereq: Six hours of social science and sophomore.

**3850 Society, Environment, and Resource Conservation** (3) This course focuses on the sociological analysis of the impacts of economic activities on the bio-physical environment and the people within it, at the national and international levels. Topics include the foundations of environmental sociology, social change, national and international institutions, monitoring pollution prevention and control, the uses of applied sociological techniques, etc. Prereq: Six hours of social sciences, three of which must be in sociology or permission.

**3900 Ethnic Group Relations** (3) Description and analysis of various ethnic groups, their contributions, distinctive attributes and problems, with emphasis on the United States. Using a majority-minority group perspective, major attention is given to prejudice, discrimination, social policy and other aspects of the current situation in institutional settings. Prereq: Six hours of social science.

**4020/8026 Collective Behavior** (3) Group and individual processes of ephemeral social action and institution formation are studied. The development of transitory groups and ideologies in new movements and organizations through opinion formation; case and comparative investigations of the origins and growth of collective movements are made and relevant social theories are applied. Prereq: For SOC 4020; nine hours of sociology, including SOC 1010.

**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 social scientific method is elaborated as it pertains to data derived from community investigation. Prereq: For SOC 4100; nine hours of sociology including SOC 1010.

**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 SOC 4130; nine hours of sociology, including SOC 1010 or 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 SOC 4140; nine hours of sociology including SOC 1010 or permission of instructor. (Same as GEOG 4140/8146)

**4150/8156 American Family Problems** (3) (1) This course takes up problems and issues of the contemporary American family. Specific topics vary, but might include: family violence; the impact of poverty and racism on families; families and work; gender roles; divorce and its aftermath; remarriage and step-parenthood; family and economy; law and the family; parenting; sexuality, sexual orientation, and reproduction; family policy; drug, alcohol, and mental health problems; and the most basic question of all: what is a family? Family problems and issues are presented in an historical and analytical context which connects the family to basic social institutions and processes. Prereq: SOC 1010 or 2150 or permission.

**4300 Sociology of Gender** (3) An examination of the roles of females and males throughout the life cycle, with emphasis placed upon the social processes and institutions affecting and shaping these roles in the United States. Topics considered include work and family relationships, friendship processes, the impact of political and economic institutions and sexuality. Prereq: Junior or senior and three hours of social science or permission of instructor.

**4410/8416 Advanced Qualitative Methods** (3) This course familiarizes students with contemporary qualitative methodologies and techniques by which the social sciences explore social and cultural relations in natural settings. Students will conduct individual and/or group field projects. Prereq: SOC 2510 or permission of instructor.

**4500/8506 Law, Family, and Public Policy** (3) This course analyzes law and public policy affecting the family in a variety of areas, which include: family violence; divorce, child custody, and child support; reproductive technology, contraception, and abortion; unmarried couples' and parents' rights; welfare; care and support of the aged; rights of parents to determine education and health care of their children; adoption and foster care, etc. New policy proposals and likely changes in law are considered, as well as the process of policy formation and legal change. The role of the professional in this system, including legal regulation and ethical issues, is considered. Prereq: Junior standing or above and six hours of social sciences or human services or permission.

**4520/8526 Latino/a Migration in the World Economy** (3) This course covers issues related to: 1) the political-economic and socio-cultural factors that have shaped Latino/a migration streams historically and in today's world economy and, 2) contemporary empirical methodologies and findings related to the causes and multiple socioeconomic costs and benefits of migration streams for immigrants as well as "sending" and "receiving" communities. Prereq: At least two social science courses or permission of the instructor.

**4620/8626 Sociology of Formal Organizations** (3) Examines organizational theory and research. Analyzes organizational problems such as goals and effectiveness; authority, leadership and control; professionals in organizations; communications; clients; organizational change, and organizations and their environments. Comparative analysis of many types of organizations such as business, industry, schools, prisons, and hospitals with special attention given to human-service organizations. Prereq: Nine hours of sociology including SOC 1010 or permission of instructor.

**4710 Development of Sociological Theory** (3) An intellectual history of sociology as an academic discipline surveying outstanding contributions to its body of theory. Stress is placed on the development of sociology as a science with illustrative materials drawn from the established works of recent decades although backgrounds to these are traced to their ancient and medieval antecedents where applicable. Prereq: Senior and 12 hours of sociology.

**4720 Contemporary Sociological Theory** (3) A thorough and detailed presentation of a major theoretical integration of contemporary sociological research and theory with shorter descriptive presentations of alternative positions indicating similarities and differences. Principles of theory construction and a review of major sociological concepts and writers. Prereq: Senior and 12 hours of sociology.

**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 SOC 4750, SOC 1010 and junior or higher.

**4800/8806 Contemporary Topics in Sociology** (3) This course reviews research and writing in an area which is of current interest in the field of sociology. The specific topic(s) to be covered will be announced at the time the course is being offered. Since the topic will vary, students may elect to take this course more than once. Prereq: Permission.

**4820/8826 Team Research Seminar** (3) Students participate in a semester long class research project. Students will be involved in all stages of research: problem formulation, literature review, research design, measurement construction, data collection, data analysis, report writing and presentation of findings. The project's focus will vary, but it may often involve issues confronting Omaha, a particular organization or a specific group of people. Prereq: Junior and SOC 2510 and 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, epidemiology and etiology, the role of the family, "careers" of mental illness, the mental hospital, the patient-therapist relationship; mental health professionals, community health and legal issues. Prereq: SOC 1010 and six hours of social sciences.

**4850/8856 Sociology of Religion** (3) Analysis of religious behaviors from a sociological and social-psychological perspective, and utilizing both theoretical and empirical materials. The class is designed as an introductory approach to the sociology of religion, and the first in a two-step sequence, undergraduate and graduate. Prereq: For SOC 4850, SOC 1010 or permission of instructor.

**4900 Senior Thesis** (3) This is a research course designed for sociology majors who are in their senior year. Each student will develop an original thesis project in this course. This course meets the UNO general education requirement for a third, upper division writing course. Students will produce an original 20 page thesis based upon material of special interest to them over the course of their major field of study. Because the course is required of all students who major in sociology, juniors who have completed all prerequisites for the course may enroll with the permission of the instructor. Prereq: SOC 1010, 2130, 2510, 4710, or 4720 and six (6) additional hours of upper division sociology or anthropology courses.

**4990/8996 Independent Study** (1-3) Guided readings or independent research in special topics under the supervision of a faculty member. A formal contract specifying the nature of the work to be completed must be signed before registering for the course. SOC 4990 may be taken for a maximum of six hours.

## **Women's Studies** (WMST)

**2010 Introduction to Women's Studies: Social and Behavioral Sciences** (3) A survey course which explores social science perspectives on women including the biological contribution to human behavior and the impact of science as an institution. Examines challenges to traditional definitions of women's place and movements for change. Includes historical and multicultural materials.

**2020 Introduction to Women's Studies: the Humanities** (3) An introduction to the issues of women's studies in the humanities (literature, art, dance, music, theatre, philosophy). Explores both historical and contemporary images of women in these fields; discusses the context in which these images developed. Introduces the basic concepts and terminology of women's studies. Prereq: ENGL 1150. Recommended: WMST2010.

**4990 Independent Study** (1-3) An individualized course of study with a member of the Women's Studies Faculty. Either independent research or advanced readings may be pursued. No more than 6 hours of independent study may be used towards the minor. Prereq: Permission from the Women's Studies coordinator and the supervising faculty member is required.

**NOTE: Course prerequisites are being revised. Please refer to the CBA site on the World Wide Web for the most current information.**

Prerequisites for all accounting courses numbered 3000 and above include: 2.5 accounting and cumulative GPA; ACCT 2010 and 2020 with a grade of "C" or better in each; ECON 2200 and 2220 with a grade of "C" or better in each; and additional prerequisites as listed for each course.

### Accounting (ACCT)

**2000 Special Topics in Accounting** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings. Please contact the CBA for specific course offerings.

**2010 Principles of Accounting I** (3) Basic concepts and assumptions underlying accounting; basic structure of accounting; the accounting cycle; external financial statements of the enterprise with emphasis on the corporation; income determination; accounting for and reporting of assets, liabilities and owners' equity; analysis and reporting of fund flows; financial statement analysis. Prereq: MATH 1310. *(Fall, Spring)*

**2020 Principles of Accounting II** (3) A study of techniques and concepts affecting internal accounting in a business organization. These include budgeting in general, costing systems, variance analysis and generating reports for management decision-making. Special topics include segment reporting, control of decentralized operations, capital budgeting, and service department cost allocations. Prereq: ACCT 2010 ("C" or better), CSCI 1000. *(Fall, Spring)*

**3020 Basic Federal Income Taxation** (3) An introduction to federal income tax basic concepts and principles applicable to individuals, partnerships, corporations and limited liability companies. Prereq: ACCT 2020, ECON 2200 and 2220 with "C" or better in each. *(Fall, Spring)*

**3030 Intermediate Financial Accounting I** (3) A more intensive study of basic accounting theory and principles learned in ACCT 2010. Topics include a conceptual framework of accounting, net income concepts, financial statements, present value applications, current assets, plant assets, intangible assets and liabilities. Prereq: ACCT 2020, ECON 2200, and ECON 2220, with a grade of "C" or better in each course. *(Fall, Spring)*

**3040 Intermediate Financial Accounting II** (3) This is the second of two courses in intermediate financial accounting. It focuses on financial reporting issues relating to stockholders' equity, leases, pensions and other postretirement benefits, and income taxes. Other topics include earnings per share and cash flows. It is intended for students who plan to major in accounting. However, it would also be useful for prospective users of financial statements. Prereq: ACCT 3030 with a "C" or better. *(Fall, Spring)*

**3050 Intermediate Managerial Accounting** (3) The objective of managerial accounting is to provide management with relevant and timely information to aid economic decision making. This course analyzes numerous economic decisions and identifies what information is relevant. Special attention is given to how accounting can support TQM, JIT, and Activity-Based Management. Prereq: ACCT 2020 and BSAD 3140 suggested. *(Fall, Spring)*

**3080 Accounting Information Systems** (3) Introduction to professional accounting, including accounting information systems concepts, accounting and database software and research tools to provide a foundation for subsequent accounting courses. Prereq: ACCT 2020, ECON 2200 and 2220, with "C" or better in each. *(Fall, Spring)*

**4000 Special Topics in Accounting** (1-3) The course content and topic will vary. Please contact the CBA for specific course offerings.

**4010/8016 Advanced Financial Accounting** (3) Mergers and corporate acquisitions including consolidation techniques are studied. Other topics include: translation of foreign currency financial statements; accounting for foreign currency denominated transactions; financial instruments and hedging transactions; accounting and reporting for individuals and their estates, as well as partnerships. Prereq: ACCT 3040 with "C" or better.

**4030 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. Credit will not be given for this course if the student has completed ACCT 3020. Prereq: As in prior note or permission of instructor.

**4040/8046 Advanced Federal Income Taxation** (3) Analysis of various advanced tax issues applicable to individuals, partnerships, corporations, and limited liability companies, such as executive compensation, tax-deferred exchanges, passive activity rules, and transactions between shareholders and their corporations and between partners and their partnerships. Prereq: ACCT 3020 with a "C" or better.

**4060/8066 Advanced Managerial Accounting** (3) An intensive analysis of current topics in managerial accounting. Prereq: ACCT 3050 with "C" or better.

**4070/8076 Governmental/Nonprofit Accounting and Auditing** (3) Study of budgeting, accounting, financial reporting and auditing in governmental and nonprofit entities. Prereq: ACCT 3080 with a "C" or better.

**4080 Principles of Auditing** (3) An introduction to auditing. Standards, responsibilities, the audit framework, the nature and evaluation of evidence and reports are studied. Prereq: ACCT 3030, 3080 and BSAD 2130. *(Fall, Spring)*

**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.

**4120/8126 Advanced Accounting Problems** (6) Discussions and problems are used to develop and refine problem-solving techniques for areas frequently occurring in accounting practice. Prereq: LAWS 3910, ACCT 3020, 4010, 4050 (all with "C" or better); 3.0 GPA and permission of instructor.

**4500 Special Problems in Accounting** (1-3) Individual investigation of specific problems in the field of accounting. Prereq: Senior and permission of program chair. (Maximum of 6 hours.)

**4510 Accounting Internship** (1-3) A course for junior or senior accounting students to apply their academic accounting knowledge to accounting practice in an employment situation. A student report on the internship experience and an employer's evaluation of the student's performance are course requirements. Can be applied to free electives, but not accounting specialization electives. (Maximum of 3 hours) Prereq: None (note: permission of director before internship begins).

### Business Administration (BSAD)

**1500 Introduction to Business** (3) This course is intended for first-year CBA students. The course introduces students to the contemporary business world. Students will be introduced to the academic options available in CBA and will be assisted in choosing a career path. Students will be assisted in developing their academic skills. Prereq: None.

**2130 Principles of Business Statistics** (3) Emphasizes the function of statistics in business, critical analysis of data sources, accessing data including information technology sources, description statistical measures, probability, probability distributions, sampling, estimation analysis hypothesis testing, and simple regression and correlation. Prereq: MATH 1320 and CSCI 1000.

**3100 Management Information Systems** (3) Current applications of information technology for competitive advantage. Examines the management role in effectively implementing management information systems. Analysis of emerging technologies application to business problems and opportunities. Prereq: ACCT 2020, MGMT 3490.

**3140 Business Statistical Applications** (3) Applies inferential statistics analysis of variance, multiple regression and correlation, time series, non-parametric statistics such as chi-square analysis, and decision analysis to business problems. Prereq: BSAD 2130.

**3500 Production/Operations Management** (3) The aim of the course is to introduce the students to a broad spectrum of knowledge and techniques used in production operations management including control decisions that deal with day-to-day production and service operational problems, tactical decisions that result in the improvement of the production process, and strategic decisions that deal with long term aspects of production and service organizations. Prereq: BSAD 2130.

### Business Honors Program

**4980 Honors Thesis** (3 or 6) Individually designed research projects which allow CBA Honors Students an opportunity to demonstrate the ability to do an extended piece of research and writing indicating breadth of knowledge and grasp of ideas, as well as scholarly attention to precise, verified and documented detail. Prereq: Second semester junior or senior and permission of coordinator of the CBA Honors Program.

### Economics (ECON)

**1200 An Introduction to the U.S. Economy** (3) An introduction to U.S. economy and an investigation of U.S. and international economic problems and policies. Prereq: None. Note: Not available to students who have completed either ECON 2200 or 2220.

**2000 Special Topics in Economics** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**2200 Principles of Economics (Micro)** (3) An introduction to economic principles, decision making and policies with the emphasis on national income and output, employment, growth, money, the price level and the international economy. Prereq: MATH 1310, 12 hours earned and a cumulative 2.0 GPA. (Fall, Spring)

**2220 Principles of Economics (Macro)** (3) An introduction to economic principles, decision making and policies with the emphasis being on macroeconomic theories and policies as they relate to national income and output, employment, growth, money, the price level and the international economy. Prereq: MATH 1310, 12 hours, 2.0 GPA. (Note: It is recommended for students taking both ECON 2200 and 2220 that they take 2200 first.) (Fall, Spring)

**3100 Agricultural Economics** (3) Introduction to American agricultural structure and production with special emphasis on production methods and technology, farm supply industry, markets and marketing systems, domestic and foreign trade, government programs, farm organizations and financial institutions. Prereq: ECON 2200 and 2220 or permission of instructor.

**3130 Economic Geography** (3) A comprehensive study of production, consumption and exchange in primary, secondary and tertiary economic activities as related to spatial factors. Prereq: ECON 2200 and 2220. (Same as GEOG 3130)

**3150 Labor Economics** (3) A theoretical analysis of the micro and macro labor markets with special emphasis on labor market problems and policies. An examination of the history and organization of the American labor movement. Prereq: ECON 2200. (Spring)

**3180 Collective Bargaining** (3) A study of issues and procedures of collective bargaining in the private and public sectors. Prereq: ECON 2200. (Fall)

**3200 Economic Theory: Micro** (3) Analysis of individual, firm and industry behavior in product and factor markets. Provides a theoretical foundation for managerial and public policy decision-making. Prereq: ECON 2200. (Fall, Spring)

**3220 Economic Theory: Macro** (3) This course analyzes the determination of the level of aggregate income, employment and the price level. The theoretical framework developed is used to study the use of monetary policy and fiscal policy to influence the level of aggregate economic activity. Prereq: ECON 2200 and 2220 or permission of instructor. (Fall, Spring)

**3250 Business Conditions Analysis** (3) The course is a study of business fluctuations in the national economy. The causes and measurement of cyclical fluctuations are examined. The relationship between the domestic economy and other major economies of the world is studied. Macroeconomic stabilization policies and economic forecasting are important topics in this course. Prereq: ECON 2220.

**3260 Evolution of Economic Thought** (3) Tracing the evolution of economic thought from the medieval through the current period. Focus is on the interactions of institutional milieu, thought and economic doctrine. Prereq: ECON 2200 and 2220 or permission of instructor.

**3300 Introduction to Econometrics** (3) An introduction to empirical research methods in economics. Subjects covered include estimations of the basic linear regression model, hypothesis testing, correlation coefficients, analysis of variance, multicollinearity, dummy variables, specification error, auto-correlation, heteroscedasticity and unconditional forecasting. Empirical illustrations are provided by reference to contemporary economic questions. Prereq: ECON 2200 and 2220 and BSAD 2130. (Note: or permission of instructor.) (Fall)

**3320 Introduction to Environmental and Natural Resource Economics** (3) An introductory course which looks at the causes, consequences and policy solution to environmental and natural resource problems. Topics covered include: air and water pollution, solid and hazardous waste management, nonrenewable and renewable natural resource use, recycling, growth and sustainability. Prereq: ECON 2200 Principles of Micro Economics. (Fall)

**3350 Comparative Economic Systems** (3) Analysis of the underlying concepts and characteristic features of modern economic systems. Prereq: ECON 2200 and 2220 or permission of instructor.

**3360 The Economy of the Soviet Union** (3) This course examines how the institutions of the Soviet Union are organized and operate. An analysis of their problems and achievements throws into sharp focus the different ways of allocating scarce resources among competing ends. Prereq: ECON 2200 and 2220 or permission of instructor.

**3550 Public Finance** (3) Theories of taxation and principles of public expenditure. Prereq: ECON 2200 and 2220. (Same as FNBK 3550) (Spring)

**3600 Introduction to International Economics** (3) An introduction to analyses of international trade and international monetary system. Subjects covered include the economic basis for international specialization and trade, the effect of trade on income distribution, commercial policy, economic integration, the balance of payments, adjustment mechanism, exchange rate determination, external effects of monetary and fiscal policy and foreign investment. Prereq: ECON 2200 and 2220. (Fall, Spring)

**3800 Managerial Economics** (3) Economic analysis applied to executive decisions; emphasizing the empirical determination of demand, and the nature and determination of the firm's cost, pricing and investment problems. Prereq: ECON 2200.

**4000 Special Topics in Economics** (1-5) The course content and topic will vary. Please contact the economics department for specific course offerings.

**4150 Human Resource Economics** (3) Employment statistics and forecasts; labor force composition and change; alternative labor market concepts; investment in human capital; government manpower programs; human resource planning within organizations. Prereq: ECON 3150 or permission of instructor.

**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 2200 and 2220 or permission of instructor.

**4260/8266 History of Economic Thought** (3) The first half of the course focuses on the development of economics from Adam Smith in 1776 to John Maynard Keynes in the 1930s. The second half uses the history sketched in the first half as a partial basis for addressing important questions about methodology, institutional structure and policy impact of economics. Prereq: ECON 2200, 2220.

**4290 Research Methods in Economics and Business** (3) Through lectures, readings, and hands-on experience, the students will learn the fundamental methodology of economics, including a brief, broad philosophical overview, picking a promising research topic, conducting a thorough literature search, gathering and presenting data, performing basic analysis of the data using statistical packages, and writing the results. The student will be required to submit a research project that exhibits many of the skills listed above. The skills will help prepare the student for future academic work in the program and for research-oriented jobs in the business, non-profit and government sectors. Prereq: ECON 2200 and 2220.

**4300/8306 Quantitative Applications in Economics and Business** (3) The study and application of modern quantitative techniques to problem-solving in economics and business. Prereq: ECON 2200, 2220 or permission of instructor. (Fall)

**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 and evaluates various public policy prescriptions. Prereq: ECON 2200 and 2220 or permission of instructor.

**4450/8456 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-classicists are examined and compared. The implications of each school for monetary policy are examined. Prereq: ECON 3220 or permission of instructor. (Spring)

**4500 Special Problems in Economics** (2-3) Individual investigation of specific problems in the field of economics. Prereq: Senior and permission of department chair. (Fall, Spring)

**4510 Economic Internship** (1-3) Correlation of theory and practice through part-time employment and weekly seminars; required readings. Prereq: Permission of department chair or internship coordinator. (Maximum of 4 hours) (Fall, Spring)

**4560/8566 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 utilization of scarce resources for state and local governments. Prereq: ECON 2200 and 2220. (Same as FNBK 4560/8566) (Fall)

**4610/8616 International Trade** (3) An analysis of the character of international economic relations. Subjects covered include the economic basis for international specialization and trade, the economic gains from trade, commercial policy, economic integration and economic growth. Prereq: ECON 2200 and 2220 or permission. (Fall)

**4620/8626 International Monetary Economics** (3) An analysis of the international monetary system. Subjects covered include the balance of payments adjustment mechanism, alternative exchange rate systems, external effects of monetary and fiscal policy, foreign investments and international monetary reform. Prereq: ECON 2200 and 2220 or permission of instructor.

**4660/8666 International Economic Development** (3) Problems relating to early stages of economic development; investment priorities, mobilizing savings and policies and programs are studied. Prereq: ECON 2200 and 2220 or permission of instructor. (Spring)

**4850 Economics of Urban and Regional Development** (3) An analysis of urban growth and development and regional economic development within the framework of economic theory. The discussion centers around urban and regional growth, urban problem areas and urban-regional policy issues. Prereq: ECON 2200 and 2220 or permission of instructor.

**4910/8916 Special Topics in Economics** (1-3; may be repeated up to 6) A series of special courses each designed to focus on current major topics and developments in a specific area of economics or business, scheduled as a workshop or seminar according to purpose. Prereq: Graduate student or advanced undergraduate student and as indicated for specific workshop or seminar. (Fall)

## Finance and Banking (FNBK)

**2000 Special Topics in Finance, Banking and Insurance** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**2280 Personal Finance** (3) A study of the personal and family finance designed to assist the student develop sound financial habits. (Fall, Spring)

**2710 Principles of Insurance** (3) This course is intended to introduce students to the basic concepts of risk and insurance. Special emphasis is placed on the insurance coverage needed by the consumer: life, health, homeowner and auto insurance. (Fall, Spring)

**3000 Financial Reporting and Analysis** (3) Seeks to develop students' understanding of the origin and derivation of accounting data, and their skills in employing the data for the purpose of financial analysis, reporting and valuation. Prereq: ACCT 2020. (Fall, Spring)

**3250 Principles of Financial Management** (4) As a comprehensive introduction to financial management, the course will cover various fields of finance and discuss topics including bond and stock valuation, capital budgeting, capital structure and debt management. In the required lab, students will be introduced to analysis and decision methods, including those utilizing computer application. Prereq: Successful completion of ACCT 2020, ECON 2200 and 2220, and BSAD 2130. (Fall, Spring, Summer)

**3400 Investment Principles and Practices** (3) A study of the market for investment securities, an introduction to the field of security analysis, and selection and management of a portfolio of securities. Prereq: FNBK 3250 or approval of instructor. (Fall, Spring)

**3500 Financial Markets** (3) An overview of money and banking, monetary policy, and analysis of the operations of financial markets in a global context, as well as the evolving regulatory framework within which these markets operate. Prereq: Junior standing and ECON 2200 and 2220, or approval of instructor. (Fall, Spring)

**3550 Public Finance** (3) Theories of taxation and principles of public expenditure. Prereq: ECON 2200 and 2220. (Same as ECON 3550) (Spring)

**3650 Commercial Bank Management** (3) A study of the organization, structure and operation of commercial banks with an emphasis on the banking functions, competitive aspects and the nature and framework of regulation. Prereq: FNBK 3250. (Fall, Summer)

**3700 International Financial Management** (3) Application of basic principles and techniques of international financial management to the decision-making process of the multinational firm. The course covers the foreign exchange markets, management of the foreign exchange risk, international working capital management, and foreign portfolio and direct investment. Factors bearing on the international financing and investment decisions, such as political risk and international taxation issues will be also examined. Prereq: FNBK 3250 or approval of instructor. (Fall, Spring, Summer)

**4000 Special Topics in Finance and Banking** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**4150 Intermediate Financial Management** (3) Seeks to develop the students' ability to identify, analyze and solve integrative problems in management of business finance, including financial analysis, working capital management, capital budgeting decisions, long term financing, and leasing, through the use of prescribed readings, case studies and computer applications. Prereq: FNBK 3250 and senior. (Fall, Spring)

**4400 Bank Administration** (3) An advanced course in banking involving problems of day-to-day management of the money position, loan and investment portfolio, formation and adequacy of capital. An analytical approach. Prereq: FNBK 3250. (Spring)

**4500 Special Problems in Finance and Banking** (3) Individual investigation of specific problems in the fields of finance and banking. Prereq: Senior. Note: permission of department chair required prior to registration. (Fall, Spring)

**4510 Finance and Banking Internship** (1-3) The aim of this course is to facilitate the transition from the academic training to the actual practice of the finance and banking professional business environment. The course is intended to enrich the student's knowledge of the finance and banking profession and provide an opportunity to apply this knowledge/experience to the student's remaining academic classwork. Prereq: Junior or senior standing. (Fall, Spring)

**4560/8566 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 utilization of scarce resources for state and local governments. Prereq: ECON 2200 and 2220. (Fall)

**4590/8596 Risk Management for Business Managers** (3) An analysis of risk management techniques for handling the risk exposures most businesses face, including insurance, self insurance, risk control and risk avoidance, among others. Prereq: At least junior standing. (Spring)

**4600/8606 Derivatives** (3) The course introduces students to the financial derivatives market, and the use (or abuse) of derivative instruments for risk management (or speculative) purposes. It employs computer applications to illustrate various hedging strategies with derivative instruments. Prereq: FNBK 3400 and FNBK 3500, and senior or graduate standing. (Fall)

## Law and Society (LAWS)

**2000 Special Topics in Law and Society** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**3170 Ethics in Business** (3) Application of ethical concepts and principles to moral issues in business: corporate responsibility, discrimination, advertising, competition, whistle-blowing, trade secrets, multinationals, environment, workers' rights, government regulation, investment, bribes, product liability and consumerism. Prereq: ECON 2200 and 2220.

**3460 Real Estate Law** (3) This course is concerned with the sources of real estate law, both cases and statutes, and covers estates in land, conveyances, leases, mortgages, easements, zoning, brokers, contracts, taxes, foreclosures and open occupancy. Prereq: RELU 2410 or 3410. (Fall, Spring)

**3910 Business Law I** (3) This course is a basic introduction to the legal environment in which business operates, the relationship between government and business and the individual. It covers law as a process to resolve disputes, ethics, alternatives to litigation, and the common law and the uniform commercial code, a survey of the law of agency. Prereq: ENGL 1150, SPCH 1110 (or higher). (Fall, Spring, Summer)

**3920 Advanced Business Law** (3) LAWS 3920 focuses on commercial law, employment law, business organizations, and the regulation of business. Ethical and international issues are addressed. Intended primarily as a required course for business administration students, may be an elective for students outside CBA, especially students in the College of Information Science and Technology. Prereq: LAWS 3910 and ECON 2200. (Fall, Spring, Summer)

**4200 The Nature of the Law** (3) The structure of our legal system; considering the economic, social and political implications as they influence the development of a rule of law. Historical and present legal controversies will be examined. Prereq: Junior. (Fall, Spring)

**4220 Legal Issues in Management** (3) Overview of the general nature of legal knowledge in human resources administration. The course is designed to alert students of the legal considerations when an employer-employee relationship is established. Discusses how human resource practices have been impacted by recent legal developments, anti-discrimination laws, affirmative action and labor relations. Prereq: MGMT 3490, MGMT 3510, LAWS 3920. Students not having the prerequisites, but wanting to take this course, should obtain permission of the instructor.

**4500 Special Problems in Law and Society** (1-6) Individual investigation of specific problems in the field of business law. Prereq: Senior and permission of program chair. *(Fall, Spring)*

**4510 Law and Society Internship** (1-3) Correlation of theory and practice through part-time employment and weekly seminars; required readings. Prereq: Permission of department chair. (Maximum of 4 hours) *(Fall, Spring)*

**4910 Seminar on Business Law** (3) Contact the instructor since the content will vary from semester to semester, but will have a strong emphasis on current events. The course will focus on one aspect of relationship between government and business, and its related ethical and international law issues. A major student research project is included. Prereq: LAWS 3910 and ECON 2200, its equivalent, or permission of department chair. *(Spring)*

**4930 International Business Law** (3) This course is designed to inform students interested in international business transactions of the major legal principles governing international law, the major legal systems affecting the conduct of international business transactions, the domestic and foreign policies of the United States which affect business overseas, and foreign business inside American borders. Prereq: LAWS 3910.

## Management (MGMT)

**2000 Special Topics in Management** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**2010 Minorities in the Private Enterprise System** (3) To acquaint students with the opportunities, challenges and successes in minority businesses. Emphasis is given to the role of the individual and importance of these businesses to the aggregate economic structure. Additionally, the opportunities for minorities in majority-owned businesses. Prereq: 2.0 GPA. *(Spring)*

**2800 Survey of Business** (3) A four-part survey of business: a study of the foundation of business, an analysis of the functional relationships within the business concerns, a discussion of the societal issues confronting contemporary business and the simulation of business operations by means of a computer. Although open to all students, it is intended for non-business majors who want to develop a basic understanding of the world of business and management. *(Fall, Spring)*

**3040 Managerial Decision Making** (3) Students will have the opportunity to understand and apply techniques for effective individual and organizational problem solving. The students will interactively participate in generating, prioritizing and organizing their ideas in order to become better managerial decision-makers/problem solvers. Prereq: None.

**3200 Managerial Communications** (3) This course is designed to integrate the four basic communication skills of reading, writing, speaking and listening with the research, reasoning and logical skills our students should have to become effective managerial communicators. The emphasis is on utilizing communication theory concepts and various communication technologies and skills in order to have students provide written and oral presentation of formal business reports and/or case analyses. Prereq: None. *(Fall, Spring)*

**3490 Management** (3) In this course, students will develop a clear understanding of management concepts, develop critical thinking skills in applying management concepts to real world problems and begin to develop the technical, interpersonal, communication, conceptual and decision-making skills that are important to success as a manager in modern organizations. Current management trends are emphasized. Prereq: ENGL 1160. *(Fall, Spring)*

**3510 Human Resource Management** (3) A systematic study of personnel management concepts and activities. The course addresses the conceptual and current issues of such personnel activities as: recruitment, selection, training and development, appraisal, compensation, health and safety, and labor relations. Prereq: MGMT 3490. NOTE: Students not having the prerequisite, but wanting to take this course, should obtain permission of instructor. *(Fall, Spring)*

**4000 Special Topics in Management** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**4010 Compensation and Benefits** (3) Theory and practice in the management of employee compensation and benefits. Concepts and activities studied include pay and benefit policies, job analysis, job evaluation, pay surveys, developing and maintaining pay structures, and employee benefit types and management. Prereq: MGMT 3490 and 3510. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor. *(Fall)*

**4020 Seminar in Human Resource Management** (3) A student project and seminar course which provides an in-depth examination of topics such as personnel selection, compensation, training and development, performance appraisal, health/safety and labor relations. Prereq: MGMT 3490 and 3510. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor. *(Spring)*

**4040 Managerial Leadership** (3) In this course students will learn the knowledge and skills necessary to effectively manage and lead others. The discussion and application of topics such as leadership, motivation and attitudes will provide a theoretical grounding in these areas and the opportunity to practice applying these concepts to real-world problems. Prereq: MGMT 3490. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor.

**4150 International Management** (3) The purpose of this course is to explore management theory and practice from an international or cross-cultural perspective to gain an appreciation for the complexities of managing in diverse cultural, political and economics environments. Specific emphasis is placed on studying the challenges of management and organization in multinational corporations. Prereq: MGMT 3490. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor. *(Fall)*

**4250 New Venture Initiation** (3) An exploration of the various activities, processes, and requirements associated with establishing a business. Businesses planning skills and abilities will be developed and emphasized in this course. As a course project, students will typically develop a business plan for a venture they may wish to operate. Common methods of getting into business will be considered, including start-ups, buyouts, and success of control and ownership in a family owned business. *(Fall)*

**4310/8316 Small Business Management** (3) A survey of the day-to-day management practices of new and/or small businesses. The focus of the course is on developing and applying solutions to business problems. Primary topic areas include small business applications in marketing, human resource management, quality and operations management, purchasing and inventory control, basic accounting and finance, and information technology. Prereq: MGMT 3490. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor. *(Spring)*

**4340 Management of Teams** (3) Students have the opportunity to learn how to create teamwork, develop team dialogue, lead and share leadership in teams, solve problems and make team decisions, and handle team pressure, conflicts and role responsibilities. Application of tools and techniques to develop each of these topics is an integral part of this course. Prereq: None. *(Fall)*

**4440 Management of Quality and Process Improvement** (3) Major topics in this course include TQM, reengineering, process improvement, and tools and techniques to formulate, change and implement these concepts in organizations. Students can develop their knowledge and skills to apply these concepts in organizations through the applied orientation of this course. Prereq: MGMT 3490. NOTE: Students not having the prerequisites, but wanting to take this course, should obtain permission of instructor. *(Spring)*

**4480 Corporate and Business Strategy** (3) A comprehensive study of the analytical techniques and managerial tasks associated with developing, executing and monitoring a strategic course of action for medium to large firms. The interrelationships between the functional business areas will be stressed using a combination of contemporary readings, business cases, team projects or computerized situations. Prereq: Admission to the BSAD program, MGMT 3200, 3490; BSAD 3100, 3500, 3140; MKT 3310; FNBK 3250; LAWS 3910, 3920; completion of 99 hours. (NOTE: With the exception of MGMT 3490, 3200, MKT 3100 and FNBK 3250, students may be enrolled in one of the above courses concurrently with MGMT 4480.)

**4490 New Venture Strategy** (3) A comprehensive study of the analytical techniques and managerial tasks associated with developing, executing and monitoring a strategic course of action for entrepreneurial firms. The interrelationships between the functional business areas will be stressed using a combination of contemporary readings, business plans, field experiences, team projects and computerized simulations. Prereq: Admission to BSAD program; MGMT 3200, 3490; BSAD 3100, 3500, 3140; MKT 3310; FNBK 3250; LAWS 3910, 3920; completion of 99 hours. (NOTE: with the exception of MGMT 3490, 3200, MKT 3310 and FNBK 3250, students may be enrolled in one of the above courses concurrently with MGMT 4490.)

**4500 Special Problems in Management** (2-3) Individual investigation of specific problems in the field of management. Prereq: Permission of program chair. NOTE: Student should have senior standing. *(Fall, Spring)*

**4510 Management Internship** (1-3) Correlation of theory and practice through part-time employment and weekly seminars; required readings. Prereq: Permission of internship coordinator. NOTE: Student cannot be presently employed by internship firm. (*Fall, Spring*)

### Marketing (MKT)

**2000 Special Topics in Marketing** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**2210 Survey of Marketing** (3) This course is for any student majoring in business. Course content focuses on basic product and service marketing for business and non-business organizations. Additional topics include marketing for career development and marketing for non-profit organizations. Prereq: None. (*Fall*)

**2500 Direct Response Marketing** (3) Designed to introduce students to the fundamentals of direct response marketing through direct mail, telemarketing, wats, etc. Course will teach fundamentals of creative design, management of the direct marketing program, space placement, time buying, mailing list management, and testing. Prereq: ENGL 1160.

