
MINNESOTA STATE UNIVERSITY MANKATO

Undergraduate Bulletin
2001-2002

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Mankato, MN 56001

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SAVE THIS BOOK

It is your "contract" with Minnesota State University, Mankato. The requirements cited in this bulletin are valid for seven years.

If your general education or major requirements change during that time, you may still choose to graduate under the requirements in this bulletin.

Minnesota State University, Mankato Bulletin (USPS No. 484-020)

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The Minnesota State University, Mankato, Undergraduate Bulletin is a general catalog of information regarding curricula, fees, and related policies and procedures. Every effort has been made to make the bulletin accurate as of the date of publication; however, all policies, procedures, and fees are subject to change at any time by appropriate action of the faculty, the university administration, the Minnesota State Colleges and Universities Board, or the Minnesota Legislature.

The university calendar is subject to modification or interruption due to occurrences such as fire, flood, labor disputes, interruption of utility services, acts of God, civil disorder and war. In the event of any such occurrences, Minnesota State University, Mankato, will attempt to accommodate its students. It does not, however, guarantee that courses of instruction, extracurricular activities or other university programs or events will be completed or rescheduled. Refunds will be made to eligible students in accordance with Minnesota State Colleges and Universities Board policy.

This document is available in alternative format to individuals with disabilities by calling the Office of Academic Affairs, phone 507-389-1333 (V) or 800-627-3529 (MRS/TTY)

Minnesota State University, Mankato is an Affirmative Action/Equal Opportunity University.

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DIRECTORY OF PROGRAMS

Unless otherwise indicated, all of the majors listed below require completion of a minor. Check with your department, because some majors require specific minors.

BACHELOR OF ARTS (B.A.)

Anthropology
Art
Astronomy*
Biochemistry *
Biology
Chemistry
Communication Disorders*
Earth Science*
Economics
English
 Literature, Writing
French
Geography
 Professional,* Standard
German
History
Humanities**
International Relations
Law Enforcement
 Track I,* Track II
Mass Communications
 General, News-Editorial, Public Relations
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Scandinavian Studies
Sociology
Spanish
Speech Communication
Speech and Theatre Arts
Theatre Arts
Women's Studies

BACHELOR OF FINE ARTS (B.F.A.)

Art*

BACHELOR OF MUSIC (B.Mus.)

Music*
 Organ, Piano, Voice, and Winds, Strings and Percussion

BACHELOR OF SCIENCE (B.S.)

Accounting*
Anthropology
Astronomy
Athletic Training*
Automotive Engineering Technology*
Aviation*
Biochemistry*
Biology
 Bio-Business, Cytotechnology, Ecology, General, Human Biology, Microbiology, Physiology, Plant Science, Toxicology*, Zoology
Biotechnology*
Chemistry
 Option I*, Option II (ACS)*
Clinical Laboratory Sciences/Medical Technology*
Communication Disorders*
Community Health*
Computer Science

Computer Science, Computer Information Science
Corrections
Earth Science*
Economics*
Electrical Engineering*
Electronic Engineering Technology*
English
 General, Writing, Technical Writing
Environmental Sciences **
 Option I, Option II
Ethnic Studies
Family Consumer Science*
 Dietetics,* Family Life & Child Development,* Food & Nutrition,* Housing and Consumer,*
Finance*
 Corporate Finance, Financial Planning, Institutional Finance, Insurance, Real Estate, Investment Analysis
Food Science Technology
French
Geography
 Professional,* Standard
German
History
Humanities**
Interior Design and Construction Management
 Construction Management,* Facilities Planning and Management,* Historic Restoration and Preservation,*
 Interior Design
International Business+*
International Relations+
Law Enforcement
 Track I,* Track II
Management*
 General, Human Resource Management, Management Information Systems
Management Information Systems*
Manufacturing Engineering Technology*
Marketing*
Mass Communications
 General, News-Editorial, Public Relations
Mathematics
Mechanical Engineering*
Music Management*
Nursing*
Open Studies (suspended)
Philosophy
Physical Education
 General
 Exercise Science*
 Sports Management*
Physics*
Political Science
Psychology
Recreation, Parks & Leisure Services*
 Leisure Planning & Management, Resource Management, Therapeutic Recreation
Social Studies*
 Anthropology, Economics, Ethnic Studies, Geography, History, Political Science, Psychology, Sociology, Women's Studies
Social Work*
Sociology
Spanish
Speech Communication
Speech and Theatre Arts
Theatre Arts*
Urban & Regional Studies
Women's Studies

BACHELOR OF SCIENCE, TEACHING (B.S.)

Art (K-12)*
Business Education* (suspended)
Chemistry (grades 5-12)
Dance/Theatre
Early Childhood Education
Earth Science (grades 5-12)*
Elementary Education*
English/Speech: Concentration in English
English/Speech: Concentration in Speech
Family Consumer Science Education*
French*
German*
Life Science (grades 5-12)*
Mathematics*
Music Education*
 Vocal/General K-12,* Instrumental/General K-12*
Physical Education (K-12)*
Physics (grades 5-12)*
 Option I (emphasis in chemistry),* Option II (emphasis in physics)*
School Health (K-12)*
Social Studies 5-12*
 Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology
Spanish*
Technology Education (5-12)*

ASSOCIATE OF ARTS (A.A.)

Liberal Studies

ASSOCIATE OF SCIENCE (A.S.)

Dental Hygiene

MINORS

Accounting
Anthropology
Art
Astronomy
Athletic Coaching
Automotive Engineering Technology
Aviation Management
Biology
Business Administration
Business Law
Chemical Dependency Studies
Chemistry
Community Health
Corporate & Community Fitness/Wellness
Computer Science
Computer Information Systems
Computer Technology
Corrections
Dance
Early Childhood Education, Option I
Earth Science
Economics
Electronic Engineering Technology
English
Environmental Sciences
Ethnic Studies
Family Consumer Science
Financial Planning
French
Geography
Geology
German
Gerontology

History
Humanities
Human Resource Management
Information Technology
International Business
Latin American Studies
Law Enforcement
Linguistics
Management
Manufacturing Engineering Technology
Marketing
Mass Communications
Mathematics
Military Science
Music
Philosophy
Physical Education
Physics
Political Science
Psychology
Recreation
Religious Studies
Scandinavian Studies
Social Welfare
Sociology
Spanish
Speech Communication
Statistics
Teaching English as a Second Language (TESL)
Technical Writing
Theatre Arts
Urban & Regional Studies
Women's Studies

* Minor not necessary for completion of degree requirements

••Requires a second major OR two minors

**No other major or minor accepted in this degree program

+ Requires a language proficiency

TEACHING MINORS

Development/Adapted Physical Education##
Early Childhood Education, Option II*
English*
French*
German*
Middle School*
Parent Education*
School Health*
Teaching English as a Second Language (TESL)
Theatre Arts*

These minors must be completed before Fall Semester 2003.

***These teaching minors may be completed only as part of an initial teacher licensure application.**

Licensure only when accompanied by a physical education teaching major.

ADMISSION TO THE UNIVERSITY

Office of Admissions
Minnesota State University, Mankato
209 Wigley Administration Center
Mankato, MN 56001
Phone: 507-389-1822
800-722-0544
Fax: 507-389-5114 (inquiries only)

Minnesota State University is committed to providing opportunity for everyone who desires and is prepared to continue educational growth. Past performance by MSU students indicates that adequate preparation prior to entry into the university is of considerable importance. Consequently, admission requirements have been established to emphasize the need for such preparation prior to admission.

HIGH SCHOOL ADMISSION

Applicants for both day or evening on-campus classes who are graduates of accredited high schools (or who hold a GED certificate with acceptable scores) with no prior college work will be considered for admission to Minnesota State University on the basis of high school rank, ACT score and high school preparation requirements. Applicants at or above the 50th percentile in class rank or with an ACT score at or above the 50th percentile with a satisfactory class rank and high school preparation requirement compliance will be admitted.

HIGH SCHOOL PREPARATION REQUIREMENTS

4 years of English (including composition and literature); 3 years of math (2 years of algebra and 1 year of geometry); 3 years of science (including 1 year each of a biological and a physical science – each with significant lab experience); 3 years of social studies (including 1 year each of U.S. history and geography); 2 years of a single world language and 1 year of world culture or an arts elective.

Applicants who do not meet the above admission requirements will be reviewed on a case-by-case basis. The review will include an evaluation of strength of college preparation work, grade point average, probability of success, academic progression as well as class rank and ACT test scores. High school applicants are expected to have their ACT results sent directly from ACT.

Applicants who have been out of high school three or more years without attending any college, university or technical school, will generally be admitted upon application and upon providing evidence of high school graduation or the equivalent (GED).

HIGH SCHOOL APPLICATION PROCEDURE

1. Complete the Minnesota State University admission form. Forms can be obtained from your high school or the Admissions office or via the admission website.
2. Have the high school send a copy of your high

school academic record, including coursework, grades and class rank, to the Admissions office.

3. ACT test is required and score reports should be sent to the Admissions office from ACT.
4. A \$20 non-refundable application processing fee is required.

Application Deadlines. Applications are received on a rolling basis, but to expedite processing, it is recommended that applications be received 45 days before a semester begins. Applications for admission will not be considered complete until all required materials and processing fees are received in the Admissions office. Materials submitted to the Admissions office become the property of Minnesota State University and will not be returned.

POST SECONDARY ENROLLMENT OPTION (PSEO) ADMISSION

Participation Guidelines

PSEO students admitted to Minnesota State University have the rights and responsibilities of University students.

High school juniors ranking in the top 33% of their class and seniors ranking in the top 50% of their class will be considered for the program. However, the university reserves the right to restrict enrollment in any given year to insure resources are available for regularly admitted students. These admission standards shall apply to all Minnesota State University courses. Application deadlines for program participation are Fall Semester: the preceding July 15 and Spring Semester: the preceding December 15.

PSEO students must obtain a signed Notice of Student Registration form for each semester they intend to enroll. This form is provided by the Minnesota Department of Children, Families & Learning. Forms may be obtained from most high school counseling offices.

The university reserves the right to restrict the number of PSEO students enrolled in individual courses.

The university shall follow the guidelines on enrollment in summer session classes as outlined in the statewide PSEO policy.

PSEO students who choose to live on campus may do so on a space available basis at their own expense. However, it should be understood that regularly enrolled students will receive priority in on-campus housing assignments.

In situations where a calculated high school rank cannot be provided other factors will be considered in admission.

Academic Standards

All students in the PSEO program will be expected to maintain a cumulative grade point average (GPA) of 2.0 ("C") or better and maintain a course completion rate of 67% or higher. All courses must be taken for a

letter grade. If a cumulative GPA of 2.0 or better and/or completion rate of 67% or higher is not maintained, students will be dropped from the program. They will not be allowed to appeal this or re-enroll in the PSEO program. In such cases, both the student and participating high school contact person will be notified in writing.

The PSEO program reimburses a maximum of 16 credit hours per semester. There may be special circumstances where the maximum number of credits allowed may be waived following review and approval by the appropriate university staff.

PSEO students may not enroll in courses with extraordinary special fees. Examples of this include but are not limited to music lessons, computer rental, flight labs, international/study abroad classes, classes involving out of state travel.

All textbooks purchased through the PSEO program are the property of the school district and must be returned to the high school at the end of each semester. A student who withdraws during the first ten days of the semester must return books to the bookstore.

College level credits earned to meet high school graduation requirements are accepted as college credits at Minnesota State University, Mankato, but other institutions may not consider them to qualify as college credit. PSEO students interested in attending other colleges or universities should check with other institutions regarding acceptance of PSEO credits.

Advising regarding the use of college level credits to meet high school graduation requirements must be done by the high school counselor.

PSEO APPLICATION PROCEDURE

1. Complete a Minnesota State University Admission Form.
2. Complete Parts 1 and 2 of the Post Secondary Enrollment Options Program Form (form ED 01763-02), available from your high school. A high school official (superintendent, principal or counselor) must sign this form.
3. Submit a copy of current high school transcript and transcripts from any post-secondary institutions attended with the application for admission.

Application Deadlines: All applicants must apply before the deadline for any semester: Fall - July 15; Spring - December 1. Materials submitted to the Admissions office become the property of Minnesota State University and will not be returned.

TRANSFER ADMISSION

Transfer applicants with a minimum of 24 semester (36 quarter) college level credit hours from regionally accredited colleges or universities, having completed at least 75 percent of credits attempted with a cumulative grade-point average of 2.00 (A=4.0), will generally be admitted to Minnesota State University with advanced standing.

Transfer applicants who have NOT completed 24 semester (36 quarter) college level credit hours must meet the high school graduate admission requirements described previously and must have achieved a cumulative grade-point average of 2.00 and a 75 percent completion rate on college-level credit.

Transfer applicants from colleges and universities NOT regionally accredited may be considered for admission on an individual basis. Admission, if granted, will not necessarily be with advanced standing.

Transfer applicants under academic or disciplinary suspension or dishonorably dismissed from previous institutions or who are unable to obtain official transcripts will not be considered for admission.

TRANSFER APPLICATION PROCEDURE

1. Complete a Transfer Student application form and return it to the Office of Admissions. Forms are available through the Office of Admissions or via the Admissions website.
2. Request official transcript(s) to be forwarded directly to MSU Admissions office from ALL previously attended colleges, universities and schools (whether coursework was successful or unsuccessful). Applicants who have fewer than 24 semester (36 quarter) credit hours or who have attended a technical institute must also have the high school transcript sent to the Admissions office.
3. A \$20 non-refundable application processing fee is required.

Application Deadlines: Applications are received on a rolling basis, but to allow adequate time for processing and transfer credit review, it is recommended that applications be received 45 days before a semester begins. Applications for admission will not be considered complete until all required materials and fees are received in the Office of Admissions. Materials submitted to the Office of Admissions become the property of Minnesota State University and will not be returned.

NOTE: Additional information about Minnesota State University, Mankato's policies concerning the awarding of specific transfer credits is found in the "Academic Policies" section of this bulletin.

INTERNATIONAL STUDENT ADMISSION

Applicants who are not permanent residents or citizens of the United States must meet the minimum academic requirements for high school graduates and transfer applicants as previously outlined.

Applicants must also:

- be in good standing with the Immigration and Naturalization Service;
- substantiate availability of financial resources for education and living expenses;
- demonstrates English proficiency by submitting a TOEFL score report. Scores must be at least

500 on the paper/pencil exam or 173 on the computer based exam. English proficiency may also be demonstrated by completion of Level 109 from an English Language School (ELS) or a minimum score of 80 on the Michigan Test of English Language Proficiency. International students transferring from other United States regionally accredited universities or colleges who have completed college level English Composition I with a grade of C or better, will meet English proficiency.

- submit a one-page statement in English describing applicant's life, education, interests, and reasons for seeking an education at Minnesota State University.

NOTE: Additional information about Minnesota State University, Mankato's policies concerning enrollment of international students is found in the "Enrollment" section of this bulletin.

INTERNATIONAL STUDENT APPLICATION PROCEDURE

1. Complete an international student application form and return it to the Office of Admissions. Forms are available through the Office of Admissions or via the Admissions website.
2. Submit to the Admissions office official or attested transcripts and credentials from each foreign education institution attended and request that official transcripts from each U.S. college attended be sent directly to the Office of Admissions. In order to have international or foreign university credits potentially apply toward a degree program at Minnesota State University, students are required to have prior international credits evaluated by an outside professional agency.
3. Provide evidence of English proficiency as demonstrated through satisfactory performance on TOEFL or English Language School or Michigan Test of English Language Proficiency or an earned grade of C or better in college level English Composition I at another U.S. university. Minnesota State University will not waive the English language proficiency requirement for any student from a non-English speaking country.
4. Submit a \$20 non-refundable application processing fee.

Application Deadlines. All documents requested on the application form must be received in the Office of Admissions by the following deadlines:

* Students currently not living in the US and applying from another country:

- April 1 for the August term
- September 1 for the January term

* Students currently studying in the US and attending a US college, university or ELS:

- June 1 for the August term
- November 1 for the January term

-March 1 for the May term

-Application for admission will **NOT** be considered complete until all required materials and fees are received in the Office of Admissions. Materials submitted to the Office of Admissions become the property of Minnesota State University and will not be returned.

OTHER ADMISSION INFORMATION

Extended Campus Registrants. Formal admission to the university is strongly recommended for all students. Applicants who have been out of high school three or more years without attending any college, university, or technical school, will generally be admitted upon application and providing evidence of high school graduation or the equivalent (GED). Applicants who have not been out of high school three or more years, must be admitted to Minnesota State University to register for Extended Campus classes and should follow the high school application procedure.

Note: Students who have never attempted post-secondary education may be reconsidered once they have been out of high school for 3 or more years. Students who have been denied admission to MSU due to unsatisfactory prior post-secondary academic performance may be reconsidered for admission after sitting out one full calendar year.

THE UNIVERSITY COMMUNITY

Minnesota State University, located in south-central Minnesota on a bluff above the Minnesota River, is a comprehensive university within the Minnesota State Colleges and Universities system. Although most of the University's 14,000 students come from Minnesota, the strong academic programs and excellent faculty attract students from throughout the United States and more than 60 foreign countries.

A TRADITION OF ACHIEVEMENT

Minnesota State University's history began in 1867, when attorney Daniel Buck persuaded the Minnesota Legislature to authorize the city of Mankato to sell bonds for the \$5,000 required to open the state's second normal (teacher-training) school. He promised Mankato citizens that if they would support the school, untold benefits would be repaid "tenfold for every dollar invested."

Mankato Normal School opened in 1868 in downtown Mankato with 27 students. Tuition was free in return for a pledge to teach two years in Minnesota's schools. Old Main was constructed in 1870, beginning the Valley Campus that would serve the institution for over a century. In the 1880s and 1890s, the school expanded and its curriculum grew. In 1921, the school became Mankato State Teachers College, and in 1927, the institution awarded its first four-year degree, a bachelor of education.

In the late 1950s, Mankato State Teachers College was renamed Mankato State College to reflect its expanded curriculum. The college was quickly outgrowing its Valley Campus and construction was begun on the 300-acre Highland Campus.

In 1975, the college received full university status. Four years later, with completion of the Earle J. Wigley Administration Building, consolidation on the Highland Campus was complete. In September of 1998, in recognition of the University's expanded role in the state and region, Mankato State University became Minnesota State University. Visitors to Mankato can still find the Valley campus buildings, many of which have been beautifully restored or renovated for other uses.

Today, the university community enjoys a spacious, thoroughly modern campus, featuring residential living for nearly 3,000 students, beautifully landscaped lawns and gardens, an arboretum, and a grand mall where students gather to meet or just relax. A favorite place to study in the fall and spring is alongside the fountain, a highlight of the central campus. Enclosed passageways connect most academic buildings, and the campus is easily accessible to students with physical disabilities.

Now, more than 125 years since its founding, Minnesota State University continues to look toward the future, fulfilling Daniel Buck's promise of "tenfold benefits" to the city of Mankato, southern Minnesota, and the entire state. The university has more than 11,000

students, approximately 1,300 faculty and staff, and more than 77,000 alumni.

The academic life of the University is organized into six undergraduate colleges—Allied Health and Nursing; Arts and Humanities; Business; Education; Science, Engineering and Technology; Social and Behavioral Sciences and the College of Graduate Studies. MSU offers over 120 undergraduate liberal arts and professional degrees to meet the needs of students who will shape American society well into the twenty-first century. The university offers six baccalaureate degrees, six master's degrees, a specialist's degree and other advanced programs, two associate degrees for two-year programs, and several pre-professional programs of study.

MINNESOTA STATE UNIVERSITY

MISSION STATEMENT

Minnesota State University promotes learning through effective undergraduate and graduate teaching, scholarship, and research in service to the state, the region and the global community.

STATEMENT OF GOALS

To realize this mission statement by 2001, MSU will have met the following goals for excellence through the actions of and evaluation by appropriate units:

- The University will foster an actively engaged and inclusive learning community based upon civility, trust, integrity, respect, and diversity in a safe, welcoming physical environment.
- The University will prepare students for careers and for life-long learning by providing a clearly defined general education program and focused undergraduate pre-professional, professional, and liberal arts programs.
- The University will strengthen its role as a major provider of graduate education, offering intensive, scholarly graduate programs including collaborative efforts with other institutions and professionals, culminating in student expertise at professional levels.
- The University will enhance advising, support services, and learning experiences that aid students in identifying life goals, planning academic careers, and achieving timely graduation.
- The University will increase the quantity and quality of service to the state, region, and global community through collaborations, partnerships, and opportunities for cultural enrichment and continuous learning.
- The University will invest in the professional development of all members of the University Community and in the appropriate technologies necessary to achieve excellence in learning through teaching, research, and service.

- The University, as a whole and in all of its parts, will establish priorities through planning and assessment processes that anticipate our needs and focus our efforts and resources in support of our mission and goals.

CURRENT ACCREDITATIONS

Minnesota State University is reviewed for accreditation every 10 years by the North Central Association of College and Secondary Schools. In addition, individual programs undergo periodic reviews, generally every five years. Some professional associations also accredit specific programs. The following accreditations have been awarded to Minnesota State University.

General Accreditations

- 1929: North Central Association of College and Secondary Schools
- 1952: The American Association of University Women
- 1954: The National Council for Accreditation of Teacher Education

Program Accreditations

- Art - 1974: National Association of Schools of Art
- Athletic Training - 1969: Board of Directors, Commission on Accreditation of Allied Health Education Programs - Joint Review Committee on Educational Programs in Athletic Training
- Automotive Engineering Technology - 1996: Commission of the Accreditation Board for Engineering and Technology (ABET)
- Chemical Dependency Studies - 1992: Institute for Chemical Dependency Professionals of Minnesota, Inc.
- Chemistry - 1970: American Chemical Society
- College of Business - 1997: American Assembly of Collegiate Schools of Business (AACSB) (Accounting; Finance, Insurance and Real Estate; International Business; Management; Marketing)
- Communication Disorders - 1993: American Speech-Language Hearing Association (M.S. in Speech Language Pathology), Certification of Clinical Competence (CCC), Educational Standards Board of the American Speech-Language Hearing Association (ESB)
- Corrective Therapy - 1973: American Corrective Therapy Association
- Counseling and Student Personnel (School Counseling, College Student Affairs, Community Counseling) - 1985: Council of Accreditation of Counseling and Related Educational Programs
- Dental Hygiene - 1970: Commission on Accreditation, American Dental Association
- Dietetics - 1972: American Dietetic Association
- Early Childhood Education - 1988: National Academy of Early Childhood Programs
- Electrical Engineering - 1987: Commission of the Accreditation Board for Engineering and Technology (ABET)
- Electronic Engineering Technology - 1984: Commission of the Accreditation Board for Engineering and Technology (ABET)
- Manufacturing Engineering Technology - 1990 Commission of the Accreditation Board for Engineering and Technology (ABET)
- Mechanical Engineering - 1994: Commission of the Accreditation Board for Engineering and Technology (ABET)
- Music - 1971: National Association of Schools of Music
- Nursing - 1953: Minnesota State Board of Examiners of Nurses

(Minnesota Board of Nursing), 1972: National League for Nursing Accrediting Commission.

- Recreation, Parks and Leisure Services - 1986: National Recreation and Park Association/ American Association for Leisure and Recreation
- Rehabilitation Counseling - 1977: Council on Rehabilitation Education, Certified Rehabilitation Counselor (CRC)
- Social Work - 1974: Council on Social Work Education

Certifications:

- Law Enforcement - Certified by the Minnesota Board of Peace Officer Standards and Training (P.O.S.T.)
- Social Work - Certification

UNIVERSITY POLICY

The activities of the University are administered in accordance with a variety of federal and state laws, MnSCU Board policies, assorted rules and regulations, and staff and student rights and responsibilities. Individuals may consult the following university publications for detailed descriptions of applicable policies and procedures. "The Basic Stuff," "The Faculty and Staff Handbook," MnSCU Manual of Policies and Procedures, among others. For more information concerning applicable university policy, contact the office of Vice President for Academic Affairs.

Nondiscrimination in Employment and Education Opportunity.

Minnesota State University is committed to a policy of nondiscrimination in employment and education opportunity. No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in programs, services, and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission as defined by law.

Discrimination because of race, sex, or disability is prohibited by state and federal law. Discrimination because of sexual orientation is prohibited by state law. Discrimination is defined as conduct that is directed at an individual because of his/her race, color, national origin, sex, sexual orientation, mental/physical disability or that of his/her partner and which subjects the individual to different treatment by agents or employees so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the university or otherwise adversely affects the individual's employment or education.

Harassment because of race, sex, or disability is a form of discrimination prohibited by state and federal law. Harassment because of sexual orientation is prohibited by state law. Harassment is defined as verbal or physical conduct that is directed at an individual because of his/her race, color, national origin, sex, sexual orientation, or disability or that of his/her partner and that is sufficiently severe, pervasive, or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Harassment may occur in a vari-

ety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with other persons having business at or visiting the educational environment.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, sexually motivated physical conduct and other verbal or physical conduct of a sexual nature. Sexual harassment may occur when it is directed at members of the opposite sex or when it is directed at members of the same sex.

Acts of sexual violence are criminal behaviors and create an environment contrary to the goals and missions of Minnesota State University. These acts will be investigated and may subject an individual to complaints and disciplinary sanctions as well as possible referral to appropriate law enforcement agencies.

Inquiries regarding compliance should be referred to the Office of Affirmative Action, Armstrong Hall 112, or at 507-389-2986 (V) or 1-800-627-3529 (MRS/TTY).

Student Records Policy. Federal law and state statute allow current and former students access to their education records. While the primary record is located in the Office of the Registrar, other records may be located in Admissions, Financial Aid, Business Affairs, Career Development Center, Student Health Service, Student Affairs, Graduate Studies, Office of International Students and academic departments.

Minnesota State University has designated the following items as Directory Information. As such, this information may be released to the public without the consent of the student: name, date and place of birth, local and permanent address, major field of study, local and permanent telephone number, dates of attendance, previous college/university attended, degrees received, e-mail address, awards and honors, height and weight information for athletic participation, performance records and participation in competitive events, and participation in officially recognized activities, sports and organizations. Students may request that directory information be kept private by contacting the Office of the Registrar, AB 136.

Copies of the complete Student Records Policy may be obtained from the Office of the Registrar, the Office of Fiscal Affairs or the Office of Student Affairs.

Equity In Athletics Disclosure Act 1994. U.S. Department of Education guidelines now require post-secondary institutions participating in federal student aid programs to publish annual reports on gender equity in intercollegiate sports. In compliance with the EADA, Minnesota State University prepared its first Equity Act report by October 1, 1996. Updated reports are released by October 15 of each subsequent year. Included is data on the amount of money spent on men's and women's teams and recruiting efforts, participation rates, personnel and operating expenses, revenues generated, and

sports related financial aid allocations. The report is readily accessible to students, prospective students and the public. Contact the Office of Student Affairs, Administration Building, Room 336, 507-389-2121.

Student Right-to-Know and Campus Security Act 1995. The Student Right-to-Know and Campus Security Act increased the level of information universities must collect and provide to current and prospective students and employees and to the Department of Education. The first part of the act, entitled the Student Right-to-Know Act, requires colleges and universities to compile and release institution-wide graduation rates for all students, with more detailed statistical information submitted on the graduation rates of athletes. The graduation rate for Minnesota State University, Mankato, new entering freshman, fall term 1993 cohort, is 42 percent. This percentage reflects the number of first time, full-time four-year degree seeking students either who received a baccalaureate degree within six years or an associate degree within three years. The 1993 cohort is the most recent one for which a six year graduation rate is available.

Part II of the act, entitled the Campus Crime Awareness and Campus Security Act of 1990, requires colleges and universities to annually make available to all current employees and students as well as to applicants for enrollment or employment the following information: 1) a description of policies concerning the security of and access to all campus facilities; policies and procedures for reporting campus crime; and policies concerning law enforcement along with crime prevention educational programs relating to campus security, and 2) statistics concerning the occurrence of certain categories of campus crimes. Institutions are also required to issue timely warnings to the campus community about criminal activities representing a continued safety threat to aid in crime prevention. In addition, the University complies with the 1998 Higher Education Amendments Act that amended the Campus Security Act by expanding the geographic scope and categories of offenses that must be included in the annual statistics. This information is available to Minnesota State's "Partners in Safety" brochure, which is made available to each enrolled student and employee annually. Copies are available from the Security Department, WC 222, 389-2111, the Women's Center, SU 246, 389-6146, First Year Experience, GC 10, 389-5489, and Human Resources, AB 325, 389-2015.

DEGREES

Minnesota State University offers programs leading to two associate degrees, baccalaureate degrees, six master's degrees and four specialist degrees. (The Graduate Studies Bulletin contains complete information regarding graduate degree programs.) MSU also offers several non-degree programs, some leading to certification and others as preparation for further study at specialized professional schools.

Please note that for any degree program, completion of a major and a minor in the same discipline is not permit-

ted. Usually a minor is not required if two or more majors are completed on the same degree. Some majors do require specific minors to be completed.

BACCALAUREATE DEGREES

The baccalaureate degrees available are Bachelor of Arts (B.A.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.), Bachelor of Science (B.S.). Students seeking teacher licensure pursue a Bachelor of Science degree. These degrees are generally based upon four years of study and require satisfactory completion of 128 credits.

Bachelor of Arts. The Bachelor of Arts degree emphasizes both breadth and depth in its curriculum. In addition to the general education credits required for the B.S. degree, B.A. candidates must complete one total elementary or intermediate sequence in a single foreign language, unless exempted by the Department of Modern Language. This brings the total number of credits required for general education to 52. Students exempted from foreign language study must substitute elective credits in place of the language requirements; they are still accountable for 52 general education credits.

BA candidates usually complete a major not exceeding 40 semester credits and a minor not exceeding 20 semester credits, plus general education and elective credits. Certain broad majors which exceed 40 semester credits do not require the completion of a minor.

Bachelor of Arts candidates who wish to qualify as secondary school teachers may do so by completing the requirements for the Bachelor of Science (teaching) plus the professional education and other secondary teaching requirements described in the Bachelor of Science program for licensure. They may alternatively choose to complete the Master of Arts in Teaching degree described in the MSU Graduate Bulletin.

Bachelor of Fine Arts. The Bachelor of Fine Arts degree program is designed for students who desire a professional career in art. The art major for the B.F.A. program has been designated as a broad major and, therefore, does not require the completion of a minor.

Bachelor of Music. The Bachelor of Music degree program is designed for students who aspire toward a professional career in music. The music major for the B.Mus. degree has been designated as a broad major and, therefore, does not require the completion of a minor. Keyboard and vocal majors seeking the Bachelor of Music degree should complete 8 semester credits for elementary or intermediate sequence foreign language coursework as part of the degree requirements.

Bachelor of Science

Bachelor of Science (Teacher Licensure). The Bachelor of Science degree emphasizes professional or technical preparation.

Students seeking teacher licensure must also complete the professional education requirements, which include student teaching.

Minors. All approved minors may be used with most undergraduate baccalaureate majors. Some majors may require specific minors.

ASSOCIATE DEGREES

Associate degree programs are two year, 64-credit programs of a pre-professional or terminal nature. They represent an alternative to the four-year baccalaureate degree. Although most emphasize developing technical skills, they require some general education. The Associate of Arts (A.A.) degree can be earned through the liberal studies program; the Associate of Science (A.S.) degree can be earned through the dental hygiene program. Detailed program descriptions are provided in departmental sections.

NON-DEGREE PROGRAMS

Pre-Professional Programs. The purpose of the pre-professional program is to provide students with the intellectual and academic background they will need before continuing their education at other institutions. Acceptance to professional educational institutions is usually contingent upon academic performance; therefore, students enrolling in pre-professional programs should be highly motivated and realize they are expected to maintain high standards of excellence.

Certificate and Non-Teaching Licensure Programs. These programs provide evidence of specialized study and expertise in a given field such as dental assisting, gerontology, and nursing home administration.

A certificate is awarded to students who satisfactorily complete a prescribed course of study and/or a qualifying examination. Program descriptions, with specific requirements, are given under departmental headings.

COLLEGES

The university is organized into seven colleges. The academic disciplines and departments within each college are generally closely related, and an examination of the various colleges will give the student a true appreciation of the breadth and depth of learning opportunities at Minnesota State University.

COLLEGE OF ALLIED HEALTH AND NURSING

Kaye Herth, Interim Dean

165 Highland Center 507-389-6315

Dental Hygiene

Family Consumer Science

Health Science

Human Performance

Recreation, Parks and Leisure Services

Speech, Hearing and Rehabilitation Services

School of Nursing

College Mission: The College of Allied Health and Nursing is dedicated to promoting wellness and improving quality of life through education, scholarship and service to the state, region, and global community.

College Goals:

1. Facilitate lifelong learning, critical thinking, student knowledge, skills, and attitude development as the foundation for ethical practice and leadership.
2. Develop an interdisciplinary infrastructure and model that can serve the College of Allied Health and Nursing.
3. Promote faculty participation in quality research, scholarship, and service to the community related to the CAHN Mission.
4. Expand education/service partnerships with organizations external to the university.
5. Recruit and retain a diverse faculty and student population in all programs across the College.
6. Work to upgrade and improve facilities and technical support.
7. Support university values of quality teaching and learning as a first priority.
8. Serve the University through general education offerings that foster an understanding of health care and a valuing of wellness.
9. Provide undergraduate and graduate programs and continuing education to meet the needs of students and health care professionals.
10. Support and reward progress toward College mission and goals.

Academic Advising: Students majoring in an area of study in the College of Allied Health and Nursing have an advisor assigned to them from their area of interest. Questions and concerns pertaining to advising and the assignment of advisors can be answered by the student relations coordinator, Mark Schuck, 162 Highland Center 507-389-5486. Advising information about nursing is found under School of Nursing.

Probation Advising Plan:

1. The student will be notified of his/her probationary status by a letter from the Academic Affairs Office.
2. The SRC for Allied Health programs or the SRC for Nursing will send a letter to the Probationary student outlining the process to be followed before any further registration can occur.
3. The student must contact the department/school of their major to receive the Academic Probation Form and to set up an individual meeting with their faculty advisor. This will be stated in the letter from the SRC.
4. If the academic advisor and the student agree that continued enrollment is warranted, the advisor and student will complete, sign, and date the "Request for Removal of Registration Hold" form and return it to the department/school secretary. The secretary will deliver the form to the respective SRC.
5. The SRC will lift the registration hold to allow registration for the upcoming semester.

*These students are not necessarily admitted to the program but have declared as their major a program within the College of Allied Health and Nursing.

Admission to Major: Admission to majors in the College of Allied Health and Nursing is granted by the academic department or school in which the student proposes to major.

DEGREES OFFERED

Bachelor of Science: Athletic Training*, Communication Disorders*, Dental Hygiene*, Family Consumer Science (Dietetics, Family Life & Child Development, Food & Nutrition, Housing and Consumer, Health Science: Community Health*, Nursing*, Physical Education* (General, Exercise Science, Sports Management), Recreation, Parks & Leisure Services (Leisure Planning and Management, Resource Management, Therapeutic Recreation)*

Bachelor of Science (Teaching): Family Consumer Science Education*, Health Science: School Health (K-12)*, Physical Education (K-12)*

Associate of Science: Dental Hygiene

Minors: Alcohol and Drug, Community Health, Corporate & Community Fitness/Wellness, Family Consumer Science, Physical Education, Recreation.

Teaching Minors: Athletic Coaching, Developmental/Adapted Physical Education #

*Minor not necessary for completion of degree requirements.

#Licensure only when accompanied by a physical education teaching major.

In addition, the College coordinates two pre-professional programs: Pre-Physical Therapy and Pre-Occupational Therapy.

COLLEGE OF ARTS AND HUMANITIES

Jane F. Earley, Dean

226 Armstrong Hall 507-389-1712

Fax: 507-389-5887

Website: www.mnsu.edu/dept/carts

Art

English

Mass Communications

Modern Languages

Music

Philosophy

Speech Communication

Theatre and Dance

Mission and Goals Statement. The College of Arts and Humanities cultivates the appreciation and practice of forms of creative, intellectual, and cultural expression, the understanding of values and issues raised by those forms of expression, and the ability to think critically and to communicate effectively.

In order to realize its mission, the College has set the following goals:

- To offer quality undergraduate and graduate programs that engage students in effective learning communities and prepare them for professional careers or advanced study.
- To offer general education courses that encourage students to acquire disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.
- To promote creative and scholarly expression through exhibitions, performances, lectures, and discussions that will engage the campus and the general public in the arts and humanities.
- To offer students opportunities to engage in meaningful practice within their disciplines.
- To engage in scholarship, research, and creative activity--using appropriate technologies--that will contribute to faculty development and to the professions and society.
- To provide advising and support services that will aid students in academic and career planning.
- To encourage students to be lifelong learners who recognize the interrelatedness of all knowledge in a diverse, global society.

Academic Advising. Students majoring in an area of study in the College of Arts and Humanities have an advisor from their area of interest assigned to them. Questions and concerns pertaining to the major, to advising and to the assignment of advisors will be answered for students in the department office of the major. General questions can be answered by the student relations coordinator, Carrie Williams, 226 Armstrong Hall 507-389-1770.

Probation Advising Plan:

1. The student will be notified of his/her probationary status by a letter from the Office of the Academic Vice President.
2. The Student Relations Coordinator for the College will send a follow-up letter asking the student to come to the College Dean's Office (226 AH) to make an appointment with the SRC by the fifth day of classes.
3. The SRC will review with the student the process to be followed before any further registration can occur; at this meeting the student will provide information for the "College Form for Advising Majors on Probation." The SRC will route this form to the department chair of the student's major.
4. The student will contact the department chair of the major to set up a meeting to discuss the barriers to academic success in the previous term and to plan for success in the current term; this information will be added to the "College Form for Advising Majors on Probation."
5. The student will carry out the plan for success.
6. The student will meet with the department chair

prior to pre-registration to demonstrate corrective activity.

7. If the plan for success produces improved academic performance warranting continued enrollment, the department chair will approve the class schedule for the following semester, and will route the form to the SRC. The student must meet with the SRC to receive the dates for his/her pre-registration.
8. The SRC will then lift the hold for the temporary period allowed for the student to register; the hold will be re-instated automatically after the temporary period until final grades for the semester indicate whether the student has achieved success and is no longer on probation.

Admission to Major: Admission to majors in the College of Arts and Humanities is granted by the academic department in which the student proposes to major.

DEGREES OFFERED

Bachelor of Fine Arts. Art*

Bachelor of Arts. Art, English, French, German, Humanities*, Mass Communications (General, News-Editorial, Public Relations), Music, Philosophy, Scandinavian Studies, Spanish, Speech Communication, Theatre Arts

Bachelor of Music. Music (Organ, Piano, Voice or Winds, Strings and Percussion)*

Bachelor of Science. English, French, German, Mass Communications (General, News-Editorial, Public Relations), Music* (see Bachelor of Music degree), Music Management,* Philosophy, Spanish, Speech, Theatre Arts*

Bachelor of Science (Teaching). Art (K-12)*, English/Speech: English Concentration, French, German, Music Education (Vocal/General K-12,* Instrumental/General K-12*), Spanish, English/Speech: Speech Concentration, Dance/Theatre*

* Minor not necessary for completion of degree requirements.

•Requires a second major or two minors.

Associate of Arts Degree. Liberal Studies

Minors. Art, Dance, English, French, German, Humanities, Linguistics, Mass Communications, Music, Philosophy, Religious Studies, Scandinavian Studies, Spanish, Speech Communication, Technical Writing, Theatre Arts, Teaching English as a Second Language (TESL)

Teaching Minors: Speech Communication, Theatre Arts, Teaching English as a Second Language (TESL)

Special Artistic and Cultural Events. Through its departments, the College of Arts and Humanities offers special programs for students and the public. These include performances in the Recital Hall and Ted Paul Theatre, the Good Thunder Series and other readings by creative writers, exhibitions at the Conkling Art Gallery, and many other cultural activities.

COLLEGE OF BUSINESS
Norman Solomon, Dean
120 Morris Hall 507-389-5420
Accounting and Business Law
Finance, Insurance and Real Estate
Management
Marketing and International Business

Mission. Our mission is to educate undergraduate students to be successful and responsible business leaders dedicated to pursuing excellence. Our high quality business programs primarily focus on meeting the educational needs of Minnesota students, with a secondary focus on meeting the needs of students from the region. We partner with business to provide our programs in a technologically-advanced, active learning environment.

Our faculty, students and external partners work together in an environment of mutual respect and continuous professional development. The college encourages diversity of thought, exploration of technology, intellectual discovery, and contributions to the improvement of our global society. We pursue excellence in teaching, and engage high quality research and service to support our teaching. Although we value basic research, our intellectual contributions focus principally on applied research and instructional development which enhance the learning process and improve business practice. Our service facilitates management of the college and university, supports extracurricular activities, contributes to our business disciplines through the scholarly review and editorial process, and builds business partnerships to enrich student learning.

Student Outcomes.

General Effectiveness Skills:

- Demonstrate analytical, problem-solving and decision-making skills
- Demonstrate critical thinking skills
- Demonstrate written and oral communication skills
- Demonstrate quantitative skills used in business
- Demonstrate computer skills in data base management, spreadsheets, and statistics
- Demonstrate teamwork skills
- Demonstrate leadership knowledge and skills.

Business Core Competencies:

- Demonstrate technical and professional knowledge in all areas of business
- Understand the impact of global forces on business organizations
- Understand legal issues in organizations
- Understand ethical issues in business
- Understand the role of cultural diversity in business
- Understand the dimensions of quality in organizations.

Satisfaction Outcomes

- Satisfaction with the educational experience
- Employer satisfaction with student preparation.

Professional and Service Outcomes

- Community Service contributions
- Occupational attainment of graduates
- Continuing education of graduates.

Information Technology Initiative. All students entering the College of Business will be required to lease or purchase a notebook computer with a standard set of applications from Minnesota State University. Notebook use in the College of Business will begin with enrollment in the required 200 level business courses. Lease terms will be on a yearly basis.

Freshmen who are not yet enrolled in College of Business courses may lease or purchase a notebook for their personal/academic use beginning with their freshman year.

Students who minor in the College of Business are required to lease or purchase a notebook computer from Minnesota State University. Students may lease the notebooks even during semesters when not enrolled in their minor courses.

Current undergraduate students who are sophomores, juniors, or seniors at the beginning of fall 2000 semester will have the option to lease or purchase a notebook and participate in the College's Information Technology Initiative. To begin phasing in the Initiative, optional sections of selected upper division College of Business courses will be offered using the notebook format. Sophomores, juniors, and seniors who already own a notebook computer may apply to participate in the upper division program.

Academic Advising. Students majoring in an area of study in the College of Business have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

Probation Advising Plan: College of Business students who have earned a cumulative GPA of less than 2.0 and/or a rate of satisfactory course completion less than 67% will be placed on academic probation, notification of which will appear on the official transcript. The College of Business procedure for lifting probation holds is:

1. Academic Affairs notifies probationary student of general guidelines to clear probation (soon after grades are sent to student).
2. Letter is sent to each probationary College of Business student.
3. Probationary student schedules a conference with Advising Center staff for explanation of entire process to lift registration.
4. Student schedules conference with academic advisor and/or chairperson to complete the registration release form.
5. Conference held with academic advisor/chairperson. Probation form to lift hold is completed.
6. Registration hold is either lifted or retained.

Admission to Major. Admission to majors in the College of Business is granted by the academic department in which the student proposes to major. To be admitted to any program, the following requirements must be met:

- GPA of 2.5 for unconditional admission.
- Completion of 33 semester credits of general education requirements. Consult bulletin for cultural diversity requirements.
- Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers, or equivalent.
- Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; College Algebra 112; BLAW 200; Second Year Experience 201.
- Completion of the College of Business Second Year Experience Workshop.
- Completion of 60 credits (or in progress).

Students who are non-business majors, business minors, or those who are not seeking a four year degree will be allowed to complete 30 semester credits of business courses. Students seeking to exceed the 30 credit maximum need to seek approval from the Advising Center in the College of Business.

DEGREES OFFERED

Bachelor of Science. Accounting*, Finance*, International Business†*, Management (General Management, Human Resource Management, Management Information Systems)*, Marketing*

*Minor not necessary for completion of degree requirements.

†Requires a language proficiency.

Minors. Accounting, Business Administration, Business Law, Human Resource Management, International Business, Management, Marketing

Requirements for All Majors. All business majors are comprehensive and no minors are required. The majors' requirements include: 1) the business foundation requirements; 2) the specific requirements for each program; and 3) successful completion of "Business Program Orientation."

Majors in the College of Business are required to complete a minimum of 64 credits outside the College of Business. ECON 201, 202, 207, COMS 101, BED 345, and MATH 112 are outside of the College of Business.

Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business.

Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements. No more than one-fourth of a student's major shall consist of P/N grades.

Business Program Orientation. The purpose is to focus students on their academic and co-curricular professional development activities for completion of their business education at MSU. Orientation sessions are required of all students for admission to the College of Business. Transfer students with AA degrees take the sessions their first semester at MSU.

Internship Program. The College of Business offers each student the opportunity to participate in business and industrial organizations through intern programs. Internships are available during the junior or senior year in all departments. Students interested in internships should interview early with the internship coordinator for their department to enroll in this program.

College of Business Student Organizations. There are seven organizations in the College. They offer activities (speakers, workshops, company visits, fund-raisers, etc.) to help students prepare for business careers upon leaving Minnesota State University.

COLLEGE OF EDUCATION

Joanne Brant, Interim Dean
118 Armstrong Hall 507-389-5445
Fax 507-389-2566

Aviation and Business Education
Counseling and Student Personnel
Curriculum and Instruction
Educational Leadership
Educational Foundations
Library Media Education
Military Science (Army ROTC)
Special Education
The Children's House

Mission and Goals Statement. The College of Education is dedicated to preparing professionals capable of meeting the demands of preparing professionals capable of meeting the demands of living and working within contemporary society. We strive to prepare high quality professionals in teaching and aviation who can negotiate the critical challenges related to changing technology, a diverse society, progressive leadership, and high standards. Our faculty, students, and external partners collaborate to provide continuous professional development in two distinct programs, teaching and aviation. The college has a long history of pioneering innovative programs and will continue to produce world-class professionals.

In order to realize its mission, the College has set the following goals to:

- Strengthen and further develop a Professional Education program that meets all standards established by the National Council for Accreditation of Teacher Education (NCATE), Minnesota Board of Teaching, the professional education faculty at Minnesota State University, and all other relevant and appropriate accrediting bodies.
- Implement, refine, and evaluate performance assessments, requiring mastery of knowledge, skills, and dispositions in all College of Education courses.
- Enhance its technology and information support to include distance learning, use of technology and information programming for enhancing the learning and skills of traditional and non-traditional students.
- Straighten the College's systematic approach to

collaborating across departments, agencies and organizations external to the unit.

- Increase undergraduate and graduate clinical experiences in culturally diverse settings.
- Strengthen knowledge of the implementation of the Minnesota Graduation Rule among preservice teachers and MSU faculty.
- Enhance its expectations, processes, and procedures for delivering graduate programs.
- Provide advising and support services that will aid students in academic and career planning.
- Promote faculty participation and quality in research, scholarship and service to the community.
- Establish priorities through planning and assessment processes that anticipate COE's needs and focus our efforts and resources in support of our mission.
- Encourage faculty and staff to model behaviors, which reflect the basic concept of a university, that is the free exchange of ideas, with particular attention paid to "traditionally unheard voices".
- Develop a process for cooperative planning, implementation, and evaluation between departments and programs.
- Support global/international experiences for both students and faculty.

Academic Advising. Elementary and secondary education students will have an advisor assigned to them in their major field. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Cheryl Kalakian, College of Education Academic Advisement Office, 119 Armstrong Hall, telephone 507-389-1215.