**3100 Professional Salesmanship** (3) A course to teach professional selling and relationship marketing principles and practices. A variety of personal and direct sales techniques, psychology and application of personal communication theory will be applied. Use of current sales/marketing research, interactive sales training technology, and systems contracting to professional selling. Prereq: ENGL 1160, MATH 1310 or equivalent. Note: Open to non-CBA students. (*Fall, Spring*)

**3310 Principles of Marketing** (3) An examination of marketing functions and the institutions which perform them, choice of criteria for marketing strategy decisions, marketing structural relationships, and the role of marketing in society. Prereq: Sophomore standing. (Note: ECON 2200 recommended).

**3320 Consumer Behavior** (3) A study of the conceptual and theoretical foundation of consumer and industrial buyer behavior. Emphasis is placed upon the applications in the operational marketplace and research relating to specific consumer problems and patterns in marketing. Prereq: MKT 3310 and PSYCH 1010. (*Fall, Spring*)

**3340 Channels of Distribution** (3) Channels management focuses on the associations of businesses and the performance of required functions making products and services available to end users when and where buyers demand them. Attention is paid to how intermediaries (e.g. wholesalers and retailers) interact and organize an efficient system to ensure that products and services are available in proper quantities and on time for consumers. Prereq: MKT 3310. (*Fall*)

**3360 Advertising** (3) This course considers the functions and resources necessary to place effective advertisements before target audiences and thus help to achieve marketing objectives for both business and non-business organizations. Specifically, it includes advertising institutions, budgeting, positioning, creative strategy, media strategy, and determining advertising effectiveness. It also considers social and economic effects of advertising. Prereq: MKT 3310. (*Fall, Summer*)

**3370 Marketing Promotions** (3) The students will become familiar with the full range of promotional media, techniques and methodologies, understand the structuring of a promotional campaign according to the strategic objectives, be able to effectively integrate promotions into a composite marketing program, and be able to design and present a complex promotional strategy employing a diverse array of techniques and methods according to the specific objectives. Prereq: MKT 3310. Note: Suggest having MKT 3360 or JOUR 3620 or JOUR 3630. (*Spring*)

**3380 International Marketing** (3) A study of the processes, procedures, characteristics and environments for goods and services in foreign market places. Reference is drawn to the theories and concepts of domestic marketing to appraise their applicability to international markets. Considerable attention is given to the features of the foreign market environments which both facilitate the marketing processes, inhibit them, and require strategies and tactics of accommodation. Prereq: MKT 3310. (*Fall*)

**3610 Business to Business Marketing** (3) An introductory marketing management course which examines the decisions involved in marketing goods and services to the industrial buyer as opposed to the consumer buyer. Buyer motivation, promotion decisions, channel decisions, product development and pricing policies involved in the marketing of industrial goods are considered. Prereq: MKT 3310. (*Spring*)

**4000 Special Topics in Marketing** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings. (*Fall*)

**4100 Aviation Marketing** (3) This course will provide an understanding of the principles of marketing and aviation in general. An overview of the marketing relationship with the aviation industry will be explored. This course will introduce students to developing marketing plans and campaigns for aviation related businesses. Prereq: AVN 1000 and MKT 3310 recommended.

**4300 Marketing Management** (3) A case study course which examines product, price, promotion and channel of distribution policies. Major emphasis is placed on analysis of marketing problems and the facets of making decisions in the marketing area. Prereq: MKT 3310 and senior standing. Note: Suggest having MKT 4340 and six hours of marketing. (*Fall, Spring*)

**4320 Sales Management** (3) Planning, organizing and controlling the sales force. Special emphasis on application of latest research to the areas of compensation, selection, motivation, training, time and territory management, opportunity analysis and cost control. Prereq: MKT 3310. Note: It is suggested, but not required, that students have taken MKT 3100 or its equivalent. (*Spring*)

**4340 Marketing Research** (3) Application of analytical tools to marketing problems including markets, products, distribution channels, sales efforts and advertising. Emphasis on planning, investigation, collection, interpretation of data and presentation of results. Prereq: BSAD 2130 and MKT 3310. (*Fall, Spring*)

**4380 Industrial Purchasing and Materials Control** (3) A case course which emphasizes organization for purchasing, purchasing policies, source selection, price and purchase specifications. Prereq: MKT 3310. (*Fall*)

**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 U.S. population change and policy as well as a view toward international population considerations. Prereq: Junior. (*Fall*)

**4500 Special Problems in Marketing** (2-3) Individual investigation of specific problems in marketing. Prereq: Senior and permission of instructor. (*Fall, Spring*)

**4510 Marketing Internship** (1-9) (maximum of 9 hours) A course for the junior or senior student in marketing which permits her/him to apply professional knowledge in a part-time or full-time situation with a private business or institution. Supplemental reports and/or reading may be a requirement for this course. Prereq: Permission of instructor. Note: 80 credit hours must be completed, 2.5 GPA or better, and declared major in marketing. (*Fall, Spring*)

**4800 Honors Studies in Marketing** (3) A comprehensive examination of marketing as it is practiced among firms representing different industrial sectors. Course objectives include individual inquiry, theoretical applications and limitations, and an increased academic understanding of the discipline of marketing. Only grades of "A," "B," and "F" are granted. Prereq: Senior, 3.0 GPA, six hours of marketing, and approval of the department faculty. (*Spring*)

### Real Estate and Land Use Economics (RELU)

**2000 Special Topics in Real Estate and Land Use Economics** (1-5) The course content and topic will vary. Please contact CBA for specific offerings.

**2410 Real Estate Principles and Practices** (3) An introductory survey of real estate principles and practices which introduces the terminology, concepts and basic practices in the fields of real estate law, real estate finance, real estate appraisal, real estate property taxation and miscellaneous topic areas. Note: Students cannot receive credit for both RELU 2410 and 3410. (*Fall, Spring*)

**3410 Real Estate Concepts and Processes** (3) A survey course for business students introducing theory and practice applicable to real estate markets. Prereq: Junior. (*Fall, Spring*)

**3420 Building Industry and Real Estate** (3) Site planning, orientation and design of buildings with emphasis on residential building; introduction to architectural styles, building materials, methods, techniques and processes, preparation of working plans and specifications. Prereq: RELU 2410 or 3410. (*Spring*)

**3430 Real Estate Salesmanship and Brokerage** (3) "Contract form" selling technique; brokerage office location and layout; civic leadership; laws of brokerage; listing dialogue; effective advertising/ownmanship; overcoming prospective buyer's objections; financial closing statements. Prereq: RELU 2410 or 3410. (*Spring*)

**3450 Real Estate Management** (13) Managing residential, cooperative, office, commercial, shopping, special purpose properties; merchandising space, tenant selection and relations; maintenance; owner relations. Prereq: RELU 2410 or 3410. *(Fall)*

**3460 Real Estate Law** (3) This course is concerned with the sources of real estate law, both cases and statutes, and covers estates in land, conveyances, leases, mortgages, easements, zoning, brokers, contracts, taxes, foreclosures and open occupancy. Prereq: RELU 2410 or 3410. *(Fall, Spring)*

**3470 Metropolis Value Conflicts and Housing Problems** (3) Urban value conflicts, urbanization, transportation and land use, the environment, the property tax base. Housing: needs, goals, housing markets, government housing programs. Housing and community development. Prereq: RELU 2410 or 3410. *(Fall)*

**3480 City Planning** (3) Cities: ancient, classic, medieval, industrial, commercial. Planning process: general plan, zoning, circulation, neighborhood unit, commercial. Urban renewal: new regional distribution of settlements; dynamic planning for change. Prereq: RELU 2410 or 3410. *(Spring)*

**4000 Special Topics in Real Estate and Land Use Economics** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**4390 Real Estate Investments** (3) A study of the feasibility and the analysis of long term investment characteristics of condominiums, dormitories, apartments, housing complexes, office buildings, shopping centers, industrial properties and subdivisions. Prereq: RELU 2410 or 3410. *(Spring)*

**4400 Real Estate Finance** (3) Methods of financing various types of real estate, analysis of mortgage risks, mortgage instruments, mortgage lenders, financial calculations, influences of governmental agencies. Prereq: RELU 2410 or 3410. *(Fall, Spring)*

**4410 Residential Real Estate Appraisal** (3) Fundamentals of real estate valuation and appraising; factors affecting value; valuing land, valuing improvements and the valuation of special classes of residential property; appraisal practice, depreciation and obsolescence, appraising rules, the mathematics of appraising; an appraisal of a single family residence is required. Prereq: RELU 2410 or 3410. *(Fall)*

**4420 Income Property Appraisal** (3) Introduction to the theory and concepts of income capitalization approaches, methods and techniques to valuation of real estate income property. Characteristics of yield on investment real estate; future income projections; mortgage coefficients; purchase and leaseback reversions; Ellwood Tables; capitalization rates and investment yields; types of annuities; and condemnation appraisal. Prereq: RELU 2410 or 3410. *(Spring)*

**4430 Real Estate Environmental Problems** (3) Survey of environmental problems, air pollution, man's structural changes; environmental policy analysis and controls and their effect on real estate markets; legislation and regulatory structures; land use problems and environmental impact statements. Prereq: RELU 2410 or 3410. *(Fall)*

**4440 Creating a Real Estate Community** (3) Market analysis and planning for land developments for various types of uses: residential, campus, civic centers, housing for the elderly, urban renewal, shopping centers. Prereq: RELU 2410 or 3410.

**4450 Urban Real Estate Laboratory** (2) On-site analysis of history, economics, design and profitability status on local low-, medium-, and high-income housing, both single and multiple family. Public housing and housing for the aged. Shopping centers, industrial parks, central business district and recreational real estate. Planning board and city council zoning change hearings, county recorder, assessor, treasurer offices. Prereq: RELU 2410 or 3410.

**4500 Special Problems in Real Estate and Land Use Economics** (2-3) Individual investigation of specific problems in real estate and land use economics. Prereq: Senior and permission of program chair.

**4510 Real Estate Internship** (1-3) Correlation of theory and practice through part-time employment and weekly seminars; required readings. Prereq: Permission of program chair or internship coordinator. (Maximum of 4 hours).



**Professional Education** (EDUC)

*Note: The EDUC Sequence is currently under review. Please check with an education adviser for specific course requirements.*

**2010 Human Growth and Learning** (3) This course will examine human growth and learning from conception through adolescence. It will focus on how current educational practices and theories of development and learning impact and influence each other. The course includes field- based and laboratory experiences for the students. Prereq: Twenty-four hours, 2.5 GPA and passing PPST/CMEC scores.

**2020 Educational Foundations** (3) The course shall include philosophical, historical, ethical and social foundations of education as preparation for effective functioning in contemporary and future educational environments. It will be based on a study of change forces throughout time as they relate to the educational process. Laboratory experiences outside of class time will be included. Prereq: Twenty-four hours, 2.5 GPA, and passing PPST/CMEC scores.

**2030 Human Relations for Bias-Free Classrooms** (3) This course is designed to develop pre-service 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. This course meets the human relations requirement for teacher certification in Iowa.

**2510 Applied Special Education** (3) Each disabling area will be addressed as it interferes with learning. Techniques of classroom management, classroom adaptations and referral processes will be included. Field experience outside of class time is required. Co-Req: EDUC 2520. Prereq: EDUC 2010, 2020, GPA of 2.5 or above and passing PPST/CMEC scores.

**2514 Level I Field Experience Lab** (0) Co-requisite for EDUC 2510 and EDUC 2520. Prereq: EDUC 2010, EDUC 2020 and PPST/CMEC.

**2520 Instructional Systems** (3) The content includes instructional technology, curriculum scope and sequence, delivery systems and evaluation. Specific attention should focus on LB 581 and the pedagogical utilization of microcomputers, VCRs and other contemporary technologies. Laboratory and field experiences outside of class time are required. Co-Req: EDUC 2510. Prereq: EDUC 2010, 2020, GPA of 2.5 or above and passing PPST/CMEC scores.

**2524 Instructional Systems Lab** (0) Co-requisite for EDUC 2520. Prereq: EDUC 2010, EDUC 2020 and PPST/CMEC.

**Counseling** (COUN)

**1800 Career/Life Planning** (1) A course designed especially for the student making the transition from high school to college, as well as the beginning college student, to assist with the process of goal setting, decision-making and life planning. Prereq: None.

**4070/8076 Crisis Intervention and Suicidology** (3) A course which combines the application of crisis intervention theory to the most extreme of all crises, suicide, with an overview of the current community approaches directed toward resolution of such crises as situational, developmental/transitional, and natural/man-made disasters. Prereq: For 4070; senior in teacher preparation program, human service area, or practitioner in community mental health center. For 8076; graduate.

**4220/8226 Vocational Decision Making** (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: Senior or permission.

**4600 Paraprofessional Counseling with Adults** (3) An introduction to paraprofessional counseling emphasizing the parameters of the role, ethical considerations, personal self-care and relationship-building skills. Prereq: Permission of Counseling and Guidance Development considered upon written application prior to registration.

**4700 Counseling Techniques: Emphasizing Financial Counseling** (3) This course is developed specifically to assist individuals currently on active duty with the U.S. Air Force who have been designated as unit financial affairs officers, in the areas of interpersonal communication skills, counseling skills and financial counseling. Prereq: Permission of instructor.

**4710 Practicum in Paraprofessional Counseling** (3) The purpose of this course is to provide the student with an opportunity to practice, develop and improve human interaction skills. Prereq: Approved human communication course, as specified by the Base Education Office Adviser, COUN 4700 and 4600.

**4750/8756 Mid-life, Career Change, Preretirement 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 preretirement planning. Factual information, issue readings 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** (1/2-6) An integrative course designed to acquaint students and practitioners with recent developments in the counseling profession. This course is repeatable up to a maximum of six hours of credit each time the conditions of this sequence 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: For 4800; senior. For 8806; senior or graduate.

**4840/8846 Women's Issue 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. Prereq: Permission of instructor.

**Health, Physical Education and Recreation****General Health, Physical Education and Recreation** (HPER)

**2400 Health Education and Physical Education for the Elementary School Teacher** (3) This course is designed to aid the classroom teacher in developing and implementing health education and physical education programs in the elementary school curriculum. Prereq: EDUC 2010.

**Health Education** (HED)

*For further information consult a health education adviser or our website to find information on self-directed or Internet based course options ([www.unomaha.edu/~healthed/HEDprogram.html](http://www.unomaha.edu/~healthed/HEDprogram.html))*

**1500 Foundations in Health Education** (3) An introductory course for health education majors and minors that examines the relationship of health education to general education. Current trends, problems, and issues concerning health education and the implications for health educators are examined.

**2070 Drug Awareness** (3) An introduction to the effects and rationales of drug use, misuse and abuse. Particular emphasis will include the physiological, psychological, sociological, pharmacological and legal aspects of drugs in today's society.

**2310 Healthful Living** (3) A study of selected health problems and controversies in our society as related to knowledge, attitudes, and behaviors necessary for healthful living in a culturally diverse society.

**2850 Stress Management** (3) The health-related aspects of stress will be the focus of this course. Selected techniques for self-regulation of stress will be demonstrated, practiced, and analyzed.

**3030 First Aid** (3) Designed to give students knowledge and skill in implementing immediate, temporary treatment in case of injury or sudden illness before the services of a physician. Upon successful completion of the course, a student will receive a standard first aid and cardiopulmonary resuscitation certificate.

**3070 Death and Dying** (3) An interdisciplinary survey of literature in the field of thanatology, with an emphasis on working with the patient and his or her family. Prereq: None. (Same as GERO 3070)

**3080 Health Concepts of Sexual Development** (3) An examination of the factors influencing sexual development. Emphasis given to topics pertinent to healthful living in today's society.

**3310 General Safety Education** (3) An introductory course in school safety education, primarily designed for university students, teachers and administrators so they may intelligently participate in a school safety program.

**3600 Community Health** (3) A survey course of community and public health problems. The basics of epidemiology, environmental health problems, health organizations, the dilemma of health care delivery, selected diseases, and innovations in community health are examined. Prereq: HED 1500 or 2310 or permission of instructor.

**4000 Methods and Materials in Health Education (3)** This course provides opportunities to study, develop and use materials, technologies and equipment in health education. Methods of teaching health will be practiced and evaluated. Methods of orchestrating a learning environment for teaching health also will be explored. Students will be able to gain experience in planning lessons and presentations. Prereq: Junior standing, HED 1500, PE 2880.

**4040 Prevention and Control of Disease (3)** The course is designed for school and community health education students. The cause, prevention, treatment and control of prevalent communicable and non-communicable disease will be emphasized. Special emphasis will be given to disease processes that can be prevented or controlled through school health and community health measures. Prereq: HED 1500, 2310, PE 2880, or permission of instructor; minimum of three hours of statistics or mathematics.

**4060 School Health Programs (3)** Provides information for planning and conducting a school and community health program. Use of health communities and councils, coordination of instructional, environmental and service programs. Inter-related role of teachers, parents, physicians and nurses in the total health education of students. Prereq: HED 1500, 2310.

**4200/8206 Health Promotion at the Work Site (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 critical issues involving worksite health promotion in relation to cost analysis, health behavior, program standards, the insurance industry and program evaluation.

**4550/8556 Health Aspects of Aging (3)** This course emphasizes health promotion for older adults. Special health needs of older Americans are compared and contrasted with health needs for other age groups. Prevention or delaying of chronic diseases and disorders are emphasized. Prereq: For 4550, six hours of health or permission of instructor. (Same as GERO 4550/8556)

**4960 Health Education - Planning and Organization (3)** The course is designed to provide the community health student a better understanding of planning and organization in the public health education field. The use of mass media, group processes, selection of personnel and materials, evaluation methods and procedures for health, and grantsmanship will be included. Prereq: HED 1500, PE 2880, Junior standing.

**4970 Problems of Health Education (1-3)** To provide an opportunity for students to participate in special conferences on problems in the field of health education to further professional improvement and growth beyond the normal undergraduate program. Prereq: Permission of instructor.

**4990 Field Practicum in Community Health Education (7)** This practicum provides on-the-job training for health students in the non-teacher certification program in a cooperative program with state and local health departments and other appropriate community and public health agencies. Direct field experience is completed by the student under the supervision of an experienced community health educator in an approved public health agency. Prereq: Completion of or current enrollment in core courses, GPA of 2.5 or above in required courses, and no grade below a "C" in required courses.

## **Physical Education Service Program (PEA)**

**1110-1120 Individual, Dual and Team Activities (1)** Classes consist of dance, swimming, individual and team activities that assist in preparing students to develop skills for personal use and to enable them to effectively utilize leisure time.

**1130 Adapted Physical Education (1)** Physical education instruction modified in accordance with specific physical limitations of students. The student may register for four semesters.

**1180 Beginning Gymnastics (1)** An activity course in gymnastics giving the student exposure to and practice in beginning gymnastics. Prereq: Physical education major and also open to all students.

**1240 Intermediate Gymnastics (1)** An activity course in intermediate gymnastics giving the student exposure to and practice in intermediate gymnastics. Prereq: PEA 1180.

## **Professional Physical Education (PE)**

**1010 Introduction to Athletic Training Practicum (1)** This course will provide an opportunity for students to investigate careers in athletic training. Clinical observation of professionals in the field of sports medicine will be supported by lecture and demonstration of skills involved in the profession of athletic training. The course is intended for students wishing to pursue a career in athletic training. Students interested in allied health care professions may also find the course interesting.

**1800 Fitness for Living (3)** This course is aimed at exploring the values of physical activity, diagnosing fitness needs and prescribing appropriate activities. Concepts are experienced through participation in vigorous physical activity including jogging.

**2130 Advanced Lifesaving/Lifeguard Training (3)** This course is designed to prepare students in assuming the duties and responsibilities of a lifeguard. The main focus will be accident prevention in and around the water. Also stressed will be the recognition of a person in distress and a drowning victim. The development of an emergency plan and the articulation with the emergency rescue service will also be key elements in this course. Prereq: CPR certification, intermediate swimming ability and successful completion of a preliminary swimming test.

**2140 Water Safety Instructors Course (3)** This is a course in water safety instruction. The purpose of this course is to teach those enrolled how to teach the various swimming skills. This would include teaching beginning swimming through emergency water safety. Students who satisfactorily complete the course will be issued a Water Safety Instructor Certificate. Prereq: Seventeen years of age and possession of current Advanced Lifesaving or Emergency Water Safety Certificate.

**2250 Aerobic Dance: Instructor Training (3)** This course is designed to develop the student's competencies in the instruction of aerobic dance programs. Major topics to be investigated will include: dance as a mode of fitness development, fitness/medical screening and testing, program design, injury prevention, choreography, and legal issues. Methods for incorporating diverse dance techniques (social, jazz, folk) into the aerobic dance program will be emphasized.

**2300 Team Sports (5)** This course is designed to develop the skills and knowledge necessary to teach the sports of basketball, soccer, softball, flag football, and volleyball. With these skills the student will be able to orchestrate the learning environment for physical education students. Prereq: PE 2800, PPST.

**2350 Individual/Dual Sports (5)** This course is designed to develop the skills and knowledge necessary to teach the sports of archery, badminton, golf, and tennis. With these skills the student will be able to orchestrate the learning environment for physical education students. PE 2800, PPST.

**2430 Foundations in Physical Education (3)** An introductory course for physical education students that examines the relationship of physical education to other related areas and general education. The course includes an orientation to the profession and a consideration of current trends, problems and issues and their implications for the field of physical education.

**2800 Motor Behavior (3)** This course is the study of motor behavior and the conditions and factors that influence the learning of motor skills. Emphasis will be placed upon normal developmental patterns and behaviors throughout the life-span.

**2880 Basic Physiology and Anatomy for HPER (5)** The study of the structure and function of the systems of the body with an emphasis on the skeletal, muscular, nervous, circulatory, respiratory and digestive systems.

**3000 Special Projects (1-3)** Conducted as short course, seminar, workshop or special project.

**3010 Scientific Principles of Coaching (3)** Designed for coaches and potential coaches who are not physical education majors. Covers basic information to include kinesiology, physiology of exercise and behavioral aspects of coaching. Prereq: Not for physical education majors.

**3040 Care and Prevention of Athletic Injuries (3)** Designed to develop basic techniques in prevention, care and rehabilitation of athletic injuries. Students will be exposed to athletic training as a career. Prereq: Physical education majors, PE 2880 and HED 3030; Non-majors, PE 3010 and HED 3030.

**3050 Practicum in Advanced Athletic Injury Evaluation Techniques (3)** This course is designed to provide the student with knowledge and skill in the area of advanced athletic injury assessment. The student will be exposed to current methodology in the field of assessment, physiological response of the human body to injury, and contemporary equipment used to control further injury and pain. The student will receive practical experience in the management of an athletic team by assisting with one or more of the UNO athletic teams. Prereq: PE 2880, PE 3040.

**3060 Methods of Preschool and Primary School Physical Education (3)** The study of current methodology in developmentally appropriate preschool and primary school physical education. Students will use the assessment, prescription, implementation and evaluation model in developing physical education programs for this age group. Prereq: PE 2800 completed or concurrently enrolled; PPST.

**3140 Sports Officiating** (3) The general principles, basic guidelines, philosophy, mechanics and rules of officiating several team and individual sports will be covered.

**3210 Dance in the Elementary Schools** (3) This course is designed for physical education majors, elementary teachers, and recreation leaders who are interested in obtaining the fundamentals of a variety of rhythmic and creative activities and folk dance and the teaching methods for these activities at preschool through sixth grade. Prereq: PE 2800, PPST (or permission of instructor)

**3250 Dance in the Secondary Schools** (3) This course is designed to provide physical education majors with experience in learning, practicing and teaching the fundamentals of multicultural, jazz, social and aerobic dance. Prereq: PE 2800; PPST.

**3350 Methods of Teaching and Curriculum Development in Elementary Physical Education** (3) The study of teaching methodology and curriculum development in the elementary schools. Particular attention will be given to meeting the motor needs and interests of children aged 9-12. Assessing children's motor performance, prescribing activities, and evaluating the program effectiveness will be addressed. Prereq: PPST, PE 2800, PE 3060.

**3430 Practicum in Athletic Therapeutic Modalities** (4) This course will cover the theory, philosophy and application of therapeutic modalities used in the treatment of athletic injuries. Students will receive clinical experience in the use of these modalities in supervised clinical settings on the UNO campus. Basic principles of therapeutic exercise will also be covered as they related to modalities. Students will be assigned to patients and will assist them in the rehabilitation of athletic injuries. Prereq: PE 3050 and permission of instructor.

**3480 Organization and Administration of Athletics** (3) A study of the organization and administration of athletics in the secondary schools. Prereq: Sophomore.

**3730 Softball Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of fast pitch softball. The course will encompass the philosophy of coaching, coaching techniques, conditions/training activities and the analysis and correction of skills.

**3740 Volleyball Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of volleyball. The focus is on conditioning/ training activities, coaching techniques, competition strategies, equipment selection and modern coaching theories.

**3750 Wrestling Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of wrestling. The focus is on conditioning/training activities, coaching techniques, competition strategies, equipment selection and modern coaching theories specific to the sport of wrestling.

**3760 Baseball Coaching Theory and Practice** (3) A course of study designed to develop knowledge in all phases of the game. Special focus is on fundamentals, drills, managing and psychology of coaching.

**3770 Football Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of football on all levels. The focus is on theory, history and origin, conditioning, safety techniques, coaching techniques, strategy, equipment selection and modern coaching theories.

**3780 Track and Field Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of track and field. The focus is on conditioning/training activities, coaching techniques, competition strategies, equipment selection and modern coaching theories specific to the sport of track and field.

**3790 Basketball Coaching Theory and Practice** (3) A course of study designed to develop the competencies essential to the successful coaching of basketball. The focus is on conditioning/training activities, coaching techniques, competition strategies, equipment selection and modern coaching theories specific to the sport of basketball.

**3840/8845 Survey of Microcomputer Applications in Health, Physical Education and 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.

**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.

**4000 Methods of Teaching and Curriculum Development in Secondary Physical Education** (3) Designed to develop students' competencies in physical education instructional methodology and curriculum development. Analysis of teacher behavior and selection of content and materials will be examined. Students will be introduced to and will practice various methods of teaching physical education at the secondary level. Prereq: PPST, PE 2300, 2350, junior and PE major.

**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. Students must have current CPR certification. Prereq: PE 4630, PE 4940.

**4070 Optimizing Sports Performance** (3) The course is designed for coaches, athletes and physically active people, and allied health professionals. Course content emphasizes integration of several disciplines in sports medicine aimed at preparing one for optimal sports performance. Topics include peaking, detraining, overuse injury, efficiency, special foods and nutritional requirements, genetics and trainability, and designing of multi-year training schedules.

**4150 Adapted Physical Education Theory and Practice** (3) A study of problems as they relate to philosophy, procedures and practices, and organization and administration of physical education programs for exceptional students. This course surveys movement problems associated with specific disabilities and provides the student with an opportunity to work with a child who has a disability. Prereq: PE 2800 or permission of instructor.

**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: PE 4150.

**4180 Practicum in Physical Education for the Disabled Child** (3) This course is designed as a practicum to provide the physical education pedagogy 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: 4170 and permission of instructor.

**4220 Organization and Administration of Physical Education** (3) A study of organization and administration of physical education and related activities in school and corporate settings. Prereq: Junior.

**4260 Including Individuals with Disabilities in Physical Education** (3) This course is for physical education, health education, special education and therapeutic recreation students interested in the inclusion of children with disabilities in physical education environments. Students will acquire the teaching attributes needed to orchestrate inclusive physical education learning environments for students with and without disabilities. Prereq: PE 3060 or PE 4000; PE 4150.

**4500/8506 Behavioral Aspects of Coaching** (3) Designed to provide the physical education student with an overview of the behavioral aspects of coaching athletes. Research in sport will be reviewed.

**4630 Kinesiology** (3) A study of muscle function, biomechanics and analysis of human movement. Prereq: PE 2880 or equivalent, PHYS 1050, 1054 or equivalent.

**4800 Exercise Leader Practicum** (3) This practicum places the student in the role of an exercise leader in a Fitness for Living class. During this experience the student will participate in a seminar which will meet three days a week. Prereq: PE 4010.

**4850/8856 Cardiac Rehabilitation Principles and Practices** (3) The purpose of this course is to provide students with an introduction to the theories and practices involved in all phases of cardiac rehabilitation. Prereq: PE 2880, 4010/6016, 4940/8946.

**4900 Practicum in the University Fitness Program** (3) The student will serve as an exercise leader in the University fitness program. Responsibilities will include fitness assessment, exercise prescription and exercise supervision. Prereq: PE 4800.

**4910 Internship in Exercise Science** (6) This course is an off-campus, supervised, educational work experience of at least 300 hours at an approved worksite offering programs and experiences in fitness development and health promotion. Prereq: 90 hours completed, 2.5 GPA, PE 4900.

**4930/8936 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: PE 4940 and junior.

**4940/8946 Physiology of Exercise (3)** A study of the major physiological systems of the human body and its acute and chronic responses to exercise. Includes application of physiological concepts to physical training and conditioning. Prereq: PE 2880 or equivalent.

**4950 Teaching Fitness Concepts in the Schools (3)** This course is designed to provide physical education majors with knowledge and skills necessary to evaluate the curriculum and implement physical fitness program concepts and activities into the K-12 physical education curriculum. Prereq: PPST, PE 4630, PE 4940.

**4960/8966 Topics in Sports Medicine (3)** This course covers selected topics regarding the science and medicine of sports participation. Some areas to be covered include pharmacologic aspects, orthopedic aspects, prevention and rehabilitation, pediatric aspects, legal aspects and aging. Prereq: PE 4630, 4940.

**4970 Problems of Physical Education (1-3)** To provide an opportunity for students to examine specific problems in physical education and to further professional improvement and growth. Prereq: Permission of instructor.

**4980 Coaching Practicum (1)** This course is designed to give the student practical experience in the coaching of specific sports. It may be repeated with coaching assignments in different sport activities as many times as desired. Prereq: Junior and methods course or approved experience in area of practicum assignment.

## Recreation/Leisure Studies (RLS)

**1000 One-Hour Leisure Courses (1)** Selected recreational courses designed for the general student population. A complete syllabus will be developed for each course submitted under this syllabus. The purpose of each course is to prepare the student to more effectively utilize his/her leisure time.

**2000 Cultural Diversity: A Leisure Perspective (3)** A survey approach with a focus on an awareness and understanding of leisure values, lifestyles, contributions and history in a pluralistic society.

**2440 Foundations of Recreation and Leisure (3)** A survey approach to the recreation/leisure services/parks professional field to include the historical/philosophical bases of the overall profession. Provides the necessary foundational knowledge for majors as well as students within other areas of study.

**2500 Outdoor Recreation (3)** A survey of the dynamics of outdoor recreation in American life. Designed to guide students through a learning experience that results in an introduction to and a broad-based understanding and appreciation of outdoor recreation.

**2920 Education for Leisure (3)** Examines the growth of leisure in modern society and the recognition of leisure and recreation as important aspects in the lives of individuals. Nine aspects of recreation and leisure will be examined: historical, philosophical, psychological, sociological, economical, educational, ecological, political and physical.

**3100 Social Aspects of Sport and Leisure (3)** A critical examination of the function and significance of sports within the overall leisure behavior patterns of Western society. Recreational sport spectatorship, and competitive athletics are considered from the dominant theoretical perspectives within sociology Prereq: Six hours of social science or permission. (Same as SOC 3100).

**3180 Camp Counseling and Outdoor Education (3)** Designed to provide both theoretical and practical approaches to camp leadership and outdoor education. The methods employed within the course maximize "hands on" opportunities to apply foundational principles and activity skills related to camp counseling and outdoor education. Prereq: Sophomore.

**3500 Foundations of Recreation Therapy (3)** An introduction to therapeutic recreation services as a specialized field within recreation. Course content touches on the majority of the special populations recognized within American society. An in-depth survey approach is utilized.

**4000 Special Topics in Recreation and Leisure Studies (3)** A series of intensive courses especially designed for student majors within recreation and leisure studies; scheduled as seminars or workshops, according to purpose.

**4240/8246 Recreation Administration (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: For 8246, at least nine hours of upper division courses in recreation or permission of instructor.

**4300/8306 Recreation Programming and Leadership (3)** An advanced study of recreational programming and leadership through practical applications. Emphasis is placed upon understanding proven programming and leadership knowledge and skills; understanding participant leisure behavior; understanding participant leisure needs; and skill development in ways through which organization, agencies and businesses create services to respond to the leisure needs of the consumer. Prereq: Junior, senior or graduate.

**4420/8426 Recreational Therapy: Intervention for the Aging (3)** Role of leisure services as related to understanding and working with elders. Emphasis on recreation programming as a mode of intervention. Analysis and study of the phases of aging, with reference to psychomotor, affective, and cognitive changes; introduction to the theories of aging and how they relate to the lifestyle of this population; recreational therapy intervention, activity adaptation and program design; leisure education and issues and trends Prereq: RLS 3500 or GERO 2000 or permission of instructor. (Same as GERO 4420/8426).202

**4530/8536 Recreation and Sports 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.

**4550 Practicum I (6)** Practical learning experience in leisure service delivery under close University and agency supervision. Prereq: Senior, 2.5 GPA.

**4560 Practicum II (6)** Practical learning experience in leisure service delivery under close University and agency supervision. Prereq: Senior, 2.5 GPA.

**4610/8616 Recreation Therapy: 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 3500 or permission.

**4630/8636 Recreation Therapy: Intervention and Facilitation (3)** This course is designed to offer students a full range of intervention strategies and facilitation techniques specific to special populations. Prereq: RLS 3500 or permission of instructor.

**4640/8646 Trends and Issues in Recreation Therapy (3)** This course covers selected topics reflecting current trends and issues in the field of therapeutic recreation. Prereq: RLS 3500 or permission of instructor.

**4970 Problems of Recreation (1-3)** To provide an opportunity for students to participate in special conferences on problems in the field of recreation and to further professional improvement and growth beyond the normal four-year undergraduate program. Prereq: Permission of instructor.

## Special Education and Communication Disorders (SPED)

**1400 Introduction to Communication Disorders (3)** This is a beginning course for speech pathology and special education majors and is open to any student. An overview of the fields of speech pathology, audiology, and education of the deaf will be presented. Major emphasis will be given to normal development of speech, language and hearing and major types of speech, language and hearing disorders.

**3000 Special Studies (1-3)** Conducted as short course, seminar, workshop or special project. Must be arranged in conference with student's adviser.

**3020 Data Collection Techniques and Their Role in the Teaching/Learning Process (3)** This is a course with the primary focus being the special educator who is working with children in the self-contained class or in the mainstream setting. It will provide the student with practice in the use of a variety of data-collection instruments and techniques as well as procedures for writing up the data collected, making referrals, and for developing an instructional program. Prereq: EDUC 2510.

**3030 Teaching the Mildly Handicapped (3)** This course will introduce the student to several of the major concepts and principles of psychology and their application to classroom learning and instruction. Special emphasis will be given to approaches that may be applied directly to the education of children who possess mild learning handicaps.

**4010/8016 Child Abuse/Neglect: What You Can Do (3)** This course 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 a wide array of services available in the abused/neglected child and the family.

**4020 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 them 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 the areas of assessment, report writing, prescription, record keeping and remediation.

**4030 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.

**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.

**4200 The History, Psychology and Sociology of Deafness** (3) This is an introductory course which surveys historical, sociological, psychological, and future directions in the education of hearing-impaired (H.I.) children. Basic concepts, definitions, theories, and research are explored in a highly independent manner. An in-depth experience in an agency working with H.I. children or adults is expected. Basic understanding is developed which will assist the student as he/she progresses in an H.I. or related program.