Probation Advising Plan:

1. The student will be notified of his/her probationary status by a letter from the Academic Affairs Office no later than two weeks into the start of the current semester.
2. The College of Education will send a letter to the probationary student no later than two weeks after the original notification from Academic Affairs. This letter will outline the College's plan for the student to remove his/her registration hold.
3. The probationary student will be required to attend an academic success session provided by the Student Relations Coordinator scheduled within two weeks of the College's notification letter. Students will have an opportunity to select one of several sessions facilitated by the College of Education Academic Advising Office (AH 119). During these sessions each student will receive a packet of materials including (1) major advisor information, (2) major program plan of study forms, and (3) the "Request for Removal of Registration Hold" form to be completed with his/her advisor. At this session students will begin assessing their individual situation and consider possibilities for overcoming

difficulties. The Student Relations Coordinator will speak to general retention strategies (i.e. repeating of coursework and academic re-evaluation). Most importantly, clear directions will be given as to how the student continues toward his/her removal of the registration hold.

4. After attending an assessment session, students must schedule an individual advising meeting with their assigned faculty advisor (within ten days following their academic success session). The purpose of these individual academic advising meetings will be to discuss specific factor(s) which may have contributed to his/her probationary status and to identify specific action(s) to be taken in order to achieve satisfactory status. The student and advisor will complete the "Request for Removal of Registration Hold" form and as part of this form consider courses for the next semester.
5. If the academic advisor and student agree to the conditions of the "Request for Removal of Registration Hold" form, then continued enrollment is warranted and the advisor and student sign and date such form and the advisor returns the form to the Student Relations Coordinator.
6. The Student Relations Coordinator will lift the registration hold to allow registration for the upcoming semester.
7. Following pre-registration, the registration "hold" will be reinstated.

Admission to Major: Admission to majors in the College of Education is granted through the Academic Advising office, AH119.

Admission to Professional Education.

Coordinator: Cheryl Kalakian, AH119

All students working toward a teaching degree must be admitted to professional education prior to enrollment in upper division coursework in the professional education sequence. The Academic Advising Office oversees this admission process.

Application to professional education should be made when the following requirements have been met:

- Complete a minimum of 30 earned semester credit hours.
- Minimum 2.5 cumulative GPA.
- Evidence of having taken the Pre-Professional Skills Test (PPST).
- Completion of faculty recommendation folder.

The Minnesota Board of Teaching requires all candidates to provide evidence of having taken the PPST prior to enrolling in upper division coursework in the professional education sequence. Candidates who fail to achieve the minimum score on one or more of the examinations may enroll in upper division coursework in the professional education sequence; however, candidates must achieve passing scores prior to recommendation for an initial

teaching license. Please consult the Academic Advising Office or the MSU Counseling Center for test dates.

Alternative Admission Policy. An alternative admission policy exists to encourage the participation of individuals from under-represented groups. The Student Relations Coordinator, has the responsibility of hearing appeals for admission to the professional education program and may make exception to the published admission criteria.

DEGREES OFFERED

Bachelor of Science. Aviation, Elementary Education

Minors. Aviation Management and Military Science

TEACHER EDUCATION DEGREE REQUIREMENTS - GENERAL

All students who wish to teach at the elementary and secondary education levels must fulfill the general education requirements for the B.S. (teacher licensure) degree. Students are advised that some of the required coursework for the major is included within general education offerings.

Elementary Education Majors. Students wishing to teach at the elementary level should complete a major in elementary education through the Curriculum and Instruction Department. For more information, see the program descriptions under the Elementary Education section.

Secondary: 5-12 and K-12. Education Majors. Students who wish to teach in specialized fields must select an approved teaching major. In addition to the teaching major, students must complete the professional education coursework as described in the Secondary: 5-12 and K-12 Professional Education section.

Requirements related to teaching majors or professional education coursework are subject to change as new rules governing program approval are adopted by the Board of Teaching.

Student Teaching. All students are required to complete a student teaching experience in the licensure field and at the licensure level for which they are to be recommended for licensure. For further requirements, please see the Elementary and Secondary/K-12 sections.

Degree. To be eligible for Minnesota State University, Mankato's recommendation for an initial license the undergraduate student must complete a B.S. (teaching) Degree.

Transfer students wishing to earn a B.S. (teaching) degree from Minnesota State University are required to complete a minimum of 30 MSU semester credits and a program evolution of prior academic coursework as well as a minimum of six semester credits of student teaching at Minnesota State University to be recommended for teacher licensure by this institution.

Teaching License.

1. All students are required to successfully complete the PPST examination of skills in reading, writing and mathematics. Students should apply for a state's teaching license at the close of the semester in which they graduate. The Dean's Office, AH 118, Gail Orcutt, licensure coordinator, College of Education, coordinates the licensure process.
2. Effective January 1, 1996 Minnesota State Law requires that all candidates applying for initial licensure submit one fingerprint card with the application for national background checks. There is a \$25 fee for the criminal background check. A state background check will also be conducted. The licensure packet is available in AH 118, Gail Orcutt, licensure coordinator.

The Children's House. The Children's House of Minnesota State University is a model teacher education facility for prospective and in-service teachers of home economics — child development, consumer homemaking, and special and early childhood education. With its spacious facilities, functional equipment and optimum pre-kindergarten child enrollment of 100, Children's House provides the setting and the subjects for fostering creative and comprehensive teacher education. The program includes nursery school, all-day child care, part-time child care, and infant/toddler care.

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY

John Frey, Dean

131 Trafton Science Center N 507-389-5998

Automotive and

Manufacturing Engineering Technology

Biological Sciences

Chemistry and Geology

Computer and Information Sciences

Electrical and Computer Engineering and Technology

Interior Design and Construction Management

Mathematics and Statistics

Mechanical and Civil Engineering

Physics and Astronomy

The College of Science, Engineering and Technology offers a broad range of programs for students interested in the sciences, engineering and technology. Students majoring in one or more of the college programs have a variety of career opportunities in the areas of industry, research, teaching, government, professional or graduate school. Scholarships are available through the dean's office and the department in which the student is majoring.

Academic Advising. Students majoring in an area of study in the College of Science, Engineering and Technology are assigned to a faculty advisor at the time they declare their major. Students are urged to declare their

major and have an appropriate advisor assigned as soon as possible in their academic career.

Students are encouraged to develop and maintain a quality working relationship with their academic advisor. Advisors assist students by helping them to plan their coursework; monitor their academic progress; explore career opportunities related to their major; learn about curriculum changes, internships, scholarships, campus resources and undergraduate research options.

General questions and concerns about academic advising may be addressed by Angie Bomier, Student Relations Coordinator, 125 Trafton Science Center, Telephone 507-389-1521.

Student Academic Advising Center. The Academic Advising Center for the College of Science, Engineering and Technology offers advising support services for all students enrolled in college programs of study. Services of the Advising Center include the following:

- general education assessment and advising
- major declaration and major change processing
- advisor assignments
- admission to upper-level major courses
- course scheduling assistance
- pre-graduation application assessments
- probationary advising

The Academic Advising Center also offers information concerning:

- major and minor requirements
- campus resources and support services
- MSU policies and procedures
- college-based scholarships
- college-based activities

The Advising Center is located in 125 Trafton Science Center. Students may access services by calling 389-1521, by dropping in during office hours, or by arranging appointments at their convenience.

Probation Advising Plan: Among the most important goals of this probationary policy are those which encourage good planning, utilization of campus resources, support for the student's achievement in current courses, and development of an effective relationship with the student's academic advisor. These goals require time and thoughtful consideration. To support these goals, students must complete the process outlined no later than the first day of pre-registration for the next semester.

1. The College of Science, Engineering and Technology will send a letter to the probationary student, outlining the process to be followed before any further registration can occur.
2. The probationary student must contact the College of Science, Engineering and Technology's Student Relations Coordinator to confirm the student's major and academic advisor.

3. Students will be required to attend one of the small-group assessment sessions provided by the Student Relations Coordinator.
4. After attending an assessment session, students must set up an individual meeting with their faculty advisor within 10 class days to set goals for the remainder of the semester, to adjust their current schedule if necessary, and to consider courses for the next semester. If this is the student's second probation: The advisor and student will review and evaluate the previous request form before determining the criteria to be met for continued enrollment. Consideration will be given to the progress demonstrated by the student; the effect of previous recommendations; and any intervening circumstances.
5. If the academic advisor and student agree that continued enrollment is warranted, the advisor and student will complete, sign, and date the "Request for Removal of Registration Hold" form and return it to the Student Relations Coordinator.
6. The Student Relations Coordinator will lift the registration hold to allow registration for the upcoming semester.
7. Following pre-registration, the registration "hold" will be reinstated.

Admission to Major: Admission to majors in the College of Science, Engineering & Technology is granted by the academic department in which the student proposes to major.

DEGREES OFFERED

Bachelor of Arts. Astronomy, Biology, Biochemistry ++, Chemistry, Mathematics, Physics

Bachelor of Science. Astronomy ++, Automotive Engineering Technology ++, Biochemistry ++, Biology (Bio-Business, Cytotechnology, Ecology, General, Human Biology, Microbiology, Physiology, Plant Science, Toxicology, Zoology), Biotechnology ++, Chemistry, Civil Engineering**, Clinical Laboratory Sciences/Medical Technology ++, Computer Engineering, Computer Engineering Technology, Computer Science (General, Computer and Information Sciences), Electrical Engineering**, Electronic Engineering Technology ++, Environmental Sciences *, Food Science Technology, Interior Design and Construction Management (Construction Management, Interior Design, Facilities Planning and Management, Historic Restoration and Preservation ++), Management Information Systems, Manufacturing Engineering Technology ++, Mathematics, Mechanical Engineering**, Physics ++

Bachelor of Science (Teaching). Chemistry (5-12) ++, Life Science (5-12) ++, Mathematics, Physics (5-12) ++

* Requires a second major OR two minors

** No other major or minor accepted in this degree program

++ Minor is not required for completion of degree requirements

Minors. Astronomy, Automotive Engineering Technology, Biology, Chemistry, Computer Science, Computer Information Science, Computer Technology, Earth Science, Electronic Engineering Technology, Environmental Sciences, Geology, Manufacturing Engineering Technology, Mathematics, Physics, Statistics

Andreas and Standeford Observatories. See the Astronomy section for a detailed description of the observatory facilities at Minnesota State University.

Business and Government Partnerships. The college is actively involved in partnerships with business and government agencies. These relationships are mutually beneficial for students and the associated partners. Students receive experience on up-to-date equipment/software and in "real world" applications. Such experiences help provide students with background in their major fields, linking theoretical classroom/lab preparation with day-to-day business and government applications. The business and government partners have access to a well-prepared student work force, and have an opportunity to hire graduates who have had firsthand experience on their type of equipment/software and applications.

Regional Science Fair Program. The college coordinates four regional Science and Engineering Fairs that attract about 2,500 students annually in grades three to 12. These fairs offer an exceptional opportunity to enrich school programs at both the elementary and secondary level through encouraging independent project work, developing displays, having work judged by professional scientists and engineers, sharing similar interests with other students, competing for awards, and receiving local, national and even international recognition. For future scientists and non-scientists alike, Science and Engineering Fair work provides experience and motivation that are reflected in both personal and classroom development.

Water Resources Center. The Water Resources Center is a regional center which gathers, interprets and transfers data of environmental significance. It is closely associated with the Biological Sciences Department, and is interdisciplinary in nature and functions to facilitate projects. To this end the center obtains grants and contracts in the areas of regional applied and theoretical research. The center emphasizes the involvement of students, both graduate and undergraduate, in meaningful research experiences. At present there are 12 on-going projects involving lakes, rivers, wetlands, groundwater, land use, agriculture waste utilization and public policy.

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Susan Coultrap-McQuin, Dean
111 Armstrong Hall 507-389-6307
Advising Office 507-389-6306

Anthropology
Economics
Ethnic Studies
Geography
Gerontology
History
Political Science/Law Enforcement
Psychology
Social Studies
Social Work
Sociology and Corrections
Urban and Regional Studies Institute
Women's Studies

The College of Social and Behavioral Sciences promotes the exploration, understanding, explanation and transformation of the social world. The organization of the college into distinct disciplines and departments insures we can offer diverse perspectives on the social world, its historical emergence, and its interaction with physical and ecological surroundings. While we seek to convey the specialized knowledge of our distinct disciplines to our students, we also strive to educate the whole person and to encourage our students to utilize this knowledge toward self-understanding. We seek to cultivate a broad set of intellectual abilities, including critical thinking, analytical and research skills, and clarity of oral and written expression. In addition to these broad skills, some programs within our college incorporate applied, pre-professional, and professional components.

The College of Social and Behavioral Sciences offers students a broad range of courses and programs aimed at increasing understanding of human behavior and developing skills that will be useful in a variety of people-orientated jobs and careers. Students majoring in one or more of the social and behavioral sciences may, for example, go on to graduate school, teach, do research, follow careers in public service, become part of the helping professions, serve as program administrators and planners, or follow one of many other routes to using the special perspectives and skills developed through the programs of this college. The college offers both undergraduate and graduate programs of study. In each program we commit ourselves to promoting the success of our students during their time at Minnesota State University and in their future endeavors.

Academic Advising. Students majoring in an area of study in the College of Social and Behavioral Sciences are assigned an advisor who is a teaching faculty member within the department of their major. Students are assigned an advisor when they declare their major. Students are encouraged to develop a quality working relationship with their advisor who may help them select

classes, explore career and internship opportunities, access appropriate campus resources, and monitor their academic development. Students should contact the department of their major to declare the major and be assigned an advisor. General questions and concerns about advising are addressed by Clark Johnson, Student Relations Coordinator, 114 Armstrong Hall, telephone 507-389-5718.

Advising U. Advising U. is the student resource center for the College of Social and Behavioral Sciences. Located in the center of campus, Advising U. is a good place for students to seek answers to questions they have about academics and advising in the College.

Advising U. can help students with:

- General education advising
- Selecting a major in the College of Social and Behavioral Sciences
- Developing strategies for success in classes
- Career exploration
- Study skills and time management
- Information about scholarships
- Finding volunteer opportunities

Advising U. also serves as the home for preparing College faculty to be effective advisors. College advisors participate in Advising University which provides training and other learning experiences designed to improve advising in the College. Advising U. is located in Armstrong 114 and can be reached by phoning 507-389-6306.

Probation Advising Plan: Students on academic probation will have a hold placed on their registration. Students are placed on academic probation when they achieve a grade point average of below 2.0 and/or a cumulative course completion rate of less than 67 percent of all Minnesota State University courses. In order to return to good academic standing and have the registration hold removed, students must meet with Social and Behavioral Sciences personnel in “Advising U” to begin the process of planning and preparing for a successful semester. “Advising U” is located in Armstrong Hall 114.

The **Mentor Connection Program** in the College of Social and Behavioral Sciences is a program designed to assist students in making satisfactory academic progress, which results in removal from probationary status. Participation in the Mentor Connection Program is an opportunity for students to develop skills and learn about resources that will help improve academic performance. While participating in the Mentor Connection program, students will:

- create strategies for success in their classes
- identify their academic strengths and weaknesses
- plan for successful academic experience

Program Overview

The Mentor Connection Program is a 3 step process. During the first step, students meet with “Advising U” personnel to assess individual needs and establish objectives. During the second step, students meet with

their advisors, who assist students in creating and implementing strategies to meet the established objectives. This step usually takes 2-4 meetings. During the third step, students again meet with “Advising U” personnel to discuss academic progress and plans for the future. The registration hold is then lifted for the student.

Expectations

From the Mentor Connection Program, students can expect:

- accurate information about class registration, academic requirements, and campus opportunities and resources
- friendly support of educational goals and plans
- professional respect of skills, interests, and unique circumstances
- prompt referral to other people and offices who can best address students’ needs

The college expects from students:

- genuine effort to learn about themselves and campus opportunities and resources
- careful preparation for advising sessions by reading, forming questions, and considering options
- honest communication of individual skills, interests, and circumstances
- personal responsibility for learning and accepting consequences of academic and personal choices

Admission to Major: Admission to majors in the College of Social & Behavioral Sciences is granted by the academic department in which the student has a major.

DEGREES OFFERED

Bachelor of Arts Anthropology, Earth Science*, Economics, Ethnic Studies**, Geography (Professional*, Standard), History, International Relations, Law Enforcement (Option I*, Option II), Political Science, Psychology, Sociology, Women’s Studies

Bachelor of Science. Anthropology, Corrections, Earth Science, Economics*, Ethnic Studies, Geography (Professional*, Standard), History, International Relations, Law Enforcement (Option I* or Option II), Political Science, Psychology, Social Studies* (Anthropology, Economics, Ethnic Studies, Geography, History, Political Science, Psychology, Sociology, or Women’s Studies), Social Work*, Sociology, Urban & Regional Studies, Women’s Studies

Bachelor of Science (Teaching), Earth Science (5-12)*, Social Studies (Anthropology, Economics, Geography, History, Political Science, Psychology, or Sociology)(5-12)*

*Minor not necessary for completion of degree requirements.

**Requires an additional major from another discipline.

Minors. Anthropology, Corrections, Earth Science, Economics, Ethnic Studies, Geography, Gerontology,

History, Latin American Studies, Law Enforcement, Political Science, Psychology, Social Welfare, Sociology, Urban & Regional Studies, Women's Studies

Center for Applied Social Science. The Center for Applied Social Science is dedicated to promoting applied learning and research opportunities for students and faculty in service to agencies, organizations, and communities in and beyond Minnesota. Students may be involved with faculty members on sponsored projects with communities and agencies. For more information, contact the Dean's Office in Armstrong Hall 111, Telephone 507-389-6307.

Center for Rural Policy and Development. The Center for Rural Policy and Development, established in 1997 by the Minnesota Legislature, promotes partnerships between university scholars and rural community leaders to address social and economic issues in rural Minnesota. The Center engages faculty and students throughout Minnesota in its projects. For further information, contact the Dean's Office in Armstrong Hall 111, telephone 507-389-6307.

Kessel Peace Institute. The Kessel Peace Institute is dedicated to advancing the understanding and the existence of peace at all levels, from the individual to the global community. The Institute defines peace in its broadest sense, denoting not only the absence of conflict but also the interrelationship of the factors necessary to create or to enhance harmony within and among human beings and their environment. The Institute supports the annual Kessel Lecture and sponsors films, forums, speakers, and one-day conferences on important issues. The Institute honors the life and work of Abbas Kessel, MSU Political Science professor from 1966 to 1985.

Special Projects for Students. The College annually sponsors or hosts several projects of interest to secondary and/or university students. The annual Career and Agency Day provides students the opportunity to learn about career opportunities related to social and behavioral sciences. In partnership with the YMCA, the College hosts the State Convention of the Youth in Government Program. The College recognizes student achievement through Community Service Awards and nominations to Who's Who Among College and University Students. Departments within the College also recognize student excellence through scholarships and other awards.

Honor Societies. Departments within the College of Social and Behavioral Sciences are associated with national honor societies including: Alpha Kappa Delta, International Sociology Honor Society; Alpha Phi Sigma, National Criminal Justice Honor Society; Gamma Theta Upsilon, Geography Honor Society; Omicron Delta Epsilon, International Honor Society in Economics; Phi Alpha, National Social Work Honor Society; Phi Alpha Theta, International Honor Society in History; Pi Sigma Alpha, National Political Science

Honor Society; Psi Chi, National Psychology Honor Society; Sigma Xi, National Science Honor Society.

COLLEGE OF GRADUATE STUDIES

125 Wigley Administration Center

507-389-2321 • FAX: 507-389-5974

Website: www.mnsu.edu/dept/gradstud/gradweb/menu.htm

From art to women's studies, Minnesota State University, Mankato has the most comprehensive offering of Master's programs in the Minnesota State Colleges and Universities system. The College of Graduate Studies provides 71 graduate degree programs in areas such as the arts and humanities, natural sciences, allied health and nursing, education, social and behavioral sciences, and business. These programs include such noteworthy programs as MFA degrees in theatre arts and creative writing, and MS degrees in nursing and engineering. Over 400 of our Graduate Faculty hold the highest degree in their respective discipline. Many of our faculty have won teaching awards, published scholarly books, and have provided a broad range of services to our University and community.

More detailed information about each program contact the Office of Graduate Studies.

GENERAL EDUCATION

Cultural Diversity Requirement

All MSU undergraduate students must satisfy a Cultural Diversity (CD) credit requirement. Students pursuing a baccalaureate degree must take at least two (2) courses and a minimum of six (6) credits from the list of courses designated as Cultural Diversity courses. One CD-Core course and a minimum of 3 credits satisfies the CD requirements for the AA and AS degree. Transfer students that have taken between 33 and 63 credits will be granted up to 3 credits of their CD requirement while transfer students that have taken 64 or more credits or have already received an AA degree will be granted 6 CD credits, satisfying their entire CD requirement.

Two types of courses fulfill the Cultural Diversity requirement: (1) Cultural Diversity CORE courses (CD-Core) and (2) Cultural Diversity Related courses (CD-related). Throughout the following listing of General Education Courses, Cultural Diversity courses are designated with either ** for core CD courses or * for related CD courses.

Courses must be taken according to the following distribution: (1) At least one course must be taken from the list of courses designated as Cultural Diversity-core; (2) At least two different departments must be represented. Students are encouraged to take more than one core course in completing the CD requirement. For a list of courses, see the book *General Education and Cultural Diversity Bulletin 2001-2002*, available from the Office of Cultural Diversity.

MINNESOTA TRANSFER CURRICULUM

Completion of the Minnesota Transfer Curriculum fulfills the general education requirement for any Minnesota public institution. Students transferring with a completed Minnesota Transfer Curriculum will satisfy Minnesota State University, Mankato's general education requirement. Completion of individual competencies within the Minnesota Transfer Curriculum will not satisfy general education. However, satisfied individual competencies will be evaluated and transferred on a course-by-course basis.

Students transferring from MSU to another Minnesota public institution of higher education will have fulfilled the Minnesota Transfer Curriculum if they have completed required courses in the following ten categories: Communication, Critical Thinking, Natural Science, Mathematical/Logical Reasoning, History and the Social and Behavioral Sciences, Humanities and the Arts, Human Diversity, Global Perspective, Ethical and Civic Responsibility, and People and the Environment.

GENERAL EDUCATION GUIDELINES

1. A total of 44 credits must be completed to satisfy the General Education Program at Minnesota State University.

2. A single course may be placed in one or two categories and also may be designated as a Writing Intensive course. Each credit in any of these courses, however, may be counted only once in meeting the 44 credit requirement.
3. The Critical Thinking category (2) may be satisfied either by taking a course or by the satisfactory completion of the other General Education categories.
4. In each category where two courses are required (i.e., #3, 5, and 6), students are required to take courses from different disciplines.
5. For general education credit, students may take no more than two courses or eight (8) credits, whichever is greater, from the same discipline.
6. For Bachelor of Science in Electrical or Mechanical Engineering General Education see the program requirements for a detailed explanation of general education coursework for these two degree programs.
7. The general education requirements of the Associate of Arts degree are the same as for the Bachelor of Science degree.

GENERAL EDUCATION PROGRAM

The general education program integrates a broad foundation of knowledge and skills with the study of contemporary concerns. The goals and competencies within the curriculum are reflective of those capabilities essential for all college-educated adults facing the twenty-first century, including emphasis on:

1. Skills needed for effective understanding and communication of ideas through reading, listening, critical and integrative thinking, writing, speaking, and technological literacy;
2. Exploration of various ways of knowing through study of the content, methods of inquiry and creative modes of a broad spectrum of disciplines;
3. Our common membership in the human community, coupled with awareness that we live in a diverse world;
4. The interrelatedness of human society and the natural environment and the ethical dimensions of political, social, and personal life; and
5. Development of responsibility for lifelong learning.

CATEGORY 1: COMMUNICATION

Goal: To develop writers and speakers who use the English language effectively and who read, write, speak, and listen critically. At a base, all students should complete introductory communication requirements early in their college studies. Writing competency is an ongoing process to be reinforced through writing-intensive courses and writing across the curriculum. Speaking and listening skills need reinforcement. There are multiple opportunities for interpersonal communication, public speaking and discussion.

Part A: English Composition
(requires one course, 3 credits or more, with a grade of at least "P" or "C")

Goal: To develop writers who use the English language effectively and who read and write critically. This course will require faculty-critiqued writing. Writing competency is an ongoing process which needs to be reinforced throughout the curriculum.