**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 4450/8456.

**4230/8236 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.

**4240 Teaching Language to the Hearing Impaired** (3) This course will examine specific programs, methods, and techniques employed in teaching and developing language with hearing-impaired children from primary through secondary levels. Language learning in all phases of the curriculum will be emphasized. Language development and learning will be viewed in relation to the development and learning of language by normal hearing children.

**4250 Manual Communication for Special Educators I** (3) This is a beginning course in manual communication. Students will be introduced to sign language systems and will develop skills in fingerspelling and use of sign language in face-to-face communication.

**4260 Manual Communication for Special Educators II** (3) A continuation of SPED 4250, increased skill development in the practice of simultaneous communication and basic sign language and the application of these skills to the classroom. Students may elect to test out of this course via a basic competency test; see instructor. Prereq: SPED 4250.

**4330/8336 Aural Rehabilitation** (3) This course examines the research and methodology of speechreading 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 are also presented.

**4350 Teaching Content Subjects to the Hearing Impaired** (3) This course will describe, investigate, and put into practice instructional strategies employed in developing knowledge, concepts, and skills in writing, reading, social studies, science, and mathematics. The scope of the course will be preschool through high school. Curriculums and materials used with the hearing impaired will be reviewed and evaluated. Students will be expected to develop instructional units in the content areas, review teaching materials, assemble a file of teaching activities, and design a classroom. The application of computers in the classroom with the hearing impaired will be examined.

**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 communicative disorders specialist. Competency will be accrued in performance of basic hearing tests. Prereq: SPED 4390.

**4380/8386 Speech Science I: 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 communication handicapped in education or rehabilitation settings.

**4390 Hearing Science** (3) This course is designed for undergraduate majors in speech pathology and audiology and for 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 for the hearing mechanism, acoustics and physics of sound, processes of human hearing, elements of basic hearing measurements, and psychophysics.

**4400 Introduction to Learning Handicaps** (3) This course is intended for preteachers who are preparing to teach children and youths with mild learning handicaps (Learning Disabled, Emotionally Disturbed, Mentally Retarded). Prereq: EDUC 2510.

**4410/8416 Communication Disorders with Organic Etiologies** (3) This is an applied science and clinical methods course related to several of the most common communication disorders associated with organic etiologies. It is designed as an elective pre-clinical course in the undergraduate degree program in Speech Pathology.

**4420 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.

**4430 Articulation Disorders** (3) Discussion of the types and causes of phonological and speech articulation disorders in children and adults with special emphasis on assessment and remedial technology applicable to this population.

**4440/8446 Speech Pathology II: Rhythm and Symbolization** (3) Types and causes of rhythm and language symbolization disorders, classroom demonstrations; special emphasis on rehabilitation procedures and methods associated with stuttering, aphasia and delayed language development.

**4450/8456 Speech Science II: Experimental and Applied Phonetics** (3) Analysis of phonetic and phonetic elements in major American English dialects: practice in phonetic transcription of standard and defective speech; analysis of sound spectrograms, use of the sound spectrograph, spirometer and other equipment.

**4490 Pre-Clinical Observation and Assessment in Speech Pathology** (3) A prerequisite to basic clinical practicum in Speech Pathology. This course is designed to provide the student with instruction and directed opportunities to observe and critique client/clinician interactions and other clinical activities in actual clinical settings and to develop pre-clinical skills in assessment and diagnosis of communication disorders. Prereq: SPED 4430.

**4500 Communication Disorders in the Elementary and Secondary Schools** (3) Speech-language correction programs as related to goals of public and private education of school-age children: role and responsibilities of the speech clinician; current practices in evaluation, caseload selection and scheduling; special emphasis on methods and materials appropriate to a variety of facilities.

**4510 Basic Clinical Practicum in Speech Pathology** (3) Supervised clinical practicum in the University Clinic. Students will provide diagnostic and clinical services to communication disordered individuals. Therapy plans, reports, and a weekly colloquium are required of all students. Prereq: SPED 4490, 2.5 GPA, senior and permission.

**4520 Basic Clinical Practicum in Speech Pathology** (2) Supervised clinical practicum in the University Clinic. Students will provide diagnostic and clinical services to communication disordered individuals.

**4570 Dysphagia Diagnosis and Treatment** (3) A study of structural and neurologically based disorders of swallowing. Assessment of these disorders including radiographic analogues; prescriptive considerations; implementation of services including functions of a swallowing team, therapeutic intervention and referral; evaluation of treatment outcome.

**4590/8596 Disorders of Communication in Older Adults** (3) This course is designed to familiarize the student with the identification and symptomatology, basic assessment and intervention strategies associated with disorders of communication affecting older adults and geriatric patients. It is beneficial to students majoring in gerontology or speech pathology, as an elective course, or as a professional enrichment course for persons working in these or related fields.

**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.

**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.

**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: (a) challenges of parenting the handicapped; (b) strategies for involving parents in planning, implementing, and evaluating handicapped child education plans; (c) curriculum/instruction/therapy modification for family use; and (d) 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: EDUC 2510.

**4720 Basic Student Teaching in Special Education** (12) A practical experience in a classroom for exceptional children. Observation, participation, and actual teaching in an individually selected placement will each be a part of the student's involvement in this program. Students must successfully complete a Level II field experience prior to student teaching.

**4730 Advanced Student Teaching in Special Education** (3) A second semester of practical experience in a classroom for exceptional children. Observation, participation, and actual teaching will be part of the student's experience. Students will take this course for 3 semester hours in combination with an elementary or secondary education assignment.

**4750 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.

**4800/8806 Social and 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: EDUC 2510.

**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: EDUC 2510.

**4830 Methods and Materials for Educating the Developmentally Young** (3) The work of this course involves the study of developmental delay and/or deviance which affects children from birth to age 8. Implications for adaptation of the learning environment are identified and applied. The course is appropriate for students preparing to teach at pre-school or elementary levels. Prereq: EDUC 2510.

## Teacher Education (TED)

*Note: TED undergraduate programs are currently under review. Please check with an education adviser for specific program requirements.*

**2250 Introduction to Early Childhood Education** (3) This course provides an overview of early childhood education programs with particular emphasis on programs for children birth to age five. Observations in preschool and child care programs fourteen hours of field experience are required components of the course. Prereq: EDUC 2010, ED, PPST/CMEE.

**3000 Special Projects** (1-3) Offerings which have or could have a broad (K-12) multigrade application, are often field-based, and conducted as a short course, seminar, workshop or special project.

**3050 Handicapped Students in the Regular Classroom** (3) This course is designed to provide an overview of characteristics of and teaching strategies for use with handicapped students placed in elementary and secondary classrooms.

**3300 Introduction to Teaching of Reading: Elementary** (3) A course designed to build and develop skills and competencies preparatory to learning the strategies in teaching reading. Prereq: EDUC 2010, 2020, PPST/CMEE, ED.

**3450 Advanced Writing for Educators** (3) This course will improve written composition proficiency to an advanced level. Each student will produce prose materials for educational purposes and be able to communicate the composition process to elementary school through adult-age students. Due to the extensive use of microcomputers for writing and student data management, students will also learn the use of at least one integrated software package with word processing, data base, spreadsheet and communications functions. This course meets the requirement for advanced composition.

**3550 The Art and Science of Teaching in Secondary Schools** (3) This is a general methods course for all students preparing to teach at the secondary level. Students will apply core competencies in learning how to plan their instruction, how to use a variety of instructional methods, how to manage instruction and how to evaluate and improve their instruction. Prereq: EDUC 2510, 2520, PPST/CMEE, ED.

**3690 Reading for Secondary Teachers** (3) This course is designed to introduce basic concepts of the reading process, reading methodology and materials to secondary content area teachers. Students will learn basic instructional procedures and strategies appropriate for use with students' reading of content textbooks. Prereq: EDUC 2010, 2020, PPST/CMEE, ED.

**3750 Teaching English Linguistically** (3) An analysis of various aspects of linguistic study including nature of language, dialectology, usage today, modern descriptive grammars, semantics, lexicography, etc., and their application in the secondary school English classroom. The emphasis will be on investigation and clarification of language concepts, on the development of teaching materials for the classroom, and on appropriate methodology. Prereq: EDUC 2510, 2520, PPST/CMEE, ED.

**4000 Special Methods in the Content Area: Secondary** (3) Designed to provide secondary education majors with specific competencies regarding methods and materials of instruction in specific teaching content and certification areas. Students will be grouped and taught by content areas. The course may be repeated for each area in which certification is sought. Prereq: TED 3550, PPST/CMEE, ED. *Offered fall only.*

**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.

**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.

**4120 Reading Diagnosis and Remediation for the Classroom Teacher** (3) This course is designed for classroom teachers who wish to develop a better understanding of reading problems, their assessment and their remediation. Prereq: TED 3300, PPST/CMEE, ED.

**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.

**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: ED, TED 2250, PPST/CMEE.

**4250 The Nature and Guidance of the Young Child** (3) Overview of the developmental patterns of the young child and an investigation of effective and appropriate guidance techniques as they relate to the preschool, kindergarten and primary grade classroom. Prereq: ED, TED 2250, PPST/CMEE.

**4260 Curriculum for Early Childhood Education** (3) Designed for students who are preparing to teach the child from three to eight years of age with particular emphasis on the appropriate curriculum. Prereq: ED, TED 2250, PPST/CMEE.

**4270 Current Trends in Early Childhood Education** (3) This course provides an overview of programs provided for young children and their families at the local, national and international level, as well as an examination of selected issues and trends which currently have an impact on the care and education of children. Prereq: ED, TED 2250, PPST/CMEE.

**4280 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. Prereq: ED, TED 2250, PPST/CMEE, 58 hours.

**4290 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. Prereq: ED, TED 2250, PPST/CMEE, 58 hours.

**4300 Teaching of Reading: Elementary** (3) This course is designed to assist students in understanding the process of developmental reading and to acquaint the teacher with the newest as well as the traditional tools for teaching reading. Prereq: TED 3300, EDUC 2510, 2520, PPST/CMEE, ED. Co-requisite TED 4310.

**4310 Teaching of Language Arts: Elementary** (3) A survey of the content of the language arts in the elementary school and a study of the methods and techniques of teaching language arts. Prereq: EDUC 2510, 2520, PPST/CMEE, ED. Co-requisite TED 4300.

**4320 Teaching of Social Studies: Elementary** (3) This course is a study of the content, basic concepts, skills and methods of teaching social studies in an elementary school. Prereq: EDUC 2510, 2520, PPST/CMEE, ED.

**4330 Teaching of Mathematics: Elementary** (3) A survey of the content of mathematics in the elementary school and a study of the methods and techniques of teaching modern mathematics. Prereq: MATH 1310, EDUC 2510, 2520, PPST/CMEE, ED.

**4340 Teaching of Science: Elementary** (3) A survey of the content of science in the elementary school and a study of the methods and techniques of teaching science. Prereq: EDUC 2510, 2520, PPST/CMEE, ED.

**4470/8476 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.

**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.

**4570 Practicum in Library/Media** (3-5) This three to five credit hour supervised practicum is designed to give librarians and library media specialists an overview of the administrative and instructional aspects of a library/media center.

**4590/8596 Computers 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.

**4600 Student Teaching and Seminar: Elementary or Secondary Level** (12) A supervised teaching experience under the direction of a university faculty member and a classroom teacher in the student's teaching area. Students must successfully complete a Level II field experience prior to student teaching.

**4604 Level II Field Experience Lab** (0) Co-requisite TED 4600.

**4610 Teaching Writing Throughout the Curriculum** (3) This course includes a study of the writing process and its use throughout the curriculum. The research regarding writing instruction is studied and application is made to classroom practices. Prereq: EDUC 2510, 2520, PPST, and 58 hours.

**4644 Level II Field Experience Lab** (0) Co-requisite TED 4640.

**4640 K-12 Student Teaching and Seminar: Elementary/Secondary** (12) Designed for students seeking certification in art, music, physical education and library media in the K-12 preparatory program. Students must successfully complete a Level II field experience prior to student teaching.

**4650 Literature for Children and Youth** (3) Selection, evaluation and guidance in various types of literature for elementary and junior high school levels with emphasis upon developing a broad acquaintance with authors and works, and including the development of a better understanding of the significance of literature in meeting children's needs and interests. Prereq: EDUC 2010, 2020, PPST/CMEE.

**4660 Literature for the Adolescent** (3) This course is designed to assist library media specialists, English teachers, teachers of the humanities and other classroom teachers to gain information about adolescents, their reading and viewing habits and interests. Factors which affect reading, guidance in reading, and types of literature, regardless of format, are examined. Prereq: EDUC 2010, 2020, PPST/CMEE, ED.

**4710/8716 Reference and Bibliography** (3) A basic course in the most commonly used language dictionaries, encyclopedias, indexes, catalogs, bibliographies and biographical dictionaries. Bibliographical form also is emphasized.

**4720/8726 Advanced Reference and Subject Bibliography** (3) Detailed consideration of reference materials in the pure and applied sciences, humanities, and social sciences, including United States government publications. Prereq: TED 4710.

**4740/8746 Cataloging and Classification I** (3) Elementary cataloging and classification. Designed to give basic understanding of descriptive and subject cataloging and the role played by a catalog in the total library program. Laboratory work with the basic cataloging tools.

**4750/8756 Cataloging and Classification II** (3) An advanced course in cataloging and classification including analytics, series, serials, government publications and non-print materials. Laboratory work with the basic cataloging tools. Prereq: TED 4740.

**4760/8766 Selection and Evaluation of Educational Media** (3) A course designed for library media specialists and classroom teachers interested in gaining background information concerning learning resources for preschool through adolescence. For both print and non-print media, principles of selection and evaluation are identified and examined.

**4770/8776 Production and Utilization of Educational Media** (3) The purpose of this course is 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.

**4780/8786 Instructional Television Program Planning and Production** (3) Students will be introduced to the role of television as applied to instruction. Production, training and practice TV lessons will be included in addition to production of a major project of practical and application.

**4800/8806 Administration of the Library Media Program** (3) This course is designed for students who wish to prepare themselves for the administration of an educational-media program.

**4810/8816 Principles and Philosophy of Vocational Education** (3) A study of the basic philosophy underlying education and the principles and practices in the various fields.

**4850/8856 Coordination Techniques in Vocational Education** (3) Reviews responsibilities and techniques of coordination for the vocational teacher-coordinator and or vocational coordinator, with special emphasis upon local administration of the part-time cooperative program and analysis of the laws and regulations governing this program.

**4860 Vocational Student Organizational Management** (3) Developing skills in designing and managing vocational student organizations. Required for business education and marketing education majors.

**4980 Special Studies** (1-3) Advanced level offerings which have or could have a broad (K-12) multigrade application, are often field-based, and conducted as a short course, seminar, workshop or special project.

## Computer Engineering

### Computer and Electronics Engineering (CEEN)

#### 1030 Computer and Electronics Engineering Fundamentals (4)

Introduction to DC circuit analysis and digital logic. Topics include Ohm's and Kirchoff's laws, mesh and nodal analysis, Boolean algebra, logic gates, minimization, counters and flip-flops. Uses of computer based resources for data analysis and report generation. Use of internet to locate and retrieve engineering resources. Prereq or coreq: MATH 1950 or permission.

**1060 Microprocessor Applications (3)** Emphasis on assembly language programming of microprocessors. Assemblers and debugging tools utilization. Coverage of microprocessor system hardware components along with necessary control signals. Prereq: CEEN 1030 or permission.

#### 1920 Individual Study in Computer and Electronics Engineering I (1-3)

Individual study at the freshman level in a selected computer or electronics engineering area under the supervision and guidance of a computer and electronics engineering faculty member. Prereq: Freshman and departmentally approved proposal.

#### 1940 Special Topics in Computer and Electronics Engineering I (3)

Special topics in the emerging areas of computer and electronics engineering at the freshman level which may not be covered in the other courses in the computer and electronics engineering curriculum. Prereq: Freshman or permission of instructor.

**2130 Electrical Circuits I (3)** Introduction to electrical circuit theory, Kirchoff's laws, network topology and circuit analysis theorems. The analysis of resistive, circuits and computer solutions to circuits problems are emphasized. Inductors, capacitors and circuits containing these elements are studied. Prereq: CEEN 1030, MATH 1950.

**2140 Electrical Circuits II (3)** Sinusoidal steady-state analysis, phasor concepts, frequency response, power, rms values, resonance and magnetically coupled circuits are studied. Prereq: CEEN 2130, MATH 1960.

**2184 Electrical Circuits Laboratory I (1)** Laboratory to accompany CEEN 2130. Electrical concepts covered in CEEN 2130 are verified by experiments and by computer simulation. Prereq or coreq: CEEN 2130.

**2220 Electronic Circuits I (3)** Introduction to analysis and design of modern analog electronic circuits, diode circuits, bipolar and field effect transistor circuits, transistor amplifier circuits and operational amplifier circuits. Prereq: MATH 1960; prereq or coreq: CEEN 2140, 2234.

**2234 Electronic Circuits Lab I (1)** Laboratory to accompany CEEN 2220, Electronic Circuits I. Includes circuits with diodes, bipolar transistors, field effect transistors, operational amplifiers. Prereq: MATH 1960; prereq or coreq: 2220.

**2250 Computer and Electronics Engineering Seminar (1)** This course will inform the student of careers available in computer engineering and in electronics engineering. Practicing engineers from local industries will be used as speakers. Tours of industries will provide students with first-hand knowledge of the types of work engineers perform. Professionalism and ethics are addressed. Prereq: CEEN 2130.

**2560 High Level Programming Applications (2)** Introduction to fundamentals of a high level programming language (i.e., C or C++) and its effective use for problem solving. The emphasis is on design, debugging and testing of related applications for hardware elements such as memory systems, I/O interfacing and graphics. Prereq: CEEN 1060.

#### 2920 Individual Study in Computer and Electronics Engineering II (1-3)

Individual study at the sophomore level in a selected computer or electronics engineering area under the supervision and guidance of a computer and electronics engineering faculty member. Prereq: Sophomore and departmentally approved proposal.

#### 2940 Special Topics in Computer and Electronics Engineering II (3)

Special topics in the emerging areas of computer and electronics engineering at the sophomore level which may not be covered in the other courses in the computer and electronics engineering curriculum. Prereq: Sophomore or permission of instructor.

**3100 Digital Design and Interfacing (3)** The course will cover the structure of digital integrated circuit families, interfacing and the advantages and disadvantages of each. The cause and effect of noise in digital circuits and the techniques used to minimize its adverse effects. Commercially available software will be used to simulate the circuits discussed. Prereq: CEEN 1030, 2220, 2234.

**3130 Switching Circuit Theory (4)** State machine and design. Includes synchronous/clock mode circuits, pulse mode, asynchronous sequential circuits. Minimization, race and hazard elimination is covered. Programmable logic devices are used to implement the state machines. Prereq: CEEN 1030, 2220.

**3250 Communications Circuits (4)** Relevant communication circuits; principles of transmission and reception; amplitude, frequency and phase modulation. Digital modulation systems: FSK, PSK, PCM. Prereq: CEEN 2220, 2234, MATH 3350; prereq or coreq: MATH 3800.

**3520 Electronic Circuits II (4)** Operational amplifier circuit design and analysis with emphasis on feedback and stability. Design and analysis of large signal power amplifiers. Other integrated devices such as regulators, comparators, Schmitt triggers, oscillators and active filters are also presented. Prereq: CEEN 2220, 2234; prereq or coreq: MATH 3350.

**3550 Signals and Linear Systems (3)** Continuous and discrete time representations of signals. System modeling and analysis using differential and difference equations. Fourier, Laplace and z transforms. State description of continuous and discrete time transfer functions. The course focuses on the primary mathematical tools used in the analysis of continuous and discrete time systems. Prereq: CEEN 2140, MATH 3350; prereq or coreq: MATH 3800.

**3610 Data and Telecommunications Transceivers (4)** The study of transceivers in a typical data communication network. Component characteristics, media interfacing, data protocols, switching techniques, modulation and synchronization, and related performance issues. Prereq: CEEN 2560, 3250.

#### 3920 Individual Study in Computer and Electronics Engineering III

(1-3) Individual study at the junior level in a selected computer or electronics engineering area under the supervision and guidance of a computer and electronics engineering faculty member. Prereq: Junior and departmentally approved proposal.

#### 3940 Special Topics in Computer and Electronics Engineering III (3)

Special topics in the emerging areas of computer and electronics engineering at the junior level which may not be covered in the other courses in the computer and electronics engineering curriculum. Prereq: Junior or permission of instructor.

**4330 Digital Computer Design I (4)** An introduction to the architecture of a microprocessor, memory characteristics, designs and applications. Memory and I/O decoding techniques, I/O interfacing, interrupts, programmable support chips and timing analysis. Prereq: CEEN 3100, 2560 or CSCI 1620.

**4360 Digital Computer Design II (4)** A comprehensive study of the peripherals for a high speed microcomputer system. The emphasis is on direct memory access (DMA) controllers, interrupt controllers, dynamic RAM hardware interfacing and programmable logic devices (PLD). Prereq: CEEN 4330.

**4630 Digital Communications Media (4)** Topics related to the transport of bit streams from one geographical location to another over various physical media such as wire pairs, coaxial cable, optical fiber and radio waves. Transmission characteristics, media interfacing, delay, distortion, noise and error detection and correction techniques. Prereq: CEEN 3610.

**4660 Telecommunications Engineering I (4)** Standard telecommunications protocols, architecture of long distance integrated data networks, local area networks, wide area networks, radio and satellite networks. Network management, internetworking, system modeling and performance analysis. Prereq: CEEN 4630.

#### 4920 Individual Study in Computer and Electronics Engineering IV

(1-3) Individual study at the senior level in a selected computer or electronics engineering area under the supervision and guidance of a computer and electronics engineering faculty member. Prereq: Senior and departmentally approved proposal.



### 4940 Special Topics in Computer and Electronics Engineering IV (3)

Special topics in the emerging areas of computer and electronics engineering at the senior level which may not be covered in the other courses in the computer and electronics engineering curriculum. Prereq: Senior and permission of instructor.

**4980 Senior Thesis ( )** The capstone design course for the BS in computer engineering and electronics engineering. The student will complete a design project that demonstrates his/her ability to combine knowledge from individual courses in the program to complete a design task. Prereq: CEEN 3610 or 4330.

## Engineering Technology

### Construction Engineering Technology (CET)

**1250 Construction Drawing (3)** An introduction to the drawing, reading and interpretation of construction drawings for commercial and industrial building. Topics include: basic drawing concepts; geometric constructions; orthographic view; technical sketching; interpreting site, structural, architectural, mechanical and electrical details from blueprints. Not intended for DDET or Interior Design majors. *(Will continue as GET 1250)*

**1260 Structural and Building Drawing (3)** A study of basic structural principles related to building design. Preparation of structural working drawings for wood, concrete and steel framed buildings. Prereq: DDET 1240 or 1250. *(Will continue as GET 1260)*

**1270 Introduction to Construction (3)** Introduction to the construction industry, its organization and participants. Methods employed in the construction of large buildings and other structures. Emphasis on developing an understanding of the terminology, the methods, the materials and the equipment used to solve construction problems. This course will provide the background necessary for a continued, detailed study of the building construction industry. Topics include: significance of the construction industry and how it operates, site investigation, excavations and embankments, foundations, formwork, concrete work, timber structures, reinforced concrete and structural steel frames, masonry, curtain walls, interior work. Field trips to selected job sites will complement the formal classroom presentation.

**1300 Construction Materials (3)** The evaluation and selection of construction materials. Emphasis is given to sources of information, building codes, specifications and the following materials: concrete, masonry, wood, ferrous metals, non-ferrous metals, roofing, insulation, interior partition materials, acoustical materials, floor and wall coverings, glass, paint, doors, windows and hardware. Prereq: CET 1270, DDET 1230 or permission.

**2000 Construction Surveying I (3)** The techniques of surveying related to the use of equipment and the necessary computations, including the use of the computer, to reduce and check field data. Topics include: use of instruments, linear measurements, leveling, angles, bearings, azimuths, the transit, traversing, traverse computations, enclosed areas, stadia surveying and field notes. Field work related to the above topics. Prereq: GET 1020, DDET 1250 or 1240.

**2020 Construction Surveying II (3)** Continuation of Construction Surveying I with emphasis on advanced topics, including the layout and staking of construction projects, and use of the computer in reducing the field data. Topics include: establishing horizontal and vertical control, leveling for earthwork, horizontal and vertical curves, cuts and fills, slope staking, layout of buildings, setting batterboards and construction related land surveys. Field work related to above topics. Prereq: CET 2000.

**2110 Construction Business Methods (3)** A study of the business concepts and practices used by construction contractors. Topics include: the construction industry, management principles, forms of business ownership, company organization, construction contracts, estimating and bidding, business ethics, bonds and insurance, financial statements, cost accounting, equipment management, planning and scheduling, labor relations and personnel management. Prereq: CET 1300, DDET 1260.

**2180 Soil Technology (3)** An introduction to the study of soils and their properties as related to building construction. Topics include: types and origins of soils, field exploration, standard laboratory and field tests, physical and chemical properties, interpretation of soils reports, and the interrelationship of soils tests and foundation design. Prereq: GET 2140, CET 1300, GET 1020, PHYS 1110.

**2250 Computational Analysis (3)** Introductory computer applications and programming techniques. BASIC language and system commands, common small systems applications to technical and design environments. Graphics fundamentals, text editing, spreadsheets, data filing systems. Prereq: GET 1010. *(Will continue as GET - 2250)*

**2280 Mechanical and Electrical Drawing (3)** Preparation of working drawings, plans and details for HVAC, piping, electrical and lighting systems for buildings. Topics include: mechanical air distribution plans, piping plans, electrical power and lighting plans, elevations and typical details of air-handling units, chillers, boilers, pump and service equipment. Prereq: CET 1250.

**2300 Concrete Technology (3)** A study of the properties of concrete, including proportioning, mixing, placing, curing and testing so as to produce concrete of suitable and predictable quality and economy for construction purposes. Topics include: composition of concrete, Portland cements, aggregates, admixtures, properties of fresh concrete, proportioning mixes, batching, mixing, curing, strength of concrete, and elastic properties of concrete. Laboratory work related to above topics. Prereq: CET 1300, GET 2140.

**2360 Service Systems (3)** An introduction to the materials, selection and design of equipment used in the mechanical services of buildings. Topics include: heat loss and heat gain calculations, heating and air conditioning systems, water supply and drainage systems. Prereq: DDET 2900.

**2500 Construction Economy (3)** A study of the time value of money as a means of making comparisons between alternatives when making economic-related decisions in the construction industry. Topics include: equipment economics, interest rates, time value of money, present worth and annual cost comparisons, effective rate of return, acceptable methods of depreciation and equipment financing. Prereq: GET 1020.

**2900 Electrical Systems for Buildings (3)** An introduction to the materials, selection and design of electrical systems for building design and construction applications. Topics include fundamental design procedures, lighting fundamental designs, and service and distribution systems. Prereq: DDET 1240 or 1250. *(Will continue as GET 2900)*

**3160 Construction Specifications and Estimating (3)** To gain knowledge of estimating the cost of projects to be constructed. Interpretation of plans and specifications for the purpose of preparing a bid. Topics include: approximate and detailed estimates of materials, equipment and labor costs, lump-sum and unit cost estimates, overhead, profit and production rates. Prereq: CET 2110, DDET 1260.

**3190 Construction Methods and Equipment (3)** A study of the characteristics, capabilities and selection of equipment and methods used in the building construction industry. Topics include: estimating job production, equipment production rates, machine operating costs, earth-moving equipment, pile drivers, pile tests, dewatering, concrete handling equipment, hoisting equipment and operations analysis. Prereq: DDET 1260, CET 2180, 2500.

**3290 Design and Construction of Steel Buildings (3)** Analysis and design of steel frame buildings, tension members, bracing systems, columns, beams, and welded and bolted connections. Construction practices including erection of steel frames. Use of design aids. Review of the cost of various framing systems and related construction problems. Emphasis on construction details. AISC Specifications. Prereq: GET 2130, DDET 1260.

**3330 Planning and Scheduling Techniques (3)** Planning and scheduling a construction project using the critical path methods (CPM) with computer applications. Topics include: project pre-planning, logic networks, arrow diagrams, network construction, time estimates, critical path, float time, crash programs, costs, scheduling and monitoring project activities. Prereq: CET 3160, 3190, DDET 2250, GET 2140.

**3390 Design and Construction of Concrete Buildings** (3) Analysis and strength design of reinforced concrete buildings, rectangular beams, tee-beams, floor systems, one-way slabs, columns, column and wall footings. Study of various floor systems as far as construction is concerned. Review of cost data for various concrete floor systems and related formwork and construction costs. Emphasis on construction details. ACI Specifications. Use of design aids. Prereq: CET 3290.

**3420 Piping Systems** (3) Preparation of working drawings and construction procedures associated with non-pressurized and pressurized water systems, viscous materials and gaseous systems. Topics covered will be cooling, heating, steam, gas and oil piping networks including pumps, supports, insulation and joints. Prereq: CET 2360, 3910.

**3650 Project Budgets and Controls** (3) A study of the basic systems related to revenues and expenses associated with record keeping of construction contracts. Managerial accounting related to planning and control of construction projects. Prereq: CET 2110.

**3900 Electrical Power Distribution Systems** (3) The study of power transmission and distribution to the facilities, within the facilities and the economics associated with the construction and installation of the power systems. The areas covered will be transformation of power, motor control centers and service distribution. Application of code requirements will be covered. Prereq: CET 2900.

**3910 Applied Dynamics and Fluid Mechanics** (3) Topics in dynamics include kinematics; rectilinear, angular and plane motion; kinetics; work; energy; impulse and momentum. Topics in fluid mechanics include systems of units; fluid properties; fluids at rest; steady flow; fluid dynamics; pipe flow losses; and closed pipe flow measuring devices. Credit cannot be given for both GET 3910 and GET 3130, or for both CET 3910 and GET 4710. Prereq: GET 2010 and 2120.

**4140 Accident Prevention in Construction** (3) A study of safety practices in the construction industry and the national safety and health standards of the Occupational Safety and Health Administration. Topics include the theory of accidents, including personal attitudes, statistics and environment; accident occurrence, prevention and inspection in connection with the construction of buildings, highways and associated heavy facilities. Major consideration is given to nationally accepted safety codes and their relationship to accepted practices in the industry. Prereq: CET 3330, 3290.

**4150 Bituminous Materials** (3) A study of the origin, production, specifications and placement of bituminous materials used in the construction and maintenance of roads, airfields and pavements. Included is the design of flexible pavements to include selection and blending of aggregates for a mix design and laboratory tests used to prove adequacy of bituminous mix design. Prereq: CET 2180, 2300.

**4180 Design and Construction of Foundations** (3) Review of basic soil properties. Settlement of structures. Selection of foundation for various soil conditions. Shallow foundations, pile foundations, drilled caissons, earth pressure and retaining walls. Emphasis of foundation selection and performance. Construction of various foundations is emphasized. Cost comparisons of the various foundation systems. Legal aspects of foundation construction. Prereq: CET 2180, 3390.

**4190 Timber and Formwork Design** (3) Design of structural timber, beams, columns, connections. Design of formwork, concrete and lateral loads, wall forms, slab forms, beam forms and column forms. Shores and scaffolding. Shoring and reshoring for multistory buildings and bridge formwork. Both job built and manufactured forming systems. Prereq: CET 3390.

**4200 Personnel and Supervisory Methods** (3) An experiential study of the theory of management and its application to the supervision of construction work. Topics: the management process, setting objectives, forecasting, planning models, budgets, organizational structures, group dynamics, performance measurement, leadership styles, communications, decision making and the role and functions of the first-line supervisor. Prereq: CET 2110, senior or permission.

**4410 Building Acoustics, Specialities and Equipment** (3) Study of advanced building systems construction technology, architectural acoustics, special construction, vertical transportation, fire-protection systems, special service systems and equipment, furnishing and equipment, special problems or restoration, remodeling, and retro-fit. Prereq: CET 2360.

**4420 Quality Management in Construction** (3) A study of the methods used to ensure conformance to quality standards in the most cost effective standards in the most cost effective manner. Ethical and social issues will be discussed as they to the legal obligations. Topics will include specification interpretation, quality management techniques, quality vs. cost evaluation, and team building. Prereq: Senior and permission.

**4450 Heating, Ventilation and Air Conditioning Systems** (3) The study of various heating, ventilating and air conditioning systems. Included will be installation procedures and requirements of the different designs, split DX, Packaged, Central systems (Chilled water and steam). Preparation of drawings, specifications and estimates are included. Prereq: CET 3420.

**4460 HVAC System Controls** (3) Lect. 2, Lab 3. Sizing and selecting control systems for various HVAC systems, including pneumatic, electrical and direct digital controls. Topics covered will be compressible fluid mechanics, application principles and systems for each control system and preparing and interpreting control drawings and specifications. Prereq: Concurrent with CET 4450 or approval of instructor.

**4480 HVAC Senior Project** (3) Discussion 1, Lab 6. Provides for the development of complete working drawings and specifications for the mechanical and electrical sections of a selected project. Coordination, preliminary presentation and completion of final bid documents for the mechanical and electrical sections. Project will be reviewed by professional engineers and contractors. Prereq: CET 4450 and senior standing.

**4650 Advanced Estimating and Bidding Techniques** (3) Advanced estimating techniques and bidding strategies; cost accounting and control; computer applications for estimating and cost accounting. Group project required. Introduction to Knowledge Based Expert Systems as related to risk analysis for general building construction and estimating. Prereq: CET 3330, statistics elective.

**4950 Construction Performance and Claims** (3) A review of the American Judicial system, principles of contract formation and interpretation. A study of the legal aspects of construction claims, bidding, bonds and insurance, contracts, time, performance and payment. Prereq: CET 2110 and senior; or permission.

**4990 Special Projects in Construction Engineering Technology** (1-6 repeatable) Individual research and study on a selected technical, structural, materials or management problem in construction. A final report is required which presents the study results in a form useful to engineering management. Prereq: Permission.

## Drafting Design Engineering Technology (DDET)

**1230 Introduction to Design** (3) Study of the place of design in contemporary technological society; review of design and design processes in various technological settings; specific emphasis on environmental design decisions. Students will undertake several simple creative design micro-projects typical to several design fields. Engineering and architectural graphics, design fundamentals, perspective, and shades and shadows are covered. An introduction is made to the design of buildings. Prereq: IST 1210 or one year high school or employee drafting. (Fall 1992)

**1240 Architectural Drafting** (3) An introduction to drafting for architectural working drawings, methods of architectural graphics and building construction science fundamentals. Preparation of architectural working drawings for a light commercial building. Topics include: drawing conventions, including technique, lettering and dimensioning; plot plans, floor plans, sections, exterior and interior elevations. Prereq: DDET 1230 or concurrent. (Fall 1992)

**2240 Architectural Engineering Drafting** (3) Drafting techniques for architectural and engineering working drawings for building construction. Emphasis is on delineation conventions for structural, mechanical, electrical and site plans. Continued study of building construction science fundamentals and architectural drafting. There will be preparation of working drawings using overlay pin-bar drafting and composite paste-up drafting for a commercial building. Prereq: DDET 1260. (Fall 1993)

**2310 Introduction to Architectural Design** (3) Preliminary and schematic design techniques and theory. Fundamentals of programming and functional analysis. Review of design constraints and economics. Techniques for presentation of preliminary design, including graphics, models and photography. Individual preliminary design of a moderately complex commercial or industrial building with outline specifications and an estimate of probable construction cost based on area and volume calculations. Prereq: DDET 2250, 2240. (Spring 1994)

**2320 Architectural Systems Design** (3) Design development techniques and theory. Emphasis is on selection and integration of the various building construction systems; selection of major construction materials and development of construction details; design presentation by model and graphic means; refinement of specifications; estimates of probable construction cost based on units-of-use and unit systems costs; and small group design development projects for a moderately complex building. Prereq: DDET 2310. (Spring 1995)

**2340 Advanced Structural Drafting** (3) A study of structural frames of buildings with emphasis on preparation of fabrications drawings for steel frames and placement drawings for reinforced concrete frames. Discussion of building failures related to causes and prevention. Prereq: DDET 1260 and GET 2130. (Fall 1994)

**3210 Automated Drafting and Design Systems** (3) Use of automated devices and systems, programming for successful operation, digitizing, plotting and display. Prereq: DDET 2250. (Spring 1996)

**3240 Site Engineering Drafting** (3) The study of methods of documentation site analysis and design, and inspection and analysis of completed sites. Preliminary design development, topographic surveys and preparation of drawings of site plans such as vicinity, topographical, grading and utilities will be studied. Earthwork computations, specifications and estimates will be undertaken. Prereq: CET 2000 and 2360. (Fall 1995)

**3340 Introduction to Computer Graphics** (3) Introduction to the specialized techniques, logic and standards for developing and controlling screen and plotted graphics. Systems components and inter-relationships, graphics commands and routines, digitizing routines, plotter/printer commands and routines. The history and application of computer graphics to automated drafting in the building design and construction industry. Prereq: DDET 2250. (Fall 1994)

**3920 Lighting, Signals and Communications for Buildings** (3) The study of lighting systems, natural and artificial; security and alarm systems; communications systems; intercom, telephones and computer management systems. Areas to be covered are design concepts, installation procedures, construction operations and case studies. Prereq: DDET 3910. (Special Elective)

**4000 Production Drawings and Specifications** (3) Senior project involving practical application of skills developed in all areas of architectural engineering technology training. Group project involving the production of a complete set of working drawings for a moderately complex commercial or industrial building project, including final specifications and an estimate of probable construction cost based on quantity take-offs and unit prices. Projects will be reviewed by professional design and construction practitioners. Prereq: Senior, DDET 2320. (Spring 1996)

**4210 Computer-Aided Design** (3) Study of common engineering design programs for architectural engineering applications; structural, mechanical, electrical and sitework construction systems calculation techniques; scheduling techniques for construction applications; business management tools for engineering applications, and introduction to available methods and equipment for computer-aided graphics applications. Prereq: Junior or permission. (Fall 1995)

**4500 Management of CADD Systems** (3) Investigation of the use of single and multi-user Computer-Aided Drafting and Design Systems. Techniques for the efficient organization of technical work, staffs, facilities and production schedules. Development of automated command procedures for machine generated (automatic) drafting routines. Prereq: DDET 3210. (Spring 1996)

**4990 Special Projects in Drafting/Design Engineering Technology** (1-6, repeatable) Individual research and study on a selected technical structural, mechanical/electrical, or automated graphics problem. A final report is required which presents the study results in a form useful to engineering management. Prereq: Permission of instructor. (Will continue as GET 4990)

### **Electronics Engineering Technology (EET)**

**1030 Computer Applications for Electronics Problems I** (2) An introduction to the use of computer techniques to solve electronics problems. Spreadsheets are used to analyze data and present it graphically. Methods of including analyzed data and graphs in computer generated reports and presentations are covered. High level languages are used for circuit simulation and analysis. Retrieval of documents and software from Internet sites is covered. Prereq or coreq: EET 1070.

**1040 Electronics Laboratory I** (1) Measurement techniques and interpretation of data involving direct-current circuits. Prereq or Coreq: EET 1070.

**1050 Electronics Laboratory II** (1) Measurement techniques and interpretation of data involving alternating-current circuits. Prereq: EET 1030 and 1040. Prereq or Coreq: EET 1080.

**1060 Digital Logic** (3) An introduction to digital logic circuits. Topics include combinational logic, Boolean algebra, reduction methods, counters, registers, and digital family electrical characteristics. Prereq or Coreq: EET 1070 or permission.

**1070 Direct Current Circuits** (3) Principles of direct-current circuits, solution techniques involving Kirchhoff's law, superposition, mesh and nodal analysis, Thevenin's and Norton's theorems. Prereq or Coreq: Mathematics proficiency or GET 1010 or MATH 1310.

**1080 Alternating Current Circuits** (3) Alternating-current circuit principles and analytical techniques: sinewave characteristics, j-operator notation, phasor, resonant and non-resonant series and parallel circuits, power. Prereq: EET 1070. Prereq or Coreq: GET 1020 or MATH 1320 and 1330.

**1090 Electronics Drafting and Fabrication** (3) The drafting and fabrication of electronic circuits. Topics include schematic drawings, block diagrams, various assembly techniques, PC board layout and etching. Prereq: EET 1060 and 1070.

**1160 Transistor Theory and Applications** (3) A device-centered study of semiconductor theory and the application (diodes, bi-polar and field effect transistors) based on that theory. Laboratory and computer analysis is performed on lecture material. Prereq or Coreq: EET 1050, 1080.

**2050 Solid State Devices** (3) Semiconductor devices and applications in electronics circuits. The various types of special semiconductor devices are studied in detail. Prereq: EET 1160, 1080, 1050.

**2070 Circuit Design I** (3) Small signal H parameter analysis and design of single and multiple stage transistor amplifiers. Low and high frequency response of transistor amplifiers and the design and analysis of transistor differential amplifiers are covered. Computer simulation of circuit operation is compared to results obtained in the laboratory. Prereq: EET 1050, 1080, 1160.

**2080 Circuit Design II** (3) Class A and B power amplifiers, distortion analysis and heat sink requirements. Negative feedback and applications of integrated circuit operational amplifiers. Power supply regulators. Simulation of circuits using standard circuit analysis programs. Prereq: EET 2070 and MATH 1950.

**2090 Communication Circuits** (3) Circuit analysis and basic design procedures for r-f amplifiers and associated coupling, impedance matching, mixing, modulation, and demodulation networks in AM and FM receivers, including SBSC and SSB devices. Prereq: EET 2070. Coreq: EET 2080.

**2360 EET Seminar** (1) The applications of the content of EET course work in industry and the role of the student in preparing for participation in the career field involving these applications are studied. Pertinent topics are explored through the use of field trips and guest speakers. Membership and participation in student chapters of professional organizations such as the IEEE and ISA is encouraged. Prereq: Sophomore in EET program.

**2430 Microprocessor Fundamentals** (3) An introduction to microprocessors. Machine language programming and assembly language programming techniques are emphasized. Disk operating systems are used for program debugging. Prereq: EET 1060 or permission.

**2530 Computer Applications for Electronics Problems II** (2) Use of computers to solve electronic problems. Emphasis is on applying C and assembly language capabilities in hardware related applications. Input/Output, graphics, control, and file management topics will be covered. Prereq: EET 2430 or permission.

**3020 Networks I** (3) Study of advanced network theorems in time and frequency domain including transients with an emphasis on Laplace transformations. Applicability of the theory is emphasized by solutions of practical problems. Prereq: MATH 3350. Prereq or Coreq: EET 2090.

**3050 Switching Circuit Theory** (3) Combinational and sequential circuit analysis and synthesis. Topics include Boolean algebra, gate implementation, state diagrams, minimization techniques and transition tables. Computer generation and analysis of timing diagrams of sequential circuits. Prereq: EET 1060.

**3070 Wave Shaping** (3) Analysis and synthesis of waveforms including square, sine, cosine, triangular and saw tooth. Circuit responses to these and other special waveforms. Additional topics will include, D to A, and A to D conversion. Prereq: EET 2080 and 2430.

**3080 Digital Design and Interfacing** (3) Advanced development of digital topics initiated in previous course work. Study of characteristics of various digital technologies such TTL, NMOS, PMOS, CMOS, ECL and I<sup>2</sup>L. Interfacing between these technologies and to non-digital devices. Use of CAE/CAD programs to determine propagation delay and transfer characteristics. Prereq or Coreq: EET 3050.

**3090 Data and Telecommunication Transceivers** (4) Modulation, multiplexing and concentration techniques; switching and communication control; terminal and modem devices utilized in modern electronic communications systems. Prereq: EET 2090 and 2430.

**3120 Transducer Theory and Applications** (3) The theory and principles of transducers used to translate physical quantities into analog and digital electrical signals. Prereq: EET 2430, PHYS 2120. Prereq or Coreq: EET 3070

**3220 Electronic Circuit Manufacturing Techniques** (3) Utilization of Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) systems in design and manufacturing of Printed Circuit Boards. Design techniques for cost optimization, reliability and performance are discussed. Prereq: EET 1090 and 3080.

**3280 Data and Telecommunication Transmission Channels** (4) Characteristics of transmission channels, including fiber optics systems. Measurement and corrective techniques for parameters including delay, distortion and noise. Applications of regenerative repeater devices. Prereq or Coreq: EET 3090.

**3360 Individual Study in Electronics** (1-3 hours arranged) Individual study in a selected electronics area under the supervision and guidance of an EET faculty member. Meeting hours arranged with the faculty adviser. Prereq: Junior or senior and the approval of a formal proposal which has been submitted to the chairman of the department prior to the start of the semester.

**3430 Digital Computer Design I** (3) Investigation of hardware and software design of computer and microprocessor systems. Topics include: advanced 8/16 bit microprocessor architectures, memory systems interfacing, I/O interfacing techniques, bus loading and time characteristics, and interrupts and Programmable Array Logic (PAL). Prereq: EET 2530, 3050. Prereq or Coreq: 3080.

**4030 Networks II** (3) Extensive coverage of the S-plane; Fourier Analysis, Fourier Transformations and other advanced analytical methods are studied and applied to practical problems. Prereq: EET 3020 or equivalent.

**4090 Digital Communications Networks** (3) Categories of networks and operating parameters including teleprocessing functions, classes of traffic service, protocols and channel organization. Reliability and security requirements of networks are included. Prereq: EET 3280.

**4430 Digital Computer Design II** (3) A continuation of EET 3430. Advanced subjects in microprocessor-based system design are discussed. Topics include: 16/32 bit microprocessors architectures, interfacing and programming, dynamic RAM, DMA controller, auxiliary storage media interfacing, software interfacing to operating systems (e.g. device drivers), etc. Prereq: EET 3430.

**4440 Control Systems** (3) Control systems equations and methods of solutions, stability criteria, transfer functions, pole zero and root locus methods. Prereq: MATH 3350.

**4450/8456 Digital Control Systems** (3) (Lect 2 Lab 3) (8456 is for non EET majors) This course focuses on the role of the digital computer on control systems design. Topics will include Z transformation solutions, digital signal processing, discrete and sampled data systems and real time computer controls. Other topics such as digital filters, artificial intelligence, fuzzy sets and parallel processing will be included. Prereq: EET 4440 or permission.

**4520 Special Topics in Electronics** (3) Special topics in the newly emerging areas of electronics which may not be covered in other courses in the EET curriculum. Prereq: Junior or senior and permission of instructor.

**4610 Senior Thesis Proposal** (1) Preliminary investigation of work that will be undertaken and completed in EET 4620. Written and oral reports defining the scope of the work and procedures to be employed along with time and cost estimates are presented to the EET faculty for approval and for the assignment of an adviser for each student. Prereq: GET 2140 and EET 3430.

**4620 Senior Thesis** (1-3) The terminal curricular requirement for the baccalaureate degree involving research, design, implementation, testing and reporting on the proposal developed in EET 4610. Each student carries out the thesis work under the supervision of an assigned faculty adviser. The thesis written and oral reports are presented to the EET faculty for final evaluation. Prereq: EET 4610.

## Fire Protection Technology (FPT)

**1100 Principles of Fire Protection** (3) The objective of this course is to provide fire science students and new fire protection personnel with an overview of the fundamental methods of fire protection, prevention, and suppression. Basic topics covered are characteristics and behavior of fire, fire hazards of materials and buildings, fire protection equipment and systems, codes and standards for fire protection and prevention, and firefighting forces and how they operate. Possible field trips will be scheduled to study state-of-the-art fire protection systems.

**1510 Hazardous Materials Management** (3) Fire prevention and protection in regard to high hazard industries and the safe management of hazardous materials associated with these industries. An overview of the legal requirements involving the transportation, storage, processing and handling of hazardous materials. Prereq: FPT 1100 or approval.

**1600 Fire Chemistry** (3) An introduction to chemistry, with emphasis on chemicals reacting to one another plus their reactivity to fire and fire extinguishing agents. Prereq: GET 1010 or approval.

**2100 Municipal Fire Administration** (3) Review of fire division organization, fire company organization, the company officer, personnel administration, communications, fire equipment maintenance, training, fire prevention, records and reports. The fundamentals of fire suppression. Prereq: FPT 1100 or approval.

**2190 Fire Protection Equipment** (3) A study of the procedures necessary to evaluate the needs and requirements of various types of fire protection equipment. The writing of specifications will be used in setting up the criteria for specific equipment. Prereq: FPT 1100 or approval.

**2200 Codes and Inspection** (3) Fire protection requirements, including zoning laws and primary access routes for flammable and explosive materials. Major considerations in the formulation of zoning and building codes. Familiarization of local, state and national codes. Prereq: FPT 1510 or approval.

**2210 Hydraulics and Pumping Applications** (3) A study of the characteristics of water and the fluid systems which move and utilize water in the science of fire engineering. Topics include: water distribution systems, fire service pumps, friction loss calculations, engine and nozzle pressures, standpipe systems, automatic sprinkler systems, foam systems. Prereq: GET 1010 and CET 2250.

**2300 Fire Investigation** (3) Procedures in arson investigations, legal documentation, submittal of evidence and photographic requirements. Also the use of the polygraph as an investigative aide. Prereq: Sophomore or approval.

**2310 Fire Protection Systems** (3) A study of structural protection systems, personnel protection and detection systems. Commercial and private fire alarm systems, direct, local and auxiliary. Prereq: Sophomore or approval.

**2320 Firefighter Health and Welfare** (3) This course is devoted to firefighter health and welfare. Factors studied in depth will include: Stress management, diet and exercise specific to the needs of firefighters, critical incident debriefing, and other health and welfare subjects related to reduce firefighter "burnout" and increase firefighter life expectancies.

**2410 Fire Strategy and Tactics** (3) Effects of fire on structural components and the analysis of the strategic areas of concentration in a fire situation. Prereq: Sophomore or approval.

**2520 General Insurance** (3) A study of the insurance industries guiding influence throughout the fire service today. How the insurance industry has helped in fire prevention and fire protection. A study of insurance rating systems in relation to fire prevention measures.

**2990 Fire Service Research** (3) This course will focus on the needs and methods of fire service research. Students will be required to complete a research project for course completion.

### General Engineering Technology (GET)

**1000 Introduction to Engineering Technology** (1) (Lect I)

**1010 Technical Problems Analysis I** (3) (Lect 3) Fundamental problem solutions for engineering technology related problems. Includes topics utilizing algebra, right-triangle trigonometry and Euclidean geometry. Prereq: GET 1100 or Departmental TPA Placement Test.

**1020 Technical Problem Analysis II** (4) (Lect 4) Advanced problem-solving of engineering technology related problems involving trigonometry, vectors and complex numbers. Solution of problems involving logarithmic techniques. Problems involving analytical geometry and selected topics in differential calculus. Prereq: GET 1010.

**1030 Computer Techniques** (3) Introductory digital computer programming with engineering technology applications. Emphasis on FORTRAN programming language. Prereq: GET 1020 or equivalent.

**1100 Introduction to Technical Problems Analysis** (3) (Lect 3) Fundamental solutions and terminology of algebraic expressions and plane geometric shapes. Topics include: basic geometric figures, concepts and operations of fundamental algebraic expressions. Also included are fractions, factoring, exponents and radicals. Introduction of concepts which will be expanded and developed in GET 1010. Prereq: Departmental TPA Placement Test.

**2000 Introduction to Solar Energy** (3) (Lect 3) A broad survey and introduction to solar energy thermal processes with an emphasis on passive and active systems. Practical applications to residential and commercial heating HVAC systems will be stressed. Prereq: Sophomore standing, GET 1020, or permission of instructor.

**2010 Technical Problems Analysis III** (3) (Lect 3) Additional topics of plane analytical geometry and differential calculus as applied to engineering technology problems. In-depth study of applications of integral calculus. Prereq: GET 1020.

**2120 Statics** (3) (Lect 3) A study of the concepts of force actions and conditions of equilibrium. Detailed study of related topics including fundamental concepts, resultants, moments, two and three dimensional force systems, problems of equilibrium, methods of analysis of trusses. Consideration of both static and kinetic friction, belt friction and geometric properties including centroids and moments of inertia. Prereq: GET 1020.

**2130 Strength of Materials** (3) (Lect 2 Lab 3) Development of the fundamental relationships that exist between applied forces and the internal stresses they produce within various members and structures. Topics include simple stress concepts, materials and their properties, relationships between stress and strain, torsional stresses, shear and bending moment diagrams, stresses in beams (bending and shearing, beams of two materials, deflections of beams, combined stresses, connections), rivets, bolts, welds, thin-walled pressure vessels and columns. Prereq: GET 2120.

**2140 Technical Report Writing** (3) (Lect 3) Techniques and practice in technical writing. Emphasis on preparation and use of technical reports. Prereq: ENGL 1150.

**2360 Special Technical Problems** (1-4) Individual research and study on a selected technical problem which presents the results of research and study in a form useful to engineering management. Final report required. Hours arranged. Prereq: Permission of instructor.

**2620 The World at Work** (3) This course surveys historical, sociological, psychological and future directions in the diverse world of work. Students will investigate workplace trends, global relationships, diverse groups, productivity, prejudice, conflict resolution and group dynamics. Prereq: Sophomore standing or permission.

**2800 Practical Foremanship** (3) (Lect 3) Work planning and scheduling, merit ratings of employees, safety programs, industrial organization, labor-management relationships, and executive development for foremen. Prereq: Sophomore standing or permission.

**3010 Technical Problems Analysis IV** (3) (Lect 3) Study of advanced topics in differential and integral calculus. Solving engineering problems by calculus techniques. Problem-solving using first and second order differential equations and expansion of series. Prereq: GET 2010 or permission.

**3130 Dynamics** (3) (Lect 3) Kinematics of particles; force, mass, acceleration; work and energy; impulse and momentum. Prereq: GET 2120, 2010, PHYS 1110.

**3710 Thermodynamics** (3) (Lect 3) Applications of fundamental laws of heat, work and energy. Prereq: PHYS 1120, GET 2010.

**4000 Solar Energy Design Techniques** (3) (Lect 3) Specific design techniques for active, passive and hybrid solar energy systems are covered. Rules of thumb, heat loss and solar gain calculations are followed by various solar design techniques for passive and active systems. Prereq: GET 2010 or equivalent mathematics course and GET 2000.

**4690 /8696 Technology, Science and Civilization** (3) (Lect 2 Lab 3) This course seeks to study the development of technology as a trigger of change upon humankind, from the earliest tools of Homo Habilis to the advent of the radio telescope today in exploring the creation of the universe. The course will trace the paths from early science to the development of the technologies that dominate the latter part of the 20th Century. Cultural, political and ecological impacts of our 20th Century technologies will be discussed. Prereq: Senior or permission. (*8696 is for non SET students.*)

**4710 Fluid Mechanics** (3) (Lect 3) Properties of fluids, pressure, hydrostatics, friction losses, kinematics and dynamics of fluid flow. Prereq: GET 2010, PHYS 1120.

### Industrial Systems Technology (IST)

**1160 Metals Technology I** (3) (Lect 2 Lab 3) Introduction to machine shop practices using hand tools, precision layout and measuring equipment and machine tools technology, including cutting tool design and geometry. Tooling identification and operational procedures using traditional machine tools, such as engine lathes, milling machines, drill presses and grinders. Identification of properties and characteristics of both ferrous and non-ferrous metals, along with practical heat treatment procedures. Safety procedures and practices are emphasized throughout the course. Prereq: IST 1180, 1210. Coreq: IST 1190.

**1170 Manufacturing Materials and Processes** (3) (Lect 2 Lab 3) Materials and processes theory and practice, using manufacturing materials, such as metallics, polymers, ceramics, and fibrous materials and composites, as they relate to traditional manufacturing processes, with primary course emphasis upon metallurgy. Manufacturing of metal materials, from mining to surface treatments. Study of casting, forming, machining, joining, and heat treatment processes and related finishing techniques. Case studies and materials testing procedures in destructive and non-destructive labs. Prereq: IST 1160.

**1180 Manufacturing Inspection and Measurement** (3) (Lect 2 Lab 3) Use of manufacturing quality control inspection devices, standard calculations and manufacturing inspection procedures. Coreq: GET 1010 or permission of instructor.

**1190 Manufacturing Computations** (3) (Lect 3) Basic probability and statistics, geometry and layout applications for manufacturing, including the use of digital computers. Prereq: IST 1180, GET 1010 or permission of instructor.

**1210 Engineering Graphics** (3) (Lect 2 Lab 3) Parallel projection with emphasis on oblique, isometric and third-angle orthographic projections. Fundamentals of freehand sketching, geometric construction, shape description, auxiliary and sectional views, lettering, dimensioning and tolerances.

**2110 Industrial Wood Technology** (3) (Lect 2 Lab 3) Care, use and operation of tools and machines. Physical properties, characteristics and preservation of wood. Identification, selection and use of woods. Prereq: IST 1210.

**2160 Metals Technology II** (3) (Lect 2 Lab 3) Design and construction of patterns, molds and stamping dies used in metal fabrication. Presswork design and capacity computations. Determination of speeds and feeds for materials removal processes. As an associate degree capstone activity, a group situation is employed, simulating mass-production techniques necessary to produce a saleable product for a profit. Professional reference texts and standard steel catalogs are used as essential tools to solve manufacturing problems. Prereq: IST 1170, GET 1030.

**2200 Welding Technology** (3) Theory and practice of oxyacetylene (OAW), shielded metal arc (SMAW) (AC and DC), gas tungsten arc (GMAW), gas metal arc (GTAW), plasma arc (PAC), brazing (B) and resistance welding (RW) processes. Study of related processes, include heat treatment, welding design and cost estimating. American Welding Society, specializations and procedures safety are emphasized. Coreq: IST 1170.

**2370 Statistical Quality Control I** (3) (Lect 2 Lab 3) Presentation of statistical techniques which provide economical means of maintaining continual analysis and control of processes and products including control charts for attributes and variables, statistical sampling plans, life testing, reliability and economic aspects of industrial quality control. Prereq: IST 1160, 1190 or permission of instructor.

**2550 Industrial Material Finishing** (3) (Lect 2 Lab 3) Common finishing material for wood and metal and methods of application. Prereq: IST 2110 and 2160, or permission.

**2670 Quality Management** (3) (Lect 3) This course stresses the principles and practices of modern quality management from a systems approach. The management activities are classified as planning, control and improvement. All major functions are covered, including marketing research, product development, manufacturing (production) and operations planning, purchasing, inspection and tests, marketing, and customer service. The total quality activity of these management functions is studied as the "quality function." The course objectives develop the students' effective knowledge of the activities which achieve: "delighted customers, empowered employees and higher profits." Prereq: IST 2370 or permission of instructor.

**2900 Industrial Electricity** (3) (Lect 2 Lab 3) Electrical circuit principles, basic circuit laws, motors, generators, controls, distribution systems and electrical codes. Prereq: PHYS 1120/1160.

**3150 Operations Analysis** (3) (Lect 3) Principles and techniques of work measurement, methods engineering and work sampling. Basic ergonomics including an introduction to anthropometry, biomechanics and physiological measurement of work. Prereq: Junior, IST 2160.

**3230 Computer Graphics** (3) (Lect 2 Lab 3) Theory and laboratory practice of computer graphics systems and equipment, including programming, digitizing, plotting and creation of a symbol library. Prereq: IST 1210, GET 1030, IST 3830, or permission of instructor.

**3500 Plant Maintenance** (3) (Lect 3) Plant maintenance areas of responsibility; facilities and equipment maintenance and construction; power and utilities; pollution abatement; plant protection for small, medium and large industrial plants. Prereq: IST 2160.

**3510 Industrial Plastics Technology** (3) (Lect 2 Lab 3) Materials and processes of the plastic industry. Thermoplastic and thermosetting plastics processes, injection and compression molding, casting, reinforcing and foaming. Prereq: IST 2160.

**3610 Industrial Safety** (3) (Lect 3) A technology management-based course covering the legislation of OSHA, elements of an organized safety program, hazard recognition and correction procedures and industrial fire protection. Effective use of professional publications, communications and presentations are treated. Design and organization of industrial safety programs, record keeping requirements and efficient use of computerized accident data. Prereq: IST 2160.

**3620 Plant Layout and Materials Handling** (3) (Lect 2 Lab 3) A survey of the movement and storage of materials and related facilities design. Prereq: IST 2160. Coreq: IST 3830.

**3640 Automated Production Techniques** (3) (Lect 2 Lab 3) Continuation of operation planning, equipment, tools and techniques used in mass production and Computer-Aided Manufacturing (CAM). Prereq: IST 3830.

**3670 Quality Seminar** (3) Selective studies of contemporary quality subjects. Prereq: Junior or permission of instructor.

**3820 Control Devices** (3) (Lect 3) Characteristics and properties of automatic control systems and their mechanical, electrical, hydraulic and pneumatic components. Prereq: DDET 2900 or EET 2900, GET 2010, or permission of instructor.

**3830 Numerical Control** (3) (Lect 2 Lab 3) Theory and laboratory practice in programming and operating designated CNC machines. Basic understanding of computer-assisted programming. Prereq: IST 2160, GET 1030.

**4100 Contemporary Manufacturing Processes** (3) (Lect 3) Abrasive jet cutting, electro-chemical metal removal, chemical metal removal, electric discharge machining, thermo-electric. High energy forming, modern foundry methods, plastics forming. Prereq: IST 3640 or permission.

**4170 CAD/CAM** (3) (Lect 2 Lab 3) Manufacturing methodology utilizing practices and procedures of Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM). Simulated manufacturing exercise. Prereq: IST 3230, 3640, 3820.

**4180 Methods and Time Measurement** (3) (Lect 3) Analysis and visualization of manual methods required to perform operations efficiently; establishment of time standards. Prereq: IST 3150.

**4600 Manufacturing Cost Analysis and Control** (3) (Lect 2 Lab 3) Fundamentals of cost analysis as applied to cost control in industrial manufacturing plants. Introduction to external financial statements. Internal manufacturing cost accounting for job order and process costing systems. Designing, installing and improving standard cost systems and establishment of basic standards. The use of cost systems for manufacturing estimating, scheduling, facilities planning and making economic evaluations. Time value of money in the analysis of economic alternatives. Coreq: IST 4170.

**4610 Manufacturing Plant Management** (3) (Lect 2 Lab 3) A case-oriented baccalaureate-degree terminal capstone course designed to integrate the technical, managerial, analytical and communications skills which have been acquired throughout the entire degree program. Emphasis will be made on the use of small groups and teams in analyzing manufacturing case problems and presenting written and/or oral recommendations in class. Prereq: IST 4600

**4680 Production Control Techniques** (3) (Lect 2 Lab 3) Techniques for analyzing and improving production operations. Standard APICS techniques, such as forecasting, inventory planning and control, inventory management, materials requirements planning, master scheduling and shop floor control are discussed. Prereq: IST 4600. Coreq: IST 4610.

### Civil Engineering (CE)

**112 Introduction to Civil Engineering** (1) Introduction to civil engineering as a career by use of case studies; alternate approaches to engineering designs illustrated by use of engineering principles.

**125 Ecology, the Environment, and the Engineer** (3) An investigation into the nature of ecology, man's relation with the environment and man's chance of survival in that environment, and the political influence, for good or bad, of modern man's activities.

**221 Geometric Control Systems** (3) (Lect. 2, Lab 3) Introduction to the theory and application of mensuration and geometric information processing in civil engineering. Measurement of distance, direction, elevation and location using mechanical, electronic and satellite systems; collection of field data, error propagation; elementary geometric data bases for design, construction, operation and control of civil works. Prereq: MATH 1950.

**310 Fluid Mechanics** (3) Fluid statics, equations of continuity, momentum, and energy; dimensional analysis and dynamic similitude. Applications to: flow meters; fluid pumps and turbines; viscous flow and lubrication; flow in closed conduits and open channels. Two-dimensional potential flow. Prereq: MATH 2350, EM 3730. (Same as ME 3100)

**319 Hydraulics Laboratory** (1) Hydraulic experiments and demonstrations. Velocity, pressure and flow measurements; pipe flow, open channel flow; hydraulic structures and machinery, hydrologic and sediment measurement and student projects. Prereq or Coreq: CE 310.

**326 Introduction to Environmental Engineering** (3) Introduction to the principles of environmental engineering, including water quality, atmospheric quality, pollution prevention, and solid and hazardous wastes engineering. Design of water, air, and waste management systems. Prereq: CHEM 1180. Parallel: CIVE 310 (or ME310).

**327 Environmental Engineering Laboratory** (1) Measurement and determination of environmental quality parameters such as solids, dissolved oxygen, biochemical and chemical oxygen demand, pH and alkalinity. Use of such parameters in assessing the quality of water supplies and wastewater effluents. Prereq: CHEM 1180. Parallel: CIVE 326.

**334 Introduction to Geotechnical Engineering** (4) (Lecture 3, Lab 3) Soil composition, structure and phase relationships; soil classification. Principles of effective stress; loading induced subsurface stresses; load history; deformation and failure of soils. Elastic and limit analysis with applications to design for bearing capacity, settlement, retaining walls and slope stability. Steady state seepage. Prereq: EMEC 3250. Coreq: CIVE 3100.

**341 Introduction to Structural Engineering** (4) Introduction to the analysis and design of structural systems. Analyses of determinate and indeterminate trusses, beams, and frames are covered, and design philosophies for structural engineering are explored. Laboratory experiments deal with the analysis of determinate and indeterminate structures. Prereq: EngrM 325.

**352 Introduction to Water Resources Engineering** (4) (Lect. 3, Lab 2) Introduction to water resources engineering design and planning, surface hydrology, groundwater hydraulics, reservoirs and other control structures. Introduction to field measurement and computational methods in water resources. Prereq: CE 310.

**361 Highway Engineering** (4) (Lect 3, Lab 2) Introduction to the principles of highway engineering and traffic operations and control. Prereq: EM 2230 and CE 221.

**370 Mechanics of Materials in Laboratory** (1) (Lab 2) Experiments covering the concepts of stress and strain, in the categories of axial, torsional, shear, and flexural behavior. Mohr's Circle. Experimental analysis of beams, frames, trusses and experimental measurement of the deflections of beams and trusses. Buckling behavior of columns. Parallel: EM 3250.

**378 Materials of Construction** (3) (Lect 2, Lab 2) Introduction to the behavior, testing and design of soil, portland and bituminous concrete mixes, steel and wood. Common ASTM lab test procedures and specifications, field quality control tests and statistical applications are introduced. Prereq: EM 3250.

**401/801 Civil Engineering Systems** (3) Systems analysis approach to civil engineering problems. System model elements and principles of systems theory with applications to civil engineering. Prereq: MATH 3350.

**421/821 Hazardous Waste Management** (3) A survey of components of the hazardous waste management system in the U.S. Included is an overview of federal and state regulations, classification, chemical characteristics, prevention, treatment and disposal technologies, superfund site analysis and clean-up technologies, and risk analysis. Prereq: CE 326 or permission.

**422 Flow Systems Design** (3) Application of hydraulic principles to the design of water distribution systems, wastewater and stormwater collection systems, channelized flow systems, and treatment facilities. Prereq: CIVE 326, 352.

**424/824 Solid Waste Management Engineering** (3) Planning design and operation of solid waste collection processing, treatment, and disposal systems including materials, resources and energy recovery systems. Prereq: CE 326, 334.

**425 Environmental Engineering Process Design** (3) Design of unit operations and processes associated with water and wastewater treatment facilities including unit sizing, equipment selection, plant layout and hydraulic analysis. CE 422.

**430 Fundamentals of Water Quality and Modeling** (3) A comprehensive study of water quality and the effects of various water pollutants on the aquatic environment; modelling of water quality variables. Prereq: CIVE 326.

**434/834 Soil Mechanics II** (3) Application of the effective stress principle to shear strength of cohesive soils; analysis of stability of slopes. Development of continuum relationships for soils; solutions for stresses and displacements for an elastic continuum, solution of the consolidation equation for various initial and boundary conditions. (Lecture 3, optional Lab 3) Prereq: CE 334.

**436/836 Foundation Engineering** (3-4) Subsoil exploration and interpretation; selection of foundation systems; determination of allowable bearing capacity and settlement; design of deep foundations; pile driving analysis; control of groundwater. (Lecture 3, Optional Lab 3). Prereq: CE 334.

**440 Reinforced Concrete Design** (3) Introduction to the design concepts for reinforced concrete building components. Emphasis is placed on design of beams for moment, shear, deflection, crack control, and bond strength. Students are introduced to design of compression members. Member behavior, and limit states design of members are emphasized. The working stress design method is also discussed. Prereq: CE 341.

**441/841 Steel Design** (3) Introduction to the design concepts for structural steel building components. Design of tension members, bolted and welded connections, column members, and beam members are covered. Limit states design concepts are used throughout the course, and emphasis is placed on behavior of members and code design procedures. Prereq: CE 341.

**443/843 Reinforced Concrete I** (3) Continuation of the study of analysis for structural building systems. Matrix analysis methods will be stressed, and computer solutions to indeterminate analysis problems will be studied. Prereq: CE 441 and Computer Methods.

**444/844 Structural Design and Planning** (3) (Lect 2, Lab 2) Introduction to the principles of design of steel and reinforced concrete structural building systems, planning of building vertical and horizontal load resisting systems. Several design projects will involve indeterminate analysis and design concepts for both steel and reinforced concrete. Prereq: CE 440, 441.

**445/845 Structural Analysis III** (3) Computation of stress resultants in statically indeterminate structures including beams, and planar and three dimensional frames and trusses using matrix formulations (finite element method), advanced moment distributing techniques and column analogy. Consideration of shearing and axial deformation in addition to the usual flexural deformations. Effects of temperature and prestrain, support displacements, elastic supports and axial-flexural interaction. Prereq: CE 441, EM 4800.

**446/846 Steel Design II** (3) A continuation of CE 441, but directed toward building systems. Steel and timber structural systems are studied. Prereq: For 446, CE 441.

**447/847 Reinforced Concrete II** (3) The use of reinforced concrete design principles in special applications including columns and footings, and the study of additional design concepts including deflections, prestressing and torsion. Prereq: CE 443.

**451/851 Introduction to Finite Element Analysis** (3) Matrix methods of analysis. The finite element stiffness method. Computer programs. Applications to structures and soils. Introduction to finite element analysis of fluid flow. Prereq: EM 3250 and 4800 or permission.

**452/852 Water Resources Development** (3) Theory and application of systems engineering with emphasis on optimization and simulation techniques for evaluating alternatives in water resources developments related to water supply, flood control, hydroelectric power, drainage, water quality, water distribution, irrigation and water measurement. Prereq: CE 352.

**454/854 Hydraulic Engineering** (3-4) Fundamentals of hydraulics with applications of mechanics of solids, mechanics of fluids; engineering economics to the design of hydraulic structures, continuity, momentum; energy principles are applied to special problems from various branches of hydraulic engineering. (Lecture 2-3, Lab 0-3). Prereq: CE 352.

**455/855 Nonpoint Source Pollution Control Engineering** (3) Identification, characterization, and assessment of nonpoint source pollutants; transport mechanisms and remediation technologies; design methodologies and case studies. Prereq: CE 326 and 352.

**456/856 Surface Water Hydrology** (3) Advanced topics in surface water hydrology including parametric and stochastic processes and systems analysis of hydrologic problems with particular emphasis on the application of techniques in the design of engineering projects. Prereq: CE 352.

**458/858 Ground Water Engineering** (3) The application of engineering principles to the movement of ground water. The influence of the physical and geologic environment on ground water hydraulics, water well hydraulics and aquifer evaluation. Emphasis is placed on practical ground water engineering problems. Prereq: CE 310, 352.

**460 Highway Design** (3) Design of roadways, intersections, interchanges, parking facilities, and land development site access and circulation. Emphasis on design projects. Prereq: CE 361.