Students will be able to:

- demonstrate and practice strategies for idea generation, audience analysis, organization of texts, drafting, evaluation of drafts, revision, and editing;
- write papers of varying lengths that demonstrate effective explanation, analysis, and argumentation;
- become experienced in computer-assisted writing and research;
- locate and evaluate material, using PALS, the Internet, and other sources;
- analyze and synthesize source material, making appropriate use of paraphrase, summary, quotation, and citation conventions;
- employ syntax and usage appropriate to academic writing and the professional world.

Course(s) which satisfy this category include:

ENG 101

Part B: Speech and Oral Reasoning
(requires one course, 3 credits or more)

Goal: To develop skills necessary for reasoned communication. Courses in this category will require individual public speaking which is critiqued by the instructor. Speaking and reasoning competency is an ongoing process which needs to be reinforced throughout the curriculum.

Students will be able to:

- understand/demonstrate communication processes through invention, organization, drafting, revision, editing and presentation;
- participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding;
- analyze, evaluate, and synthesize in a responsible manner material from diverse sources and points of view.
- select appropriate communication choices for specific audiences;
- construct logical and coherent arguments;
- use authority, point of view, and individual voice and style in communications;
- employ syntax, usage and analytical techniques appropriate to academic disciplines and the professional world.

Course(s) which satisfy this category include:

CDIS 201 SPEE 100 SPEE 102

Part C: Writing Intensive

(requires one course, 3 or more credits)

Goal: Students will continue to develop skills taught

in Composition, applying them in the context of a particular discipline.

Students will be able to:

- use writing to explore and gain a basic familiarity with the questions, values and analytical or critical thinking methods used in the discipline;
- locate, analyze, evaluate, and use source material or data in their writing in a manner appropriate to intended audiences (popular or within the discipline).

Course(s) which satisfy this category include:

BIOL 103	BIOL 105	COMS 202
ENG 112*	ENG 113*	ENG 211**
ENG 212*	ENG 213	ENG 242
FREN 302	HIST 158	HIST 170*
HIST 180*	HUM 250	HUM 280
HUM 281**	HUM 282*	MUS 221
MUS 222	PHIL 100	PHIL 115**
PHIL 120	PHIL 205	PHIL 222*
PHIL 224*	PHIL 226	PHIL 334
PHIL 336	PHIL 358	POL 103
POL 107	SOWK 190	URBS 230
WOST 310		

CATEGORY 2: CRITICAL THINKING

(requires completion of the rest of the Gen. Ed. Program or one course)

Goal: To develop critical thinking, communication, and problem solving skills. Courses in this category must focus on skill development and throughout the course will provide opportunities to exercise skills. Although the exercise of skills requires a subject matter, the emphasis in this category will be on skill development. The skills will not be ones that are specific to the practice of a particular discipline or area of inquiry but rather will be skills that are common to different disciplines and different areas of inquiry.

Students will be able to:

- gather and analyze information of various kinds, employing formal or informal tools to represent information in ways useful for solving problems;
- weigh evidence for and against hypotheses;
- recognize, construct, and evaluate arguments;
- apply appropriate critical and evaluative principles to texts, documents, or works—one's own or others'—in oral, visual, or written mediums.

Course(s) which satisfy this category include:

AST 115	CHEM 111	CHEM 133
CHEM 201	CSP 110	HLTH 212
PHIL 110	PHIL 112	PHIL 311
PHYS 211	PHYS 221	POL 103

CATEGORY 3: NATURAL SCIENCE

(requires two courses from different disciplines, 6 credits or more. At least one course must have a laboratory)

Goal: To improve students' understanding of natural

science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena. Students should be encouraged to study both the biological and physical sciences.

Students will be able to:

- develop understanding of scientific theories;
- formulate and test hypotheses in either laboratory, simulation, or field experiences;
- communicate his/her experimental findings and interpretations both orally and in writing;
- apply the natural science perspective to society issues.

Course(s) which satisfy this category include:

ANTH 220	AST 101	AST 102
AST 104-lab	AST 115	BIOL 100-lab
BIOL 102**	BIOL 103	BIOL 105-lab
BIOL 270-lab	CHEM 100-lab	CHEM 105
CHEM 111-lab	CHEM 131	CHEM 132
CHEM 201-lab	EET 112-lab	FCS 140
GEOG 101	GEOL 100-lab	GEOL 121-lab
GEOL 122-lab	PHYS 100-lab*	PHYS 101-lab
PHYS 102	PHYS 105-lab	PHYS 107
PHYS 110-lab	PHYS 211-lab	PHYS 221-lab

CATEGORY 4: MATHEMATICAL/LOGICAL REASONING
(requires one course, 3 credits or more, with a grade of at least "P" or "C")

Goal: To increase students' knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply mathematics, logic, and/or statistics to help them make decisions in their lives and careers.

Students will be able to:

- illustrate historical and contemporary applications of mathematical/logical systems;
- clearly express mathematical/logical ideas in writing;
- explain what constitutes a valid mathematical/logical argument (proof);
- apply higher-order problem-solving and/or modeling strategies.

Course(s) which satisfy this category include:

MATH 110	MATH 112	MATH 113
MATH 115	MATH 121	MATH 130
MATH 180	MATH 181	MATH 184
MATH 201	PHIL 110	PHIL 112
PHIL 311	SOC 202	STAT 154

CATEGORY 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES

(requires two courses from different disciplines, 6 credits or more)

Goal: To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events and ideas. To

challenge students to examine the implications of this knowledge and its interconnection with action and living an informed life.

Students will be able to:

- employ the methods and data that historians and social and behavioral scientists use to investigate the human condition;
- examine social institutions and processes across a range of historical periods and cultures;
- use and critique alternative explanatory systems or theories;
- develop and communicate alternative explanations or solutions for contemporary social issues.

Course(s) which satisfy this category include:

ANTH 101*	ANTH 240*	CORR 106
CORR 132	ECON 100	ECON 201
ECON 202	ECON 314*	EDFN 235
ETHN 100	ETHN 101	ETHN 110
ETHN 120	ETHN 130	ETHN 140
FCS 100	GEOG 103*	HIST 151**
HIST 153	HIST 154	HIST 155**
HIST 156	HIST 157	HIST 170*
HIST 171*	HIST 180	HIST 181
HIST 190**	HIST 191**	HLTH 203
LAW 132	MRKT 100	POL 100
POL 104	POL 111	PSYC 101
PSYC 206	SOC 100**	SOC 101*
SOC 102	SOC 208**	SOC 255
SOWK 190	SOWK 255*	URBS 100*
URBS 150	WOST 240	WOST 310

CATEGORY 6: HUMANITIES AND THE ARTS
(requires two courses from different disciplines, 6 credits or more)

Goal: To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, the fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities.

Students will be able to:

- demonstrate awareness of the scope and variety of works in the arts and humanities;
- understand those works as expressions of individual and human values within an historical and social context;
- respond critically to works in the arts and humanities;
- engage in the creative process or interpretive performance;
- articulate an informed personal reaction to works in the arts and humanities.

Course(s) which satisfy this category include:

ART 100	ART 160*	ART 231
ART 260**	ART 261**	ART 275
EDFN 251	ENG 110	ENG 112*
ENG 113*	ENG 114	ENG 211**
ENG 212*	ENG 213	ENG 214
HUM 150*	HUM 155*	HUM 250
HUM 251**	HUM 280	HUM 281**
HUM 282*	MUS 120*	MUS 125
MUS 126	MUS 221	MUS 222
PHIL 100	PHIL 115**	PHIL 120
PHIL 205	PHIL 222*	PHIL 224*
PHIL 321	PHIL 334	PHIL 336
PHIL 337	PHIL 358	SPEE 310
THEA 100	THEA 101	THEA 283**
THEA 285	URBS 110	WOST 251

CATEGORY 7: HUMAN DIVERSITY

(requires one course, 3 credits or more)

Goal: To increase students' understanding of individual and group differences, emphasizing the dynamics of race, gender, sexual orientation, age, class, and/or disabilities in the history and culture of diverse groups in the United States; the contributions of pluralism to United States society and culture; and issues--economic, political, social, cultural, artistic, humanistic, and education traditions--that surround such diversity. Students should be able to evaluate the United States' historical and contemporary responses to group differences.

Students will be able to:

- understand the development of and the changing meanings of group identities in the
- demonstrate an awareness of the individual and institution dynamics of unequal power relations between groups in contemporary society;
- analyze and evaluate their own attitudes, behaviors, concepts, and beliefs regarding diversity, racism, and bigotry;
- describe and discuss the experience and contributions (political, social, economic, artistic, humanistic, etc.) of the many groups that shape American society and culture, in particular those groups which have suffered discrimination and exclusion;
- demonstrate communication skills necessary for living and working effectively in a society with great population diversity.

Course(s) which satisfy this category include:

CDIS 110	CDIS 290**	EDFN 222**
EDFN 251	ENG 211**	ETHN 100**
ETHN 101	ETHN 120	ETHN 130
ETHN 140	ETHN 200**	GERO 200**
HIST 151**	HIST 155**	HIST 190**
HIST 191**	HUM 251**	HUM 281**
PHIL 115**	POL 102**	REHB 110**
SOC 100**	SOC 208**	THEA 283**
THEA 285	WOST 110**	WOST 251**
WOST 310		

CATEGORY 8: GLOBAL PERSPECTIVE

(requires one course, 3 credits or more)

Goal: To increase students' understanding of the growing interdependence of nations, traditions and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic, and political experiences.

Students will be able to:

- describe, analyze, and evaluate political, economic, humanistic, artistic, social and cultural elements which influence relations of nations and peoples in their historical and contemporary dimensions;
- demonstrate knowledge of cultural, social, religious and linguistic differences;
- analyze specific international problems illustrating cultural, economic, artistic, humanistic, social, and political differences which affect their solution;
- understand the role of a world citizen and the responsibility world citizens share for their common global future.

Course(s) which satisfy this category include:

ANTH 101*	ANTH 230*	ANTH 240*
ART 160*	ART 260*	ART 261*
BIOL 201*	ECON 314*	EET 125*
ENG 212*	ENVR 101*	FREN 101
FREN 102	FREN 201	FREN 202
GEOG 100*	GEOG 103*	GER 101
GER 102	GER 201	GER 202
HIST 153	HIST 170	HIST 171
HIST 181	HUM 155*	HUM 282*
PHIL 205*	PHIL 358*	POL 106*
SCAN 101	SCAN 102	SCAN 111
SCAN 112	SOC 101*	SOWK 255*
SPAN 101	SPAN 102	SPAN 201
SPAN 202	THEA 225	URBS 100*
WOST 220*		

CATEGORY 9: ETHICAL AND CIVIC RESPONSIBILITY

(requires one course, 3 credits or more)

Goal: To develop students' capacity to identify, discuss and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship. While there are diverse views of social justice or the common good in a pluralistic society, students should learn that responsible citizenship requires them to develop skills to understand their own and others positions, be part of the free exchange of ideas, and function as public minded citizens.

Students will be able to:

- examine, articulate, and apply their own ethical views;
- understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues;

- (c) analyze and reflect on the ethical dimensions of legal, social, and scientific issues;
- (d) recognize the diversity of political motivations and interests of others;
- (e) identify ways to exercise the rights and responsibilities of citizenship.

Course(s) which satisfy this category include:

BLAW	131*	CHEM	131	CORR	106
CORR	250	EDFN	101	EDFN	250
ENG	213	HIST	158	HIST	180
MASS	110*	PHIL	120**	PHIL	222*
PHIL	224	PHIL	226	PHIL	321
POL	101	POL	107	POL	111
SOC	255	SOWK	190	SPEE	300
URBS	230	WOST	120	WOST	220*

CATEGORY 10: PEOPLE AND THE ENVIRONMENT (requires one course, 3 credits or more)

Goal: To increase students' understanding of today's complex environmental challenges. Students will examine the interrelatedness of human society and the natural environment. Knowledge of both bio-physical principles and psychosocial cultural systems is the foundation for integrative and critical thinking about environmental issues.

Students will be able to:

- (a) explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems;
- (b) discern and analyze patterns and interrelationships of the bio-physical and psycho-social cultural systems;
- (c) critically discern and analyze individual, social, and ecological dimensions of health;
- (d) describe the basic institutional arrangements (social, legal, political, economic, health, ethical, religious) that are evolving to deal with environmental and natural resource challenges;
- (e) evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions;
- (f) propose and assess alternative solutions to environmental problems;
- (g) articulate and defend the actions they would take on various environmental issues.

Course(s) which satisfy this category include:

BIOL	201	CHEM	133	CI	205
ENVR	101	GEOG	100*	GEOG	101
GEOL	100	GEOL	121	HLTH	101
PHIL	226	RPLS	282	TECH	180
URBS	150				

CATEGORY 11: PERFORMANCE AND PARTICIPATION (requires 2-3 credits)

Goal: To prepare students for responsible and effective participation in groups and communities.

Students will be able to:

- (a) participate effectively in a variety of artistic, edu-

cation, political, recreational, health and public service, or social service settings;

- (b) interact with others of another culture in its indigenous setting through a structured experience;
- (c) participate cooperatively in group athletic activity or artistic performance.

Course(s) which satisfy this category include:

CDIS	205	EDFN	222	ENG	242
HLTH	210	HP	101	HP	103
HP	104	HP	105	HP	114
HP	117	HP	130	HP	138
HP	143	HP	145	HP	146
HP	147	HP	148	HP	149
HP	150	HP	152	HP	153
HP	154	HP	155	HP	156
HP	157	HP	158	HP	159
HP	161	HP	166	HP	170
HP	174	HP	175	HP	176
HP	177	HP	178	HP	179
HP	182	HP	190	HP	241
HP	242	HP	245	HP	248
HP	250	HP	252	HP	257
HP	291	MUS	101	MUS	102
MUS	103	MUS	104	MUS	105
MUS	111	MUS	112	MUS	113
MUS	114	MUS	115	MUS	116
MUS	117	MUS	119	NURS	101
POL	101	RPLS	278	SOWK	214
SPEE	220	SPEE	310	THEA	102
THEA	103	THEA	105	THEA	107
THEA	108	THEA	109	THEA	123
THEA	125	THEA	126	THEA	127
THEA	128	THEA	223	THEA	225
THEA	226	THEA	227	THEA	228
THEA	229	THEA	328	URBS	230

CATEGORY 12: FIRST YEAR EXPERIENCE (requires 0-1 credits)

Goal: To promote further development of student success skills, such as reading, writing and speaking; help students gain intellectual confidence; build in the expectation of academic success; and to provide assistance in making the transition to the University.

Students will be able to:

- (a) experience higher personal expectations of his/her ability to meaningfully participate in academic life;
- (b) define and give examples of critical thinking;
- (c) interact with other students regarding academic matters;
- (d) affirm that careful thinking is an important aspect of the educational process;
- (e) make a comfortable transition to college life.

Course(s) which satisfies this category include:

FYE	100
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**CATEGORY 13: INFORMATION TECHNOLOGY
(requires 0-2 credits)**

Goals: To familiarize students with the tools, concepts and societal impact of information technology and to develop the skills necessary to use this technology critically and effectively.

Students will be able to:

- (a) use electronic information technology ethically and responsibly;
- (b) access and retrieve information through electronic media, evaluating the accuracy and authenticity of that information;
- (c) create, manage, organize and communicate information through electronic media;
- (d) demonstrate a working knowledge of information technology terms and concepts;
- (e) understand how computers function and the limits of computation and information technology;
- (f) recognize changing technologies and make informed choices in their use.

Course(s) which satisfy this category include:

COMS 100 EET 115 EET 116
POL 105

HONORS PROGRAM

Director: Suzanne Bunkers

203 Morris Hall

Mankato, MN 56001

507-389-5056

Email: suzanne.bunkers@mnsu.edu

Web site: <http://www.intech.mnsu.edu/honors/>

The Honors Program is an alternative to the traditional general education program. An Honors student completes a total of 35 Honors credits:

6-8 credits of Honors Seminars

The Honors seminars fulfill general education competencies in the areas of Communication, Critical Thinking, Human Diversity, Global Perspective, Ethical and Civic Responsibility, People and the Environment, Performance and Technology. Honors 201, "Introduction to Honors," is strongly recommended for each Honors student during his/her first year.

4-8 credits of Honors Topics

Honors 450 topics courses are designed to allow extensive, in-depth coverage of specific topics in small-group settings. An Honors student is eligible to enroll in topics courses after he/she has been admitted to his/her academic college.

17-23 credit Honors Designated General Education Classes

An Honors student has many opportunities to take general education courses that enable him/her to interact with other Honors students as well as with other students at MSU. At least one Honors designated General Education course must be

completed in each of three areas: Humanities and the Arts, History and the Social & Behavioral Sciences, Natural Sciences or Mathematics.

2 credits of Honors Senior Project

Each Honors student undertakes an individual project under the direction of a faculty advisor in the student's major discipline. The result of this project may be a scholarly paper, a creative work, a performance, a web site, etc. The senior project must be completed prior to graduation.

Honors GPA Policy. To enter the Honors Program, a student has typically achieved a score of 25 or above on the ACT, been in the upper 10% of his/her graduating class, or earned a cumulative GPA of 3.2 or above in college-level coursework. All applications for the MSU Honors Program will be evaluated on an individual basis. Once accepted, to remain in the Honors Program, an Honors student must maintain a minimum GPA of 3.0 during the first year of coursework, a 3.1 GPA during the sophomore year, a 3.2 GPA during the junior year and a cumulative GPA of 3.3 at the time of graduation from the University. In addition, all University policies including Pass/No Credit, Incompletes, In Progress Grades, and Grade Appeals apply to Honors students.

GENERAL POLICIES

Admission to Major Policy

Students will be admitted to a major based on requirements established by the major and monitored by a department.

To be admitted to an academic major a student must fulfill the following minimum requirements:

- Completion of a minimum of 32 earned semester (48 quarter) credit hours;
- A minimum 2.0 (C) cumulative grade-point average;

Additional requirements may include, but are not limited to: completion of prerequisite courses, higher grade-point averages for admission to major and/or graduation from the program, testing, other forms of evaluation or portfolios.

Continuation in Major. Departments may establish additional eligibility requirements for continuation in a major and/or major completion.

Application. Application should be made directly to the department or program of the individual's choice.

Denial of Admission. Students may be denied admission to major for failure to meet any of the admission requirements imposed by the department or program.

Suspension from Major. Students must remain in good standing to continue toward degree completion, and may be suspended from an academic program for failure to meet any of the admission or continuation requirements imposed by the program or department.

Appeals. Students shall have the right to appeal a department's decisions concerning denial of admission to major or suspension from major. Each department shall establish an appeals procedure that shall be concluded within 30 days of initiation. This 30 day period shall include an appeal to the department and the option of an appeal to the College Dean.

Conditional Admission. Students may receive provisional/conditional admission to major for a total of one semester only with a special exception. No provisional or conditional admissions may be granted unless the student has met the minimum requirements of a GPA of 2.0 and completion of 32 semester credits.

Waiver/Substitution of Requirements. Minimum requirements may not be waived nor may substitutions be made. Under exceptional circumstances Department/Program requirements may be adjusted at the discretion of the Department/Program.

Attendance Policy

Class attendance is expected unless other guidelines are announced by the instructor. Check your syllabus for this information or ask your instructor. If you're skipping classes more and more, it's a good idea to talk with a counselor, advisor, or professor. Maybe you need to change majors or maybe you need help in learning to

study or in self-motivation techniques. Contact the Learning Center in the library, 389-1791, the Career Development and Counseling Center, 389-1455, or your advisor.

Conference Credits Policy

Credit-bearing activities for work associated with conferences, where the conference is central to the course of study, will be offered through a workshop. Workshops might be offered through any department. In such cases, it becomes the responsibility of the department to ensure that a valid academic experience accompanies each workshop. Two or more departments might offer workshops associated with the same conference. Students cannot earn more than one credit for the same course-associated conference.

Credit by Examination Policy

Undergraduate students currently enrolled at Minnesota State University who believe they have the same information as normally gained through a course offered by the university may apply to take a comprehensive examination for credit in the course. Credit will be granted only as "Pass" (P) credit. A fee of \$5 per credit is charged for each examination to be taken. Applications for such examinations must be secured from and receive the approval of the department chairperson as well as that of the college dean.

College Level Examination Program (CLEP)

Credits may be awarded through the successful completion of the College Level Examination Program (CLEP) of the College Entrance Examination Board in the general examinations in humanities, mathematics, natural sciences, and social sciences/history provided no previous academic credits have been earned in these areas. Students interested in this option can contact the Counseling Center for more information.

At the present time, credit may also be granted through successful completion of the CLEP Subject Matter Examinations in specified courses of the College of Business and the Department of Modern Language. Standards and other information may be obtained by contacting the dean of the College of Business or the chairperson of the Department of Modern Language.

To earn credit in general education toward English composition, it is necessary to apply to the English Department for permission to attempt credit by examination. This locally developed examination is used at Minnesota State University in place of the CLEP English examination.

Prerequisite Policy

Some courses are designed to be taken in sequence. Prerequisites for courses which require them are listed with the course descriptions. Prerequisites for a course must be met before the course is taken unless written permission to omit the prerequisites is obtained from the department chairperson.

In courses where prerequisites exist, an instructor may not allow a student to continue in a class if the instructor has determined that the student has not fulfilled the necessary prerequisite requirements. Tuition will be refunded in such cases.

Students who fail the first course of a sequence cannot take the following courses in the sequence until they have made up the failure.

Accommodation for Students with Disabilities

In compliance with the provisions of Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act, Minnesota Statute 363, and Minnesota State Colleges and Universities policy, Minnesota State University prohibits discrimination against qualified students with disabilities on the basis of their disabilities. Under the leadership of the President, university officers, faculty and staff will implement the principles of equal access at Minnesota State University.

Communications. All forms of communication with the public, staff and students will be equally accessible and effective for people with disabilities. This includes, but is not limited to, providing written materials in alternative format, TTY service for telephone contact, sign language interpreting, and accessible web sites, on-line classes, and distance learning endeavors.

Accessibility. All classes, meetings, programs, or other events will be held in facilities that are accessible. Announcements of meetings or other events will contain a statement indicating the availability of accommodations of disabilities upon request.

Reasonable Accommodations. All programs, services, and activities, when viewed in their entirety, will be accessible to and usable by qualified students with disabilities.

Reasonable accommodations may include modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, provision of auxiliary aids or the provision of equally effective programs, services, or activities. Accommodations will not be provided 1) for personal devices or services even though the individual may be a qualified individual with a disability, 2) that result in a fundamental alteration in the nature of a service, program, or activity or an undue financial or administrative hardship, 3) that result in any change in the standards of performance required by an academic program, or 4) when they do not reduce to an acceptable level a direct threat to the health or safety of the student or others.

Requests for accommodation must be initiated by the student and supported by documentation of the disability indicating a current need for accommodation. Students may request accommodation through the Office of Disability Services.

THE GRADING SYSTEM

Grading Policy

A student's work in any course will be evaluated in accordance with the following system of letter grades: A, B, C, D, F, NC and P.

Note: Consult the class schedule for the deadline pertaining to change of grading system.

- A** represents work of definitely superior quality.
- B** represents a better-than-average level of performance.
- C** represents an average-level of performance.
- D** represents below-average performance.
- F** represents an unacceptable level of performance (regular graded courses).
- NC** represents an unacceptable level of performance at the undergraduate level (P/N graded courses).
- P** represents passing performance (P/N graded courses).

Pass/No Credit Policy. Under the pass/no credit (P/NC) system, a student may register for a course with the understanding that a P will be recorded if passed. If the course is not passed, no credit will be given and an NC will be recorded on the permanent record. Whether the indication is P or NC, the hours taken will not affect the grade-point average. To receive a P, the student is expected to perform at C level or better.

Individual departments may offer pass/no credit courses at any level of undergraduate instruction.

Courses taken for P/NC credit may be applied to major or minor requirements for graduation but only at departmental discretion. Each student has the responsibility to determine individual departmental policy in this regard. A limited number of P/NC units are accepted to apply toward a major, and no more than one-fourth of the total undergraduate degree requirements may be earned in pass/no credit courses. Courses offered for only P/NC grading are exempted from the one-fourth computation.