**461/861 Urban Transportation Planning** (3) Development of urban transportation planning objectives and goals. Data collection procedures, land use and travel forecasting techniques, trip generation, trip distribution, modal choice analysis, and traffic assignment. Site development and traffic impact analysis. Prereq: CE 361.

**462/862 Airport Planning and Design** (3) Planning and design of general aviation and air-carrier airports. Land-side components include vehicle ground access systems, vehicle circulation parking and terminal buildings. Air-side components include aircraft apron-gate area, taxiway system, runway system and air traffic control facilities and airspace. Emphasis on design projects. Prereq: CE 361.

**464/864 Traffic Engineering Design** (3) Design of signalized intersections, arterial street and network signal systems, and freeway control systems. Emphasis on design projects. Prereq: CE 361.

**465/865 Traffic Engineering Laboratory** (1) Traffic engineering experiments and field studies used to measure traffic characteristics and driver/pedestrian behavior. Measurements of traffic flow, speed, density, travel time, delay, platoon dispersion, saturation flow, parking characteristics, and traffic conflicts. Perception-reaction time and gap acceptance measurements. Prereq: CivilE 361 and MATH 380.

**468/868 Portland Cement and Asphalt Concrete Laboratory** (1) (Lab 3) Laboratory and field procedures used to obtain Portland cement and asphalt concrete for engineered construction. Prereq: For 468, EM 3350, 3760 or equivalent and CE 334.

**469/869 Pavement Design and Evaluation** (3) Thickness design of flexible and rigid pavement systems for highways and airports; design of paving materials; evaluation and strengthening of existing pavements. Prereq: CE 334.

**480/880 Engineering Economy** (2) Economic comparison of engineering alternatives. Studies of equipment selection and replacement, depreciation, break-even points and minimum-cost points. Prereq: For 480, senior. For 880, graduate.

**490 Issues in Civil Engineering** (1) Basic elements of civil engineering practice; roles of all participants in the process — owners, designers, contractors, and suppliers; emphasis on contractual aspect of the process — project estimating, planning and controls. Prereq: Senior in Civil Engineering or permission.

**495 Senior Design Project** (3) The formulation and completion of a civil engineering design project. Prereq: Senior and permission.

**498/898 Special Topics in Civil Engineering** (1-6) Special problems, topics, or research in civil engineering. Prereq: Permission.

## Pre-Engineering

### Chemical Engineering (CHME)

**120 Introduction to Chemical Engineering** (3) Introduction to the basic principles in chemical engineering and the areas of chemical engineering practice; the problem-solving process as applied to chemical engineering; computers as a tool in problem solving programming in a high-level programming language; development and use of algorithms.

**202 Mass and Energy Balances** (3) Application of the principle of conservation of mass and energy in the analysis of steady-state chemical processes. Selected topics in physical, chemical and thermal property estimation. Prereq: CHEM 114, CHEM 112 (CSCE 150 or ENGM 112 for transfer students). Parallel: MATH 107.

### Electrical Engineering (ELEC)

**2110 Elements of Electrical Engineering** (3) Principles of electrical circuits. Not for electrical engineering majors. Prereq: MATH 1960; PHYS 2110.

### Engineering (ENGR)

**3000 Creativity and Writing for Engineers** (3) Writing technical engineering reports; creative thinking and brainstorming applied to a real engineering problem with individual solutions submitted in report form. Prereq: ENGR 1150 or placement and sophomore.

**4000 Professional Ethics and Social Responsibility** (1) Discussions on professionalism and ethics of engineering practice; problems encountered by new graduates. Prereq: Senior.

**4160 Engineering Contracts and Specifications** (2) Elements of construction contracts; legal implications of engineering practice; bidding procedure; construction insurance and surety bonds; contracts for engineering and architectural services; specification writing. Prereq: ENGR 3000 or equivalent.

**4410 Engineering Economy** (3) Economic factors involved in the comparison of engineering alternatives and the techniques of equipment selection and replacement. Prereq: Senior or permission.



### Engineering Mechanics (EM)

**1110 Introduction to Computer-aided Graphics** (3) (Lab 3) Fundamental concepts of engineering graphics. Programming commands for input/output of subroutine programs for shape and size description. Computational problem-solving and graphical representation of engineering data.

**1120 Computer-aided and Interactive Graphics** (3) (Lect 2 Lab 2) Programming in FORTRAN and QBASIC to provide a fundamental understanding of engineering problem-solving techniques including use of spreadsheets through numerical, graphical and interactive methods. Prereq: Some familiarity in the use of the personal computer is recommended.

**2230 Engineering Statics** (3) The action of forces on engineering structures and machines. Force systems, static equilibrium of frames and machines. Friction, center of gravity, moment of inertia, vector algebra. Prereq: EM 1110; MATH 1960; PHYS 2110.

**3250 Mechanics of Elastic Bodies** (3) Concept of stress and strain considering axial, torsional and bending forces. Shear and moments. Introduction to combined stresses and column theory. Prereq: EM 2230; MATH 1970.

**3350 Elements of Structural Materials** (2) Elastic and inelastic behavior of commonly used structural materials including metals, organic materials, concrete and bituminous materials. Prereq: EM 3250.

**3730 Engineering Dynamics** (3) A study of force action related to displacement, velocity and acceleration of rigid bodies. Kinematics of plane motion, kinetics of translation and rotation. Mass moment of inertia, vibration, work, energy and power, impulse and momentum. Prereq: EM 2230; MATH 1970.

**3760 Structural Materials Laboratory** (1) Laboratory work accompanying EM 3350. Laboratory tests for evaluating properties of structural materials including temperature effects, fatigue and corrosion. Coreq: EM 3350.

**4480/8480 Advanced Mechanics of Materials** (3) Stresses and strains at a point. Theories of failure. Thick-walled pressure vessels and spinning discs. Torsion of non-circular sections. Torsion of thin-walled sections, open, closed and multicelled. Bending of unsymmetrical sections. Cross shear and shear center. Curved beams. Introduction to elastic energy methods. Prereq: EM 3250, 3730.

**4520/8526 Experimental Stress Analysis I** (3) Investigation of the basic theories and techniques associated with the analysis of stress using mechanical strain gages, electric strain gages, brittle lacquer, photoelasticity and membrane analogy. Prereq: EM 3250.

**4600/8600 Vibration Theory and Applications** (3) Free and forced vibrations of mechanical and structural systems with various types of damping. Vibration isolation. Harmonic and non-harmonic disturbances. Shock spectrums. Rayleigh's method for beams. Lagrange's equation. Design of vibration absorbers. Theory of vibration measuring instruments. Experimental methods and techniques. Prereq: EM 3730; MATH 2350.

**4610 Special Topics in Engineering Mechanics** (1-6) Treatment of special topics in engineering mechanics by experimental, computational and/or theoretical methods. Topics will vary from semester to semester. See current schedule of classes for offerings. Prereq: Permission of instructor.

**4800/8806 Digital Computer Methods in Engineering Analysis** (3) Computers and programming. Roots of algebraic and transcendental equations. Simultaneous algebraic equations. Numerical integration and differentiation. Ordinary initial-value problems. Error analysis. Ordinary boundary value problems. Two-dimensional problems. Digital computer simulation by CSMP. Emphasis is placed on the application of numerical methods to the solution of engineering problems. Prereq: MATH 2350.

### Industrial and Management Systems Engineering

(ISMG)

**2060 Engineering Economy I** (3) An introduction to economic comparisons of engineering alternatives. Concepts of time value of money, methods of evaluating alternatives, depreciation and taxes. Prereq: Sophomore.

**3020 Engineering Sales** (3) Sales engineering requirements. Relationship of sales engineering to contract administration, purchasing, production, and marketing. Prereq: Junior and ISMG 206.

**3050 Introduction to Engineering Management** (3) Intensive analysis of the specialized problems of engineering organization and the management of technical manpower. Design of procedures for the control of engineering projects and assignment of engineering manpower. Prereq: ISMG 2060 (ISME 206-UNL)

**3150 Work Analysis and Measurement** (3) Principles and techniques of work measurement, methods engineering and work sampling. Basic ergonomics, including an introduction to anthropometry, biomechanics and physiological measurement of work. Prereq: Junior.

**3210 Applied Engineering Probability and Statistics** (3) An introduction to the application of probabilistic and statistical techniques to the solution of engineering and industrial design problems. Prereq: MATH 1970 (Math 208 UNL).

**3280 Introduction to Modeling in Industrial Engineering** (3) The emphasis is on developing modeling skills for proper representation and analysis of industrial engineering problems and on presentation techniques. Examples will include operations research, classical industrial engineering and ergonomics problems. Prereq: ISMG 1500 (ISME 150-UNL), ISMG 321 (ISME 321-UNL) coreq.

**3700 Manufacturing Methods and Processes** (3) An introduction to traditional and modern manufacturing processes and methods to include: foundry; forming processes; welding; metal removal theory and practices; modern manufacturing systems and automation; and economics of process selection. Prereq: MENG 2600, EM 3250.

**4010 Engineering Law** (3) Introduction to jurisprudence, civil procedure, contract, product liability, employment, real property, intellectual property, alternative dispute resolution and other fields of law relevant to the engineering profession. Prereq: Junior.

**4050/8050 Analysis of Engineering Management** (3) General concepts and principles of engineering management applied to cases. Prereq: ISMG 206.

**4060/8066 Engineering Economy II** (3) Extension of basic concepts of engineering economy and managerial economics to decision making under risk and uncertainty. Prereq: ISMG 2060 and 3210 or MATH 380 (UNL).

**4180 Methods and Time Measurement** (3) Analysis and visualization of manual methods required to perform operations efficiently; establishment of time standards. Prereq: ISMG 3150.

**4210/8210 Industrial Quality Control** (3) Statistical process control and quality assurance techniques in manufacturing including control charts, acceptance sampling and analyses and design of quality control systems. Prereq: ISMG 3210 (ISME 321 UNL).

### Mechanical Engineering (MENG)

**1000 Introduction to Mechanical Engineering** (1) An overview of mechanical engineering. Introduction to problem layout and development of basic skills required to solve mechanical engineering problems. Collection, manipulation and presentation of engineering data. Prereq: none.

**1300 Introduction to CAD** (2) Principles and accepted practices of geometric design. Computer generation of 2D and 3D models for mechanical systems. Introduction to engineering design practices such as specifications, dimensioning and tolerancing. Prereq: MENG 1000 for mechanical engineering majors; none for others.

**2000 Thermodynamics** (3) First and Second Laws of Thermodynamics, properties of gases and vapors. Sources of energy and its conversion to work. Prereq: MATH 1960, PHYS 2120, CHEM 1180, EM 2230.

**3000 Thermodynamics II** (3) Applications of control-volume analysis (mass, energy and momentum), both transient and steady; mixtures of gases and vapors; introduction to combustion; thermodynamic relations and establishment of data banks of thermal properties; applications of computer-aided engineering to processes and cycles; methodologies and case studies for thermal systems design; execution of small-scaled design projects. Prereq: MENG 2000, CIVE 3100.

**3100 Fluid Mechanics** (3) Fluid statics, equations of continuity, momentum and energy; dimensional analysis and dynamic similitude. Applications to: flow meters; fluid pumps and turbines; viscous flow and lubrication; flow in closed conduits and open channels. Two-dimensional potential flow. Prereq: MATH 2350, EM 3730; Coreq: ME 2000, 3120. (Same as CE 310)

**3300 Mechanical Engineering Analysis** (3) Conceptual modeling of mechanical engineering systems. Analytical exploration of engineering behavior of conceptual models. Case studies drawn from mechanical engineering problems. Prereq: MATH 3350, CSCI 1800, EMEC 325, 373, MENG 200.

**3600 Elements of Material Science** (4) (Lec 3, lab 2) A four credit-hour lecture-lab class designed to acquaint students with the concepts of atomic, molecular and crystal structure of metals, alloys, polymers and ceramics. These fundamental concepts will be applied to design and optimization problems. Prereq: CHEM 118, EMEC 223.

**3700 Manufacturing Methods and Processes** (3) An introduction to traditional and modern manufacturing processes and methods to include: foundry; forming processes; welding; metal removal theory and practices; modern manufacturing systems and automation; and economics of process selection. Prereq: MENG 2600, EM 3250.

**4060/8066 Air Conditioning Systems Design** (3) Application of thermodynamic principles to the design of air conditioning systems. A comprehensive design project will be an integral part of the course. Prereq: MEngr 300 or equivalent.

**4070/8076 Power Plant Systems Design** (3) Application of the thermodynamic and fluid dynamic principles to the design of power plants. A comprehensive design project will be an integral part of the course. Prereq: MEngr 300 or equivalent.

**4080/8086 Heat Exchanger Design** (3) Design methodology for various heat exchangers employed in mechanical engineering. Introduction to computer-aided design as applied to heat exchangers. Hands-on exercises in actual design tasks. Prereq: MEngr 300 or equivalent.

**4470 Advanced Dynamics** (3) Particle dynamics using Newton's laws, energy principles, momentum principles. Rigid body dynamics using Euler's equations and Lagrange's equations. Variable mass systems. Gyroscopic motion.

**4650 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: METL 360 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 are emphasized with these case studies. Several projects involving case analysis and design by students are included. Prereq: EM 325\*; METL 360\* or EM 335\* or equivalent.

**4730/8736 Corrosion** (3) Fundamentals of corrosion engineering, underlying principles, corrosion control, materials selection and environmental control. Prereq: CHEM 109\* or equivalent.

**4980/8986 Laboratory and Analytical Investigations** (1-6) Investigation and written report of research into specific problem in any major area of mechanical engineering.

**Art and Art History (ART)**

**1010 Art Appreciation** (3) An introductory-level course designed for the non-art major. Surveys the aesthetic principles of the visual arts and their interpretation in a socio-historical context. (May not be taken for major credit.) Prereq: None. *Lab fee required.*

**1100 Foundation Drawing and Design I: Two Dimensional Applications** (3) An introduction to the essential tools of art making through an active exploration of drawing mediums and design concepts. The focus is on the development of conceptual and technical skills used in contemporary studio practice. Prereq: None.

**1110 Foundations Drawing and Design II: Three Dimensional Applications** (3) An introduction to the technical and conceptual aspects of three dimensional design, focusing on drawing and sculpture problems. Students will develop an understanding of 3-D design components and principles, learn handmade and shop oriented technologies, and explore analytical and conceptual drawing. They will also address critical skills and the cultural analysis of art practice. Prereq: ART 1100.

**1210 Foundations Theory and Practice I: Alternative Media** (3) An investigation of contemporary art practice incorporating a variety of mediums that utilize reproduction, assemblage and photographic techniques. This course focuses on the elements and principles of design and problem solving using the language of visual communication with reproduction mediums. Prereq: ART 1110.

**1220 Foundations Theory and Practice II: Intermedia** (3) A continuation of the exploration of fundamental 2 and 3 dimensional design principles with a focus on the use of text as well as light, sequence, movement and time study. Students will explore the theory and practice of mixed and new genre media: book arts, installation, performance and video, working on both independent and collaborative projects. Prereq: ART 1110, ART 1210.

**1810 Watercolor I** (3) Covers watercolor techniques, beginning and advanced.

**1820 Watercolor II** (3) This course will review fundamental methods and techniques associated with watercolor painting; and it will introduce more advanced techniques in both transparent and opaque watercolor. An in-depth study of watercolorists past and present will also be included. Prereq: ART 1810.

**2000 Art in the Elementary School** (3) Study of the purposes, scope and sequence of the elementary art program including teaching methods and art experiences. Prereq: Sophomore. *Lab fee required.*

**2040 Cross-Cultural Survey of Art** (3) Explores the painting, sculpture and decorative arts of five cultures: Pre-Columbian, Native American, Asian, European and African. Students explore reasons for making art and its relationship to the religion, politics and everyday life of the cultures. Also explores influence of these cultures on contemporary American art. Prereq: None. *Lab fee required.*

**2050 Survey of Western Art History I** (3) A survey of the major developments in painting, sculpture and architecture from Paleolithic cave paintings through the Middle Ages. *Lab fee required.*

**2060 Survey of Western Art History II** (3) A survey of the major developments in painting, sculpture and architecture from the Renaissance to the 20th century. *Lab fee required.*

**2070 Art of India and Southeast Asia** (3) A study of the arts of India and cultures under its influence, with attention to religious and philosophical background. Prereq: Sophomore. *Lab fee required.*

**2080 Art of China and Japan** (3) A study of the arts of China and Japan, with attention to religious and philosophical background. Prereq: Sophomore. *Lab fee required.*

**2100 Life Drawing I** (3) An introduction to drawing of the human form. The goal is to introduce the various materials used in drawing and relate them to the problems of drawing the figure. Prereq: 1110.

**2110 Life Drawing II** (3) Instruction in life drawing to help the student to become aware of unfamiliar forms in the figure. Creative work in materials and ideas. Prereq: 2100.

**3100 Advanced Drawing I** (3) Instruction in drawing at an advanced level to develop practical skills and techniques through directed classroom projects. Prereq: 1110, 2110.

**3110 Advanced Drawing II** (3) Instruction in drawing at an advanced level to develop practical skills and techniques through directed classroom projects. Prereq: 1110, 2110, 3100.

**3200 The Hand Produced Book I: Typography and Book Design** (3) An introduction to typographic principles as applied to printed books. Each student learns hand typesetting and letterpress procedures, then designs and prints a small edition of their selected text. Prereq: None. *Lab fee required.*

**3210 Color Theory** (3) Instruction in the study of color through directed classroom assignments. Prereq: ART 1110, 1210.

**3220 The Hand Produced Book II: Letterpress Printing** (3) Continuing work in typography and book design with an emphasis on book illustration, multi-color printing, and the standardization and control of edition work. Prereq: ART 3200.

**3230 Book Structures: An Introduction to Bookbinding** (3) This course investigates basic approaches to bookbinding, introducing students to the history, tools and techniques of the discipline. In addition to the concertina structure and simple presentation wrappers, students execute a variety of non-adhesive bindings, both Western and Japanese, and learn basic case-binding methods. Prereq: None.

**3250 Patterned Paper** (3) An investigation of the history and techniques of making patterned papers for bookbinding. Including marbling (Western, Turkish and Japanese Sumigashi), pastegrain, stamped and printed patterned papers. Prereq: None.

**3300 Introduction to Art Education** (3) Study of the theory, methods, curriculum and recent research affecting art education with emphasis on the elementary art program. Prereq: Junior and Art K-12 majors only.

**3310 Elementary Sculpture** (3) Exploration of 3-dimensional form using clay, plaster, wood, steel. Prereq: 1220. *Lab fee required.*

**3320 Intermediate Sculpture** (3) Exploration and continuation of ART 3310. Prereq: 3310. *Lab fee required.*

**3360 Fundamental Arts & Crafts** (3) This course is designed to provide fundamental understanding of Arts and Crafts activities for education and recreation students. Both 2-dimensional and 3-dimensional fine art and craft experience for people of all ages. Prereq: Sophomore. *Lab fee required.*

**3410 Elementary Painting** (3) Instruction in oil painting and related media permits each student the time and environment to work and develop individually. Strong emphasis on knowledge of contemporary art. Prereq: 1110, 1210.

**3420 Intermediate Painting** (3) Instruction in oil painting and related media permits each student the time and environment to work and develop individually. Strong emphasis on knowledge of contemporary art. Prereq: 3410.

**3510 Intaglio** (3) Fundamentals of intaglio, monotypes and collograph techniques. Prereq: 1110, 1210. *Lab fee required.*

**3520 Lithography** (3) Beginning lithography techniques on plates and stones. Prereq: 3510. *Lab fee required.*

**3530 Papermaking** (3) Fundamentals of papermaking. Theory and practice and pulp preparation for sheet forming and casting processes. Prereq: ART 1110, 1210. *Lab fee required.*

**3610 Elementary Ceramics** (3) Basic methods of forming and decorating pottery, introduction to glaze composition, kiln loading and firing. Prereq: 1220. *Lab fee required.*

**3620 Intermediate Ceramics** (3) Basic methods of forming pottery on the potter's wheel. Continuation of glaze composition, further development in design and decoration of pottery. Prereq: 3610. *Lab fee required.*

**3760 Art History Seminar** (3) A seminar in a selected area of art history. This course is designed to introduce students to readings in journals and to methods of research in art history. Prereq: 2050 and 2060. *Lab fee required.*

**3770 History of Architecture to 1850** (3) A survey of the history, aesthetics and technical developments in architecture from ancient times to the middle of the 19th century. Prereq: None. Recommended: ART 2050 or 2060. *Lab fee required.*

**3780 History of Architecture Since 1850** (3) A survey of the history of architecture since the coming of the industrial age, including the major schools and movements in architecture of the 20th century. Prereq: None. Recommended: ART 2050 or 2060. *Lab fee required.*

**4000/8006 Special Studies in Art Education** (1-3) A series of intensive courses in the history and theory of art education designed specifically for elementary and secondary school art teachers. These courses are scheduled as special seminars or workshops according to purpose. Prereq: Junior, SEED CORE 2500 or permission. For 8006, graduate and departmental permission.

**4100-4110/8100-8116 Independent Study in Drawing** (3) Advanced individualized study in drawing. Prereq: ART 3110 and permission.

**4120 Thesis - Drawing** (3) Individually designed study in drawing. A faculty committee and thesis exhibition are required for this course. Prereq: 4110 and permission.

**4200 Manuscript Books** (3) Seminar. Topics range from the origins of graphic communication through ancient writing systems, tablet, scroll, codex, illustration and illumination, the alphabet and book hands, authors and texts, production and publication techniques, up to Gutenberg and beyond to the practice of calligraphy today.

**4210 Printed Books** (3) Seminar. Printing type, composition, paper, imposition, presswork, binding, decorating and illustration, the trade, plates, printing machines, automation, publication, copyright from origins, in China and Korea until today.

**4300 Art in the Secondary School** (3) Study of the philosophy of teaching art, methods and art curriculum for the secondary school. Prereq: Junior and ART 3300. *Lab fee required.*

**4310/8316 Advanced Sculpture** (3) Advanced work in area of student's choice with facilities for oxyacetylene welding, arc welding and wood working. Prereq: For 4310, ART 3310. For 8316, ART 3310 and permission of instructor. *Lab fee required.*

**4320-4330 Independent Study in Sculpture** (3) Advanced individualized study in sculpture. Prereq: ART 4310 and permission. *Lab fee required.*

**4340 Thesis - Sculpture** (3) Individually designed study in sculpture. A faculty committee and thesis exhibition are required for this course. Prereq: 4330 and permission. *Lab fee required.*

**4410/8416 Advanced Painting** (3) Instruction in oil painting and related media permits each student the time and environment to work and develop individually. Strong emphasis on knowledge of contemporary art. Prereq: ART 3410. For 8416, ART 3410 and permission of instructor.

**4420-4430 Independent Study in Painting** (3) Advanced individualized study in painting. Prereq: ART 4410 and permission.

**4440 Thesis - Painting** (3) Advanced individualized study in painting. A faculty committee and thesis exhibition are required for this course. Prereq: 4420 or 4430 and permission.

**4510/8516 Advanced Techniques in Printmaking** (3) Intaglio, lithography, collagraph and the embossed print, stressing color and technical proficiency in the various media. Prereq: ART 3510. For 8510, ART 3510 and permission. *Lab fee required.*

**4520-4530 Independent Study in Printmaking/Papermaking** (3) Advanced individualized study in printmaking. Prereq: ART 4510 and permission. *Lab fee required.*

**4540 Thesis - Printmaking** (3) Individually designed study in printmaking and/or papermaking. A faculty committee and thesis exhibition are required for this course. Prereq: 4530 and permission. *Lab fee required.*

**4610/8616 Advanced Ceramics** (3) Advanced work on the potter's wheel, glaze composition, loading and firing of a high-fire kiln. Prereq: For 4610, ART 3610. For 8616, ART 3610 and permission of instructor. *Lab fee required.*

**4620-4630 Independent Study in Ceramics** (3) Advanced individualized study in ceramics. Prereq: ART 4610 and permission. *Lab fee required.*

**4640 Thesis - Ceramics** (3) Individually designed study in ceramics. A faculty committee and thesis exhibition are required for this course. Prereq: 4630 and permission. *Lab fee required.*

**4710 Ancient Art History** (3) A study of the art of ancient civilizations. The course includes ancient Egypt and the Mesopotamian peoples. Prereq: 2050 and junior or permission. *Lab fee required.*

**4730/8736 Classical Art History** (3) A study of painting, sculpture, architecture and minor arts of the classical world beginning with Cycladic art and including Minoan, Mycenaean, Greek, Etruscan and Roman art through 300 A.D. Prereq: 2050 and junior or permission. *Lab fee required.*

**4750/8756 Late Roman and Byzantine Art History** (3) A study of painting, sculpture and architecture of the Eastern Roman Empire from the founding of Constantinople, and of Western Europe from the time of Constantine to the dissolution of the Western Roman Empire. Prereq: 2050 and junior or permission. *Lab fee required.*

**4770/8776 Early Medieval Art History** (3) A study of painting, sculpture and architecture of Western Europe from the time of the Migrations to 1150 A.D. Prereq: 2050 and junior or permission. *Lab fee required.*

**4780 Late Medieval Art History** (3) A study of painting, sculpture and architecture of Western Europe from approximately 100 A.D. to 1500 A.D. Prereq: 2050 and junior or permission. *Lab fee required.*

**4810 Northern European Renaissance Art History** (3) Study of painting, sculpture and architecture during the 14th, 15th and 16th centuries in France, the Low Countries, Germany, Spain and England. Prereq: 2060 and junior or permission. *Lab fee required.*

**4830 Italian Renaissance Art History** (3) Study of painting, sculpture and architecture in Italy during the 14th, 15th and 16th centuries. Prereq: 2060 and junior or permission. *Lab fee required.*

**4850 Baroque and Rococo Art History** (3) Study of painting, sculpture and architecture in Europe during the 17th and 18th centuries. Prereq: 2060 and junior or permission. *Lab fee required.*

**4870 American Art History** (3) Study of the arts in North America from Pre-Columbian times to the present. Prereq: 2060 and junior or permission. *Lab fee required.*

**4880 Nineteenth Century Art History** (3) Study of the arts in the 19th century in Europe. Prereq: 2060 and junior or permission. *Lab fee required.*

**4890 Modern Art History** (3) Study of the arts in Europe and America from Post-Impressionism to Abstract Expressionism. Prereq: 2060 and junior or permission. *Lab fee required.*

**4900 Contemporary Art History** (3) Study of European and American art from World War II to the present. Major developments in various media, both traditional and new, will be discussed. Prereq: 2060 and junior or permission. *Lab fee required.*

**4910 Independent Study in Art History** (1-3) Independent research under the direct supervision of the sponsoring faculty member, generally involving the writing of a paper. The topic of the research and the expectations for credit should be jointly agreed upon in writing by the student and the faculty member at the beginning of the semester. Prereq: Art History major in upper division and/or permission of instructor. *Lab fee required.*

**4930 Special Topics in Art History** (1-3) An illustrated lecture course dealing with a limited topic in the field of 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. *Lab fee required.*

**4940 Introduction to Methodology in Art History** (3) A seminar surveying major developments in aesthetics and selected problems in art history, this course is designed for the art history major, but will be open both to studio and art education majors. Readings and discussions will focus upon the work of scholars and aestheticians - such as that by Langer, Danto, Weitz, Woffelin, Riegler, Kubler, Panofsky - which helped shape art history as a discipline and aesthetics as a branch of philosophy primarily concerned with the visual arts. The emphasis will fall especially on problems of methodology: the recognition of method, the uses of various methods and the critical evaluation of specific methods in the history of art. Prereq: 2050, 2060 and preferably, one other art history course. Required of all art history majors. *Lab fee required.*

## Dramatic Arts (DART)

**1000 Theatre Laboratory** (1) Lecture/discussion/experience on theatre production concepts and techniques. One hour formal meeting each week and an average of two hours per week in a chosen or assigned technical production area. Required of dramatic arts majors and may be taken by all other students. May be repeated eight times.

**1010 Introduction to the Theatre** (3) A survey course designed to acquaint the theatre major and the non-major alike with all basic areas of theatre practice and study. Several major periods of theatre art will be explored and, depending on the instructor, emphasis can include acting, playwrighting, design and theatre technology, and/or theatre literature.

**1050 Film History and Appreciation** (3) Aesthetic values of the motion picture: history of the film and a survey of the elements involved.

**1090 Oral Interpretation of Literature** (3) Analysis and oral reading of various types of literature. (*Same as SPCH 1710*)

**1210 Voice for the Actor** (3) Discovery and training of the human voice as a technical instrument and as one of the key expressive elements of any performance-oriented medium.

**1220 Movement for the Actor** (3) Discovery and training of the human body as a technical instrument and as one of the key expressive elements of any performance-oriented medium.

**1510 Stage Costume** (3) An introduction to the design and execution of stage costumes.

**1550 Stage Makeup** (3) The function, design and application of theatrical makeup.

**1610 Scenic Production Laboratory** (1-2-3) Directed, practical experiences in scenic production skills.

**1630 Stagecraft** (3) Theories and techniques of the construction and painting of stage settings; organization and operation of production crews; care and handling of power and handtools.

**2000 Summer Theatre Workshop** (3) Intensive supervised workshop experience involving significant overall contribution(s) to the summer theatre program.

**2060 Theatrical Design** (3) An exploration of design fundamentals and principles as applied to designing for the stage, emphasizing unity between scenery, costume and lighting in the theatrical production. Prereq: DART 1010, 1510, 1630, or permission of instructor.

**2280 Dance for the Theatre I** (3) An acting class that explores dance as a means of communication in the theatre. Use of ballet, folk and court dances. (Medieval to 18th century). Research and creative projects.

**2290 Dance for the Theatre II** (3) An acting class that explores modern dance, jazz and vaudeville technique as used in 19th and 20th century theatre. Research and creative projects.

**2310 Acting I** (3) The basic acting class, for majors and non-majors. Emphasis on "freeing" oneself as a preparation for basic character and scene work using exercises for relaxation, energy generation, concentration and group interaction. Three relationships basic to the actor are explored: to oneself, to another actor, to the ensemble.

**2320 Acting II** (3) Incorporating skills and awareness developed in Acting I, this class moves toward examining various tools for character development by oneself, in large group improvisations and with written scripts. Specific scene work leads to a final scene presented both for the class and for all interested persons. Prereq: DART 2310.

**2630 Drafting for the Theatre** (3) Guided, practical experience in the use of common drafting equipment and in drafting mechanical drawings commonly used in the theatre. Prereq: DART 1010, 1630.

**2810-2820 Development of Drama I & II** (3 each) A survey of the history of the drama of Western Europe and America from Aeschylus to contemporary drama. The course will stress the development of various types of drama and the theatres for which they were written. Prereq: For 2820, ENGL 1160 or permission of instructor.

**3020 Theatre Production Practicum** (1) Supervised practicum involving significant participation in theatrical production. Projects may include work in acting, directing, designing, costuming or technical production. Prereq: Sophomore and permission of instructor.

**3250 Stage Dialects for the Performing Artist** (3) Voice as a tool in characterization. A study of dialect and accent as they operate in the theatrical situation.

**3430 Directing: Theory and Technique** (3) The emergence of the director as an influential force in Western theatrical production; consideration of alternative approaches to directing; workshop development of a personal style. Prereq: DART 2310, 2320, 2810, and 2820.

**3510 History of Costume** (3) A survey of the significant trends in dress and personal adornment, from the Greeks to the 20th century.

**3610 Rendering and Scene Painting** (3) The methods and materials for presenting design ideas and the materials, equipment and techniques for painting scenery. Prereq: DART 1010, 2060, 1630, ART 1100, 1210 or permission of instructor.

**3660 Stage and TV Lighting** (3) Characteristics and control of light and color and their application to the theatre and television; elementary electricity; lens systems; reflectors; lamps; control systems. Prereq: DART 1010, 1630 or permission of instructor.

**4000 Summer Theatre Workshop** (3) Intensive supervised workshop experience involving significant overall contribution(s) to the summer theatre program.

**4010-4020/8016-8026 Advanced Projects in Dramatic Arts** (1-3) Special projects in theatre supplementing regular courses; individual research projects; combined study and practicum. Prereq: For 4010-4020, junior or senior and at least nine hours of work in the general area of dramatic arts to be studied. For 8016-8026, graduate with an undergraduate major or minor in theatre and permission of instructor.

**4040/8046 Introduction to Dramatic Activities in the Classroom** (3) Theories of creative drama, drama-in-education, creative play, teaching-in-role and storytelling as they may be used to enhance the instruction of most subjects by teachers in the classroom. Development of practical methods of implementing theatre techniques with an emphasis on materials that demonstrate an international and multi-cultural perspective. Prereq: Junior or senior standing.

**4060/8066 Children's Theatre Production** (3) Study of the methods of direction, design, acting and production of plays for children. Students plan a complete children's theatre production or become actively involved in an actual production. Prereq: For 4060: DART 1010, 1630, 2060, 2320, 3660, 4430, junior or permission of instructor. For 8066, graduate with undergraduate major or minor in theatre or permission of instructor.

**4070/8076 Youth Theatre Production** (3) Methods in organizing, developing and presenting theatre productions that involve young people as performers. Intended for teachers, youth group sponsors or anyone who is interested in presenting plays acted by young people. Scripts for production will employ materials from countries around the world which represent a diverse ethnic and cultural background. Prereq: Junior or senior standing.

**4310/8316M Advanced Acting Studio I: Characterization and Analysis** (3) Advanced work in the technical skills of voice, speech, movement and textual analysis. Exploration of the neutral mask to create character. Development of a technique designed to meet the needs of any text. Prereq: DART 2310 and 2320 and permission of instructor.

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

**4330 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: DART 2310 and 2320 and permission of instructor.

**4340 Advanced Acting Studio IV: Auditioning** (3) An acting class designed to develop audition skills and material as well as cultivate a working knowledge of the business of acting. Prereq: DART 2310 and 2320 or permission of instructor.

**4440/8446 Directing: Rehearsal and Performance** (3) A practicum in play selection, analysis, casting, directing and performing. Prereq: DART 1010, 2060, 2320, or permission of instructor.

**4500-4510/8506-8516 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 technique. Prereq: DART 2060, 3510; ART 1100, 1210; or permission of instructor.

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

**4710/8716 History of the Theatre to 1700** (3) A historical survey of the theatre as an institution and the literature of the theatre from its origins to 1700. Prereq: For 4710, DART 1010, ENGL 1160 and junior or permission of instructor.

**4720/8726 History of the Theatre Since 1700** (3) A historical survey of theatre and its literature from 1700 to the present. Prereq: For 4720, DART 1010, ENGL 1160 and junior or permission of instructor.

**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.

**4750/8756 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.

## Music (MUS)

**1000 Applied Music Laboratory Recital/Masterclass** (0) This course is a weekly meeting of all music majors which provides students with performance opportunities for themselves as well as recitals and lectures by guest artists. The Masterclass portion provides interaction with other students performing on similar instruments.

**1060 Masterpieces of Musical Theater** (3) Study of significant popular works from the musical theater with emphasis on American innovations. Designed for non-music majors. *Lab fee required.*

**1070 Music of the People: United States** (3) A study of music of various cultures within the United States practiced primarily by individuals who produce music as a part of their everyday life.

**1080 Music of the People: The World** (3) A study of music of various cultures throughout the world practiced primarily by individuals who produce music as a part of their everyday life.