Incompletes. The grade of "incomplete" is reserved for special cases and means that, because of extenuating circumstances, the student failed to meet a specific need and an important requirement of the course, but has in other respects done passing work for the semester. The incomplete must be made up in the next semester in which the student is enrolled, unless other arrangements have been made between the student and instructor who assigned the grade. The instructor must file an "Extension of an Incomplete" form with the Office of the Registrar if more time is to be granted. If the deficiency is not made up within the specified time, the grade automatically becomes an F (regular-graded course) or NC (P/NC-graded course). **Students making up an incomplete should not re-register for the class. Student making up incompletes cannot be used for enrollment or financial aid verification in subsequent terms.**

In Progress Grades. The grade of “in progress” is reserved for courses that are designed not to be completed by the end of the term.

Quality Points. Quality points (grade points) are determined on the basis of letter grades. For each credit of A quality, students receive four points; of B quality, three points; of C quality, two points; of D quality, one point; of F quality, zero (0) points; and for each incomplete, in progress, pass or no credit, zero (0) points.

The number of quality points earned for a course may be determined by multiplying the number of points the grade commands by the number of credits the course carries. Thus, a four-credit course in which the student receives a B grade will carry 12 quality points, and a four-credit course of A quality will carry 16 quality points. Incomplete, in progress, pass, and no credit evaluations are not included when calculating grade-point average.

Grade-Point Average (GPA). The total number of quality points acquired by the student divided by the total number of credit hours attempted on a regular grade basis, is called the grade-point average (GPA). For example, if a student has earned 102 quality points and has completed 48 credits of work, the grade-point average is 102 divided by 48, or 2.125. Grades of NC and P have no effect upon the calculation of a grade-point average.

Repeating Courses Policy

There is no limit to the number of credits that may be repeated; however, only the first 12 semester credits of repeated classes will be exempted from grade-point average calculation. This policy affects only the first repeat of a course. Additional repeats of the same course are used in calculating grade-point average. In any repeated class, the highest grade will become the official grade for the course. All grades are shown on the transcript even though they may not be used to determine GPA or counted toward graduation. Courses originally completed under either the P/N or regular grading method may be repeated under either the P/N or regular grading method.

Repeated courses which originally carried a grade of F or NC are included within the allowed 12 credits of repeat.

Students must file a “Notice of Repeated Course” form at the Registrar’s Office upon completion of the repeated course to initiate the change to the transcript.

Change of Grade Policy

A change of grade will be accepted by the Office of the Registrar only if properly signed by the instructor and the department chair. Changes will be accepted for completed grades for up to two calendar years from the original term of enrollment for that specific course. Changes will be accepted for IP (in progress), Z (grade unknown) and, in the event of error, in the calculation of the original grade. Changes of grade for I (incomplete) are not included in this policy. (See previous paragraph entitled Incompletes.)

Grade Appeals Policy

Students have the right to ask an instructor for an explanation of any grade received. Grade appeals are reviewed in instances where students perceive that a final grade is unfair, arbitrary, or capricious. Appeals must be filled within two weeks* of university notification of a final grade. Students needing assistance at any step in appealing or filing a complaint may contact the Academic Affairs Coordinator of the Student Senate (SU 280; phone 389-2611). Note: Students are encouraged to talk to their instructors before beginning this process to attempt to resolve the matter informally.

Review Process. Grade appeals will be reviewed in the following manner.

Step 1. A written petition will be submitted by the student to the instructor of the class. This petition should contain the nature of the problem, relevant information which supports the appeal, and the remedy sought. The student should retain a copy for his/her records. Within two weeks, the instructor will respond to the student in writing. If the student is not satisfied with the response provided by the instructor, he/she may proceed to Step 2. In cases where the departmental chairperson is the faculty member whose grade is being appealed, the student shall proceed to Step 3.

Step 2. A written petition will be submitted by the student to the departmental chairperson with a copy to the instructor. This petition should contain the nature of the problem, a statement that an attempt was made to resolve this issue directly with the instructor, relevant information which supports the appeal, and the remedy sought. The student should retain a copy for his/her records. The student, instructor, and chairperson may meet to discuss the complaint, if necessary. Within two weeks*, the departmental chairperson will respond to the student in writing with a copy to the instructor of the class. If the student is not satisfied with the response provided by the chairperson, he/she may proceed to Step 3.

Step 3. A written petition will be submitted by the student to the dean of the college with a copy to the departmental chairperson and instructor of the class. This petition should contain the nature of the problem, a statement that an attempt was made to resolve this issue directly with both the instructor and the departmental chairperson, all relevant information which supports the appeal, and the remedy sought. The student should retain a copy for his/her records.

Copies of all materials presented in this matter shall be forwarded to the dean, upon request, by the chairperson. The dean may convene a college grade appeals committee which shall serve in an advisory capacity to the dean. The manner of appointment and number of members on the College Grade Appeals Committee shall be determined within the college. The chairperson of the College Grade Appeals Committee shall be appointed by the dean. Within two weeks*, the chairper-

son of the College Grade Appeals Committee will make a recommendation to the dean who will respond to the student in writing of the decision reached, with a copy to the instructor and departmental chairperson. If the student is not satisfied with the response provided by the dean, he/she may proceed to Step 4.

Faculty Right to Appeal. The instructor of the class who is not satisfied with action at either Step 2 or 3 may appeal by submitting a written statement to the dean if the complaint involves the departmental level or Vice President for Academic Affairs if the complaint involves the college level.

Step 4. For *undergraduate student* complaints, a written petition will be submitted by the student to the Vice President for Academic Affairs with a copy to the instructor of the class, departmental chairperson, and dean. For *graduate student* complaints, a written statement will be submitted by the student to the Dean of Graduate Studies with a copy to the instructor of the class, departmental chairperson, and dean. The petition should contain the nature of the problem, a statement that an attempt was made to resolve this issue according to Steps 1 through 3, all relevant information which supports the appeal, and the remedy sought. The student should retain a copy for his/her records.

Use of the University Grade Appeals Committee. During consideration at Step 4, the Vice President for Academic Affairs may convene the University Grade Appeals Committee which shall serve in an advisory capacity. This Committee shall consist of a pre-selected panel comprised of a faculty member from each college selected by the Faculty Association and one student from each college selected by the Mankato Student Senate Association. Faculty serve a two-year term of appointment, and students serve a one-year term. The chair of the committee is determined by the Vice President of Academic Affairs.

In order for the University Grade Appeals Committee to review an appeal, two faculty members and two students will be randomly selected by the vice president to serve on the panel in addition to the chair of the committee. For *undergraduate students*, the chair of the committee shall be the Assistant Vice President for Academic Affairs. For appeals involving *graduate students*, the chair shall be the Dean of Graduate Studies. Panel representatives shall not review grade appeals when the instructor and/or student involved in the case are from their own college. The University Grade Appeals Committee shall have the right to all relevant information and will request all relevant instructor records.

For *undergraduate student* complaints, the chairperson of the University Grade Appeals Committee will respond to the vice president in writing within two weeks*, with a copy each to the instructor, departmental chairperson, student, and dean. For *graduate student* complaints, the chairperson of the Grade Appeals Committee will respond to the vice president in writing within two

weeks*, with a copy to the instructor, chairperson, student, dean of the College, and the dean of the College of Graduate Studies.

Both the student and faculty member shall be permitted to make a rebuttal to the written record compiled by the committee. Intent to present a rebuttal should be made in writing within one week of notification* to the Vice President for Academic Affairs. The rebuttal should be presented to the vice president within two weeks* and should provide specific information which addresses the items in objection.

The decision of the Vice President for Academic Affairs/Dean of Graduate Studies shall be communicated in writing to the student with copies to the instructor, departmental chairperson, and college dean. This decision is final.

Note: *The time period consists of normal university operating days when classes are held. Under unusual circumstances, deadlines may be extended. If the University representative, at any step, fails to review and/or respond within the time limits provided, the student may proceed to the next step. If the student fails to respond within the time limits provided, the appeal shall be deemed to have been withdrawn. Adopted March, 1992.

SCHOLASTIC STANDARDS

Probation/Suspension Policy

Satisfactory Academic Progress. Satisfactory academic progress is defined as:

- (a) achieving a cumulative grade point average (GPA) of 2.0 or higher in all post-secondary coursework completed, and
- (b) maintaining a cumulative satisfactory course completion rate of at least 67 percent of all Minnesota State University credits attempted.

Unsatisfactory performance will result in academic probation or suspension.

Probation for Unsatisfactory Academic Progress.

Students who have earned a cumulative GPA of less than 2.0 and/or a rate of satisfactory course completion less than 67% will be placed on academic probation, notification of which will appear on the official transcript. While on probation, a hold will be placed on student records, requiring formal probation advisor approval prior to registration for the following term.

Continuation in Probationary Status

Students placed on academic probation will have two academic year semesters to meet standards of satisfactory academic progress. Failure to achieve the required GPA and/or percentage of completion will result in suspension following the close of the second probationary semester. Any student earning a term GPA of 3.00 or higher during the second semester of probation will be allowed to continue enrollment for an additional semester.

Removal from Probationary Status

The cumulative GPA must be above 2.00 and the cumulative rate of satisfactory MSU course completion

above 67% to be removed from probation and the requirement for probation-related advising.

Suspension for Unsatisfactory Academic Progress

Students who fail to meet GPA and rate of course completion requirements associated with probation will be suspended. An accumulated record of cumulative grade point averages below 2.00 and/or rate of satisfactory MSU course completion below 67% jeopardizes admission to major programs, precludes graduation and may prevent transfer to other institutions. Remaining at the University under such conditions serves no useful academic purpose to the student. Academic suspension disqualifies a student from further enrollment, effective immediately. Notice of academic suspension will appear on the official transcript. A student placed on academic suspension may not enroll at the university for one full academic year (2 semesters, not including summers).

Suspension for Academic Misconduct

Students may also be suspended for academic misconduct according to the definitions and procedures published in the University’s Statement of Student Responsibilities.

Appeal of First Suspension.

Students with extenuating circumstances (e.g., prolonged illness, accident, death in immediate family) may appeal a first suspension prior to the elapse of two terms with the Office of Academic Affairs by submitting a written appeal and supporting documentation. Applications must be received in the Academic Affairs office no later than five (5) working days, excluding weekends and holidays, before the first day of the term for which reinstatement is requested.

Reinstatement After Suspension.

After an absence from the University for one academic year, a student may request a Reinstatement After Suspension for one term. Application for reinstatement must be made to the Office of Academic Affairs by the last Friday of October for consideration of reinstatement the following Spring term and the last Friday of March for the following Summer or Fall terms. Students are required to file an “Application for Reinstatement,” and the student may attach any supporting materials.

Academic Standing Committee. A committee shall be established to review appeals of suspensions and requests for reinstatement of suspended students. When the Academic Standing Committee decision is to reinstate, Reinstatement Contracts shall be established by the Committee in cooperation with the student and the Academic Affairs Office.

POLICY NOTES

Grade Point Average (GPA) is the total number of quality points (with A-4, B-3, C-2, D-1, F-0) earned by the student divided by the total number of credit hours attempted on a regular grade basis. For example, if a student has 102 quality points and has completed 48 credits, the GPA is 102 divided by 48, or 2.125. Deficiency in quality points can be determined by multiplying the number of credits attempted times 2 to determine the number of quality points necessary to achieve a 2.0. In the example above, multiply 48 x 2 = 96 quality points. In this example, fewer than 96 quality points results in a GPA below 2.0, and placement on probation. Courses in which the grade of P or NC is earned are not included in calculating GPA.

ACADEMIC STANDING SUMMARY

Current Academic Standing	Cumulative GPA	MSU Cumulative Completion Rate	Resultant Academic Standing
Satisfactory	2.00 or higher	67% or higher	<i>Satisfactory</i>
Satisfactory	2.00 or higher	Less than 67%	<i>Probation 1</i>
Satisfactory	Lower than 2.00	67% or higher	<i>Probation 1</i>
Conclusion of First Term of Unsatisfactory Progress			
Probation 1	2.00 or higher	67% or higher	<i>Satisfactory</i>
Probation 1	Lower than 2.00	67% or higher	<i>Probation 2</i>
Probation 1	2.00 or higher	Lower than 67%	<i>Probation 2</i>
Conclusion of Second Term of Unsatisfactory Progress			
Probation 2	2.00 or higher*	67% or higher	<i>Satisfactory</i>
Probation 2	2.00 or higher*	Lower than 67%	<i>Suspension</i>
Probation 2	Lower than 2.00	67% or higher	<i>Suspension</i>
<i>2nd Term of Unsatisfactory Progress Results in Automatic Suspension. The Academic Standing Committee Must Approve Appeals.</i>			

* Achievement of a term GPA of 3.00 or greater during the second term of probation will allow the student to enroll in courses the following term, regardless of the cumulative GPA achieved.

Rate of Satisfactory Course Completion is defined as the completion of courses which have received grades of A, B, C, D and P. Courses assigned grades of F, NC or I are not completed in a satisfactory manner. When the cumulative rate of satisfactory course completion at MSU drops below 67%, students are placed on probation. Percentage of completion is calculated by:

Number of Credits graded A, B, C, D, P

Number of Credits graded A, B, C, D, P, F, NC, I

Academic Honors Policy

An undergraduate student who carries 12 credits or more for a grade (not including P/N) during any one semester and achieves a grade-point average of 3.5 is included on the Academic Honors List for that semester; if a 4.0 grade-point average is achieved, the student will be on the Academic High Honors List.

Academic Reevaluation Policy

Academic reevaluation is the process of removing all prior F grades from a student's GPA calculations. This removal applies both to MSU courses and those courses transferred in from other universities. The F grades are NOT deleted from the student's record and are still printed on transcripts. A student is entitled to academic reevaluation only once.

To be eligible for academic reevaluation, a student must have:

- 1) Earned at least 24 MSU semester credits in consecutively enrolled semesters following the last F grade to be expunged.
- 2) Obtained a GPA in each of those semesters of at least 2.0.
- 3) Obtained a cumulative GPA for the courses in those semesters of at least 2.25.
- 4) No incompletes, in-progress grades, or Z grades on their record.
- 5) Not yet graduated with a B.S. degree from any institution.

TRANSFER POLICIES

Transferring General Education Requirements

Baccalaureate Graduates. Students with a Baccalaureate degree and 40 semester credit hours of general education coursework will generally have satisfied MSU's general education requirements for a Bachelor of Science degree. These same baccalaureate guidelines apply to the requirements for a Bachelor of Arts degree. However, if not previously completed, 8 semester credits of foreign language are also required for the B.A.

Associate of Arts Graduates (AA)

- * Students from Minnesota Community Colleges with an AA degree will have satisfied the general education/Minnesota Transfer Curriculum (MnTC) requirements for the Bachelor of Science (BS) degree.
- * Students from Iowa Community Colleges participating in the Regent's Agreement, transferring with

an AA degree, will have satisfied the general education requirements for the BS degree.

- * Students with an AA degree from other regionally accredited US community or two year colleges will satisfy the general education requirements of the BS degree if their AA contains 40 semester (60 quarter) credit hours of general education coursework. This coursework must be equivalent to the MSU general education/liberal arts courses. If the AA degree contains less than the required general education requirements, additional general education coursework will be required to make up the difference prior to graduation.

Associate of Science (AS)/Associate of Applied Science (AAS) Graduates.

- * Students from Minnesota Community and Technical Colleges with AS and AAS degrees may not have the entire general education/MnTC completed. Prior to graduation additional general education coursework will be required to make up the difference.
- * Students with AS and AAS degrees from other regionally accredited US community and two-year colleges may not have the required 40 semester (60 quarter) credit hours of general education. Prior to graduation additional general education coursework will be required to make up the difference.

Non-degree transfer students. Students without an associate or baccalaureate degree are obligated to complete the minimum credit and distribution requirements for general education MnTC at Minnesota State University.

Minnesota Transfer Curriculum (MnTC). Students transferring with a completed MnTC will satisfy Minnesota State University, Mankato's general education requirements.

General Transfer Policies

A variety of transfer credit policies exist at Minnesota State University, depending upon the type of institution previously attended or program in which applicants are enrolled.

Any college level credits earned at (1) any college on the list of the American Association of Colleges of Teacher Education or (2) any college that is a member of the North Central Association of Colleges or other comparable regional associations are applied toward the student's selected degree program as appropriate. The university reserves the right to determine whether previous coursework provides a suitable base for advanced study at Minnesota State University.

Vocational/Technical College Credits. A maximum of 16 semester credit hours of vocational/technical credit will generally be accepted in transfer from vocational or technical colleges which have appropriate regional accreditation. Credits approved for transfer will be

treated as elective credits and will not apply to the major, minor or to general education. Students may petition a specific department/major for an evaluation of the vocational/technical credits believed to be applicable to the major.

- * Minnesota Community and Technical Colleges. To be considered for transfer all general education coursework taken, as part of a vocational/technical degree, must be taken from the Minnesota Transfer Curriculum (MnTC) approved courses.
- * Other vocation/technical schools. For coursework to be considered applicable to the Minnesota State University general education requirements the school transferred from would have to be regionally accredited and the coursework would have to be traditional college level general education.

International Credits. In order to have international or foreign university credits potentially apply toward a degree program at MSU, students are required to have prior international credits evaluated by an outside professional agency. The form necessary to request this evaluation may be requested from the MSU Undergraduate Admissions Office.

Three Year Nursing Program Credits. Licensed registered nurses who have completed three-year hospital training programs may receive 48 credits of electives toward any undergraduate degree program except nursing. Thirty-two (32) credits will be applicable to the lower division; 16 to upper division coursework. To qualify, registered nurses need only present proof of satisfactory completion of R.N. tests as applicable. For further information, contact the Undergraduate Admissions office.

Military Credits. Veterans, upon admission, may be granted academic credit for formal military schools attended while on active duty. The American Council on Education's Guide to the Evaluation of Educational Experience in the Armed Forces will be used to evaluate military experience. A copy of the student's Report of Transfer or Discharge (Form DD-214) is required for the evaluation. Completion of military service obligation does not exempt a student from fulfilling MSU's General Education Category 11 Performance requirement.

Examination Credits. College Level Examination Program (CLEP), Advanced Placement (AP) and International Baccalaureate (IB) scores are evaluated for the potential awarding of college credit according to Minnesota State University standards. Original score reports are required for each of these exam programs.

Correspondence Credits. A student may apply a maximum of 10 semester (15 quarter) credit hours of correspondence coursework, from a regionally accredited college or university, toward a baccalaureate degree. Correspondence credits will transfer as elective credits, but may be reviewed upon request by your major department for possible application to the program.

Graduation Credit Requirements for Transfer Students. Students transferring from junior or community colleges must earn a minimum of 64 semester (96 quarter) hours of credit from four-year institutions beyond their junior/community college credit to meet minimum graduation requirements.

Cultural Diversity Transfer Requirement. Students transferring to Minnesota State University are required to meet the University's Cultural Diversity (CD) requirement. The requirement is prorated based on the number of credits transferred. Contact the Office of Cultural Diversity for the specific requirements for your particular number of transfer credits and a list of acceptable CD courses. Students who have completed an A.A. degree or transfer with 64 semester hours will have fulfilled the cultural diversity requirement.

All students who are fulfilling the Cultural Diversity requirement, must take at least one core course. Transfer students needing to complete 6 or more of cultural diversity credit must take courses in at least two different departments.

REGISTRATION FOR CLASSES

Office of the Registrar,
132 Wigley Administration Center
507-389-6266

After you've seen your advisor, it's time to choose your classes. MSU has a modern electronic telephone and Web registration system—MARS.

New Students. Fall first year students who attend summer orientation will be trained in the use of the MARS system, and will be allowed to early register for fall classes. New students not registering in the summer and planning to enroll for the fall semester will be notified when they are to report for orientation and registration. Late registration for new students is the day before the first day of fall and spring semesters or the first day of summer session.

Returning Students. Continuing and former students will register either during early registration or during the first week of classes. Refer to the semester Class Schedule for registration opportunities and procedures or contact the Registrar's Office for information.

Auditing Courses. If students wish to take a course just for its content, and do not wish to take exams or receive credit, registration is still required, and regular tuition fees are charged. Courses audited do not earn academic credit and, therefore, cannot be counted toward meeting graduation requirements or course load requirements, for receiving veterans' benefits or other financial assistance, or for intercollegiate eligibility.

Change in Enrollment. Students are permitted to adjust their class schedule prior to the beginning of the semester or for five days at the beginning of each term. Students may add or drop courses. Refer to the semes-

ter Class Schedule for specific times, dates, location and deadlines for dropping and adding classes.

(Note: Students dropping all courses should contact the Office of Business Affairs and officially withdraw. Dropping all courses on MARS is not the same as withdrawing from the University. See section on “Withdrawal from the University” below.)

Changes to the grading method are permitted for a short period of time at the beginning of a term.

No courses may be dropped after the officially published drop deadline. Courses dropped before designated deadlines are not recorded on the permanent record. Any course not officially dropped will result in a grade being registered on the student’s record. See the current semester Course Schedule for specific times, dates, location and deadlines for dropping classes.

Refunds for withdrawal of all classes are prorated depending on the number of days that have passed after the beginning of a particular term. Consult the semester Class Schedule for withdrawal refund percentages and drop deadlines.

Changing Evening Course Enrollment. An evening course, either on the campus or off campus, may be added or changed no later than the second session of the course.

Common Market Program. Minnesota State University participates in the MnSCU system’s Common Market program. Students may move among the 7 state universities for a maximum of two semesters without completing a formal application for admission to the host institution. A Common Market Passport must be completed by the student and approved. Contact the Office of the Registrar for specific details of the program.

In addition to the Common Market Program, Mankato State has a similar program arrangement with Gustavus Adolphus College, St. Peter, Minnesota. For additional details and specifics of this program, contact the Registrar’s Office.

Course Load. The maximum undergraduate student course load per term is 18 credit hours, including summer, unless an overload permission is granted by the student’s advisor. Requests for 19 or more credits, including summer, must be approved by the student’s major college dean. The load includes all courses for which a student is registered in any given term, including off-campus, evening, Saturday and regular on-campus courses. Students who successfully carry an average load of 16 credit hours per term for 8 semesters can accumulate the 128 semester credits required for graduation within four years. Students taking graduate courses are limited to 16 credit hours (9 in summer) per term.

Late Registration Policy. Consult the semester Class Schedule for late registration deadlines and fees. Enrollments are not accepted after these deadlines have passed.

Order of Registration Policy. Students register in descending order: seniors, juniors, sophomores, and first-year students. Graduates and students who have completed a four-year degree and are pursuing additional undergraduate work are able to register at any time during the registration period.

Permission to Register. Some courses require the permission of the faculty member before a student may register for a class. Once permission has been granted, the student, not the faculty member, is responsible for registering for the class.

Withdrawal from the University. Withdrawal may be initiated from only two sources: (1) a student requesting withdrawal and (2) the university, when a student fails to meet standards or contractual obligations. Requests for withdrawal by parents, spouse, significant others, etc., shall not be processed without either (1) written permission of the student or (2) sufficient documentation to satisfy the university that the person is acting on behalf of a student unable to represent her or his own interests at the time.

Students with outstanding financial obligations to the university will be required to pay them in full before withdrawal can be completed. Students who have refunds due may request them through the Office of Business Affairs in accordance with the refund schedule established by the MnSCU Board and the state legislature. (See “Finance” section below for refund policy.)

Withdrawals are not permitted during the last 10 class days of the quarter or the last five class days of a summer session.

Students withdrawing officially from the university should contact the Office of Business Affairs, 236 Administration Building to complete an official withdrawal form.

Repeated withdrawal may result in disqualification from further enrollment for at least two academic quarters.

(Note: Students dropping all courses should officially withdraw at the Office of Business Affairs WA 236.)

TYPES OF COURSES

Auxiliary Course. Auxiliary courses are experimental courses numbered 001-090. They have all the attributes of regular courses, but can only be offered two times within a two year period, and then cannot be offered again. The purpose of an auxiliary course is to determine if the course should be offered on a regular basis under a regular number. For courses numbered 091-099, see “Developmental Courses” below.

Continuing Education Units (CEU’s). Many licensed professions require that the license be upgraded each year through attending workshops or earning college credits. For those individuals who wish to upgrade their license without doing coursework for credit, a record-keeping device called the CEU, or Continuing Education Unit, has been developed. The CEU is a nationally

recognized standard and, like college credits, generates a transcript so that a permanent record of the upgrading procedure exists. Upgrading requirements are usually expressed in terms of contact hours, or hours actually spent in the classroom or workshop. One CEU equals 10 contact hours. Programs dealing with job-related problems and issues, or for broadening professional skills can be arranged either on or off campus. Requests for information on any of these offerings should be directed to the Extended Campus/Continuing Education Office, Minnesota State University.

Developmental Course. These courses have been designated as remedial with no credit toward any degree program. Examples are CI 092, MATH 094 and 098; ENGL 100. Regular tuition rates apply, but the credits do not count toward the graduation requirement of 128 credits.

Field Trip. A short-term visit off-campus to a site of educational significance. This activity is supplemental to a regular course. Credit awarded is for the course involved, with no extra or separate credit awarded for the field trip.

Individual Study. Permits properly qualified students to undertake independent study under guidance of a faculty member. It is used only where the time sequence and content are especially suited to the individual student and no other students are enrolled in the same work at the same time. Written permission from the individual professor and/or department is required prior to registration.

In-Service. A professor and a group of students concentrate on cooperatively working toward the resolution of a specific problem clearly relating to professional assignments of students. An in-service course focuses on concerns of a unique clientele. This course is usually offered on-site over an extended period of time. Each new subtitle must be approved by the department chairperson, college dean and, if at the graduate level, the graduate dean. Approval is for an indefinite time.

Laboratory. Component of a course involving "hands-on" experience with specialized equipment, performing scientific testing/examination procedures and analysis.

Module. Identifies a regular course taught in a two week format. All other guidelines for a regular course apply.

Practicum, Internship, Field Study or Fieldwork Credit. Awarded for an educational experience on an individual basis emphasizing on-the-job training. Compensation in dollars may not always be awarded, but academic credit is always awarded. The student's work is jointly supervised by the academic unit involved and the cooperating agency. Written permission from the individual professor and/or department is required prior to registration.

Regular Course. Contact hours between professor and students designed more to synthesize content than to present material to be learned. Thus, contact among class members and professor is heavily supplemented by regular assignments and systematic evaluation. A course

meets on a regular basis usually for an academic semester or a summer session, or as a module.

Self-Paced Course. A series of specifically defined lessons. Each lesson involves an assignment and an evaluation which the student must complete at an acceptable competence level. Learning may involve group and/or individual activity, but the standards established apply equally to all members.

Seminar. Characterized by in-depth study and a narrow focus. Students are expected to do extended research outside of class and to present and defend their research in class. A limited number of students is accepted, and stringent prerequisites are required.

Tour. An extended group experience off the campus in which major learning results from travel. Tours must be supervised and accompanied by regular Minnesota State University faculty. Credit is awarded and student evaluation is expected. The tour itself is the major learning experience in earning credits.

Workshop. The principal learning takes place through interchange among class members, professor and his/her assistants. Thus, most work is frequently done within the scheduled contact hours; however, appropriate evaluation of student performance may include assessment of outside work as well. A workshop has specific focus on an educational problem and occurs in a compact time period.

COURSE OFFERINGS

This bulletin lists course offerings for the calendar year beginning with fall semester 2000. This listing is as accurate as possible when the bulletin is compiled. Students are advised, however, that all information regarding course information is subject to change, and it is recommended that students check the class schedules listed prior to each term. The university reserves the right to withdraw or modify any course or to change instructors.

Contact Hour. One 50-minute period containing class group activity under supervision.

Course Numbering System. Courses are identified by a 3-4 digit character code which indicates the department offering the course. This is followed by 3 digits identifying the course level (001-499). The last two digits represent a particular section of a course. Please be aware that undergraduate courses are from 001-499; graduate courses are numbered 500-999.

COURSE ABBREVIATIONS

ACCT	Accounting
AET	Automotive Engineering Technology
ANTH	Anthropology
ART	Art
AST	Astronomy
AVIA	Aviation Management
BED	Business Education
BIOL	Biological Sciences
BLAW	Business Law
CDIS	Communication Disorders

CHEM	Chemistry
CI	Curriculum and Instruction
COMS	Computer and Information .Sciences
CORR	Corrections
CSP	Counseling and Student Personnel
DHYG	Dental Hygiene
ECON	Economics
ED	Education
EDFN	Educational Foundations
EDLD	Educational Leadership
EE	Electrical Engineering
EET	Electronic Engineering Technology
ENG	English
ENVR	Environmental Sciences
ESL	English as a Second Language
ETHN	Ethnic Studies
EXED	Experiential Education
FCS	Family Consumer Science
FIRE	Finance, Insurance and Real Estate
FYEX	First Year Experience
FREN	French
GEOG	Geography
GEOL	Geology
GER	German
GERO	Gerontology
HIST	History
HLTH	Health Science
HONR	Honors Program
HP	Human Performance
HUM	Humanities
IBUS	International Business
IDCM	Interior Design and Construction Management
LATA	Latin American Studies
LAWE	Law Enforcement
LME	Library Media Education
MASS	Mass Communications
MATH	Mathematics
ME	Mechanical Engineering
MEDT	Clinical Laboratory Sciences/Medical Technology
MET	Manufacturing Engineering Technology
MGMT	Management
MODL	Modern Languages
MRKT	Marketing
MSCI	Military Science
MUS	Music
NURS	Nursing
OPEN	Open Studies
PHIL	Philosophy
PHYS	Physics
POL	Political Science
PSYC	Psychology
REHB	Rehabilitation Counseling
RELG	Religious Studies
RPLS	Recreation, Parks and Leisure Services
SCAN	Scandinavian Studies
SEA	Studies in Educational Alternatives
SOC	Sociology
SOST	Social Studies
SOWK	Social Work
SPAN	Spanish
SPED	Special Education
SPEE	Speech Communication
STAT	Statistics
TECH	Technology Education
THEA	Theatre and Dance
URBS	Urban and Regional Studies
WOST	Women Studies

GRADUATION POLICIES

In preparation for graduation, students should consider whether they have completed the following requirements and broad categories of coursework:

- General Education Requirements
- GPA Requirements (MSU cumulative) Major and Minor **OR** Broad Major without a Minor
- Number of P/N Courses Allowed
- Residency Requirements

Application for graduation must be made no later than one calendar year prior to the expected graduation term. A minimum of four months must be allowed for application processing and notification. Forms are obtained from the Office of the Registrar reception area or the Hub and are processed in the order in which they are returned to that office.

Bulletin Expiration Policy

The privilege of graduating under the requirements of an undergraduate bulletin extends no longer than seven years from the term of the student's original enrollment.

The requirements outlined in this bulletin become effective at the beginning of the fall semester, 2000. Although no student can graduate under requirements outlined in a bulletin of more than seven years preceding the date of graduation, the student may elect to graduate under a more recent bulletin. However, students must complete all the requirements under a single bulletin, except for new programs.

Note: While specific requirements for a degree may expire or change, students never "lose" college credits they have earned. They may have to take additional coursework, or fulfill different requirements to obtain a degree under a new bulletin.

Graduation Scholastic Standards Policy

A minimum grade-point average of 2.0 is required for all coursework earned at Minnesota State University. In addition, a minimum cumulative grade-point average of 2.0 is required for graduation from any undergraduate degree program. Specific majors may have their own GPA requirements as well.

No degree will be awarded until all grades are finalized. "I", "IP", or "Z" grades may not remain on the permanent record.

Minimum Credits. Graduation with an associate degree is based upon successful completion of a minimum of 64 semester hours of credit. Graduation with a baccalaureate degree requires a minimum of 128 semester hours of credit.

Double Majors. Double majors must be taken in the same degree.

Graduation Residency Policy

To be eligible for graduation with a bachelor's degree, a student must have earned at least 30 semester hours of undergraduate credit from Minnesota State Univer-

sity during the last two academic years. The term “last two academic years” refers to work completed after the first 64 semester credits have been earned.

To be eligible for graduation with an associate degree, a minimum of 20 of the last 30 semester credits must be earned from MSU.

Transfers from junior or community colleges must earn a minimum of 64 semester hours of credit from four-year institutions to meet minimum graduation requirements.

A student must be enrolled at MSU for credit during the term in which the degree is awarded. However, the academic vice president is authorized to permit a student who lacks four or fewer credits for graduation, and who has a good scholastic record, to complete degree requirements in a manner prescribed by the academic vice president.

Graduation Honors Policy

To qualify for graduation honors, students must:

- meet all requirements for a baccalaureate degree; earn a minimum of 43 semester hours from Minnesota State University *after* attaining junior classification;
- have a minimum cumulative grade point average to satisfy honor requirements. For the student's name to be listed in the graduation program as an Honors Scholar, all of these requirements must be met the SEMESTER BEFORE graduation.

There are *no* exceptions to these requirements.

Students with a minimum cumulative grade-point average of 3.3 are graduated Cum Laude; 3.5, Magna Cum Laude; 3.8, Summa Cum Laude. Any student who meets the requirements may graduate with academic honors without participating in the Honors Program. Students in the Honors Program will also graduate with the additional distinction of “Honors Scholar.”

Grade-point average for determining graduation honors is calculated on the basis of all work attempted and completed toward a degree, including transfer credits. While the number of credit hours earned during the graduation term does not affect the determination of graduation honors for recognition at commencement, quality points earned for those credits are considered in calculating the final grade-point average which determines graduation honors for transcript and diploma purposes. Enrollment in P/N-graded courses during the final term *does not* alter the 43-semester-hour requirement specified above.

To be recognized in the commencement program as achieving graduation honors and to wear an academic honors ribbon, you *must* be graduating the term in which commencement is held.

Graduation Date Policy

The graduation date reflected on all university documents is the date that all degree requirements are completed. Students who enroll for courses, internships or

other special projects during their final semester (the semester of graduation) but do not complete the course, internship or project until after the graduation date for that semester have one additional semester to remove grades of I and IP. Special cases will be treated individually upon appeal to the Office for Academic Affairs.

Once admitted to Minnesota State University, there are many services and programs available to help make the transition into the University community an easy one. Getting oriented right from the start is an important part of university life that will have many long term benefits. You'll get to know your new environment and become familiar with all the resources of Minnesota State University.

FINANCES

EXPENSES

The rates for tuition and student fees, and for living expenses in university housing are determined by the Minnesota Legislature and the Minnesota State Colleges and Universities Board and are subject to change without notice.

Tuition: Resident/Non-Resident. Students who are not permanent residents of the state of Minnesota are charged a higher rate of tuition than are residents of the state. The MnSCU Board establishes the criteria by which student residency, for tuition purposes, is determined. Generally, a student's permanent residence is that location at which a student has graduated from high school, and where parents or legal guardians permanently reside. A classification of non-resident can be changed to resident at any time residency requirements are met. Students desiring to change their residency may obtain information concerning the specific requirements from the Office of the Registrar.

Tuition: Reciprocity with Other States. Students who are residents of North Dakota, South Dakota, Wisconsin and Manitoba can attend Minnesota State University without paying non-resident tuition. Students from Kansas, Michigan, Missouri and Nebraska can attend Minnesota State University at a rate less than the non-resident tuition rate. Students desiring the reciprocal rate must apply by completing the reciprocity application form, available in the Office of the Registrar, and sending the form to the Higher Education Board of their home state. Students may also obtain a form from a nearby postsecondary school.

ESTIMATED UNDERGRADUATE
TUITION RATES FOR
2001-2002 ARE LISTED BELOW

On-Campus

1-11 credits
Resident \$ 118.00 per credit hour
Non-resident ... \$ 250.00 per credit hour

12-18 credits (Banded)
Resident \$1,475.00 flat fee
Non-resident \$3,125.00 flat fee

19+ credits
Resident Flat fee + \$165.00/credit
Non-resident .. Flat fee + \$337.70/credit

Extended Campus

Resident \$118.00 per credit hour
Non-resident \$250.00 per credit hour

Student Fees. Student fees are assessed based on enrolled credits. The student fee provides funds for a variety of student services and programs that benefit all students. Student fees are charged per credit hour and are the same for resident and non-resident students. The

fees for the 2000-2001 academic year were \$23.59 per credit hour. The \$23.59 per credit hour fee was distributed to support the following services: \$7.97 Student Union facility fee, \$6.90 Student activity fee, \$3.39 Health Services fee and a \$5.00 Academic Computer Lab fee. The above fees are charged through the first 12 credit hours. A Minnesota State University Student Association fee of \$.33 is charged through 15 credit hours. Fees are determined at the close of each academic year. Information about student fees for 2001-2002 can be obtained by calling the Office of Student Affairs, 507-389-2121 or (MRS/TTY 1-800-627-3529.

Other Course Related Costs. In addition to university tuition and fees, there may be additional course-related costs associated with enrollment in certain classes. Special costs include, but are not limited to, those for supplies and materials, facility use, liability insurance, or conference attendance costs.

Senior Citizens Fees. Minnesota senior citizens age 62 and over may enroll for any course free of charge if they do not desire degree credit. An administrative fee of \$20 per credit hour will be assessed if degree credit is desired. No activity fees will be assessed; however, any laboratory and/or course fees will be required regardless if taking the course for credit or audit. For further information contact the Office of the Registrar, phone 507-389-6266.

Other Fees. At various times in their academic career, students may incur other fees and charges, such as a late payment fee, matriculation fee, and graduation fee among others.

ESTIMATED COSTS FOR 2001-2002

The following is a summary of estimated basic education costs for undergraduates during the academic year 2000-2001, based on a course load of 30 credit hours over two semesters. Costs of attending Minnesota State University will vary according to the student's actual credit load, book and supply needs, housing arrangements and so on. Expenses such as parking permits, laundry, health needs, etc. are not included.

	Resident	Non-Resident
Tuition (24-36 cr)	\$2950.00	\$6250.00
Room & Board (residence hall, double room, 19 meal ...	\$3677.00	\$3677.00
Books (est.)	\$ 700.00	\$ 700.00
Total estimated education costs* (2 semesters)	\$7327.00	\$10627.00
* plus student fees		

Payment of Tuition and Fees. Tuition and fees are payable on a per term basis. All tuition must be processed by the fifth day of each term. An installment payment plan (three payments) for tuition/fees and residence hall is available each term for a \$15.00 fee. **Reg-**

istrations will not be canceled for nonpayment. Students must officially withdraw from the university, if they do not wish to be enrolled. ***Consult the per term class schedule for specific deadline dates and instructions for each term.***

Refund of Tuition and Fees. Refunds and/or credits are based on the guidelines set forth by the MnSCU Board.

Refund Policy: Dropped Classes. Students registered for on campus daytime classes will receive a full refund/credit providing the class is dropped through the fifth class day or by one class after the first class session, whichever is later.

Students registered for on campus summer session classes will receive a full refund/credit through the second class day of the session. No refunds/credits are given past the second class day.

Students registered for workshops, modules, or short courses will receive a full refund/credit only if the course is dropped prior to the first class meeting.

Refund Policy: Withdrawal from the University. The term "Official Withdrawal" is defined as not being enrolled in any classes during a specific term.

NOTE: Dropping all classes on MARS does not officially withdraw a student from the University. Contact the Office of Business Affairs either in person (Wigley Administration Building, WA 236) or by phone (507-389-2261) to officially withdraw.

Students who have officially withdrawn from the University will receive a refund based on the schedule listed below. Consult the per term class schedule for deadline dates.

Refunds for Withdrawal: Regular Academic Year:

To be determined. Refer to the Semester Class Schedule.

Refunds for Withdrawal: Summer Session:

To be determined. Refer to the Semester Class Schedule.

Refund Policy: Off Campus Courses. Students registered for off-campus classes wanting to either drop courses or withdraw, need to contact the Office of Extended Campus at 507-389-2572 or refer to the class schedule.

FINANCIAL AID

To assist students in meeting the costs of attending the university, a variety of student financial aid is offered. Financial aid can be awarded to students in the form of scholarships, grants, loans, and/or part-time employment. Detailed information and instructions on all financial aid programs may be obtained from the Office of Financial Aid, 109 Wigley Administration Center, Minnesota State University, MN 56001; 507-389-1185 (v), 800-627-3529 (MRS/TTY), www.mnsu.edu/dept/faids.

Need-Based Programs. Some programs are available

only to those students with financial need as determined by the Free Application for Federal Student Aid (FAFSA) application process. Need-based programs administered by the Office of Financial Aid, are listed below.

Scholarships

Alliss Foundation Scholarships
University Scholarships

Grants

Federal Pell Grants, Minnesota State Grants,
Federal Supplemental Educational Opportunity
Grants, University Grants, Post-Secondary
Child Care Grant

Loan Programs

Federal Stafford Loans (Subsidized and Un-
subsidized), Federal Perkins Loans, Federal
Parent Loans for Undergraduate Students (PLUS),
Student Educational Loan Fund (SELF)

Need-Based Employment

Federal Work-Study, State Work-Study

How to Apply. To have eligibility determined for need-based financial aid programs, students must complete a Free Application for Federal Student Aid (FAFSA). These forms are available at high schools, or the Office of Financial Aid, FAFSA on the Web www.fafsa.ed.gov, or it a continuing student, renewal FAFSA form are mailed if certain criteria is met. To receive priority consideration for all funds the FAFSA must be received by the Federal Processor on or before **March 15**. To ensure that funding is received in time for payment of fall semester university charges, the FAFSA must be received by the Federal Processor on or before **July 1** of that year. Applications received after July 1 will be processed as time permits.

To be considered for funding, a financial need must be demonstrated through the application process and the student must be accepted for admission. Awards are made in the order that applications are received until funds are exhausted. Accurate completion of the FAFSA requires the prior year's federal income tax information; therefore, early completion of tax forms, followed by prompt completion of the FAFSA, is recommended. Estimated tax data are acceptable if the March 15 date becomes a factor.

Award notices outlining eligibility and awarded funds are mailed to students upon the processing of their FAFSA applications and any required documentation. More detailed information can be obtained in, the Office of Financial Aid or www.mnsu.edu/dept/faids.

Non-Need Based Programs. There are a number of student loan programs available to those who do not demonstrate a financial need. To be eligible for such funding, a valid FAFSA application must be on file with the Office of Financial Aid. Information is available by contacting the Office of Financial Aid. The Office of Admissions coordinates the awarding of a variety of academic scholarships and talent grant programs for new entering freshmen and transfer students. For information concerning these, contact the Office of Admissions, 122 Taylor Center.

A number of scholarships are awarded to students regardless of their major for participation in athletics, band, orchestra, and other music programs. Students interested in athletic financial aid should contact the coach of their sport. Those interested in scholarships for music activities should contact the Department of Music, 261 Performing Arts Center.

Many scholarships are available to students majoring in a specific discipline once they have been formally admitted to a college or program. These include, but are not limited to, business, computer science, education, geography, home economics, law enforcement, music, nursing, physics and engineering, political science, social work, sociology, and theatre arts. Students interested in college and departmental scholarships beyond the freshman year should contact the chairperson or scholarship coordinator of their academic department.

Part-Time Employment. In addition to the Federal and State Work-Study Programs administered by the Office of Financial Aid, the University offers other on-campus employment opportunities in the form of Student Help positions. Students who are currently enrolled for six or more credits are eligible to apply for these positions, with no requirements to demonstrate financial need. Because placement into Student Help positions is not guaranteed, students interested in these jobs will go through selection methods similar to those involved in any job-hunting process.

The Student Part-Time Employment Service provides information on many on-campus and off-campus job openings. Brief job descriptions for Student Help positions and the off-campus part-time job openings of the Minnesota Job Service are posted on job boards in Wigley Administration Building, near the Academic Computing Center, and in Morris Hall.

Other Financial Aid. Many other forms of financial aid are available to students who qualify for specific programs, such as Rehabilitation Services, Veterans' Benefits, Short-Term Student Loans. For further information on these programs, contact the Office of Financial Aid or the appropriate government office.

Satisfactory Academic Progress Standards. To be eligible for financial assistance, specific criteria must be met. These requirements are federal and state mandates. The criteria include cumulative grade point average, completion rate and maximum time frame. The minimum cumulative grade point average required is 2.0 (3.0 for graduate students). Students must maintain a 67% completion rate. Completion rate is defined as the ratio of number of credits paid for compared to number of credits completed. The maximum time frame a student has to complete his/her degree cannot exceed 150% of the published program length.

Please note that these Satisfactory Academic Progress Standards may not be the same as the Academic Progress Standards of the University, your college or your de-

partment. Please contact the Office of Financial Aid for additional information.

LIVING ARRANGEMENTS

DEPARTMENT OF RESIDENTIAL LIFE

111 Carkoski Commons

507-389-1011

Fax: 507-389-2687

E-mail: reslife@mnsu.edu

Website: <http://www.mnsu.edu/dept/reslife>

The Department of Residential Life oversees all on-campus residence hall housing and dining activities. Contact this office for further information concerning on-campus housing and dining or to acquire contract forms. Please write to Department of Residential Life, 111 Carkoski Commons, Mankato, MN 56001 or visit our website.

Students can select their own living situations from a variety of options. While there is no on campus live-in requirement, new students will find living in residence halls a good idea: GPAs are higher and students who live on campus are more likely to graduate. About 3,000 students are able to take advantage of on campus living. It gives them an opportunity to meet other new students and get involved in social and academic support activities; they don't have to worry about cleaning, landlords, light, phone, cable or heat bills and can concentrate on school; and best of all, they live right on the campus.

UNIVERSITY RESIDENCE HALLS

Students desiring the convenience of living on campus may live in either Crawford, McElroy, or Gage Complex. Maverick Hall, a housing option designed especially for first year students, is housed in Gage Complex. Each community is unique and provides a comfortable living situation. All of the residence halls are open during the breaks for students who want to stay in Mankato. First-year and transfer students are highly encouraged to live on campus to help with their adjustment to Minnesota State University.

Residence Hall Living. The residence life program at MSU is designed to provide a variety of opportunities and experiences that enhance and support students' academic experiences. There are a number of living-area choices available, including floor environments focusing on quiet-study, upper-class/transfer/graduate/non-traditional students, intercultural students, engineering, computer science, substance-free areas and smoke-free areas. Residence hall staff are carefully selected and extensively trained to meet the needs of residents, and a large number of educational and personal development activities are planned by the staff and student governments throughout the year. There are also many social and recreational programs offered.

Furnishings and Services. Rooms in the residence halls are equipped with single beds, mattresses, blinds, drawers, closets, desks, telephone lines, cable service and

internet service. Most rooms also have a sink. Bedding and telephones are not included, and students are expected to bring their own. Most students live in double rooms with only one roommate, although some triple rooms, single rooms and suites are available.

Dining Service. There are five meal plans available from which students may choose. Depending on their circumstances, students may opt for the 19, 14, 10, 75 or 115 meal plan. The 19, 14 and 10 meal plans allow students to eat 19, 14 or 10 meals, respectively, of the 19 meals served each week. The 75 and 115 meal plans allow students to eat any 75 or 115 meals respectively per semester. A small percentage of assignments are also made to students desiring only a room contract; however, most students have found that eating in the dining hall is more convenient and cost-effective. All contracts include a minimum of 50 of Flex dollars each semester. Flex dollars allow you to purchase anything you like at any time at any campus dining outlet. You may also opt for the larger Flex plans of 100 or 150 flex dollars per semester.

Costs

Residence hall costs vary according to the type of room, type of meal plan and length of semester.

- A single room with 19 meals per week for 2001-2002 will be \$4,522.
- A double room with the same meal plan will be \$3,677.
- A room-only contract for 2001-2002 will be \$3,164 for a single room and \$2,319 for a double room.

All rates are subject to change as the result of decisions made by the MnSCU Board and are set each spring for the following academic year. The rates are subject to change by the board or the state legislature at any time.

Residence Hall Reservations. Admission to the university does not include reservation in a residence hall nor does a receipt for room deposit indicate admission to the university. Reservations are made in the order in which they are received.

Application Procedure

Students who have applied for admission to Minnesota State University will receive a housing application form from the Office of Admissions along with the letter of official acceptance to the university. To reserve housing on campus students should complete the housing application and return it along with a \$100 prepayment to Residential Life.

NOTE: Students with disabilities who have specific housing needs should identify their particular need when returning the application agreement.

Currently enrolled or previously enrolled students should contact the Department of Residential Life for housing application materials.

Policies and Regulations. All applicable policies and regulations are published in the Residence Hall Student Guide. A copy is given to each student who moves into the residence halls.