**1090 Music Appreciation** (3) A listening course for the non-music major designed to promote a better understanding of noteworthy compositions from various periods and styles. *Lab fee required.*

**1100 Survey of Jazz** (3) In this course, the history of jazz will be traced from its origins up to the present. Designed primarily for non-music majors, the course will chronicle the development of various stylistic trends which characterize jazz and discuss the prominent musical artists that influenced each style period within the history of jazz. *Lab fee required.*

*Applied Music instruction is given in the areas designated below under course numbers 1150 - 2150. A student's first registration into Applied Lessons in an area is permitted following a successful audition performed for faculty members. Students must pass a qualifying examination to enter 2150. Credit earned each semester is one or two hours (1-2). Lab fee required.*

**1150/2150 Bassoon** (Each 1-2)

**1150/2150 Cello** (Each 1-2)

**1150/2150 Clarinet** (Each 1-2)

**1150/2150 Double Bass** (Each 1-2)

**1150/2150 Euphonium** (Each 1-2)

**1150/2150 Flute** (Each 1-2)

**1150/2150 French Horn** (Each 1-2)

**1150/2150 Guitar** (Each 1-2)

**1150/2150 Harp** (Each 1-2)

**1150/2150 Oboe** (Each 1-2)

**1150/2150 Percussion** (Each 1-2)

**1150/2150 Piano** (Each 1-2)

**1150/2150 Pipe Organ** (Each 1-2)

**1150/2150 Saxophone** (Each 1-2)

**1150/2150 Trumpet** (Each 1-2)

**1150/2150 Trombone** (Each 1-2)

**1150/2150 Tuba** (Each 1-2)

**1150/2150 Viola** (Each 1-2)

**1150/2150 Violin** (Each 1-2)

**1150/2150 Voice** (Each 1-2)

**1400 Music Fundamentals** (3) Music Fundamentals will cover the basics of music including music reading in multiple clefs, scales, key signatures, meter signatures, triads seventh chords, and elementary aural and singing skills. The primary purpose of the course is to prepare students for further study in music at the college level. Prereq: None

**1410 Music Core Curriculum I** (5) The study of basic elements of music and their application to musical performance, education, and analysis. Prereq: None

**1420 Music Core Curriculum II** (5) The study of basic elements of music and their application to musical performance, education, and analysis. Prereq: Music 1410 or permission

**1640 Voice Techniques** (1) Class instruction for K-12 instrumental music majors in the fundamentals of voice production with emphasis on group and solo tone quality.

**1660 Diction for Singers** (1) A study of the rules of pronunciation for the purpose of singing songs with texts in Latin, Italian, Spanish, German, French and English. Prereq: Music major with a concentration in voice or by special permission.

**1670 Applied Class Lesson - Guitar** (1) Class instruction in the development of basic skills in the applied guitar area. Prereq: Permission.

**1670 Applied Class Lesson - Piano** (1) Class instruction in the development of elementary basic skills in the applied piano area. Initial preparation for departmental piano proficiency examination. Prereq: Permission.

**1670 Applied Class Lesson - Voice** (1) Class instruction in the development of elementary basic skills in the applied voice area.

**1680 Applied Class Lesson - Guitar** (1) Class instruction in the development of basic skills in the applied guitar area. Prereq: MUS 1670 (Guitar) or equivalent. Permission.

**1680 Applied Class Lesson - Piano** (1) Class instruction in the development of basic skills in the applied piano area. Prereq: MUS 1670 (Piano) or equivalent. Permission.

**1680 Applied Class Lesson - Voice** (1) Class instruction in the development of basic skills in the applied voice area. Prereq: MUS 1670 (Voice) or equivalent.

**2410 Music Core Curriculum III** (5) The study of intermediate elements of music and their application to musical performance, education, and analysis. Prereq: Music 1420 or permission.

**2420 Music Core Curriculum IV** (5) The study of advanced elements of music and their application to musical performance, education, and analysis. Prereq: Music 2410 or permission.

**2550 Music History I** (2) Western music from antiquity through the Renaissance era. A survey of the major developments. Prereq: MUS 1410. To be taken concurrently with MUS 1420 and 1440.

**2560 Music History II** (2) Western music from the Baroque through the Classical period. A survey of the major developments. Prereq: MUS 1420, 2550, or permission. To be taken concurrently with MUS 2410 and 2430.

**2570 Music History III** (2) Western music from Beethoven and the early Romantic period to the present day. A survey of the major developments. Prereq: MUS 2410, 2560, or permission. To be taken concurrently with MUS 2420 and 2440.

**2610 Fundamentals of Music for Elementary Teachers** (3) Music fundamentals and teaching techniques for prospective elementary classroom teachers focusing on the mechanics and language of music. Not open to music majors.

**2670 Applied Class Lesson - Intermediate Guitar** (1) Class instruction at the intermediate level in applied guitar. Prereq: MUS 1680 (Guitar) or equivalent. Permission.

**2670 Applied Class Lesson - Intermediate Piano** (1) Class instruction at the intermediate level in applied piano. Prereq: MUS 1680 (Piano) or equivalent. Permission.

**2670 Applied Class Lesson - Intermediate Voice** (1) Class instruction at the intermediate level in applied voice. Prereq: MUS 1680 (Voice) or equivalent.

**2680 Applied Class Lesson - Intermediate Guitar** (1) Class instruction at the intermediate level in applied guitar. Prereq: MUS 2670 (Guitar) or equivalent. Permission.

**2680 Applied Class Lesson - Intermediate Piano** (1) Class instruction at the intermediate level in applied piano. Final preparation for the departmental piano proficiency examination. Prereq: MUS 2670 (Piano) or equivalent. Permission.

**2680 Applied Class Lesson - Intermediate Voice** (1) Class instruction at the intermediate level in applied voice. Prereq: MUS 2670 (Voice) or equivalent.

**2700 University Chorus** (1) Mixed choral ensemble open to all University students, faculty and staff. No audition necessary. All styles of music, including popular.

**2710 Women's Chorale** (1) A choral ensemble for women's voices. Open to all students regardless of major. Performances on campus and occasionally off-campus. All styles of music. Prereq: No audition necessary.

**2720 Chamber Choir** (0) Selected a cappella ensemble of singers. Preparation and performance of all styles of music. Appearances in concerts throughout the year, on campus; in the metropolitan area; and , occasionally, in various other regions of Nebraska. Prereq: Must audition with director.

**2730 Chamber Orchestra** (1) A string orchestra with selected winds performing symphonic repertoire. Public performance. Open to all students and members of the greater metropolitan community.

**2740 String, Wind or Percussion Ensemble** (1) Specialized chamber music groups from the string, wind or percussion area. Literature will be chosen from the extensive materials available for these combinations of instruments. Prereq: Audition and permission.

**2750 Marching Band** (0) Open to all full- and part-time UNO students during the fall semester only. No audition is required. K-12 music education majors are required to enroll in Marching Band.

**2760 Symphonic Band** (1) The Symphonic Band presents two concerts each year featuring a wide variety of concert band literature. Open to all full- and part-time UNO students. No audition is required. Prereq: No audition required.

**2770 Jazz Ensemble** (1) A select ensemble performing jazz literature from all periods. Open to all full- and part-time UNO students. An audition is required with the director. Prereq: Acceptance into jazz ensemble is by audition only. Students must demonstrate technical command of their instrument, sightreading skills in multiple jazz styles and ability to demonstrate credible jazz improvisation skills.

**2780 Jazz Lab Band** (1) This course is intended to introduce and educate the music student to jazz music. This is accomplished mainly through big band rehearsals and performances. Prereq: All students must audition for this group at the beginning of the fall semester. Personnel will not read audition for the spring semester.

**2790 Accompanying** (1) This course is designed to develop skills useful to piano accompanists and ensemble musicians. A laboratory setting allows for coaching and observation. May be repeated. Prereq: Permission.

*For all 3150 music courses: Applied Music Instruction is given in the areas designated below under the course numbers 3150-4150. Students must pass a qualifying examination to enter 3150 and 4150. Successful completion of Music History I. Lab fees required.*

**3150/4150 Guitar** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Piano** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Voice** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Violin** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Viola** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Cello** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Double Bass** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Flute** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Oboe** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Clarinet** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Bassoon** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Saxophone** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Trumpet** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 French Horn** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Euphonium** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Trombone** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Tuba** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Pipe Organ** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Percussion** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3150/4150 Harp** (Each 1-3) Extra credit during semester of half or full recital. Prereq: Audition and permission.

**3400 Music Core Curriculum V** (5) The study of advanced elements of music and their application to musical composition; arranging for chorus, band and orchestra; and, performance through the keyboard, singing and conducting. Prereq: MUS 2420.

**3440 Composition I** (3) Individualized applied study of the basic craft of musical composition in small media and various styles. Prereq: MUS 2420 and written permission.

**3600 Music Education Core I - Elementary** (5) Methods and materials for teaching elementary (K-6) general, instrumental and choral music; woodwind pedagogy; fretted instruments; seminar in music education.

**3610 Music Education Core II - Middle School/Junior High** (5) Course includes brass and percussion pedagogy, middle school instrumental and choral literature and techniques, general music, conducting, and laboratory ensemble experiences. Prereq: MUS 3600 or permission.

**3630 Music Education Core III - High School Instrumental** (5) Course includes string pedagogy, marching band techniques and administration, conducting, performance literature, and laboratory ensemble experiences. Prereq: MUS 3600 and 3610 or permission.

**3640 Music Education Core III - High School Vocal Music** (5) Course includes string pedagogy, choral organization and administration, conducting, performance literature, accompanying, and laboratory ensemble experience. Prereq: MUS 3600 and 3610 or permission.

**3660 Advanced Conducting and Repertoire** (2) An advanced course in conducting for music majors. This course will provide a theoretical and practical study of various materials and methods as they relate to conducting score study, gestures, rehearsal strategy and related performance practices. Prereq: Successful completion of MCC IV.

**4000 Special Studies in Music** (1-3) Seminars or workshops in Theory, History, Performance, and Music Education designed to meet specific interests and needs of students. Topics and number of credits for each specific offering will be announced during the prior semester.

**4090/8096 Native American Music** (3) An overview of Native American music, musical performance and musical instruments with emphasis on participation and contemporary issues as well as historical perspective. Prereq: Junior or senior or permission.

**4100 Concert Choir** (1) A select choral ensemble specializing in outstanding examples of music of all styles and from all periods. Public performance. Open to all University students. Students enrolled in this course may participate in University Chorus but need not register for MUS 2700. Prereq: Audition and permission.

**4130 University Orchestra** (1) Heartland Philharmonic Orchestra is a full symphony orchestra performing symphonic repertoire. Public performance. Open to all students and members of the greater metropolitan community. Prereq: Audition and permission.

**4160 Symphonic Wind Ensemble** (1) The Symphonic Wind Ensemble performs the finest concert band literature at four campus concerts, professional conferences, and tours. Open to all full- and part-time students. Prereq: Audition is required for membership in the Symphonic Wind Ensemble.

**4190 Recital** (1) The senior recital represents the culmination of each student's major-performance study. Those students obtaining the performance degree are required to give a recital of one hour's length. The students receiving the Bachelor of Music degree with K-12 certification are required to give a half-hour recital.

**4400/8406 Advanced Composition I** (3) Individualized applied study of the craft of musical composition in larger media and various styles. Prereq: MUS 3450 and written permission.

**4410 Advanced Keyboard Harmony** (2) The application of advanced principles and techniques of harmonization to the keyboard. Prereq: Two semesters of applied piano or permission.

**4420 Improvisation** (3) Basic techniques of keyboard and instrumental improvisation. Prereq: MUS 4410 or permission.

**4430 Arranging for Jazz Ensemble** (3) Techniques of writing for jazz ensembles of various combinations of instruments. Prereq: Permission.

**4440/8446 Music Since 1945** (3) This course covers important developments in music in the United States and Europe since 1945. The purpose of the course is to familiarize students with the issues, techniques, composers and literature found in this period. Prereq: Completion of MUS 3420 or permission of instructor.

**4450/8456 Orchestration** (2) Basics of instrumentation and scoring for band and orchestra. Prereq: MUS 2420 and 2440 or permission.

**4470/8476 Counterpoint** (3) A study through analysis and composition of contrapuntal techniques in tonal music with an introduction to contrapuntal techniques in non-tonal and non-western music. Prereq: Permission of instructor.

**4530 History of Opera** (3) This course will consist of a study of significant music theater works in the Western world from 1600 to the present. Prereq: Junior standing.

**4540/8540 Renaissance Music Literature** (3) This course is intended for music majors who wish to undertake a comprehensive survey of music literature c. 1350-1600. Prereq: MUS 2550, 2560, and 2570.

**4550/8556 Baroque Music Literature** (3) This course is intended for music majors who wish to undertake a comprehensive survey of music literature from c. 1600-1750. Prereq: MUS 2550, 2560, and 2570.

**4560/8566 Classical Music Literature** (3) This course is intended for music majors who wish to undertake a comprehensive survey of music literature from c. 1750-1815. Prereq: MUS 2550, 2560, and 2570.

**4570/8576 Romantic Music Literature** (3) This course is intended for music majors who wish to undertake a comprehensive survey of music literature from c. 1815-1912. Prereq: MUS 2550, 2560, and 2570.

**4580/8586 Music in the Twentieth Century** (3) This course is intended for music majors who wish to undertake a comprehensive survey of music literature from the post-romantic period to the present day. The objective will be to provide the student with a broad overview with special attention given to composers and individual works which typify a style or form. Listening assignments will be an integral part of the course, and attendance at live, film and/or television performances will supplement the lectures, discussions and readings. Prereq: MUS 2560.

**4600/8606 Piano Pedagogy** (3) This course is designed for piano majors and private music teachers in "how to teach piano," from the beginning stages through elementary and advanced levels. Procedures of instruction, basic principles of technique and materials used in teaching piano are covered. Prereq: Permission of instructor.

**4610/8616 Voice Pedagogy** (3) This course is a study of the physiological and acoustical properties of the vocal mechanism and of various techniques used in developing the "singing" voice. Also, it will apply knowledge acquired about the voice through studio teaching and observations of other voice teachers. Prereq: For 4610, junior voice or permission of instructor. For 8616, graduate voice or permission of instructor.

**4680/8686 Pedagogy of Multicultural Music** (3) An overview of the music of the world's people and an overview of the music of the people of the United States. Several pedagogical approaches to teaching music and cultural diversity will be included. The class will include activities and performances of music as well as attendances at performances. Prereq: Upper division standing in music or education.

**4710/8716 Acting for Music Theater** (2) This course is a study of theoretical and practical approaches essential to developing the "singer/actor." Prereq: Music or drama major and permission.

**4720/8726 Choral Literature** (3) A survey course in the study of significant choral genre of the various periods of musical composition from plainsong 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 and 3640.

**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 influence on English and American song. Prereq: For 4740, junior voice or permission of instructor. For 8746, graduate voice or permission of instructor.

**4910-4970 Projects in Music** (Each 1-3) Individually designed research projects for students of advanced standing and abilities in the following categories: Music history/literature, music education, performance, theory/composition and honors. Prereq: Permission of department chair.

## Writer's Workshop/Creative Writing Program (WW)

**1010 Contemporary Writers: In Print/In Person** (3) An introduction to reading literature as a personal response to experience by studying the ways in which a writer shapes a poem or tale to communicate with an audience. Emphasizes the most contemporary prose and poetry and includes a series of readings and classroom visits by guest writers.

**1500 Introduction to Creative Writing** (3) An introduction for non-majors in creative writing to the arts of writing fiction and poetry. Follows a workshop format based on individual and group critique of students writing, discussion of principles and techniques of the craft, and reading and analysis of instructive literary examples. Presumes the student has already acquired a good foundation in the fundamentals of written English prose. Prereq: ENGL 1150 or equivalent.

**2000 Special Studies in Writing** (1-3) Offers varying subjects in writing and reading for the introductory study of special forms, structures and techniques of imaginative literature. Consult the current class schedule for the semester's subject. May be repeated for credit as often as the subject changes. Prereq: ENGL 1150 or equivalent.

**2050 Fundamentals of Fiction Writing** (3) A study of the ways in which the writer confronts the technical choices of his craft. Introduces the student to the major elements of a piece of fiction in order to increase his critical awareness both as reader and writer. Prereq: ENGL 1150 or proficiency.

**2060 Fundamentals of Poetry Writing** (3) A beginning writing course in poetry with emphasis on the manner in which the poet meets and deals with the technical choices confronting him in the making of a poem. Written work introduces the student to a number of established forms in order to increase his understanding of the elements of a successful poem. Prereq: ENGL 1150 or equivalent.

**2100 Basic Fiction Studio** (4) A basic course in fiction writing. Allows the apprentice writer to explore different forms - the character sketch, mood piece, story - while trying to find that voice which is peculiarly his/her. Prereq: WW 2050.

**2200 Basic Poetry Studio** (4) A basic course in the making of the poem. Explores different forms while encouraging the poet to find his/her own voice. Prereq: WW 2060.

**3000 Selected Topics in Writing** (3) Presents selected theoretical and practical approaches to literary craftsmanship. Specific topics for the course will vary from semester to semester. Consult current class schedule of the semester's topic(s). May be repeated for credit as long as the topic is different. Prereq: Vary according to specific topics being offered.

**3010 Literary Magazine (Applied)** (3) For writing majors as an applied experience in editing and publishing a literary journal. During his/her involvement in the course, the student will assume responsibility as a member of the editorial staff of the UNO literary magazine. May be repeated up to six hours. Prereq: Sophomore and permission of magazine adviser.

**3100 Fiction Studio** (4) An intermediate course in fiction writing. Emphasis on developing complete short stories or constructing a novel. Prereq: WW 2100 or permission of instructor.

**3200 Poetry Studio** (4) An intermediate course in the making of poetry. Emphasis on further development of poetic technique by making poetry and subjecting what is made to critical analysis. Prereq: WW 2200.

**3990 Independent Studies** (3-6) For the writing major who has need of work not currently available in program offerings and who has demonstrated a capacity for working independently. Emphasis on in-depth study in some specific aspect of writing. Prereq: Permission of instructor.

**4000 Advanced Techniques in Writing** (3) Offers advanced work in varying subjects related to form, structure and techniques in imaginative writing. Presented as often as student need and available faculty exist. Consult current class schedule for the semester's subject. May be repeated for credit as long as the subject is different. Prereq: Prerequisites vary according to specific subject being offered.

**4100-4110/8106-8116 Fiction Studio** (Each 4) An advanced course in fiction writing. Emphasis on refining the techniques of developing short fiction or the novel. Prereq: WW 3100 or permission of program director. Prereq: WW 3100

**4200-4210/8206-8216 Poetry Studio** (Each 4) An advanced course in poetry writing. Emphasis on refining poetic technique. Prereq: WW 3200.

**4300 Creative Nonfiction** (3) A study of the modern familiar essay, with an emphasis on writing the informal essay. Prereq: ENGL 2000, 2400 or 2430, or permission. (Same as ENGL 4700)

**4990 Senior Thesis** (3-6) For the writing major in his last year of study to enable him to prepare a body of original work in his area of concentration for judging by a committee of faculty. Prereq: Permission of program director.



### Human Resources and Family Sciences

(HRFS)

**1830 Human Resources and Family Sciences Seminar** (2) This course will introduce the student to contemporary problems in individual and family life with emphasis on roles that home resources and family sciences professionals can assume in providing economic, physical and psychosocial well-being for people. Students will investigate past, present and future issues in human resources and family sciences through lecture, discussion, individual research and problem-solving activities.

### Family and Consumer Sciences (FMCS)

**1200 Individuals and Families as Consumers** (3) Study of the economic problems and responsibilities of consumers. Guides for developing good buying skills for individual and household use.

**1600 Human Development and the Family** (3) A developmental life cycle approach to the study of the individual from conception to death. Each stage of life is studied from the perspective of how individual development is fostered within the family system.

**2150 Critical Thinking Processes** (3) The overall goal is to help students use processes to critically examine issues facing individuals, families and society. The course will use the cooperative learning model so that students can learn how cooperation can enhance social action. The content will be built upon critical science theory. Students will examine the similarities and differences between critical thinking, practical reasoning, decision making and problem solving. Prereq: Sophomore.

**2220 Introduction to Family Finance** (3) Individual and family financial planning. Emphasis upon financial planning for families in early life cycle. Application of credit, insurance, savings, investments, taxes, and estate planning information to individual and family needs.

**2320 Family Resource Management** (3) Management of personal resources for more effective living. Emphasis is on management of time, energy, materials and money for maximizing human potential. Applications are based on individual values, goals, and demands. Prereq: Sophomore.

**2530 Housing Needs of Families** (3) Evaluation of housing in terms of its ability to meet social, psychological, economic and physical needs of individuals and family as consumers.

**2800 Family Science** (3) An introduction to research and theory on family relationships and to careers working with children and families. The study of family systems and how they are affected by healthy and unhealthy processes. The examination of how ethnicity, gender and social class influences family living.

**2810 Community Services for Individuals and Families** (2) Students will have practical involvement and limited volunteer experience with individuals and/or families in human services agencies of community based programs. Prereq: Sophomore.

**3220 Advanced Family Finance** (3) Critical analysis of issues in family finance across the life course including household spending and savings patterns, debt management, insurance portfolios, and retirement planning. Prereq: FMCS 2220.

**3330 Families in the Economy** (3) The family economy as a unit important to family members and the greater economy is studied from a micro and macro perspective. Determinants of family resources including human capital, income and wealth as factors in standards and levels of living are explored. Prereq: Nine hours of social science.

**3700 Middle Childhood and Adolescence** (3) Study of the theoretical interrelationships of the physiological, psychological, and social and cognitive aspects of development during the years after early childhood through adolescence. Emphasis on understanding of the individual and his/her continuous adjustments within the family lifestyle during the transition from childhood to adulthood. Prereq: FMCS 1600 or equivalent.

**3770 The Hospitalized Child** (3) A comprehensive course dealing with the reactions of children and families to hospitalization, the developmental and emotional needs of children and their families in the health care setting. Prereq: FMCS 170, 270, 270L.

**3800 Contemporary Family Relationships** (3) The study of intimate, interpersonal relationships across the life span, in a variety of forms, with an emphasis on change and diversity of family patterns. Prereq: HRFS 1830, FMCS 1600, 2800 and 2320 or permission.

**3810 Family Consultation in Human Services Professions** (3) This course will focus on theories and skills for consultation, initial assessment and referral with families in educational, social services and criminal justice systems. This course examines the benefits, pitfalls, and limitations of a consultation model for intervention in these settings. Prereq: FMCS 2800 or permission.

**3820 Parenting** (3) Dimensions of mothering and fathering: a study of the psychological, social and physiological dimensions related to the parent-child dyad and how these change throughout the family life cycle. Prereq: FMCS 1600, 2800 or 3800.

**4160 Educational Programming** (3) Planning and implementing developmentally appropriate educational experiences for a variety of audiences in non-formal settings. Not open to HRFS education majors in teacher certification tracks. Prereq: Junior or permission of instructor.

**4220 Financial Counseling** (3) Will enable students to work with individuals and families in attaining economic well-being by making them aware of their alternatives. This knowledge will help them make productive use of their resources, or assisting them in resolving financial crises. Prereq: FACS 222, 322, 381 and 434.

**4340/8340 Decision Making** (3) Decision-making theory related to family and small group situations. Emphasis on types of decisions and decision-making rules. Participation in learning activities that emphasize decision-making skills. Prereq: FMCS 2320 and 2800.

**4380/8380 Problems in Family Resources** (1-3, max 6) Readings, observations, projects and discussion on current issues in family resources. Prereq: Permission of instructor.

**4800 Professional Issues in Family and Consumer Sciences** (3) Consideration of current subjects in FMCS research. Professional issues involved in working with children and families will be covered. Questions of ethics and values will be discussed. Prereq: 12 hours of FMCS including FMCS 2800 and 3800 or permission.

**4810/8816 Family Violence** (3) A study of literature on family violence including child, spouse and elderly abuse. The course examines theories of family violence as well as causes and characteristics and treatment. Prereq: Twelve hours of FMCS and/or social sciences.

**4850 Contemporary Family Issues** (1-3) The study of current family related issues such as cross-cultural families, work and family, addiction in families, gender and family. Prereq: HRFS 1830, FMCS 1600, 2800 and 2320, or permission of instructor.

**4880 Family Policy** (3) A detailed analysis of child and family policy, policy making processes, historical basis, cultural values and goals underlying family policies, future directions for child and family policy. Prereq: 12 hours FMCS and/or Social Sciences.

**4960/8966 Independent Study** (1-5) Individual projects in research, literature review or creative production may or may not be 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 Practicum** (1-6, Max 12) Appropriate fieldwork experiences in areas of specialization within the department. For example: early childhood, parent education, physical or mental disabilities, gerontology and human services. Prereq: Twelve hours in FMCS (or concurrent enrollment) or permission of instructor as required for individual emphasis.

**4980 Research Experiences in Family and Consumer Sciences** (1-5) Participation in an ongoing research project in Child Development Studies/Early Childhood Education, Family Science, Marriage and Family Therapy, Family Financial Management or Family and Consumer Sciences Education. Prereq: 18 hours in FMCS and/or social sciences. Permission/contract with individual faculty.

#### Additional Courses Offered at UNL:

- 170 Introduction to Child Development (1)
- 171 Infancy (2)
- 171L Infancy Lab (1)
- 210 Orientation to Family and Consumer Science Education (3)
- 271 Development of the Young Child (3)
- 271L Development of the Young Child Lab (1)
- 272 Child Guidance (2)
- 273 Healthy Lifestyles in Childhood (2)
- 274 Emerging Literacy (2)
- 274B Emerging Literacy — Assessment and Research (1)

- 315 Program Planning in Human Resources & Family Sciences — Curriculum (3)
- 316 Program Planning in Human Resources & Family Sciences — Instruction (3)
- 318 Program Planning in Human Resources & Family Sciences — Evaluation (3)
- 320 Social and Psychological Aspects of Consumer Behavior (3)
- 362 Adulthood and Aging (3)
- 372 Emerging Social and Emotional Processes (2)
- 372B Emerging Social and Emotional Processes — Assessment & Research (1)
- 410 Multicultural Practicum (3)
- 413A Internship: Cooperative Extension — Family & Consumer Sciences
- 413B Internship: Selected Experiences (3-6)
- 414B Supervised Experience in Family & Consumer Sciences — Teaching (10)
- 414D Supervised Experience in Family & Consumer Sciences — Comm. Services (3-6)
- 415 Curriculum and Methods for Family & Consumer Sciences Related Occupational Programs (3)
- 429 Current Consumer Issues (3)
- 438 Problems in Family Resources (1-3)
- 458 Housing and Society (3)
- 459 Problems in Housing (3)
- 470 Emerging Cognition (2)
- 470B Emerging Cognition — Assessment & Research (1)
- 477 Administration of Early Childhood Programs (3)
- 479B Pre-primary Student Teaching (3)

### Nutritional Science and Dietetics (NUTR)

**1310 Science of Food** (3) The course is designed as a Basic and Applied Science, General Education course emphasizing scientific concepts in biology, chemistry and physics using food as a model. Students will study food from its chemical and nutritional perspectives and the fate of food from the farm to becoming a part of the individual. (*Same as FSCI 1310*)

**1500 Introduction to Dietetics** (1) Information on philosophy and goals of the department, curriculum requirements, practical work experiences, routes to registration, employment and career opportunities, and advanced degree programs. *Credit/No-Credit*

**1510 Introduction to Nutrition** (3) A survey of the science of human nutrition and relationships between nutrition and health of individuals and groups throughout life and in special nutritional problems.

**1700 Introduction to Restaurant and Food Service Management** (1) Orientation to restaurant/food service management, industry characteristics, organizational structure, growth trends in dining and career opportunities.

**2410 Principles of Food Preparation** (3) Basic theory and principles involved with food through production, growing, harvesting and preparation thus leading to evaluation and discrimination of food quality. Prereq: Sophomore. *Materials fee required.*

**2510 Nutrition in the Life Cycle** (3) Influence of normal physiological stress throughout the life span including pregnancy, lactation, growth, and aging on nutritional requirements. Prereq: NUTR 1510, six hours Natural Science or permission.

**2530 Cultural Aspects of Food and Nutrition** (3) An understanding of the influences of culture on food and nutrition practices.

**2720 Computers in Restaurants/Food Service and Dietetics** (1) Demonstrations and work assignments using word processing, spreadsheet, data base, and nutrient analysis software in applications relevant to food service management and dietetics.

**2980 Special Topics in Nutritional Science and Hospitality Management** (1-6) This course will be used for a wide variety of topics at the undergraduate level. Prereq: As announced by department.

**3400 Advanced Foods** (3) An examination of the objective and subjective methods of evaluation of food quality and characteristics. Prereq: NUTR 2410, 12-14 hrs. natural science.

**3500 Advanced Nutrition** (3) Nutrients essential for humans with emphasis on sources and factors affecting utilization and metabolism. Prereq: Biochemistry and physiology (or concurrent) or permission of instructor.

**3700 Quantity Food Production and Purchasing** (3) Application of quantity food production and purchasing principles in food service management. Utilization of computer management systems in production and purchasing. Prereq: NUTR 2410. *Lab fee required.*

**3710 Quantity Food Production and Purchasing Lab** (1) Application of theoretical knowledge and quality assessment is provided in university of community laboratory setting. Prereq: NUTR 2720 and concurrent enrollment in NUTR 3700.

**3720 Food Safety and Sanitation** (3) This course will cover the various factors that result in food illness: food allergy, natural toxins, parasites, microbial and viral foodborne infections, and foodborne intoxications. The course will enable students to assess hazards, identify critical control points and establish monitoring and system verification procedures.

**4520 Clinical Nutrition** (3-4) (3 cr. lect., 1 cr. concurrent practical experience) Nutrition in the disease state including physiological and biochemical basis of nutrition care and diet therapy. Prereq: NUTR 3500 or 950 or permission of the instructor.

**4730/8736 Organization and Administration of Foodservice** (3) Application of food and beverage management principles through catered event planning, coordination, service and evaluation; promotion; and cost and inventory. Prereq: NUTR 3700 and MGMT 4040 or 3510.

**4760 Restaurant and Foodservice Management Study Tour** (1-6) A learning experience for broadening the student's perspective and developing a more thorough understanding of the restaurant and foodservice industry. The experience includes visits to hospitality facilities, national food and equipment shows, food processors, equipment manufacturers and trade exchanges. Number of credits determined by tour length, assignment and sites visited. Prereq: NUTR 3700 and 3710.

**4900 Professional Preparation for Careers in Dietetics** (1) Provides the student with information and assistance in completing professional requirements in order to become a registered dietitian. Discuss types of supervised practice experiences available and assist students in application process. Additional topics include career options, professional organizations and current issues in dietetic profession. *NOTE: Pass/fail only.*

**4910 Senior Seminar** (1) Selected topics. Prereq: Senior and permission of instructor.

**4960 Independent Study** (1-5) Individual projects in research, literature review or creative production may or may not be an extension of course work. The study will be supervised and evaluated by departmental faculty members. Prereq: 12 hours course work in major related areas; permission of instructor.

**4970/8976 Practicum in Foodservice Management** (6) Professional experience under supervision in the restaurant and foodservice industry as planned for individual student's interests, needs and background. Prereq: Permission of instructor.

**4980/8986 Research Experiences** (1-5) Participation in an ongoing research project. Select from foods, human, nutrition education, small animal or survey research areas. Prereq: Senior and permission of instructor.

### Additional Courses Offered at UNL:

- 255 Nutrition Mini Course (1)
- 296 Independent Study (1-5)
- 299 Independent Study (1-5)
- 441 Functional Properties of Food (3)
- 4500/8506 Applied Clinical Dietetics (3)
- 451 Nutrition Problems (1-6)
- 452 Clinical Nutrition (3)
- 455 Experimental Properties of Food (3)
- 456 Community Nutrition (3)
- 457 Community Nutrition Experience (1)
- 466 Home Economics Resources for the Elderly (3)
- 469 Food Service Facility Planning and Design (2)
- 474 Food Service Facility Planning and Design (2)
- 476 Restaurant & Food Service Mgmt. Study Tour (1-6)
- 496 Independent Study (1-5)

### Textiles, Clothing and Design (TXCD)

**1034 Apparel Design and Evaluation Laboratory** (1) A self-paced study in essential apparel and textile structural techniques and technological processes. Prereq: None.

**1130 Textile and Apparel Industry Processes** (3) A study of the textile and apparel industry processes, with emphasis on social, cultural and economic influences.

**1210 Design Essentials** (3) Development of appreciation of beauty of line, form, color and texture; judgment in the fine use of things pertaining to everyday living. Selecting, evaluating and arranging many forms of art expression. *Lab fee required.*

**1230 Clothing and Human Behavior** (3) Analysis of social, cultural, aesthetic and economic influences on clothing and human behavior.

**2060 Textiles** (3) Fibers, yarns, fabric construction, and finishes as they affect use and care. Prereq: Sophomore.

**2090 Apparel Analysis** (3) Analysis and evaluation of apparel structure with emphasis on design, style and construction variations as related to quality, price and performance. Prereq: TXCD 2060 or parallel registration in TXCD 2060.

**2220 Intermediate Design and Color Theory** (3) Lect 1 Studio 4. Development of creative and perceptual analytical skills through problem solving in design with an emphasis on function, material, techniques, color and aesthetics Prereq: TXCD 1210 or permission of instructor. *Lab fee required.*

**2250 Surface Design on Textiles** (3) Lect 1 Studio 4. Introduction to surface design with creative applications of printing and dyeing techniques on fabric. Prereq: TXCD 1210 and 2220. *Lab fee required.*

**3130 Theory and Practices in Merchandising** (3) Investigation of the role and responsibilities of apparel/home furnishings merchandisers in a retail operation in addition to fundamentals of merchandise mathematics and its application to computer technology. Prereq: Three hours statistics.

**3140 Visual Merchandising** (3) A study of merchandise presentation designed to convey both image and merchandise to a target customer. The artistic and marketing functions of the retail environment shall be subject of analysis. Prereq: TXCD 222 or ARCH 210 or permission.

**3380 Field Experience** (1-6) Field experience under supervision designed to develop understanding and skills involved in business and professional settings. Planned for individual student needs, interests and background. Paper or project required. A. Textiles, B. Clothing, D. Design. Prereq: TXCD 15 hours, junior and permission.

**3990 Independent Study** (1-5) Readings in current literature and individual problems.

**4130 Textile and Apparel Merchandising** (3) (UNL) Lect. 3. Problems involved in the merchandising of textiles and apparel, cultural and economic aspects of textile and apparel distribution, structure of the industry, and marketing practices specific to the textile and apparel industry. Prereq: Junior standing, 5-6 hours economics.

#### Additional Courses Offered at UNL:

- 216 Apparel Design by Flat Pattern (3)
- 323 Fashion Illustration (3)
- 325 Woven and Nonwoven Textile Design (3)
- 380 Workshop in Textiles, Clothing & Design (1-3)
- 403 Apparel Design by Draping (3)
- 405 Advanced Textiles (3)
- 406 Textile Testing and Evaluation (3)
- 407 History of Costume (3)
- 408 History of Textiles (3)
- 409 Textile Conservation (3)
- 410 Socio-psychological Aspects of Clothing (3)
- 416/416L Advanced Apparel Design and Lab (4)
- 422 Prof. Study Tour - International or Domestic (1-6)
- 423 Adv. Design in Multi Media (3)
- 425 Adv. Fiber Art (3)
- 428 Textile Dyeing (3)
- 496 Independent Study (1-5)
- 499 Undergraduate Research (1-6)

### College of Information Science and Technology Core Courses (CIST)

**1100 Introduction to Personal Computing** (3) Covers the history of the information age, an introduction to computer system architecture, personal computing fundamentals and ethical and legal issues. Provides hands-on training in spreadsheets, presentation software, database, tools and internet applications. Prereq: None.

**1400 Introduction to Computer Programming** (3) An introduction to programming within the context of a high level modern programming language. Coverage of fundamental programming concepts and program design; including arrays, user defined types, and objects. This course has a laboratory component in CIST 1404. This lab must be taken at the same time. Prereq: CIST 1100, MAT 1310.

**1404 Introduction to Computer Programming Laboratory** (1) A laboratory course to accompany CIST 1400 Introduction to Computer Programming. This requires two contact hours per week. Prereq: CIST 1100.