Semester Break/Summer Occupancy. Students who need to stay on campus during academic year vacations may stay in their own rooms during the breaks. Students should be aware, however, that they are responsible for their own meals during these times. For Winter Break there is an additional charge for the room.

A residence hall on campus is always open for students attending summer school. Specific information about summer housing is available beginning in the spring of each year. Current resident students may have to move to another location for summer housing.

Residence Hall Fee Payment. Residence hall payments are due upon receipt of the billing invoice. Payments can be made on an installment basis and/or by credit card if desired. Registrations will be suspended for all students who have unpaid bills after the payment deadline date. A hold is placed on the academic records of any student owing past-due obligations to the university.

Off Campus Housing. For the MSU students who do not live in the residence halls there are numerous off-campus housing available in the Mankato area, much of it very near to campus. **Student Leadership Development & Service-Learning,** 173 Centennial Student Union, 507-389-6076 or <http://www.csu.mnsu.edu/comcon/off-campus.html>, can provide a listing of the nearby apartment complexes, representing more than 1,500 living units, with information on amount of rent, deposit and length of lease. There is also a database of other rental options in the surrounding area, including houses, rooms, and more apartments for rent - this may only be accessed by calling or stopping in the office. Monthly rental fees generally run \$375-525 for a one-bedroom unit, \$460-680 for a two-bedroom unit, and \$590-1300 for a three to five bedroom unit. The office also maintains a file of students seeking roommates. In addition to providing information on housing vacancies, the friendly staff can answer a variety of questions on off-campus living, or refer students to other sources on campus and in the community.

CAMPUS RESOURCES AND SERVICES

ACADEMIC ADVISING AND PROGRAM PLANNING

Planning is important for your academic success. It should begin in your first year, and it should begin with finding an advisor who can best meet your individual needs and help you plan all facets of your degree. Every course you take fits into one of the general categories required for a baccalaureate degree. Students seek advising services for some of the following reasons: pre-major advising, choosing or changing a major, general education advising, career exploration, registration, or academic difficulty.

Advising Resources. Every new student is assigned an academic advisor. We urge you to work closely with this individual. Listed below are additional advising resources.

COLLEGE ADVISING

STUDENT RELATION COORDINATORS

Allied Health

Mark Schuck, HA 162

389-5486

Arts & Humanities

Carrie Williams, AH 226

389-1770

Business

Larry Herke, MH 151

389-2963

Education

Cheryl Kalakian, AH 118

389-1215

Nursing

Candice Mentele, WB 324

389-6022

Science, Engineering & Technology

Angie Bomier, TR C125

389-1521

Social & Behavioral Sciences

Clark Johnson, AH 114

389-6306

FIRST YEAR EXPERIENCE

Maverick Hall G10

Tracy Harris

Lynette DiBrito

Phone 389-5498

OTHER ADVISING RESOURCES

Multicultural Affairs CC115

389-6300

Ex.C.E.L. Student Support Services WI 355

389-2797

Learning Center ML132

389-1791

Counseling Center CSU245

389-1455

Career Development Center AB209

389-6061

DISCOVER/Resource Library

389-1962

Disability Services AH112

389-2825

ACADEMIC COMPUTER CENTER

121 Wissink Hall

507-389-5160

The Academic Computer Center (ACC) has over 475 computers and printers for student use. All computers have access to the Internet. Student workers are on duty to provide assistance. For students who need to develop their computer skills, many workshops are offered to learn software.

Surrounding the open lab are six classroom/labs for hands-on interactive instruction. In addition, a services area houses printers for the Unisys mainframe; VAX, UNIX, and AS400 minicomputers; black and white and color laser printers for the Macintosh and IBM microcomputers.

A multimedia area provides access to the latest technology in digitizing art, flatbed and 35mm scanning, MIDI, and sound editing.

Students who have modems on personal computers in their rooms or at home can access the campus computer network via telephone lines.

The Campus Computer Store is located in the Student Union. Students may purchase both hardware and software at an educational discount.

OFFICE OF AFFIRMATIVE ACTION

112 Armstrong Hall

507-389-2986 (V)

1-800-627-3529 (MRS/TTY)

The Affirmative Action Office provides services to students who have complaints in two primary areas: discrimination and harassment. Students who believe they have been harassed or treated unfairly because of their race, religion, color, national origin, sex, sexual orientation, age, marital status, disability, creed, or any other basis prohibited by state or federal laws, or MnSCU System policy, are encouraged to contact the Affirmative Action Office for assistance in addressing the problem.

The goal of the Affirmative Action Office is to help students obtain a prompt and equitable resolution of problems related to discrimination and harassment. The Affirmative Action policy, policies prohibiting violence or harassment based on sex, race, disability or sexual orientation, and the Grievance Procedures are available upon request at the Affirmative Action Office.

CAREER DEVELOPMENT & COUNSELING

209 Wigley Administration Center/

245 Centennial Student Union

507-389-6061/507-389-1455

<http://www.mnsu.edu/dept/cdc>

Career Development & Counseling (CDC) facilitates student success through the provision of both personal and career counseling services:

Individual personal counseling is offered to students and provides short-term confidential counseling to help students cope with personal, social, and educational concerns that may be interfering with their university career. Typical issues include relationships, stress, loss, and self-esteem. The personal counseling program operates on an appointment basis. Consultation and support is available to faculty and staff.

National testing (CLEP, LSAT, MAT, GRE, and others) is coordinated through the Counseling side of the CDC. For more information, visit Counseling in CSU 245.

Individual career counseling is available to students to assist in identifying interests and career opportunities. This can include the use of the Strong Interest Inventory and/or the DISCOVER Computer Career Guidance System.

Group presentations are scheduled throughout the semester on topics such as: Career Exploration, Resume Writing, Job Interviewing, Job Search Skills, Overcoming Test Anxiety, Grief and Loss, Coping with Academic Burnout, and Building Your Self-Image.

Internship and job seeking assistance is provided to students through group presentations, individual job search strategy assistance, "Resume Quick Stop", candidate referrals to employers, the CDC's career resource library, and Internet vacancy listings and links. The new software system *Recruiting* by "experience", provides an integrated recruitment database for employer resume referral and job listings on the web. In addition, employers from a wide variety of fields recruit students through on-campus interviewing.

MSU Job Service is provided to assist students in securing part-time, seasonal, and temporary employment either on- or off-campus. Stop at the CDC or visit our website for further information.

A number of **special events** are sponsored and co-sponsored by the CDC throughout the academic year. These include: Career Week, Minnesota State Universities Job Fair, and the Minnesota Education Fair.

STUDENT LEADERSHIP DEVELOPMENT & SERVICE-LEARNING

173 Centennial Student Union

507-389-6076

507-389-5632 (fax)

sdpadesk@mnsu.edu

www.csu.mnsu.edu/sdpa/sdpaintropage.htm

Service-Learning is an educational experience through which students are involved in community work that contributes significantly to positive change. This process always includes an intentional and structured educational component for students and may be employed in curricular or co-curricular settings.

Co-Curricular Community Service-Learning. Co-Curricular Service-Learning occurs through a variety of organizations, programs, and activities.

Organizations.

Circle K. Circle K is a recognized student organization sponsored by Kiwanis International that is dedicated to service, leadership and fellowship.

Community Outreach Connectors (COC's). The COC's are a student-run/student catalyst community service group that promotes learning, leading, and service. The group meets weekly. They help organize the Alternative Spring Break Trip, initiate community projects for the campus, and recruit volunteers to serve in community organizations.

Opportunities.

AmeriCorps (Mankato Cluster). AmeriCorps is a national service initiative. Through AmeriCorps, individuals of all ages and backgrounds address the nation's educational, public safety, human and environmental needs through service. During a one-year term of service, members receive a living stipend, health insurance, child care, loan deferment and interest accrual payments. After a term of service, AmeriCorps members receive an education award to help finance their college education or vocational training, or to pay back their student loans.

Alternative Spring Break. Alternative Spring Break is a student-run service trip that travels across the United States. Past trips have taken students to Florida, Kentucky, Utah and New York.

Service Through Off-Campus Student Employment. Students provide services in the community to low-income individuals and receive work-study money in order to help finance their education. These services occur in non-profit and government sites that allow for learning, exploration, and skill building. Students are able to enhance their understanding of needs in the community as well as act as a community building bridge between organizations/agencies and Minnesota State University, Mankato. (STUDENTS MUST QUALIFY) Contact the Office of Financial Aid at 389-1185.

America Reads (Community Read-In)/Tutoring Program. Each spring one hundred Minnesota State students, retired faculty, AmeriCorps members and community partners participate in a community-wide initiative that encourages and fosters parents to READ to children and adults at public schools, literacy centers, libraries, and community organizations. This project continues as a tutoring program throughout the school year.

Curricular Community Service-Learning. Curricular Service-Learning is an educational method that begins in the classroom and progresses into the community to meet community needs. A true Curricular Service-Learning experience requires the application of acquired knowledge, skills, and reflection on the experience.

Service-Learning classes are listed in the academic bulletins with this special Service-Learning identity indication. Students can register for these classes during fall and spring semesters.

The following courses include a Service-Learning component:

Accounting-ACCT 411 *Individual Income Tax*

Corrections-CORR 300 *Foundations & Orientation to Correctional Practices*

Educational Foundations-EDFN 222 *Human Relations and Cultural Diversity*

Physical Education- HP 101 *Developmental/Adapted Physical Education*

Political Science- POL 381 *Citizenship I*

Urban & Regional Studies-URBS 230 *Community Leadership & Service-Learning*

English-ENG 473 *Desktop Publishing*

Mass Communications-MASS 433 *Public Relations Principles*

CULTURAL DIVERSITY PROGRAM

115 Alumni Foundation Center

507-389-6125

The Cultural Diversity Program cooperates with existing student services and seeks to improve the socio-educational climate to make educational experiences more meaningful to students from diverse racial and cultural backgrounds. In addition to providing support services and cultural awareness activities, the program works with academic departments to increase diversity in the college curriculum. See also **Office of Multicultural Affairs** below. An extension of the program, the Intercultural Student Center, located at 269 Centennial Student Union, provides social and cultural outlets for students of color and others.

DENTAL HYGIENE CLINIC

Morris Hall Basement

507-389-2147

800-627-3529 (MRS/TTY)

The dental hygiene clinic is a training facility for students in Dental Hygiene on Dental assisting and staffed by a dentist and faculty. Comprehensive dental hygiene services performed include prophylaxis, radiographs, tooth whitening, and mouthguards. The clinic is open to the public and most dental insurance is accepted.

<http://cahn.mnsu.edu/dentalhygiene/clinic.html>

OFFICE OF DISABILITY SERVICES

117 Armstong Hall

507-389-2825, (V)

(800) 627-3529 (MRS/TTY)

The Office of Disability Services facilitates accommodations, for individuals with disabilities, which ensure equal access to programs, services and activities offered by Minnesota State University. The office can assist with advocacy; alternative format of printed materials, alternative testing services, assistive technology, early

registration, notetaking, sign language interpreters, and text on tape. The office also acts as a resource and referral agent for community contacts and disability related information.

Emergency assistance is also available on a 24-hour basis through the Security Department. Grievances, questions or requests related to equal opportunity for individuals with disabilities should be presented to the ADA coordinator, phone 507-389-2986, Voice/TTY.

Ex.C.E.L. STUDENT SUPPORT SERVICES

355 Wiecking Center

507-389-2797

Ex.C.E.L. STUDENT SUPPORT SERVICES is a federally funded program that assists students in achieving their potential both personally and academically. It is the goal of the program to retain and graduate participants from Minnesota State University. There are eligibility criteria to participate in this program. Eligibility is based on income level (as determined by the United States Department of Education), first generation student (neither parent has a bachelor's degree), and/or disability (a permanent physical disability including documented learning disability). The services are free to the participants and include tutoring, academic advising, personal and/or career counseling, career planning, workshops, seminars, and cultural activities. Ex.C.E.L. Student Support Services helps students deal effectively with all aspects of college life.

EXTENDED CAMPUS AND CONTINUING EDUCATION

116 Alumni Foundation Center

507-389-2572 or 800-722-0544

Minnesota State University has the largest higher education outreach program within the Minnesota State College & University System (MnSCU). Every term, more than 1,000 students, many of them employed full-time, attend undergraduate and graduate level classes at approximately 25 locations in the Twin Cities and southern Minnesota including Burnsville, Bloomington, Fairmont, Faribault, Owatonna, New Ulm, and St. Louis Park. Each of the offerings carries college credit at the undergraduate and/or graduate level and will apply toward degree requirements.

FIRST YEAR EXPERIENCE

First Year Experience

Gage G10

507-389-5498

The First Year Experience is a critical time for student retention and success at Minnesota State University. The challenges students face regarding both academic and personal transition challenge the student in new and sometimes difficult ways. Recognizing the importance of this transition period, Minnesota State University has created an office specifically designed to assist the First Year student. Named the Office of First Year Experience, the office has created the following series of pro-

grams designed to enhance and support First Year student success.

Orientation. Minnesota State University offers a full range of orientation programs for all undergraduate students entering the university – including new entering students, transfer students and adult students. Extensive summer programs are designed to familiarize new students with the college environment, provide advising, and assist with registration. Orientation programs are also available for students entering Spring term.

Special orientation programs are provided for international students, and for American students of color. Many departments welcome students each year with informal orientation programs.

Invitations and information about the programs are sent to students. If you have any questions about orientation or entering the university, contact the First Year Experience Office.

Academic Success. Good academic planning is the key to academic success and timely graduation, we are committed to helping students decide on major, find an advisor suited to their life goals. The Office of First Year Experience is an important resource to connect students to good advising and academic support.

We have also initiated a program called the Early Warning System. Through this system we contact professors of all students who have earned fewer than 24 semester credits, asking for a review of their progress. Once we have heard from MSU faculty, a follow up phone call will be made to students in academic difficulty. This phone call is made by an Academic Advisor and is designed to offer academic support, resources and the option to meet with an academic advisor on a 1-1 basis. All phone calls are confidential.

Please be aware the follow-up calls are intended to allow for the opportunity to discuss academic situations with an academic advisor and gain valuable resources. Possible resources include, but are not limited to: The Learning Center MLX-1791, Career Development Center WA 209, X-6061, First Year Experience GC 10, X 5498, and/or the Counseling Center SU 245, X 1455.

The First Year Seminar. This one-credit general education course has been especially designed to introduce first year students to the academic community. The course focuses on enhancing communication skills, critical thinking skills and examining the components of a successful first year transition, both personally and academically. Classes are small, giving students and professors an opportunity for lots of interaction. This course meets once a week for 50 minutes.

Probation Advising Plan for First Year Experience Pre-Major Students

1. An initial letter will be sent from the Office of Academic Affairs to students who are on probation.
2. Within the first weeks of the semester, the First

Year Experience Program will send letters to pre-major students who are on a academic probation.

3. Pre-Major students on probation will be instructed to attend a group intake session offered by First Year Experience before the end of the first month of the academic term, (dates will be sent to students)
4. Pre-Major students will need to complete a self-assessment form during the group intake process.
5. After the intake process, students must bring their completed assessment and a copy of their current, unofficial transcript to the FYE office to set up an individual appointment to meet with their academic advisor.
6. Upon satisfactory completion of the contract the academic advisory makes the recommendation to the Assistant Director for Advising Support Services to have the students hold lifted.
7. Pre-major probationary students must demonstrate satisfactory completion of their probationary contract. Failure to do so will delay priority registration, impact support for other academic actions, I.E. suspension and/or financial aid reinstatements.
8. After registration has occurred, the hold is reinstated.

Learning Communities. Learning Communities provide first year students an opportunity to join a community that supports their academic success.

Learning Communities are groups of 15-25 students who take fall semester courses together and live on the same residence hall floor. Participants develop lasting friendships with students who share common interests and have the opportunity to interact with select campus faculty.

Each learning community has a Learning Community Coordinator (LCC), an upper-class student dedicated to the academic success of every member as they transition to college life at MSU. The Learning Community Coordinator assists each student in setting and achieving academic goals, develops study groups for the community, and plans community events.

Residence Hall Living. Living on campus gives our highly motivated students an excellent opportunity to be actively involved in campus life.

Maverick Hall. Minnesota State University offers first year students an exciting opportunity to live in Maverick Hall – a planned living/learning environment designed especially to enhance first year success. In Maverick Hall, first year students share common experiences in their transition to college. Community Advisors provide social and educational opportunities for their residents to encourage involvement, and to provide support as students find their place in the Mankato State community.

Involvement in Campus Life. MSU provides many opportunities to develop leadership skills, participate in a cooperative learning environment, and share similar experiences with other students in such varied programs as student government, community volunteer efforts, and academic clubs and activities. Participation in all facets of community life is one of the all important keys to a successful collegiate experience.

HONORS PROGRAM

203 Morris Hall
507-389-5056
www.intech.mnsu.edu/honors/

The mission of the Honors Program at Minnesota State University, is to provide a challenging interdisciplinary program of study for a highly motivated group of undergraduates and to function as an alternative to the traditional general education curriculum. By providing opportunities for students to meet weekly with professors in small, personalized classroom settings, the Honors Program allows participants to become part of a community of scholars that includes experienced faculty who share a commitment to the program's goals. Honors Program participants have opportunities to attend special lectures, go on field trips, and work at their own pace in a setting that encourages goal-setting, perspective-taking, and independence. The MSU Honors Program is designed to help ensure a successful undergraduate experience, foster creativity and self-direction, and prepare the student for future professional and post-graduate work.

Students having questions or problems regarding Honors scheduling are invited to visit the Honors Program 203 Morris Hall, phone 389-5056 or send an e-mail: suzanne.bunkers@mnsu.edu

Honors students are encouraged to take part in extra-curricular and co-curricular activities, as these are a very important part of the university experience. Participating in the Honors Club with other Honors students helps to facilitate the scheduling of these activities. Such events might include campus lecture, a creative performance or reading, an athletic contest, a play, a film at the CSU, or any activity sponsored by campus groups and departments.

The Honors Program Curriculum is described in the general education section of this Bulletin.

INTERNATIONAL PROGRAMS

238 Centennial Student Union
507-389-6669
<http://www.mnsu.edu/dept/ipo>

The International Programs Office provides information and guidance to students and faculty about particular academic opportunities abroad. An important goal of the office is to solidify and increase such academic offerings. There is an inventory of programs sponsored by MSU, along with other available programs that fit the

learning needs of our students. Students receive help at every step to facilitate their study in a different culture. The office operates with proper procedures to comply with all legal requirements for the institution, sponsors and student participants. The office is responsible for publicizing and marketing various opportunities for study. It is also the designated overseer for all institutional agreements between MSU and programs abroad.

OFFICE OF INTERNATIONAL STUDENTS

219 Centennial Student Union
507-389-1281

The Office of International Student serves international students by advising students about academic, immigration, personal, social and financial issues. There are approximately 600 international students representing more than 70 countries at MSU. The International Student Office serves as the official contact agent between the U.S. Immigration and Naturalization Service, other government agencies, and the university community.

International student ID cards may be obtained by students planning to travel abroad to be used for discounts on travel and entrance to museums, historic sites and various other places of interest in the country. Also, ISO processes immigration paper work for faculty from abroad in J-1 status.

The International Student Office coordinates and implements international social and cultural activities to promote international awareness and understanding on campus. For further information, contact the Office of International Students.

Health Insurance. Health and Accident insurance is REQUIRED for all international students and their dependents studying at Minnesota State University on an F-1 or J-1 Visa, as well as those attending MSU under the Non-Immigrant Visas (A, B, G, H, K, etc.). All newly arrived international students are required to subscribe to the University's designated health plan prior to enrollment. Health insurance is required for the entire period of study at Minnesota State University – including the summer. Any exception of "Waiver" can only be granted by the Director of the International Student Office.

In-State Tuition Scholarship (Undergraduate). International students may apply for an In-State Tuition Scholarship after successful completion of one semester. The scholarship is renewable if the student maintains the required academic qualifications and cultural contributions.

New Student Orientation. All new and transfer international students are required to attend a New Student Orientation program before they receive authorization to register for classes. A \$30 Orientation fee will be charged to each new international student who enrolls at MSU.

English Placement Test and ESL. All new and transfer students whose native language is not English are required to take the English Placement Examination

prior to enrolling in classes. This applies to both undergraduate and graduate students, as well as to transfer students. Students who perform unsatisfactorily on the test are required to enroll in English as a Second Language (ESL) classes on a continuous basis, beginning their first semester on campus, until authorized by the ESL instructor as eligible to enroll in English Composition 101 or "waived" of further requirements in case of graduate students. ESL for undergraduate students is not a substitute for English Composition 101 for general education requirements. If a student fails to meet this requirement, a "hold" will be placed on the student's records. Questions concerning ESL can be referred to the Modern Languages Department at 389-2116.

"International Students in U.S. Higher Education"

Course. The University requires all new international students to register and complete the course: "International Students in Higher Education" during their first semester on campus. Students who have attended other U.S. institutions for more than one year are waived from this requirement. The course is offered through the Department of Educational Studies: K12 and Secondary Programs.

LEARNING CENTER

132 Memorial Library
507-389-1791
www.mnsu.edu/dept/learn

The Learning Center assists students in developing or strengthening academic skills. The main focus of the Center is to provide regularly scheduled one-on-one or small group tutoring in a variety of subjects across the disciplines, as well as help in broader areas such as writing, reading comprehension, and specific study skills (test-taking, test anxiety, note taking, reading textbooks, time management, etc.). The Center also provides Supplemental Instruction, and PPST/GRE preparation. In addition, the Center serves as a resource for international students to improve their conversational English and understanding of United States customs and cultures. All services are free to ALL MSU students.

LESBIAN, GAY, BISEXUAL CENTER

245A Centennial Student Union
507-389-5131

The Lesbian, Gay, Bisexual Center (LGBC) offers support, resources, advocacy and education to the gay, lesbian and bisexual communities of Minnesota State University and the surrounding areas. The LGBC also offers education and programming about the gay, lesbian and bisexual people and issues to the larger community.

LIBRARY SERVICES

<http://www.lib.mnsu.edu>
Library Hours: 507-389-6201

The mission of Library Services is to support the curricula by providing students and faculty with informa-

tion resources available through traditional methods and evolving technologies. Assistance and instruction in the use of information resources is available through reference services, formal classes, web access, and individual consultations. The library's resources consist of approximately 1.2 million volumes including 3200 periodical subscriptions and over 100 electronic databases. Interlibrary loan services complement the collections by providing access for materials at other libraries.

Memorial Library is a depository for Minnesota state documents, federal government publications, and U.S. Geological Survey maps. The library includes the specialized materials of the University Archives and the Southern Minnesota Historical Center. The Music Library, housed in the Performing Arts building, provides a broad collection of scores and recordings.

Additional library services include web access from over 50 dedicated terminals, circulation and reserves services for all area of the collection, study carrels, seminar rooms, paper and microform copiers, and circulation of a wide range of audio and video materials and equipment. Wireless Internet access is provided for personal laptop computers in all study areas of Memorial Library.

OFFICE OF MULTICULTURAL AFFAIRS

22 Centennial Student Union
507-389-6300

The Office of Multicultural Affairs provides a staff of individuals who are skilled in understanding the background and culture of students of color and can identify and work effectively with the concerns of students from diverse backgrounds. The office maintains four Assistant Directors: African American, Asian American, Chicano-Mexicano-Latino American and American Indian. They assist students of color and serve the entire university community in creating and providing social cultural events and programs that help to bridge minority/majority relationships.

SPEECH AND HEARING CLINIC

103 Armstrong Hall
507-389-1414

Audiology and speech therapy services are available for students with hearing and/or speech problems. Individual instruction for students with communication disorders is provided by advanced students majoring in communication disorders under the supervision of faculty members.

STUDENT HEALTH SERVICE

Carkoski Commons
507-389-6276
<http://www.mnsu.edu/dept/healthsv/welcome.html>

The Student Health Service provides medical care and health education for Services include medical care for illnesses and injuries (e.g. sore throats, sprained ankles, or depression), sports medicine, contraception, STD

screening, and physical exhaustion. There is no charge for seeing a physician or nurse practitioner, but there is a charge for certain medical procedures, laboratory tests, and prescriptions. A health insurance plan is available to students, spouses and dependents. Information is available at the Student Health Service and The Hub or Cashier's Window in the Administration Building.