**1500 Mathematical Foundations** (3) Introduction to quantitative topics important to the areas of Information Science and Technology. Coverage includes propositions and sets, binary numbering, Boolean algebra, linear systems, graph theory, and probability. Emphasis will be on topical applications. Prereq: MATH 1320.

**2010 Computer and Communication Systems** (3) This is an introductory course in computer architecture and network communication. Topics include computer architecture basics; transmission links; network topologies, security, management, protocols and standards; OSI model; and internetworking. Many network protocols will be discussed, including ISDN, Token Ring, Ethernet, ATM, TCP/IP and Netware. Prereq: CIST 1100, CIST 1500 (may be taken concurrently).

**2110 Organizations, Applications and Technology** (3) An introduction to organizations and the role that information and information systems play in supporting an organization's operations, decision making processes, quality management and strategic activities. Also includes management of the IS function, strategic and regulatory issues of telecommunications, ethical and legal issues. Prereq: CIST 2010.

### Computer Science (CSCI)

**1000 Computer Literacy with Applications** (3) The historical development of computers, implication of computers in daily life, introduction to computer applications (general purpose and specifically word processing, spreadsheet, data base and telecommunication), and a brief introduction to programming languages and their development. Designed for non-computer science majors. Not for credit toward a degree in computer science. Students may not receive credit for both CSCI 1000 and 1500.

**1500 Computer Literacy with Programming** (3) Introduction to computers and computer technology, history, applications and implications of computing to daily life. Program development with programming in BASIC. Not for credit toward a degree in computer science. Students may not receive credit for both CSCI 1000 and 1500. Prereq: One year of high school algebra.

**1610 Introduction to Computer Science I** (3) This is the first set of a two part course that introduces algorithmic problem solving in the context of a modern programming language. Such topics as problem solving strategies, basic data structure, data procedural abstraction, and algorithm complexity are discussed. Examples involving searching and sorting techniques and elementary numerical analysis are used to motivate students. Prereq: Student must be qualified for entrance into MATH 1320 and satisfactory score on CSCI placement test, CSCI 1500 with a grade of "C" or better, or CSCI 1000 with a grade of "B" or better.

**1620 Introduction to Computer Science II** (3) Continuation of CSCI 1610 (CIST 1400). Advanced topics in programming; topics in data representation and manipulation, data structures, problem solving and algorithm design. Prereq: CSCI 1610 or CIST 1400.

**1800 FORTRAN Programming** (3) A complete treatment of the current standard version of the FORTRAN computer programming language, for the student with some previous knowledge of computer systems and programming. ANSI-standardization and extension issues, elementary and advanced features of the language, the programming environment, and techniques and methodologies in FORTRAN programming. Prereq: CSCI 1610 or CIST 1400.

**1810 Introductory COBOL** (3) Introduction to use of the current standard version of the COBOL programming language. Emphasis is placed on business applications. Prereq: CSCI 1610 or CIST 1400.

**1820 Introductory PL/I** (3) An introduction to the use of the PL/I programming language in scientific, business and non-numeric applications. Prereq: CSCI 1610 or CIST 1400.

**1840 "C" Programming** (3) Programming in "C" in a UNIX operating system environment; algorithm and program development and file manipulation using "C"; UNIX-like utility development. Prereq: CSCI 1610 or CIST 1400.

**2710 Introduction to Digital Design and Computer Systems** (3) This course is an introduction to digital computer organization and the design and analysis of digital circuits. A detailed treatment of digital logic, digital systems, data representation and machine organization is undertaken. This is designed primarily for second year students in Computer Science. Prereq: CSCI 1620.

**2720 Computer Organization and Assembly Language** (3) The course is a follow-up of the Introduction to Digital Systems CSCI 2710 (CSCI 2620) course. The functional blocks of a computer and their relations in communications will be studied. This is accompanied by a study of the Assembly language of a PC processor such as the Intel 386 processor. Topics associated with data representation, I/O devices, and bus transactions are covered and applied through assembly programs. The course is designed primarily for second year students in Computer Science. Prereq: CSCI 2620 or CSCI 2710.

**2810 Advanced COBOL Programming** (3) Advanced features of COBOL. Examination of the relationship between a COBOL program and its system environment. Emphasis is placed on file processing, modularization, debugging and design of business-oriented programs. Prereq: CSCI 1810 with a grade of at least "C."

**2840 C++ and Object Oriented Programming** (3) C++ and Object Oriented Programming (OOP) is taught in the UNIX environment. Topics include C++ as a "Better C," OOP with C++, classes and data abstraction, operator overloading, inheritance, virtual functions and polymorphism, C++ stream I/O. Prereq: CSCI 1620, CSCI 1840.

**2980 Topics in Computer Science** (1-3) A variable topic course in computer science at the sophomore level. Topics not covered in the computer science degree program, but suitable for sophomore-level students. Prereq: CSCI 1620 and permission of instructor. Additional prerequisites may be required for particular topic offerings.

**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 2030 or 2230. (Same as MATH 3100/8105)

**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 and 2050.

**3320/8325 Data Structures** (3) Methods of representing arrays, stacks, queues, lists, trees, graphs and files. Searching and sorting. Storage management. Prereq: CSCI 1620 and MATH 2030.

**4150/8156 Graph Theory & 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: MATH 2030 or permission of instructor. (Same as MATH 4150/8156)

**4220/8226 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: CSCI 2710 (or 2620) and CSCI 3320/8325.

**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 2050. (Same as MATH 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 2050, MATH/CSCI 4300/8306. (Same as MATH 4310/8316)

**4350/8356 Computer Architecture** (3) The course deals with: processor design different instruction set architectures; memory hierarchy; input/output organization and communication; and an introduction to parallel architecture. Analytic study of design alternatives for each of the above topics will be covered. The course is designed primarily for third year students in Computer Science Prereq: CSCI 2710 (or 2620), CSCI 2720 (2610), and CSCI 3320 with a grade of "C" or better.

**4440/8446 Introduction to Parallel Computing** (3) Need for higher-performance computers. Classification of parallel computers. Shared-memory versus message passing machines. Forms of parallelism. Measures of performance. Designing parallel algorithms. Parallel programming and parallel languages. Synchronization constructs. Parallelizing compilers. Operating systems for parallel computers. Prereq: CSCI 4500/8506 which may be taken concurrently.

**4450 Introduction to Artificial Intelligence** (3) An introduction to artificial intelligence. Machine problem solving, game playing, pattern recognition and perception problems, theorem proving, natural language processing, machine learning, expert systems, and robotics. Prereq: CSCI 3320/8325.

**4470/8476 Pattern Recognition** (3) Structures and problems of pattern recognition. Mathematics model of statistical pattern recognition, multivariate probability, Bay's decision theory, maximum likelihood estimation, whitening transformations. Parametric and non-parametric techniques, linear discriminant function, gradient-descent procedure, clustering and unsupervised learning, and feature selection algorithms. Prereq: CSCI 1620, MATH/CSCI 2050. Recommended: MATH 3740/8745 or STAT 3080/8085.

**4500/8506 Operating Systems** (3) Operating system principles. The operating system as a resource manager; I/O programming, interrupt programming and machine architecture as it relates to resource management; memory management techniques for uni-multiprogrammed systems; process description and implementation; processor management (scheduling); I/O device, controller, and channel management; file systems. Operating system implementation for large and small machines. Prereq: CSCI 2710 (or 2620), CSCI 3320, MATH 1950. Recommended: CSCI 4350.

**4510/8516 Advanced Topics in Operating Systems** (3) State-of-the art techniques for operating system structuring and implementation. Special purpose operating systems. Pragmatic aspects of operating system design, implementation and use. Prereq: CSCI 4500.

**4530/8536 File Structures** (3) File structures is an introduction to the principles behind the design and manipulation of file structures. This course gives special emphasis to the complexity analysis of algorithms used to implement the storage and retrieval of data to/from bulk storage devices and programming techniques for large data manipulation. Prereq: CSCI 3320, a good knowledge of C, C++, Pascal, or Modula2.

**4550/8556 Communications 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 Interconnect model. Prereq: CSCI 2710 (or 2620) and CSCI 3320/8325.

**4620/8626 Computer Graphics** (3) An introduction to the acquisition, manipulation and display of graphical information using digital techniques. Topics include discussion of the various hardware devices used for input and output, the classical algorithms and data structures used in manipulation of graphical objects, the user interface to the graphics system, and applicable standards. Prereq: MATH 2050 and CSCI 3320/8325.

**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 2030. Recommended: CSCI 3320. (Same as MATH 4660/8666)

**4700/8706 Compiler Construction** (3) Assemblers, interpreters and compilers. Compilation of simple expressions and statements. Analysis of regular expressions. Organization of a compiler, including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation and error diagnostics. Prereq: CSCI 3320 and 4220. Recommended: CSCI 4500.

**4760/8766 Topics in Modeling** (3) Selection of such topics as formulation and analysis of various models involving Markov chains, Markov processes (including birth and death processes), queues, cellular automata, difference and differential equations, chaotic systems and fractal geometries. Prereq: MATH 3350/8355 and 4740/8746.

**4830/8836 Introduction 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.

**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.

**4980 Topics in Computer Science** (1-3) A variable topic course in computer science at the senior level. Topics not normally covered in the computer science degree program, but suitable for senior-level students. Prereq: CSCI 2720 (or 2610) and permission of instructor. Additional prerequisites may be required for particular topic offerings.

**4990 Independent Studies** (1-3) A variable credit course for the junior or senior who will benefit from independent reading assignments and research type problems. Independent study makes available courses of study not available in scheduled course offerings. The student wishing to take an independent study course should find a faculty member willing to supervise the course and then submit, for approval, a written proposal (including amount of credit) to the Computer Science Undergraduate Program Committee at least three weeks prior to registration. Prereq: Written permission required.

## Information Systems and Quantitative Analysis (ISQA)

**1230 Intro to Computers** (1) The course will provide a foundation in computer literacy and computer access for all pre-business students. The computer literacy portion of the course will focus on computer technology and how it fits into the overall framework of business information systems. The computer access portion of the course will provide students with the necessary skills to operate computer equipment by exposing them to two different hardware environments (VAX minicomputer and Zenith microcomputer) and by providing hands on training in various application software programs. Prereq: None.

**2000 Special Introductory Topics in Information Systems and Quantitative Analysis** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**2010 Statistics for Information Systems** (3) The course emphasizes the function of statistics in information systems including descriptive statistical measures, sampling, estimation analysis, hypothesis testing, regression and correlation, analysis of variance, and statistical decision analysis. A well-known computer package will be used to support the problem-solving process. Prereq: CIST 1500.

**3150 Principles of Quantitative Analysis** (3) An introduction to structuring real-life situations into mathematical models. The class covers four groups of decision making models: decision trees, inventory, linear programming, network planning, and winning strategy. A number of the existing commercial computer software packages will be used in the course. Prereq: CIST 1100 and BSAD 2130.

**3210 Personal Computers in Business** (3) A study of the application of personal computers in the solution of a variety of business problems. The course includes a hands-on survey of the most prominent business software applications and an application project. Primary applications include spreadsheets, database management, word processing and graphics. Prereq: CIST 1100.

**3250 Intermediate Quantitative Analysis** (3) The study of advanced decision making models in solving business case problems. These models include transportation models, integer programming, goal programming, simulation applications, Markov process in market shares and dynamic programming. A variety of computer software will be applied to formulate and solve both case-study and real-world problems. Prereq: CIST 1500, ISQA 3150.

**3300 File Structures for Information Systems** (3) The purpose of this course is to introduce the student to computer file organizations and access methods. A fundamental understanding of the performance implications of each file organization and access method is developed to allow the students to make information systems design choices that will optimize the performance of business information systems. Prereq: CSCI 1810.

**3310 Managing the Data Base Environment** (3) Introduction to business database design and management functions. The focus is on the use of current database management systems (DBMS) to support the data management function in an organization. Topics include data modeling, database design, SQL, data management and database administration. Hands-on experience in database design, creation and use is provided. Prereq: CIST 2010.

**3320 Introduction to Business Applications Development** (3) An introduction to personal computer-based database tools. Emphasis on the application development process. Course is not intended for MIS majors. Prereq: CIST 1100 or CSCI 1000 and CIST 2110.

**3400 Business Data Communications** (3) Introduction to business data communications and teleprocessing, centralized, decentralized, and distributed systems, impact of distributed systems on hardware, software, data procedures, and personnel. Prereq: CIST 2010, ISQA 3320.

**3520 Graphical User Interface Design** (3) A study of the visual design for graphical user interfaces utilized in the development of business applications. The course includes a hands-on survey of the most prominent business software applications and an application project. Prereq: CSCI 1000 or CST 1100, CIST 1400.

**4000 Special Topics in Information Systems and Quantitative Analysis** (1-5) The course content and topic will vary. Please contact the CBA for specific course offerings.

**4010 Information and Decision Making** (3) The course provides techniques for using existing information sources in making high-quality business decisions. It includes data collection and analysis, intelligent decision systems, optimal solution structures, and winning strategies. The course will cover information classifications, fuzzy logic, human expert systems vs. artificial intelligent (AI) systems and future analysis. Prereq: CIST 1500, ISQA 3150, ISQA 3250.

**4100 Information Systems Architecture and Organization** (3) To examine the frameworks and tools used to develop an organization's information systems architecture. To provide the analytical skills and conceptual frameworks with which to make recommendations and decisions regarding the integration of information technology components into an information systems architecture. Prereq: Students taking this course are expected to have working knowledge of computer, information systems and business foundations. Upper division undergraduate and graduate status.

**4110 Information Systems Analysis** (3) This course examines and applies the principles of information systems analysis, following a structured systems development methodology. It surveys project management, feasibility and analysis and systems requirement definition using modern systems analysis techniques and automated tools. Course utilizes a case approach where students initiate the analysis and logical design of a limited-scope information system. Prereq: CSCI 1810, CIST 2110.

**4120 System Design and Implementation** (3) This course examines and applies the principles and techniques of information systems design and implementation, following a structured development methodology. It surveys alternative design methodologies and approaches to systems development, and examines the trade-offs and problems involved in information system implementation. Course utilizes a case approach where students design and implement a limited-scope information system. Prereq: ISQA 4110 and 3310.

**4150 Case Studies in Applied Statistics** (3) Case studies of selected statistical techniques and their application to decision making. Topics include Descriptive Statistics, Design of Experiments, Analysis of Variance, Regression Analysis, Time Series Analysis and Nonparametric Methods. Prereq: BSAD 3140.

**4200 Applications in Service Operations** (3) A study of advanced topics pertaining to service operations. Topics may include Quality Control, Total Quality Management, Just-In-Time Systems, Scheduling and Forecasting. Prereq: CIST 1500 (or equivalent).

**4350/8356 CASE Technologies** (3) Critical examination of the foundations, issues, costs, benefits and problem areas of computer-aided software engineering (CASE). Examples of current software tools for desktop environments are provided. Additional special project(s) are required for graduate credit. Prereq: ISQA 3310 and 4110.

**4380/8386 Managing the Client/Server Environment** (3) The course introduces students to concepts, issues and tools needed to design and manage client/server environments. The course focuses on client/server technologies in building and managing client/server systems, and the strategic relationship between business processes and the information systems architecture. Prereq: ISQA 3400 and 3310 (or equivalent).

**4500 Special Problems in Information Systems and Quantitative Analysis** (2-3) Individual investigation of specific problems in the field of decision sciences. Prereq: Senior and permission of program chair.

**4510 Information Systems Internship** (2-3) The purpose of this course is to provide the students with an opportunity for practical application of their academic studies in the business world, to help prepare them for their professional career, and to provide them a view of what challenges they will face when their studies are completed. Prereq: Permission of program chair. (Maximum of 4 hours)

**4730/8736 Decision Support Systems** (3) A study of decision support systems applied to the solution of a variety of business problems. The course will integrate concepts and techniques from information systems, management science and organization behavior as a basis for the study of both the theory and application of decision support systems, information requirements for decision making, and applied artificial intelligence. Prereq: BSAD 3140 or equivalent.

**4880 Systems Simulation and Modeling** (3) Modeling and analysis of production and service systems using discrete-event computer simulation; discrete-event simulation mechanics, model structure, model building, modeling of complex systems; verification and validation; arrival processes; design of simulation experiments; and statistical analysis of systems. Prereq: BSAD 3140 and CIST 1400 (or equivalent).

### AVIATION INSTITUTE (AVN)

**1000 Introduction to Aviation and Aerospace** (3) This course provides a broad understanding of all aspects of the air transportation and aerospace industries. Lectures will cover what has happened in the industry to date, with emphasis on present and future developments in air transportation. The course will include the impact the airline industry is making on airports and other segments of aviation and aerospace. Same as PA 1000. Prereq: None.

**1020 Private Pilot Theory** (3) This course will familiarize the student with theories associated with flight. These include aerodynamics, weather, FAA regulations, navigation, airports, airspace and aviation safety. There is no flight requirement associated with this course. Prereq: None.

**1024 Private Pilot Flight Laboratory** (1) This laboratory course is designed for students pursuing flight requirements for the FAA private pilot certificate. Concurrent enrollment in AVN 1020 is required. The student will complete all flight requirements for solo flight. Course will include flight in aircraft simulators and single-engine aircraft. Class is conducted off campus. The FAA comprehensive written examination must be completed with a minimum grade of 70% prior to solo. A special fee is involved for this examination. *Special fees apply.* Prereq: Concurrent enrollment in AVN 1020.

**1030 Private Pilot Flight Certificate** (2) This course will prepare the student for the FAA practical flight examination for the private pilot certificate. Course involves flight in aircraft simulators and single-engine aircraft. Student is required to successfully complete all FAA certification requirements and obtain a private pilot certificate. Classes will be conducted off campus. *Special fees apply.* Prereq: AVN 1020 and 1024

**1040 History of Aviation and Aerospace** (3) Purpose of this course is to present the historical antecedents leading to the conquest of the air and the evolution of aviation and aerospace progress to present day. The course is intended as an introductory course for those pursuing a major in aviation or considering aviation as a vocation; or for undergraduates wishing to gain a historical perspective of the development of the field of aviation and aerospace. Prereq: None.

**1050 Aviation Meteorology** (3) A study of the elements of weather systems from the surface to the upper air level, flight hazards, and the meteorological flight planning environment as it affects the aviation environment. Convergence and divergence, pressure system structures and air mass characteristics will be reviewed. Prereq: None.

**1160 Aviation Safety** (3) This course provides the student with a detailed introduction to aspects of aviation safety as well as the associated components of flight human factors, aircraft technology, weather related accidents and accident investigation. Prereq: AVN 1000 or concurrent enrollment.

**2020 Airline Operations** (3) The purpose of this course is to introduce the student to operational aspects of airline management. Topics to be covered include management, leadership, labor relations, marketing, forecasting, and fleet planning. Prereq: AVN 1000.

**2050 Introduction to Airport Administration** (3) Students will learn about the airport community governmental agencies affecting airports, the economic impact of airports, the importance of airports, safety, and aviation in our national transportation system. The course is intended for all Aviation Institute students. It is an essential course for persons interested in becoming airport managers. Same as PA 2050. Prereq: AVN 1000.

**2160 Commercial Pilot Theory** (3) Provide the student with an understanding of the theories involved in flight at the commercial level. Course will include extensive review and study of VFR cross-country procedures and night flight procedures to prepare the student for the FAA commercial pilot written examination. There is no flight training involved in this course. Prereq: AVN 1030 or possess a U.S. FAA issued private pilot certificate.

**2164 Professional Pilot I** (2) This course consists of approximately 47 hours of flight training in VFR cross-country flight. The student will meet all flight requirements for entrance into the instrument flight course. *Special fees apply.*

**2170 Instrument Flight Theory** (3) Provide the student with an understanding of the theories and regulations involved in instrument flight. Course will include a strong foundation in attitude instrument flying and instrument navigation, to prepare the student for the FAA instrument written examination. There is no flight training involved in this course. Prereq: AVN 2164 or hold a valid U.S. private pilot certificate.

**2174 Professional Pilot II** (2) This course consists of approximately 35 hours of dual flight training in instrument procedures. The student will meet all flight requirements for obtaining the FAA instrument flight rating. *Special fees apply.* Prereq: AVN 2170 or concurrent enrollment.

**2180 Professional Pilot III** (2) This course is designed to accomplish all remaining requirements for the commercial pilot certificate and the instrument rating. Student must obtain the commercial pilot certificate and instrument rating to successfully complete this course. Prereq: AVN 2164, 2174, 2160 or concurrent enrollment.

**2510 Diversity in Aviation** (3) This course provides an overview of contributions women and minorities have made to the field of aviation. Very interdisciplinary in scope; international aspects and issues of aviation will be addressed as well. This course is intended for all UNO undergraduates to fulfill a cultural diversity general requirement with an aviation-related class. Prereq: None.

**2900 Special Topics in General Aviation** (1-3) This course will cover various topics in aviation to be determined each time the class is offered. Possible topics include the Ground Instructor Rating, the Seaplane Rating, and Airline Simulation. Prereq: None.

**3040 Human Factors in Aviation Safety** (3) The purpose of this course is to provide students with an understanding of human factors as it applies to pilots and administrators. Topics will include pilot physiological and psychological issues, work station design, crew resource management, and related public sector issues for managers. Prereq: AVN 1160.

**3060 Writing and Research in Aviation** (3) This course will further develop the communication skills of aviation students through various forms of writing. Students will learn research methods and will apply these methods to the composition of a traditional research paper. This course may be used as the third English course for general education degree requirements. Prereq: English 1160, AVN 1000, SPCH 1110, junior standing.

**3070 Air Traffic Control** (3) The purpose of this course is to introduce students to the Federal Aviation Administration (FAA) Air Traffic Control system. Elements and requirements of the course will include: basic air traffic control procedures for pilots, navigation aids, control tower operations, radar approach and departure regulations, and airport traffic control (ATC). Prereq: AVN 1000.

**3080 Aviation Weather Services** (3) The course is a study of aviation weather services, their components and methods of observing, analyzing, distributing, and presenting weather data applicable to aviators. Prereq: AVN 1000 and 1050.

**3090 Airport Master Planning and Management** (3) This course covers the nation's airspace design, navigation and air traffic systems and their effect on airport capacity. Additionally, the national airport system will be investigated as well as airport design and development parameters, fiscal processes, and management considerations. Same as PA 3090. Prereq: AVN 1000.

**3150 Aviation Law** (3) The purpose of this course is to increase the student's knowledge of aviation law and regulations. Particular attention will focus on the American legal system; important legal concepts, regulators of the industry and international aviation law. Case studies will be discussed throughout the course. Prereq: AVN 1000.

**3190 Certified Flight Instructor Theory** (3) Provide the student with an understanding of the theories involved in flight instruction. Course will include extensive oral presentation of complex aeronautical information. Students are expected to pass FAA exams for both air and ground instructor certificates. There is no flight training in this course. Prereq: AVN 2180 and SPCH 1110.

**3194 Certified Flight Instructor I** (2) This course consists of approximately 25 hours of flight training in flight instruction procedures required to obtain the FAA flight instructor rating. *Special Fees apply.* Prereq: AVN 3190 or concurrent enrollment.

**3200 Cooperative Education in Aviation** (3-6) This course will complement course work with a relevant professional work experience or practicum in aviation. The practicum/field experience may be a special project in an aviation organization to be coordinated by the instructor. Offered as a credit/not credit course. Prereq: AVN 3060, aviation major, junior/senior standing and instructor permission.

**3300 Certified Flight Instructor - Instrument Theory** (2) Provide the student with an understanding of the theories involved in instrument flight instruction. Course will include extensive oral presentations of flight instrument approaches and training procedures. Students will test for both IGI and IFI Examinations. There is no flight training in this course. Prereq: AVN 3190.

**3304 Certified Flight Instructor II** (1) This course consists of approximately 10 hours of flight training in instructing in instrument procedures and approaches in preparation for FAA certified flight instructor-instrument rating. Class is conducted off campus. *Special fees apply.* Prereq: AVN 3300 or concurrent enrollment.

**3400 Multi-Engine** (1) This course consists of ground and flight training in multi-engine procedures. The student will meet all flight requirements for the FAA multi-engine rating. Class is conducted off campus. Prereq: AVN 2180 or concurrent enrollment. *Special fees apply.*

**3510 Space Studies** (3) This course provides an overview of the United States' space program and the aerospace industry, both past and present. Very interdisciplinary in scope; other topics include the social, economic, and political aspects of space, space law, joint international space ventures, etc. Prereq: AVN 1000.

**4000 Independent Research in Aviation** (1-3) The purpose of this course is to provide the aviation student an opportunity to complete an in-depth analysis of a specific aviation topic. Examples: aerodynamics, airports rates/charges analysis, cost-allocation for airside/landside, aviation marketing relating to aircraft manufacturing, airline promotion, flight component, off-airport subjects, comprehensive regional planning, environmental subject, etc. Prereq: Aviation major, senior standing, and written permission of the instructor.

**4010 Aerodynamics and Aircraft Performance** (3) Provides the student with an understanding of the factors affecting aircraft performance during various phases of flight. Topics will include aircraft performance requirements outlined in the Federal Aviation Administration Regulations, use of performance chart and tables, runway/airport analysis, and climb/cruise/descent performance. Prereq: AVN 1000, 2160. MATH 1930 or instructor permission.

**4020 Aircraft Systems** (3) Provides the student with an understanding of systems employed on technologically advanced, sophisticated aircraft. Systems covered will include electrical, hydraulic, engines, flight control and pneumatic systems. Prereq: AVN 1000, 2180 or instructor permission.

**4030 Certified Flight Instructor III** (3) A study of the principles and methodology of instructing in multi-engine flight. This course will prepare the student for the FAA multi-engine flight instructor rating. Class is conducted off campus. *Special fees apply.* Prereq: AVN 3194, 3304 and 3400.

**4050 General Aviation Operations** (3) Organization and operation of general aviation facilities to include administration, aircraft maintenance considerations, flight line operations, and decision making. Same as PA 4050. Prereq: AVN 1000.

**4060 Advanced Air Transport Flight Operations** (3) The course will be a capstone event in the professional pilot sequence. Specific emphasis will be on the pre-flight planning and execution of air carrier flight operations. Additional instructional segments will cover regional and corporate flight operations. Prereq: AVN 4010, 4020.

**4100 Marketing in Public Non-Profit and Aviation Organizations** (3) This course will develop a working knowledge of marketing and its component parts as they may be applied to non-profit organizations. Emphasis will be placed on understanding the marketing process and applying marketing principles to real organizational settings. Prereq: AVN 1000, 2020.

**4200 Internship in Aviation** (3-6) This course is designed to provide direct hands-on experience in the aviation industry for selected students. Students will be selected for internships competitively by a panel of Aviation Institute faculty and industry representatives from companies providing the internships. This experience will be in a full-time, preferably paid position in a highly structured environment using a syllabus designated by the faculty and industry committee. Prereq: AVN 3060, junior/senior standing, aviation major, instructor permission.

**4900 Special Topics in Aviation** (1-3) This course will discuss various topics in the Aviation Industry determined each time the course is offered. Possible topics include International Aviation, Current Issues, and Cockpit Resource Management along with other topics. Prereq: AVN 1000 and junior standing.

**4970/4980 Senior Honors Project/Thesis** (3-6) An independent research project supervised by department/school faculty. The senior honors project must be approved by there CPACS Honors Coordinator. Prereq: Senior in Honors Program.

**4990 Air Transportation and Intermodal Systems** (3) A study of the historical development of air transportation and intermodal systems, domestic and international, and the impact of federal regulations upon this development. Topics will cover facilities, problems of commercial services, future requirements, economic and social implications. This course fulfills the Aviation Institute capstone and assessment course requirements. Same as PA 3050. Prereq: AVN 1000 and junior standing.

## Cooperative Education

**2700-3700 Cooperative Education** (1-3) A semester of off-campus relevant semi-professional and professional work experience coordinated to complement classroom academics with practical firsthand involvement in the business world. Prereq: Permission of the dean of the College of Public Affairs and Community Service (CPACS).

## Criminal Justice (CJUS)

**1010 Survey of Criminal Justice** (3) This course is designed to provide general knowledge about the causes of crime; the underlying purpose of law enforcement; and the role of the police officer, courts, penal institutions, probation and parole in present day life.

**2030 Police and Society** (3) This course is designed to present an overview of 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. Prereq: CJUS 1010.

**2110 The Criminal Court System** (3) This course is designed to provide an analysis of the structure and function of the criminal court system in the United States, including the roles of prosecutor, defender, judge, jury and court administrator. The issues confronting the system will be considered from historical, philosophical, sociological and psychological perspectives. The ideals of the system will be compared with actual functioning, and court reform programs and proposals will be explored. Prereq: CJUS 1010.

**2210 Survey of Corrections** (3) A general course describing the history and evolution of the corrections process. Covers all aspects of institutional and community-based corrections. Prereq: CJUS 1010.

**2510 Research Methods** (3) A basic introduction to the principles, methods and techniques of empirical social research. Prereq: CJUS 1010 or permission of instructor.

**3000 Applied Statistics and Data Processing in the Public Sector** (3) A course in the basic statistics of public sector research and public administration decision-making. The emphasis is on exploration of data processing and techniques as they relate to statistical analysis and on understanding the proper application of statistics. Prereq: MATH 1310 or permission of instructor. (Same as PA 3000)

**3010 Philosophy of Criminal Justice** (3) Philosophical examination of justice and its administration. Provides the student with a richer understanding of the conceptual foundations of justice. Prereq: Student must be admitted into upper division CJUS program or permission of instructor. (Same as PHIL 3010)

**3310 Criminal Law** (3) This course examines the means by which society attempts to use criminal law to prevent harm to society. It examines the acts which are declared criminal and the punishment prescribed for committing those acts. The course also examines the philosophies and rationales that have shaped current day substantive criminal law. It looks at the English Common Law and traces the historic evolution of substantive criminal law from its early origins. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3350 Criminology** (3) General survey of the nature and causes of crime and the effort of the criminal justice system to predict, prevent, modify and correct this behavior. Prereq: Student must be admitted into upper division CJUS program or permission of instructor. (Same as SOC 3350)

**3370 Juvenile Delinquency and Justice** (3) This course focuses on how delinquents and juveniles in need of supervision are handled within the juvenile justice system. The nature and extent of delinquent behavior, status offenses, child abuse and neglect; theories of delinquency and their implications for intervention; cultural and social factors related to delinquency; as well as the philosophy and functioning of the juvenile justice system are covered. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3380 Minorities and Criminal Justice** (3) This course provides a survey of minority groups and criminal justice in the United States. This course will focus on racial minorities as victims of crime, as offenders, as defendants, and as criminal justice professionals. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.



## COURSE DESCRIPTIONS PUBLIC AFFAIRS AND COMMUNITY SERVICE

**3390 Women, Crime and Justice** (3) This course focuses on women's experiences in the criminal justice system. The course will examine women's experiences as victims of crime, as offender, as defendants, and as criminal justice professionals. Prereq: CJUS 1010.

**3510 Criminal Procedure** (3) This course deals with the legal aspects of the investigation and arrest processes as well as the rules governing the admissibility of evidence in court. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3750 International Criminology and Criminal Justice** (3) This course analyzes the dynamics of criminality and the social response to criminality across countries. Differences in crime and justice between developed and developing countries and between socialist and capitalist nations are emphasized. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3940 Terrorism** (3) This course is designed to assist the student in developing an understanding of terrorism as a political crime. It includes an examination of the social, political and psychological aspects of this behavior. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3950 Organized Crime** (3) A course designed to trace the origins and historical development of the activities that have come to be known as "organized crime." These crimes are some of the most dangerous to American society and range from the commonly known offenses of gambling, shylocking and narcotics trafficking to the more subtle and sophisticated, less understood but equally serious, crimes of extortion, commercial bribery and political corruption. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3960 White Collar Crime** (3) A course designed to examine those illegal acts committed by non-physical means and by concealment or guile, to obtain money or property, to avoid the payment or loss of money or property, or to obtain business or personal advantage. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**3970 Internship in Criminal Justice** (3) Job-related experience in criminal justice agencies. Permission to enroll must be received from the student's adviser each semester. (May be repeated for a maximum of six hours.) Prereq: Admission into upper division CJUS program, 75 credit hours completed, GPA of 2.5 and permission of instructor.

**4030 Criminal Justice Organization and Administration** (3) This course covers contemporary concepts, principles and theories of organization and administration as they relate to criminal justice agencies. The historical development and modern practices of public policy are also considered. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**4130/8136 Sociology of Deviant Behavior** (3) This course is designed to investigate the etiology of many forms of norm-violating conduct. Emphasis will be placed on rule-breaking behavior as defined in the criminal statutes. Prereq: Students must be admitted into upper division CJUS program or permission of instructor. (Same as SOC 4130)

**4210 Institutional Corrections** (3) The course presents an in-depth analysis of the history and operation of prisons and jails in the United States and other countries. The course covers the management and operation of prisons and jails from the perspective of both employees and incarcerated persons. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**4310/8316 Correctional Law** (3) This course is designed to provide an analysis of the emerging law of corrections and prisoner's rights. The student will learn the applicability of various constitutional guarantees to the correctional process including issues surrounding cruel and unusual punishment, the right to treatment, the right not to be treated, and the parole process. Philosophical, psychological and sociological issues relating to law reform and public policy will be considered. Prereq: Students must be admitted into upper division CJUS program or permission of instructor.

**4350/8356 Community-Based Corrections** (3) A course for advanced students with a special interest in the correctional process as applied in a community setting. It is designed to focus on innovative community-based strategies for dealing with the offender as well as the traditional processes of probation and parole. Prereq: Students must be admitted into upper division CJUS program or permission of instructor.

**4800 Special Topics** (1-3) A course devoted to the exploration and analysis of contemporary problems in the criminal justice system. On occasion the course will be offered in three one-credit hour modules and students may register for one, two or three credit hours. Students may repeat the course for up to five hours of credit. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**4950 Independent Study** (1-3) Faculty-guided research in an area of mutual interest to the student and his instructor. Students are responsible for selecting the area of inquiry prior to contacting the instructor. May be repeated to a maximum of six hours. Prereq: Admission into upper division CJUS program or 24 hours of criminal justice and permission of instructor.

**4970-4980 Senior Honors Project/Thesis** (3-6) An independent research project supervised by department/school faculty. The senior honors project must be approved by the CPACS Honors Coordinator. Prereq: Student must be admitted into upper division CJUS program or permission of instructor.

**4999 Senior Assessment** (0) Course is part of the department's Student Outcomes effort. Designed to monitor the department's performance and to identify changes needed. Graduating seniors must take a comprehensive exam and participate in an exit interview. Prereq: Students must register for this course in the semester in which they plan to graduate.

### Gerontology (GERO)

**1070 Survey of Aging and Dying** (3) A survey of important concepts relating to later maturity and the end of life. This course will serve as an elective for students who do not intend to specialize in gerontology, but who wish to have some perspective on development in late life and issues relating to death and dying. Prereq: None.

**2000 Introduction to Gerontology** (3) An introduction to social gerontology and human development in later life; emphasis is on important elements of aging, such as socialization, family interaction, retirement, physical and psychological aging, and perceptions of older persons in contemporary society. Prereq: None. (Same as SOC 2000)

**3070 Death and Dying** (3) An interdisciplinary survey of literature in the field of thanatology, with an emphasis on working with the older patient and his family. Prereq: Three hours in gerontology, permission. (Same as HED 3070)

**4100/8106 Educational Gerontology** (3) An introduction to the field of education for and about the aging. The institutions and processes of education will be analyzed to determine their relationships and value to persons who are now old and those who are aging.

**4350/8356 Issues in Aging** (3) This course is intended for students in gerontology and other fields who are interested in a humanistic approach to understanding significant issues which affect the lives of older people. Prereq: Three hours in gerontology or permission.

**4420/8426 Therapeutic Recreation Intervention and the Aging** (3) This course introduces the student to the field of recreation for the aging in nursing homes and community-based recreation programs. A portion of the course involves students visiting recreation sites. Prereq: GERO 2000, RLS 3500, or permission. (Same as RLS 4520/8426)

**4460 Psychology of Adult Development and Aging** (3) The focus of this course is on the major social and psychological changes that occur as a function of aging. Both normal and abnormal patterns of developmental change are examined, along with their implications for behavior. Prereq: GERO 2000 or PSYC 1010. (Same as PSYC 4460).

**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 in gerontology or permission.

**4500/8506 Legal Aspects of Aging** (3) Consideration of the legal concerns which are likely to arise as people age. Includes introduction to the American legal system and emphasis on underlying legal concepts and issues of special importance to older persons. Prereq: GERO 2000 or 4110.

**4510 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 2000. (Same as PA 4510)

**4520/8526 Mental Health and Aging** (3) An examination of mental health problems that are particular to older people. Prereq: None.

**4550/8556 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)

**4590/8596 Disorders of Communication in Older Adults** (3) This course is designed to familiarize the student with the identification and symptomatology, basic assessment and intervention strategies associated with disorders of communication affecting older adults and geriatric patients. It is beneficial to students majoring in gerontology or speech pathology, as an elective course, or as a professional enrichment course for persons working in these or related fields. Prereq: Junior, GERO 4550 or permission of instructor. (*Same as SPED 4590*)

**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 in gerontology.

**4690/8696 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 4040*)

**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/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: 3070 or permission. (*Same as SOWK 4850/8856*)

**4920 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 in gerontology or permission.

**4940 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 broadly based perspective of the field of aging. Prereq: Nine hours in gerontology and permission.

**4970/4980 Senior Honors Project/Thesis** (3-6) An independent research project supervised by department/school faculty. The senior honors project must be approved by the CPACS Honors Coordinator. Prereq: Senior in Honors Program.

**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.

## **Goodrich Scholarship Program (GDRH)**

**1010 Autobiographical Writing** (3) This course helps students to write effectively by focusing on their own personal experience and by examining a variety of autobiographical writings. Students are exposed to multicultural perspectives throughout the course. Prereq: Goodrich student.

**1110 Perspectives on USAmerican Culture** (6) The course explores USAmerica multiculturally mostly through imaginative literature and several other arts. Prereq: English 1150, Autobiographical Writing 1110, Goodrich student.

**1210 Learning Theory and Strategies** (3) This course focuses on the acquisition of specific learning strategies designed to improve students' ability to manage and monitor learning in a variety of college contexts. Emphasis is given to investigation of students' individual learning orientations as part of their development of strategic learning systems. Prereq: None.

**2110 Core Topics in the Social Sciences: Perspectives on the Individual** (3) This course examines three traditional psychological explanations of human behavior and the controversies which grow out of them. Students explore characteristics of formal social science theory and the role observation and data play in their development. These theories are then assessed through perspectives of minority and women-centered psychology. The course stresses historical and cultural contexts for adequate explanations of human behavior. Prereq: Goodrich students.

**2120 Core Topics in the Social Sciences: Perspectives on the Family** (3) Building on concepts learned from psychology, this course examines the many forms of marriage and family in the United States from a multicultural perspective. Family systems theory helps students explore patterns in functional and dysfunctional group interactions. Students also study how social, economic and political forces have destabilized the family in modern times and examine current public policies which propose to stabilize the family as a social unit. Students consider issues of individual choice and responsibility regarding family and relationships along with obligations and commitments to traditional community or cultural values. Special attention is given to cultural diversity in family structure and traditions and to community resources which provide family wellness services. Prereq: Goodrich student.

**3010 Special Topics Seminar** (1-3) The content of this topical seminar varies each semester. May be repeated as long as the topic is not the same. Prereq: May vary with each offering.

## **Public Administration (PA)**

**1000 Introduction to Aviation and Aerospace** (3) This course provides a broad understanding of all aspects of the air transportation and aerospace industries. Lectures will cover what has happened in the industry to date, with emphasis on present and future developments in air transportation. The course will include the impact the airline industry is making on airports and other segments of aviation and aerospace. Same as AVN 1000. Prereq: None.

**2000 Leadership and Administration** (3) This course is designed to offer students the opportunity to increase their leadership skills by providing them with a series of competency-based seminars/workshops on the characteristics and tasks in which leaders are engaged. Prereq: AVN 1000 for all aviation students.

**2020 Airline Operations** (3) This course provides students the opportunity to discuss operational issues and examples of techniques used in airlines and corporate flight organizations. Aviation industry representatives will make presentations in selected classes. Topics will include deregulation, airports, airline operations, scheduling, airline aircraft procurement, capability and congestion, economic impact, revenue passenger miles and seat capacity. Same as AVN 2020.

**2050 Introduction to Airport Administration** (3) Students will learn about the airport community governmental agencies affecting airports, the economic impact of airports, the importance of airports, safety, and aviation in our national transportation system. The course is intended for all Aviation Institute students. It is an essential course for persons interested in becoming airport managers. Same as AVN 2050. Prereq: AVN 1000.

**2170 Introduction to Public Administration** (3) A study of governmental administration and its involvement in the social and economic problems of American democracy. It includes but is not limited to the organizational, financial, personnel and planning problems and administrative relations with legislatures, political parties, chief executives and the courts. Prereq: None

**3000 Applied Statistics and Data Processing in the Public Sector** (3) A course in the basic statistics of public sector research and public administration decision-making. The emphasis is on exploration of data processing techniques as they relate to statistical analysis and on understanding the proper application of statistics. Prereq: MATH 1430 or permission of instructor. (*Same as SOWK/CJUS 3000*)

**3090 Airport Master Planning and Management** (3) This course covers the principles of airport master planning and system planning. Fundamental principles of airport layout and design to include runway configuration, airside/landside technology, passenger and cargo terminal layout, capacity and delay effects will be emphasized. Same as AVN 3090. Prereq: AVN 1000, 2050.

**3180 Elements of Public Management** (3) This course is designed to provide a general and summary introduction of key aspects of public management. It will emphasize field and simulated problems as well as text and specialized readings. Prereq: PA 2170.

**4050 General Aviation Operations** (3) Organization and operation of general aviation facilities to include administration, aircraft maintenance considerations, flight line operations, and decision making. Prereq: AVN 1000. (Same as AVN 4050).

**4100 Marketing in Public Non-Profit and Aviation Organizations** (3) This course will develop a working knowledge of marketing and its component parts as they may be applied to non-profit organizations. Emphasis will be placed on understanding the marketing process and applying marketing principles to real organizational settings.

**4206 Introduction to Health Care Systems** (3) This course is designed to familiarize students with the structure of the health services system in the United States. It addresses quality, access and cost of health services delivery, personnel and funding resources for providing health care, financing health care, traditional and alternative health services delivery settings, and forces that shape the current and future health care sector.

**4300 Seminar in Public Policy** (3) A study of the economic, social and political determinants of public policy in terms of administration and decision-making and of measuring and evaluating policy impact. The course includes both study of general policy processes, and, to a lesser extent, particular policy topics. Prereq: PA 2170.

**4390 Public Budgeting** (3) A study of the processes, procedures and politics of public sector budgeting. Prereq: PA 2170, junior.

**4410 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: PA 2170, junior.

**4430 Municipal Administration** (3) The administrative structure and administrative practices of American cities covering such areas as finance, personnel, public works, public safety, health, utilities and planning. Prereq: PS 2010, junior.

**4490 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: Permission of adviser.

**4510 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: PA 2150 and GERO 2000. (Same as GERO 4510)

**4560 Intergovernmental Management** (3) This course is for students wanting to improve their knowledge and understanding of intergovernmental relations as they impact policy and administration in the United States. Prereq: None.

**4596 Techniques/Topics in Non Profit Management** (1-3) A variable content course emphasizing non profit management techniques and topics. Topics include non profit leadership, board/executive/staff roles and relationships, personnel and volunteer management, financial management, proposal and grant writing/community resources, special events planning and administration, needs assessments and legal/ethical aspects. Prereq: Permission of instructor.

**4600 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: PA 2170 and permission of instructor.

**4820 Introduction to Environmental Law and Regulations** (3) Seminar on environmental law and regulations. Addresses federal regulations, implementing instructions, legal principles, and requirements. The major federal environmental laws, air and water quality, solid and hazardous waste, and pollution prevention and remediation are discussed. (Same as GEOL 4850/8856 and BIOL 4820/8820).

**4900 Special Topics in Public Administration** (1-3) A variable content course with public administration and urban studies topics selected in accordance with student and faculty interests. Possible topics include urban homesteading, administrative federalism and economic development and the public sector. Prereq: PA 2170 and permission of instructor.

**4950 Internship** (3) A course designed to link theoretical concepts learned in the classroom to the practical application of "real world" situations and to familiarize students with attitudes, operations and programs of governmental units. Prereq: Major in public administration, senior and permission of department.

**4970/4980 Senior Honors Project/Thesis** (3-6) An independent research project supervised by department/school faculty. The senior honors project must be approved by the CPACS Honors Coordinator. Prereq: Senior in Honors Program.

**4990 Air Transportation and Intermodal Systems** (3) A study of the historical development of air transportation and intermodal systems, domestic and international, and the impact of federal regulations upon this development. Topics will cover facilities, problems of commercial services, future requirements, economic and social implications. This course fulfills the Aviation Institute capstone and assessment course requirements. Same as AVN 3050. Prereq: AVN 2020, 3150, and senior.

### Social Work (SOWK)

**1000 Social Work and Social Welfare** (3) This course is designed for the student who wants to learn about social welfare and explore a possible major in social work. The student examines historical and current issues in social welfare, social services, and the social work profession. The course focuses on values, beliefs, and goals of social services and social work, and provides a historical perspective for present activities. Prereq: None.

**1500 Volunteer Experience** (3) This course is designed to acquaint the student with the social work profession, professional roles and functions, and social services delivery systems. As volunteers, students will have an opportunity to observe and participate in social services activities within Nebraska and Iowa communities incorporated with didactic experiences. Students will also have an opportunity to explore their vocational aptitude for social work practice via interactive encounters with clients and helping professionals. Prereq: SOWK 1000, sophomores may take SOWK 1500 concurrent with SOWK 1000 or permission of the School.

**3000 Applied Statistics and Data Processing in Public Sector** (3) A course in the basic statistics of public sector research and public administration decision-making. The emphasis is on exploration of data processing and techniques as they relate to statistical analysis and on understanding the proper application of statistics. Prereq: MATH 1430 recommended; or permission of the School. (Same as PA 3000)

**3010 Human Functioning and Social Systems I** (3) This course is the first part of a two-semester sequence. The purpose of this course is to provide the student with basic knowledge of major contributions of the biological, social and behavioral sciences to the understanding of human functioning with societal structures, i.e., the person-in-environment. Within a social systems framework, this course will emphasize theories of development/personality as they relate to the individual and small group (family) systems. The content of this course will also include issues related to cultural, class, racial, ethnic and gender variations. Prereq: SOWK 1500, PSYCH 1010, SOC 1010, BIOL 1020 and admission to the BSW program.

**3020 Human Functioning and Social Systems II** (3) This course is the second part of a two-semester sequence. The purpose of this course is to provide the student with a basic knowledge of the contributions of various social sciences to the understanding of human functioning in transaction, i.e., person-in-environment, with larger societal structures. This course will emphasize the characteristics, dynamics and structure of families and other small groups, communities and organization. In accord with the social systems approach, the content of this course addresses diverse ethnic, racial, gender and cultural influences on individuals and groups within western society. Prereq: SOWK 3010 and admission to the BSW program.

**3110 Social Welfare Policy I** (3) An examination of social policy development: the historical aspects, value assumptions, social-political-economic context and processes and skills required for analysis. Prereq: Admission to the BSW program.

**3320 Social Work Practice I** (3) This is the first of a three-course practice sequence focusing on the values, knowledge and skills generic to social work practice; the problem-solving model is studied as a generic approach to social work practice. Students will be helped to integrate knowledge with practice skill through laboratory experiences; the importance of values as a guide for social work practice will be stressed. Prereq: SOWK 1500, admission to the BSW program and concurrent with SOWK 3010.

**3350 Social Work Practice II** (3) This is the second of a three-course practice sequence 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 3010 and SOWK 3320; and concurrent with SOWK 3020 and 3110.

**3700 Alcohol and People** (3) This course is designed as an overview for the study of facts, concepts and theories about alcoholism; and for achieving understanding of the dynamics of the illness for those in the helping professions. Prereq: Sophomore or permission of the School.

**3980 Writing for Social Work** (3) This course serves as introduction to various forms of professional writing such as process recordings, narrative writings, business communications, grant proposals and research reports required in the field of social work. Prereq: ENGL 1150, 1160 and junior standing.

**4010/8016 Social Work with American Indians** (3) This course provides the student with a broad study of 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 work elective requirement. Prereq: SOWK 3320 or permission of School.

**4020/8026 Social Work with Black Youth** (3) This course seeks to develop in students an awareness and understanding of some of the social and psychological/cognitive 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 black youth. Practice implications are emphasized. For social work students, the course meets the minority or social work elective requirement. Prereq: SOWK 3320 or permission of the School.

**4030/8036 Social Work with Hispanics** (3) 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. For social work students, the course meets the minority or social work elective requirement. Prereq: SOWK 3320 or permission of the 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: Senior in gerontology or social work or permission of the School. (*Same as GERO 4690*)

**4120 Social Welfare Policy II** (3) 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 and 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. Prereq: SOWK 3110, ECON 2010, PSCI 1000 or 1100 and admission to the BSW program.

**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. Prereq: SOWK 3320 or permission of the School.

**4360 Social Work Practice III** (3) This is the third of a three-course practice sequence and provides an introduction to the goal-oriented, planned change process with an emphasis on groups, organizations and communities. The focus is on developing practice skills in planning, collaboration, empowerment and advocacy to effect change. Prereq: Senior, SOWK 3020, 3110 and 3350; and concurrent with SOWK 4120 or permission of the School.

**4400 Research Methods in Social Work Practice** (3) Focus will be on the scientific method as it is applied to social work research. The purpose of all social work research is to answer questions or solve problems. The six phases of the research process will be identified and the basic tasks to be accomplished in each phase will be learned. Special attention will be given to evaluating social work practice. Prereq: An introductory statistics course prior to or concurrently, or permission of the School.

**4410 Generic Social Work Practicum I** (5) This course is designed to provide individualized and experiential generic 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 client systems and learn to apply a number of interventive modalities to effect change. In order to facilitate integration of classroom theory with practice, students will attend a seven-week practicum seminar (2 hours per week). Prereq: Senior, SOWK 3350; and SOWK 4120 and 4360 prior to or concurrently; and permission of the School.

**4420 Generic Social Work Practicum II** (5) Continuation of supervised field practice as described in SOWK 4410. Prereq: SOWK 4410; and SOWK 4120 and 4360 prior to or concurrently; and permission of the School.

**4450 Senior Social Work Seminar** (1) This course is intended as an integrating senior seminar designed to be taken with the final course of practicum. It facilitates the transition from student to professional social worker through the use of specific assignments focused on areas of resume development, continuation of research, awareness of continuing education needs, issues of licensure, and exposure to social work professionals. Prereq: BSW students who have completed SOWK 3350, and SOWK 4360 prior to or concurrently.

**4600/8606 Social Work in Mental Health** (3) This course is for the social work student who is seeking substantial knowledge of social work practice in mental health settings. It considers current mental health systems and services for those with acute or chronic mental disorders. Prereq: SOWK 3010 or permission of the School.

**4610/8616 Social Work & Family Violence** (3) This course explores the problem of family violence in American society. It includes characteristics of abuse, description of victims of abuse, and prevention and intervention strategies using societal systems. Prereq: 3020 or permission of the School.

**4620/8626 School Social Work** (3) This course explores the field of social work practice in school settings. It will include coverage of the following topics: history of social work practice in schools; the school environment; roles of school social workers; mandated foundations for school social work services; student handicapping conditions; practice modalities in school settings; and special target problems that arise in school settings. This course meets the requirements for a social work problem/condition course. Prereq: SOWK 3350 or permission of the School.

**4630/8636 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 improvement. 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 also will 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 3320 or permission of School.

**4800/8806 Social Work, Psychology and the Law** (3) This course presents the fundamental principles of criminal and civil law that have relevance to the practice of social work, psychology, and marriage and family therapy. Topics include the legal system; legal research methods; professional ethical/legal responsibilities and liabilities; family law; criminal law; juvenile law; personal injury law; employment discrimination law; capacity to make contracts and wills; rights of institutionalized patients; and rights of handicapped children to an education. Prereq: Junior or permission of School.

**4810 Spirituality and Social Work Practice** (3) Social work literature defines spirituality as the human striving for a sense of meaning, purpose, values and fulfillment. Spirituality is expressed through diverse forms in clients' lives; it is central to clients' understanding of suffering and their attempts to resolve it. This course examines major issues pertaining to spiritually-sensitive social work practice with clients of diverse religious and non-religious (i.e., outside sectarian institutional contexts) perspectives. Prereq: BSW students who have completed SOWK 3020, 3350, 4360 or concurrent.

**4850/8856 Hospice 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 in gerontology or social work or permission of the School. (*Same as GERO 4850/88560*)

### **4860/8860 Women'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 implication for social service delivery systems, social policy and practice modalities. Prereq: SOWK 3350 or permission of the School.

**4880 Topical Seminar in Social Work (1-3)** 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: Permission of the School.

**4890 Special Studies in Social Work (1-4)** Independent study in library research, social work practice, or individualized special projects. Written approval required prior to enrollment. Prereq: Permission of the School.

**4970/4980 Senior Honors Project/Thesis (3-6)** An independent research project supervised by an approved faculty member. The senior honors project must be approved by the CPACS Honors Coordinator. Prereq: Senior in Honors Program and permission of the School.

## **Urban Studies (UBNS)**

**1010 Introduction to Urban Studies (3)** Introduction to history, concepts, development and literature of urbanism. An interdisciplinary examination of issues confronting contemporary urban society and how various academic disciplines relate to those issues. *(Same as PA 1010)*

**3000 Applied Statistics and Data Processing in Public Sector (3)** A course in the basic statistics of public sector research and public administration decision-making. The emphasis is on exploration of data processing techniques as they relate to statistical analysis and on understanding the proper application of statistics. Prereq: MATH 1430 or permission of instructor. *(Same as PA 3000)*

**3010 Native American Issues (3)** There are many issues that both urban and reservation Native Americans face. Health, economic well being, cultural identity, gaming, and housing are just some of the pressing issues. Prereq: None.

**3020 Contemporary Native American Issues (3)** There are many issues that both urban and reservation Native Americans face. Health, economic well being, cultural identity, gaming, and housing are just some of the pressing issues. Prereq: None.

**4010 Multicultural Perspectives in an Urban Context (3)** The course will seek to develop an understanding of the perspectives of the major cultural groups residing in a typical American metropolis, and will expose students to the multicultural experience through direct contact with agencies or representatives of the groups in question. Prereq: Junior or senior.

**4060 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: Junior.

**4100 The National Public Policy Process and Urban Issues (3)** This course is designed to provide an analysis of the public policy-making process in the United States and to examine some of the major problems that urban Americans face. Moreover, the course will spotlight some of the governmental policy responses to these problems. The course will embrace a theoretical component as well as a pragmatic component the objective of which is to provide the student with a basis for understanding, explaining, and evaluating the American public policy-making process. Prereq: Junior or senior. *(Sophomores by permission of instructor only)*

**4820 Comparative Urban Studies (3)** Comparative urban studies: emphasis will be upon contrasting the cities of the developed and developing areas of the world. Prereq: Permission of instructor or UBNS 1010.

**4900-4910 Special Studies in Public Administration and Urban Studies (1-6)** Special studies are designed around the interests and needs of individual students. Topics may be either in urban studies or public administration and must be approved by a faculty adviser. Prereq: UBNS/PA 1010 or PA 2170.

**4970/4980 Senior Honors Project/Thesis (3)** An independent research project supervised by department/school faculty. The senior honors project must be approved by the CPACS Honors Coordinator. Prereq: Senior in Honors Program.

**4990 Senior Seminar in Urban Studies (3)** Students will be assigned special readings and research projects which have as their aim a first-hand acquaintance with various facets of the city.

## ROTC

### Aerospace Studies (AERO)

**0010 Leadership Laboratory AFROTC** Leadership Laboratory provides initial and advanced military leadership experiences including cadet squadron operations, commanding, training, recruiting, communicating, drill and ceremonies, customs and courtesies, career planning, and staff action practica designed to simulate the professional world of the Air Force officer. Leadership Laboratory is an integral part of all Aerospace Studies courses and all cadets must participate.

**1310 The Air Force Today I** (2) The fall semester freshman course of Air Force ROTC surveys the U.S. Air Force with students studying the mission, functions and organization of the Air Force. Emphasis is placed on the environment in which the Air Force operates, its role in the federal government and how it coordinates with the other military services. Students are introduced to methods of communicating within the Air Force. Prereq: None.

**1320 The Air Force Today II** (1) The spring semester freshman Air Force ROTC course continues with a survey of the U.S. Air Force. Emphasis is placed on the major Air Force commands, the functions of U.S. strategic and aerospace support forces. This course provides a stronger foundation upon which the student's study of the armed forces and the Air Force can build. Prereq: AERO 1310 or permission of instructor.

**2310 The Development of Air Power I** (1) The fall sophomore course of Air Force ROTC is an introduction to the study of air power. The course is developed from a historical perspective starting before the Wright Brothers and continuing through World War II. Emphasis is placed on factors contributing to change in the nature of military conflict concurrent with the development of air power. Prereq: AERO 1310, 1320, equivalent courses, or permission of instructor.

**2320 The Development of Air Power II** (2) The spring semester sophomore Air Force ROTC course continues the introduction to the study of air power. Beginning at the conclusion of World War II, the course traces the growth of air power through the early 1990's. Emphasis is placed on factors contributing to change in the nature of military conflict and leading to the development of air power as a primary element of national security. Prereq: AERO 1310, 1320, 2310, equivalent courses, or permission of instructor.

**3110 Air Force Management and Leadership I** (3) A study of management from the point of view of the Air Force junior officer. Major areas of study include basic management fundamentals, organizational and group dynamics of change and leadership. Additionally, communicative skills are reviewed with the primary focus on military speaking and writing. Actual Air Force case histories are used to reinforce the management and leadership course material. Prereq: AERO 1310, 1320, 2310, 2320, equivalent courses, or permission of instructor.

**3120 Air Force Management and Leadership II** (3) This course continues a comprehensive study of management as it relates to the positions and responsibilities assigned to junior officers in the Air Force. The areas of emphasis during the spring semester include the functions of management, individual motivational and behavioral processes, counseling techniques and the realities which junior officers must face as managers. Additional class time is devoted to performance evaluation in the Air Force and a study of officer career progression. Actual case histories are again used to reinforce lesson material. Prereq: Completion of AERO 3110 or permission of instructor.

**4110 National Security Forces in Contemporary American Society I** (3) A study of the armed forces as an element of society, with emphasis on the broad range of American civil-military relations and the environmental context in which U.S. defense policy is exercised. During the fall semester course themes include the role of the professional military leader-manager in a democratic society as well as political, economic and social constraints on the national defense structure. Prereq: Completion of AERO 3120 or permission of instructor.

**4120 National Security Forces in Contemporary American Society II** (3) This senior course continues the study of the armed forces as an element of society. Special emphasis is given to military justice and junior officer responsibilities. Ethical accountability and the junior officer role is also studied. The course ends by covering the transition from civilian to military life. Prereq: Completion of AERO 4110 or permission of instructor.

**4900 Advanced Air Force Leadership and Planning Seminar** (1-3) This course offers cadet leaders of Air Force ROTC advanced insight into the intricacies of proper leadership and managerial concepts. These lessons assist students with the planning and execution of the Cadet Wing during the semester. Lessons will include personnel utilization, honor and ethics concepts, performance evaluations, and planning concepts. Prereq: Permission of instructor.

*In addition to the above courses, Air Force ROTC awards credit through summer field training exercises:*

Two hours of credit are granted to students who complete four weeks of training at selected Air Force bases. Travel pay and salary stipend provided. The student is not obligated to any military service as a result of attending field training. Graduates of camp are eligible to enroll in the Professional Officer Course (POC) and compete for two-year Air Force ROTC scholarships. Prereq: Aero 1310, 1320, 2310, 2320 and department approval.

Three hours of credit are granted to students who complete six weeks of training at selected Air Force bases. Training designed for students with no military experience, training or education. Travel pay and salary stipend provided. The student is not obligated to any military service as a result of attending field training. Graduates of camp are eligible to enroll in the Professional Officer Course (POC) and compete for two-year Air Force ROTC scholarships. Prereq: department approval.

### Military Science (MILS)

**1000 Leadership Laboratory** (0) Leadership Laboratory provides basic and advanced military leadership experience in military courtesy, drill and ceremonies, and practical application of classroom taught subjects. Functions and responsibilities of leadership positions are developed through cadet staff actions and command positions. Leadership Laboratory meets Mondays through Fridays from 0700-0750 at the Peter Kiewit Creighton University Field House. All military science scholarship and advanced course students must register for MILS 1000. All other military science students will be required to attend selected Leadership Laboratories. Prereq: None.

**1010 Introduction to Officer Professionalism I** (1) Examines the role of the commissioned officer in the U.S. Army. Discussion focuses on the role and organization of the Army, role of the National Guard and Reserve, branches of the Army, sources of commissions, role of the non-commissioned officer, customs of the service, military pay and benefits, career opportunities, scholarships, and an overview of the Soviet Army.

**1020 Introduction to Officer Professionalism II** (1) Basic skill is acquired in land navigation and military first aid emphasizing the four life saving steps.

**2030 United States Military History** (3) This course will introduce students to the history of the American Military establishment and its relationships to American society from colonial times to the present. Students will become acquainted with the evolution of warfare, military theory and the military profession, with particular emphasis on the place of military institutions in society, so as to develop a sense of historical awareness. Prereq: None.

**2050 Basic Camp-ROTC** (3) Six weeks of training at Fort Knox, Kentucky. Travel pay and salary stipend provided through the Department of Military Science. The student is not obligated to any military service as a result of attending Basic Camp. Camp graduates are eligible to enroll in Advanced Military Science courses and compete for two-year military science scholarships.

**2060 Basic Camp-SMP** (3) Under the Simultaneous Membership Program (SMP), students who have completed an Army, Army National Guard, or Army Reserves Basic Training Camp may receive credit for the first two years of Army ROTC and enter the ROTC Advanced Program culminating in the awarding of a commission as a Second Lieutenant in the Army Reserve or Army National Guard in two years. Contact the Military Science Department for further details.

**2070 Fundamentals of Army Ranger Training** (2) Course designated to challenge the individual in leadership, physical endurance, special operations and small-unit tactics. Competitive area success would lead to regional championship participation at Fort Lewis, Washington. Prereq: Departmental approval.

**2080 Advanced Army Ranger Training** (2) A continuation of Military Science 2070. Prereq: Departmental approval.

**2110 Basic Individual Military Techniques** (1) Develops student leadership and critical individual skills. Training is basic in nature and includes leadership techniques, written and oral communication, rifle marksmanship, fundamentals of land navigation, and physical fitness. Prereq: MILS 1010 and 1020.

**2120 Advanced Individual Military Techniques** (1) Continues the development of student leadership and critical individual military skills. Training focuses on advanced military skills and includes orienteering, field survival skills, operation and training. Prereq: MILS 2110.

**3010 Advanced Leadership I** (3) Students learn the fundamentals of land navigation, the role and functions of a military line and staff organization, the role of the non-commissioned officer, training management, how to prepare military correspondence, how to conduct oral presentations, and how to arrange and conduct meetings and conferences. Includes physical training. Prereq: Department approval and enrollment in MILS 1000.

**3020 Advanced Leadership II** (3) Students learn the fundamentals of small unit leadership skills and tactics, how to conduct personal, performance and discipline counseling, and examine leadership case studies in detail. Includes physical training. Prereq: Department approval and enrollment in MILS 1000.

**3070 ROTC Advanced Camp Training** (3) The ROTC cadet attends six weeks of intensive leadership and management training. The training is conducted during the summer months at Fort Lewis, Washington. The student's ability to lead his unit and to plan and conduct small unit operations is thoroughly evaluated. Travel pay and salary stipend are provided through the Army. Prereq: Complete MILS 3010 and 3020.

**4010 Military Professionalism and Ethics** (2) Leadership seminar on military ethics, ethical reasoning, decision making and value clarification. Contemporary problems and ethical issues are discussed using the case study method. Entering a new organization, communications and human relations skills, the importance of power and influence are learned. Includes physical training. Prereq: Department approval and enrollment in MILS 1000.

**4020 Military Management Seminar** (2) Develops military management skills by providing a working knowledge of the Army personnel management system, the military justice system, the Army logistical system and post and installation support agencies. The focus of this course is to provide an understanding of basic leadership and management skills required by newly commissioned officers. Prereq: Department approval and enrollment in MILS 1000.

**4030 Military Science** (1-3) A variable topic course in Military Science designed to consider an issue or field of interest that relates to the military establishment. Student should contact designated faculty member for specific course requirement prior to registration. Prereq: Permission of instructor.

**4040 Independent Studies** (1-3) A variable credit course in Military Science designed to consider an issue or field of interest that relates to the military establishment. Student should contact designated faculty member for specific course requirement prior to registration. Prereq: MILS 4030 and permission of instructor.

**2160 (Honors) Honors Composition: Reasoning and Research** (3) Instruction in the conventions of formal research and the nature of critical thinking and reasoning in the written mode. Prereq: Honors Program student and placement by Department of English Diagnostic Exam or Distinguished Scholarship Essay Exam, ACT composite 26+. (*Same as ENGL 2160*)

**3000 Honors Colloquium** (3) The Honors Colloquium is an interdisciplinary seminar offered each semester under the auspices of one of the University's seven colleges. The content matter changes each semester and includes all disciplines from the fine arts through business. Prereq: Member of the University Honors Program or permission of instructor.

**3970/3980 Honors Internship** (3-6) The Honors Internship is offered to juniors and seniors in the University Honors Program and combines theoretical knowledge with the practical through placement in community businesses and organizations. Prereq: Junior or senior in the University Honors Program and permission of the University Honors Program Coordinator.

**4970/4980 Senior Honors Project/Thesis** (3-6) An independent research project supervised by University Faculty. The Senior Honors Project must be approved by the College Honors Coordinator. Prereq: Junior or senior in the University Honors Program.

## UNIVERSITY DIVISION

### Student Development Services

**1010 University Seminar** (2) This course is intended to enhance first year students' potential for success in college and provide opportunity for academic and career exploration. Focusing on three primary themes, student sense of self, student as learner, and developing linkages with the university community, this course prepares students to responsibly meet the individual and interpersonal challenges of college life. Prereq: Freshman or sophomore or permission. Open to all students, but REQUIRED of all new University Division students.

## UNIVERSITY HONORS PROGRAM

**1110 Honors Public Speaking Fundamentals** (3) A special section of SPCH 1110 reserved for honors students. SPCH 1110 - Public Speaking Fundamentals (3) Basic principles of adaptive designing, outlining, practicing and presenting speeches extemporaneously in relation to basic principles of critical listening in public settings. Each student will design and present a minimum of four public speeches.

**1950 Honors Calculus I** (5) Plane analytic geometry, theory of limits, derivatives and applications, integrals. Prereq: Four years of high school mathematics including trigonometry or equivalent and satisfactory score of the CRE (Calculus Readiness Exam) within the last two years, or MATH 1320 and 1330 with a grade of "C" or better within the last two years. (*Same as MATH 1950*).

**1960 Honors Calculus II** (5) Techniques of integration, conic sections, indeterminate forms, infinite series, applications of integration. Prereq: HONR 1950. (*Same as MATH 1960*).





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   Academic  
   **ACCT** - Accounting  
   **AE** - Architectural Engineering  
   **AERO** - Aerospace Studies  
   **ANTH** - Anthropology  
   **ARCH** - Architecture  
   **ART** - Art  
   **AVN** - Aviation  
   **BIOL** - Biology  
   **BLST** - Black Studies  
   **BRCT** - Broadcasting  
   **CE** - Civil Engineering

**CEEN** - Computer and Electronics  
   Engineering  
**CENG** - Computer Engineering  
**CET** - Construction Engineering  
   Technology  
**CHEM** - Chemistry  
**CHME** - Chemical Engineering  
**CIST** - College of Information Science  
   and Technology core courses  
**CJUS** - Criminal Justice  
**CRP** - Community and Regional  
   Planning  
**COUN** - Counseling and Guidance  
**CSCI** - Computer Science  
**DART** - Dramatic Arts  
**DDET** - Drafting Design Technology  
**ECON** - Economics  
**EDUC** - Professional Education  
**EENG** - Electronics Engineering  
**EET** - Electronics Engineering  
   Technology  
**ELEC** - Electrical Engineering  
**EM** - Engineering Mechanics  
**ENGL** - English  
**ENGR** - Engineering  
**FAP** - Fine Arts Press  
**FLNG** - Foreign Languages  
**FMCS** - Family and Consumer  
   Sciences  
**FNBK** - Finance and Banking  
**FPT** - Fire Protection Technology  
**FREN** - French  
**FSCI** - Food Science and Technology  
**GDRH** - Goodrich Program  
**GEOG** - Geography  
**GEOL** - Geology  
**GERM** - German  
**GERO** - Gerontology  
**GET** - General Engineering  
   Technology  
**HIST** - History  
**HORT** - Horticulture  
**HPER** - Health, Physical  
   Education and Recreation  
**HRFS** - Human Resources  
   and Family Sciences  
**HUMN** - Humanities  
**ID** - Interior Design  
**INST** - International Studies and  
   Programs  
**ISMG** - Industrial Engineering  
**ISQA** - Information Systems and  
   Quantitative Analysis  
**IST** - Industrial Systems Technology  
**IT** - Industrial Technology  
**JAPN** - Japanese  
**JOUR** - Journalism  
**LAWS** - Law & Society  
**MATH** - Mathematics  
**MENG** - Mechanical Engineering  
**MGMT** - Management  
**MILS** - Military Science  
**MKT** - Marketing  
**MUS** - Music  
**NSCI** - Natural Sciences  
**NUTR** - Nutritional Science and  
   Dietetics

**PA** - Public Administration  
**PE** - Professional Physical Education  
**PEA** - Physical Education Service  
   Program  
**PHIL** - Philosophy  
**PHYS** - Physics  
**PSCI** - Political Science  
**PSYCH** - Psychology  
**RELI** - Religion  
**RELU** - Real Estate and Land Use  
   Economics  
**RLS** - Recreation/Leisure Studies  
**RUSS** - Russian  
**SOC** - Sociology  
**SOWK** - Social Work  
**SPAN** - Spanish  
**SPCH** - Speech  
**SPED** - Special Education and  
   Communication Disorders  
**STAT** - Statistics  
**TED** - Teacher Education  
**TXCD** - Textiles, Clothing and Design  
**UBNS** - Urban Studies  
**WMST** - Women's Studies  
**WW** - Writer's Workshop  
   (Creative Writing Program)  
Buildings  
**AH** - Allwine Hall  
**ASH** - Arts and Sciences Hall  
**CBA** - College of Business  
   Administration  
**Engg** - Engineering  
**EAB** - Eppley Administration Building  
**FH** - Lee and Helene Sapp Fieldhouse  
**FA** - Del and Lou Ann Weber Fine Arts  
   Building  
**HPER** - Health, Physical Education and  
   Recreation  
**KH** - Kayser Hall  
**MBSC** - Milo Bail Student Center  
**PAC** - Willis A. and Janet S. Strauss  
   Performing Arts Center  
**PKCC** - Peter Kiewit Conference  
   Center  
**DSC** - Durham Science Center  
**Pwr Plnt** - Power Plant  
**Library** - University Library  
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