The Student Health Service emphasizes prevention through health education. This effort is aided by health educators whose expertise includes birth control, nutrition and eating disorders, and alcohol and drug issues.

STUDENTS' ATTORNEY

280 Centennial Student Union
507-389-2611

A service provided by the Minnesota State Student Association, the students' attorney is available on a part-time basis to all currently enrolled students. Legal counseling is provided at no charge on issues such as traffic violations, landlord-tenant disagreements, and domestic matters.

WOMEN'S CENTER

238 Centennial Student Union
507-389-6146

The Women's Center offers a variety of timely educational and training opportunities to advance women's leadership skills and is a clearinghouse for information and referrals on issues of special importance to women. Resource materials are available for use in preparing speeches, designing curricula, and writing research papers. The Women's Center advocates for women at an individual and collective level to enhance the campus climate for women. Other offerings include art and cultural events such as Women's History Week, a Lecture/Discussion Series, *Pass It On* newspaper, a radio show, and an interactive site on the World Wide Web. The program also works with both men and women to understand and prevent physical, emotional and sexual violence and violence based on sexual orientation and cultural differences.

ACTIVITIES AND ORGANIZATIONS

STUDENT DEVELOPMENT PROGRAMS AND ACTIVITIES

22 Centennial Student Union
507-389-6076
Fax: 507-389-5799

IMPACT Team. The IMPACT (Innovative Memorable Programming Activities for Campus Togetherness) Team is the major activity- and event-sponsoring organization on campus. The student volunteers who are involved with the committees plan social, cultural, educational and recreational programs for the students, faculty and staff of MSU. The areas of emphasis include: Arts and Lectures, Concert Company, Films, Flipside Entertainment, Special Events, Almost Live Produc-

tions, Cultural and Social Diversity, and Promotions and Recruitment. Some of the programs the IMPACT Team has presented include homecoming, concerts, films, lectures, comedians, bus trips to sporting and theatre events.

Organizations and Clubs. There are over 160 campus organizations for students to join at Mankato State. The organizations cover a wide range of activities from political and religious to special interest groups such as the cycling club. Many departments also have clubs or professional organizations for their majors. Recreation clubs are another important group of organizations on campus. To gain official recognition as a campus organization, applications must be processed by Student Development Programs and Activities and approved by the Student Senate. A list of all recognized student organizations can be found in the Student Development Programs and Activities Center.

Fraternities and Sororities. Greek organizations encourage scholarship, leadership, community service and social interaction. Through fraternities and sororities, students develop life-long friendships. Students may find that getting involved in a sorority or fraternity will mean a fuller, more exciting college experience at MSU. The fraternities on campus are Delta Chi, Delta Tau Delta, Kappa Sigma, Lambda Chi Alpha, Phi Delta Theta, Phi Kappa Psi, Sigma Nu, and Tau Kappa Epsilon. Alpha Sigma Alpha, Alpha Chi Omega, Delta Phi Epsilon, Gamma Phi Beta and Sigma Sigma Sigma are the sororities at MSU.

Leadership. The leadership program offers students opportunities to identify and develop their leadership skills through workshops, invited speakers, a resource library and retreats. A recognition banquet is held each spring in order to acknowledge student leaders who contribute to the Mankato State community.

Community Connections. Community Connections provides information for students and prospective students who are interested in off-campus information including maps, bus schedules, local housing options, and information on tenant rights. Other programs offered include Youth Works AmeriCorps National Service Program and the Service Learning Program. One of the most used services is the listing of off-campus housing vacancies and students seeking roommates. Information is also provided to students who are interested in commuting or interested in volunteering.

Cheer and Spirit. The MSU Cheer and Spirit Team is the driving force behind rallying the crowds at MSU games. Their electric energy and spirit is showcased at all MSU home events. The cheerleaders also represent the campus through student involvement in community services and volunteer work. Stomper, the MSU Maverick mascot, is active in athletic entertainment, community relations, special events, fund raising, and promotions.

The Indigo. Wake up and smell the coffee! The Indigo is MSU's coffeehouse located in the lower level of the Centennial Student Union. The Indigo is a great place to hang out, listen to music, and drink coffee. The Indigo—Where the Java Lives.

CENTENNIAL STUDENT UNION
220 Centennial Student Union
507-389-2224

The Centennial Student Union is the campus community center for students, faculty, staff and guests of the university. As a central meeting place, the Student Union is an integral part of the educational experience at Minnesota State University. It is a place to be with friends to study, eat, or just relax.

The Student Union is financed and operated solely on generated revenues and student facility fees. It is operated by a full-time staff and advised by a student/alumni board of directors. Which is responsible for recommending policy and conducting program review.

The **Maverick game room** in the lower level, offers leisure - time activity. The game room has 12 bowling lanes, 16 billiard tables, and various video games. The game room is open 7 days a week. Low-cost equipment rental for all seasons is also available. Equipment includes items such as camping gear, canoes, rollerblades, and skis.

INTERCOLLEGIATE ATHLETICS
123 Highland Center
507-389-6111

Minnesota State University currently offers 21 sports to students: 10 sports for men (baseball, basketball, cross country, football, golf, hockey, swimming, tennis, track, and wrestling) and 11 sports for women (basketball, cross country, dance team, golf, hockey, soccer, softball, swimming, tennis, track, and volleyball).

Minnesota State University, is an NCAA Division II institution that belongs to the North Central Intercollegiate Athletic Conference. Men's and Women's ice hockey compete on the Division I level and are members of the Western Collegiate Hockey Association.

All undergraduate students who wish to participate in the intercollegiate athletics program can obtain more information by contacting the Athletics office or specific coaches.

INTERCULTURAL STUDENT CENTER
115A Carkoski Commons
507-389-6217

The Intercultural Student Center is an extension of the Cultural Diversity Program which provides for the total University community a focal point for cross cultural programs and activities. A primary function of the center, which is operated by students, is to provide a place in which students of color and others at the University can exchange and reinforce their cultural exist-

ence. The center is a basic component of the cultural diversity retention effort which helps to reduce social cultural isolation and connect students from diverse backgrounds to the University.

MINNESOTA STATE STUDENT ASSOCIATION
280 Centennial Student Union
507-389-2611

The agency for student participation in university governance is the Minnesota State Student Association. Its governing body is the Student Senate, and it is recognized by the MnSCU Board as the official voice of the student body.

Officers include the president, vice president, speaker. Elections are held spring term for president and vice president and 27 senators. In the fall one undeclared major senator and the Maverick Hall Senator is elected. Senate committees work to represent student concerns on issues including financial aid, housing, parking, allocation of funds and changes in academic policy. Students can participate in the MSSA by seeking a senate position or joining one of its committees. The best way to develop leadership skills and to make a difference on campus is to step forward and get involved! We are students working for students.

MUSIC ACTIVITIES
202 Performing Arts Center
507-389-2118

The Department of Music offers a number of performance and educational opportunities for all students. Students can receive general education credit for participation in ensembles; some general education class offerings are designated as cultural diversity courses. Vocal/choral group opportunities include Chamber Singers, University Women's Chorale, Concert Choir, and Opera Workshop. Instrumental opportunities include Wind Ensemble, University Orchestra, Jazz Ensemble, Jazz Combo, Symphonic Band, Pep Band for football, basketball and hockey, Theatre Orchestra, and Brass, String and Woodwind Ensembles.

The Department of Music sponsors many concerts and recitals throughout the year. Our annual Performance Series brings to campus some of the world's finest musicians in performance and in one-on-one master class settings. All students are encouraged to attend these musical offerings. This is a wonderful opportunity for students to introduce themselves to a wide array of musical and educational experiences. Concerts are presented in the 350 seat E. J. Halling Recital Hall of the Performing Arts Center. Special student priced tickets are available.

RADIO

Minnesota State University is home to two radio stations, both of which offer students the opportunity to participate in radio work: KMSU-FM, a public radio station run by a full-time professional staff, and KRNR-CaFM, a commercial station managed and operated entirely by students.

KMSU-FM (89.7 FM), with studios in the Warren Street Center serves south central Minnesota with a diversity of fine arts, jazz, cultural, news and public affairs programming. KMSU-FM offers employment opportunities to students with specialized broadcast skills as announcers, engineers, reporters and producers; and offers training and experience opportunities for those desiring professional skills development. Call 389-5678 for more information.

CAMPUS RECREATION

Director: Todd Pflingsten
121 Highland Center
email: todd.pflingsten@mnsu.edu
507-389-6215
Fax 507-389-5618

The mission of the Office of Campus Recreation is to promote long-term healthy lifestyle behavior through multi-faceted recreational and leisure opportunities.

The Campus Recreation umbrella covers four different program areas of activities for university men and women of varying skills and abilities. All students, faculty and staff are eligible to participate.

Intramural Sports programs include: basketball, flag football, ice hockey, softball, volleyball, broomball, floor hockey, soccer, racquetball, tennis, triathlon, bowling, billiards, foosball, table tennis, darts, and other special events.

Open Recreation offers badminton, basketball, exercise, football, jogging, racquetball, softball, swimming, tennis, volleyball, walking, wallyball, weight lifting, soccer and other activities.

Fitness Activities offer aerobics classes and Fitness Center equipment to include: cardiovascular machines (treadmills, elliptical machines, stairmasters, and lifecycles) and variable resistant weight machines.

Sport Clubs offer fencing, judo, Shotokan karate, Kung Fu, men's and women's volleyball, men's and women's rugby, men's soccer, Aikido, men's lacrosse, men's hockey, Isshinryu self-defense, and TaeKwonDo.

SPEECH TEAM (MAVERICK FORENSICS)

This program is open to students who may be interested in developing their speaking ability through competition. Participation provides the opportunity to attend forensic tournaments throughout the United States and to compete in major speech events, such as informative speaking, persuasive speaking, extemporaneous speaking, prose and poetry interpretation, and parliamentary debate. College credit may be obtained by participating on the speech team. Contact Dr. Daniel Cronn-Mills if interested! 389-5534.

STUDENT PUBLICATIONS

The Reporter

293 Centennial Student Union
507-389-1776
Fax 507-389-5812

The Reporter is a twice-weekly student-edited, student-written newspaper that focuses on campus, local, state and national issues. Staff membership is open to all students in a variety of capacities and includes positions for editors, reporters, writers, photographers, advertising salespeople, graphic artists and computer ad designers.

Minnesota River Review

151 Centennial Student Union
507-389-2425

Minnesota River Review is a fine arts magazine published for and by students to showcase the works of students. It is published twice a year. Submissions of poetry, fiction, non-fiction and artwork are welcome at any time. Copies are available in the *Minnesota River Review* office which is located across from the bookstore in the Student Union.

THEATRE AND DANCE

201 Performing Arts Center
507-389-2118
Fax 507-389-2922
<http://www.mnsu.edu/dept/theatre/index>

The Department of Theatre and Dance presents a season of six mainstage shows in the Ted Paul Theatre and the brand new Andres Theatre; four "studio" productions in the Andres Theatre; two dance concerts; and a professional summer stock known as Highland Summer Theatre, now in its 35th year. Many shorter plays are performed in the ETC. Theatre venue. Recent mainstage productions have included *Brigadoon*, *The Diary of Anne Frank*, *Medea*, *Singin' in the Rain*, *A Street Car Named Desire*, *The Secret Garden* and *Much Ado About Nothing*. Recent Highland Summer Theatre productions have included *You're a Good Man Charlie Brown*, *The Odd Couple*, *Seven Brides for Seven Brothers*, *The Nerd*, and *Cat on a Hot Tin Roof*. Recent studio productions include: *All in the Timing*, *Moonshadow*, *The Diviners*, and *Getting Out*.

Tryouts for each play are advertised and open to all students. Construction and crew work is done by students. Credit hours may be earned by acting and working on the shows in the areas of stagecraft, costumes, lighting, sound or management. All interested parties are welcome!

Accounting

Accounting

College of Business

Department of Accounting & Business Law

136 Morris Hall • 507-389-2965

Chair: Paul Schwinghammer

Jane Baird, Abo Habib, Penny Herickoff, Georgia Holmes, Dan Levin, Marilyn Okleshen, Mary Swanson Rolfes, Paul Schwinghammer, Ray Williams, Stephen Woehrl, Robert Zelin II.

The accounting major is a professional program designed to prepare the student for work in one or more of three areas: public, industrial or governmental/not for profit accounting.

Admission to Major typically occurs at the beginning of the student's junior year. A student must be admitted to the program for permission to register for 300-400 level courses.

1. GPA of 2.5 for unconditional admission.
2. Completion of 33 credits of general education requirements.
3. Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers, or equivalent.
4. Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; MATH 112; BLAW 200; Second Year Experience 201.
5. Completion of the Math and English competencies.
6. Completion of 60 credits (or in progress).

ACCOUNTING BS

Required General Education (7 credits):

ECON 201	Principles of Macroeconomics (3)
MATH 112	College Algebra (4)

Required Support Courses (25 credits):

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
BLAW 200	Legal, Political and Regulatory Environment of Business (3)
ECON 202	Principles of Microeconomics (3)
ECON 207	Business Statistics (4)
BED 345	Business Communications (3)
COMS 101	Introduction to Microcomputers (3)
MGMT 200	Introduction to MIS (3)

Required for Major (Core, 43 credits):

ACCT 300	Intermediate Financial Accounting I (3)
ACCT 301	Intermediate Financial Accounting II (3)
ACCT 302	Intermediate Financial Accounting III (3)
ACCT 310	Management Accounting I (3)
ACCT 320	Accounting Information Systems (3)
ACCT 410	Business Income Tax (3)
ACCT 420	Auditing (3)

BLAW 450	Contracts, Sales and Professional Liability (3)
MRKT 310	Principles of Marketing (3)
MGMT 330	Principles of Management (3)
FINA 362	Business Finance (3)
IBUS 380	Principles of International Business (3)
MGMT 346	Production and Operations Management (3)
MGMT 395	Personal Adjustment to Business (1)
MGMT 481	Business Policy and Strategy (3)

Required Electives (9 credits):

Choose three of the following:

ACCT 311	Management Accounting II (3)
ACCT 400	Advanced Financial Accounting (3)
ACCT 411	Individual Income Tax (3)
ACCT 421	External Auditing (3)
ACCT 422	Internal Auditing (3)
ACCT 470	Advanced Topics (3)
ACCT 477	International Accounting (3)
BLAW 455	Legal Aspects of Banking and Finance (3)

Required Minor: None.

ACCOUNTING MINOR

Required for Minor (Core, 12 credits):

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
ACCT 300	Intermediate Financial Acct. I (3)
ACCT 310	Management Accounting I (3)

Required Electives (9 credits):

Choose three of the following:

ACCT 301	Intermediate Financial Accounting II (3)
ACCT 302	Intermediate Financial Accounting III (3)
ACCT 311	Management Accounting II (3)
ACCT 320	Accounting Information Systems (3)
ACCT 400	Advanced Financial Accounting (3)
ACCT 410	Business Income Tax (3)
ACCT 411	Individual Income Tax (3)
ACCT 420	Auditing (3)
ACCT 421	External Auditing (3)
ACCT 422	Internal Auditing (3)
ACCT 470	Advanced Topics (3)
ACCT 477	International Accounting (3)

POLICIES/INFORMATION

Students have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

College of Business majors must complete a minimum of 64 credits outside the College of Business.

Students who are business minors, non-business majors, or those who are not seeking a four year degree may not complete more than 30 credits in the College of Business.

Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business.

Residency: Transfer students pursuing a minor in the College of Business must complete 50% (one half) of their minor coursework through Minnesota State University, Mankato.

Students with an Accounting major or minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges but are required to take ACCT 200 and ACCT 210 will be able to enroll in non-notebook classes offered once per year for non-majors/minors. For further information see the College of Business section at the front of this bulletin.

Student Organizations. Students are encouraged to participate in the Accounting Club. The club is designed to bring students together for both professional and social purposes. Professional activities provide members with a greater understanding of the accounting profession. These activities include speakers and tours, along with social activities.

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the nine organizations and the college representative of the Student Senate, works directly with the Dean's office in the coordination of activities of the various organizations and sponsors activities of their own.

Internships. Students are encouraged to participate in business and industrial organizations through intern programs. Internships are available during the junior or senior years. Students interested in internships should interview early with the internship coordinator for enrollment in this program.

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of those programs and to student learning. Student participation is an important and expected part of the assessment process.

COURSE DESCRIPTIONS

110 (3) Accounting for Non-Business Majors

Taught from a user approach, this course examines the role of accounting in interpreting financial data and the use of cost information in decision making.

F

200 (3) Financial Accounting

The accounting process, financial statement preparation, and analysis. Includes the accounting cycle, asset, liability and equity accounting. Emphasis on use of accounting data.

Pre: COMS 101 (MIS majors take COMS 102)

F, S

210 (3) Managerial Accounting

Preparation and analysis of cost-based management reports: use of cost information to make short-term operating decisions and long-term capital decisions.

Pre: ACCT 200

F, S

300 (3) Intermediate Financial Accounting I

An in-depth analysis of financial accounting concepts and procedures and includes coverage of the income statement, balance sheet, time value of money, receivables and inventories.

Pre: ACCT 210

F, S

301 (3) Intermediate Financial Accounting II

A continuation of Accounting 300, with emphasis on accounting for assets, liabilities and owner's equity.

Pre: ACCT 300

F, S

302 (3) Intermediate Financial Accounting III

A continuation of Accounting 301. Topics covered include, among others, leases, pensions, deferred taxes, cash flow and accounting for governmental/not for profit organizations.

310 (3) Management Accounting I

Beginning with introduction of cost concepts, cost behavior and relevant costs for tactical decision making, this course emphasizes product and service costing, including job order and process costing systems. Other related topics are budgeting, pricing, cost-volume-profit analysis, standards and variance analysis.

Pre: ACCT 210

F, S

311 (3) Management Accounting II

Contemporary managerial accounting and control systems including activity-based costing, strategic cost management, life cycle costing, Just-in-Time, inventory management, quality control, responsibility accounting. Other managerial issues include cost allocation, decentralization performance and productivity evaluation, theory of constraints, transfer pricing, capital budgeting and international issues in cost management.

Pre: ACCT 310

F, S

320 (3) Accounting Information Systems

A discussion of various accounting information systems. Topics include documentation, internal control, system design, knowledge structures, database design, software evaluation, systems applications and current developments.

Pre: ACCT 300

F, S

Anthropology

400 (3) Advanced Financial Accounting

A study of accounting principles and concepts for mergers, acquisitions, consolidated statements, foreign currency translation, and partnerships.

Pre: ACCT 301 F, S

410 (3) Business Income Tax

The course examines the principles and procedures relating to the determination and computation of federal income taxes for various business entities including sole proprietorships, C corporations, S corporations, partnerships and tax-exempt entities. The course also covers tax research procedures.

Pre: ACCT 200 F, S

411 (3) Individual Income Tax

The course examines the principles and procedures relating to the determination and computation of federal income taxes for an individual. Federal estate tax, gift tax, and income taxation of estates and trusts are also examined. The course does not require any accounting or business background.

F, S

420 (3) Auditing

This course provides a basic introduction to financial statement (external) auditing, internal auditing, and governmental auditing. Topics include an overview of the external audit process, current audit issues, auditing standards, ethical standards, auditors' legal liability, external audit reports, other common reports prepared by auditors, and operational auditing.

Pre: ACCT 320 or concurrent registration F, S

421 (3) External Auditing

This course is designed for student planning to take the CPA exam and/or pursue an auditing career in public accounting. Topics include statistical sampling methods, compliance testing, and detailed substantive audit procedures for all transaction cycles.

Pre: ACCT 420 V

422 (3) Internal Auditing

This course is primarily for students interested in careers in internal audit, management accounting, or governmental accounting. Topics include internal control structure reviews, operational audits addressing effectiveness and efficiency of business operations, internal audit reports, human relations issues in internal auditing, sampling, statistical methods, computer system audits, and fraud audits.

Pre: ACCT 420 V

470 (3) Advanced Topics

The emphasis is on the underlying accounting theory. It also includes an introduction to the Securities and Exchange Commission and a study of the Financial Accounting Standards Board's official pronouncements.

Pre: ACCT 301 V

477 (3) International Accounting

A study of accounting principles in various countries. Topics include exchange rates, subleasing, reporting,

managerial aspects and problems dealing with multinational corporations.

Pre: ACCT 210 V

491 (3) In-Service V

493 (1-4) Honors Reading in Accounting V

497 (6-16) Internship

Supervised experience in public, industrial or governmental accounting. Students must meet standards established by the employer and the Department of Accounting. Students may not register for internship credit during the semester of graduation.

V

499 (1-4) Individual Study of Accounting V

Anthropology

College of Social & Behavioral Sciences

Department of Anthropology

358 Trafton Science Center N • 507-389-6504

Chair: Paul Brown

Winifred Mitchell, Michael Scullin, Richard A. Strachan.

Anthropology is the study of the origins and diversity of human biology and culture. Anthropologists study the evolution and adaptations of the human species through the four major subdivisions of the discipline: archaeology, biological anthropology, linguistics, and cultural anthropology. The major provides training in all areas of anthropology for the liberal arts major with an interest in global awareness, cultural diversity, human evolution and adaptation, prehistory, and an understanding of human behavior. For those interested in pursuing anthropology as a career the anthropology major is also designed to prepare students for graduate training.

Admission to Major. Admission to major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

ANTHROPOLOGY BA, BS

Required for Major (Core, 20 credits):

ANTH 101 Introduction to Anthropology (3)

ANTH 102 Ancient Peoples (3)

ANTH 220 Human Origins (4)

ANTH 230 People: An Anthropological Perspective (3)

ANTH 240 Language and Culture (3)

ANTH 490* Senior Project (2)

ANTH 490* Senior Project (2)

*prerequisite required

Required Support Courses (6 credits):

Choose two of the following areas:

1. Archaeology
ANTH 310* Archaeology: Theory and Methods (3)
2. Biological Anthropology
ANTH 320* Biological Anthropology (3) or
ANTH 322 Evolution and Behavior (3)
3. Cultural Anthropology
ANTH 330* Ethnology: Theory and Methods
*prerequisite required

Required Electives (9 credits):

Choose a minimum of 9 credits from the following:
All require prerequisites or permission of instructor.

ANTH 311	ANTH 322	ANTH 323
ANTH 331	ANTH 332	ANTH 333
ANTH 334	ANTH 410	ANTH 411
ANTH 412	ANTH 420	ANTH 421
ANTH 430	ANTH 431	ANTH 432
ANTH 433	ANTH 434	ANTH 435
ANTH 436	ANTH 480**	ANTH 485**
ANTH 486**	ANTH 491**	ANTH 492**
ANTH 493**	ANTH 495**	ANTH 497**
ANTH 499**		

**No more than 6 credits may be applied to major

Recommended Support Courses (Statistics, 3-4 credits):

Choose one of the following:

PSYC 201	Statistics for Psychology (4)
SOC 201	Social Research I (3)
MATH 354	Concepts of Probability and Statistics (3)

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

ANTHROPOLOGY MINOR

Required General Education (3 credits):

ANTH 101 Introduction to Anthropology (3)

Required for Minor (Core, 9-10 credits):

Choose a minimum of 9 credits from the following:

ANTH 102	Ancient Peoples (3)
ANTH 220	Human Origins (4)
ANTH 230	People: An Anthropological Perspective (3)
ANTH 240	Language and Culture (3)
ANTH 310*	Archaeology: Theory and Methods (3)
ANTH 320*	Biological Anthropology (3)
ANTH 322*	Evolution and Behavior (3)
ANTH 330*	Ethnology: Theory and Methods (3)
	*prerequisite required

Required Electives (6-7 credits):

Choose a minimum of 6 credits from the following:
(all require prerequisites or permission of instructor):

ANTH 310	ANTH 311	ANTH 320
ANTH 322	ANTH 323	ANTH 330
ANTH 331	ANTH 332	ANTH 333
ANTH 334	ANTH 410	ANTH 411

ANTH 412	ANTH 420	ANTH 421
ANTH 430	ANTH 431	ANTH 432
ANTH 433	ANTH 434	ANTH 435
ANTH 436	ANTH 490	ANTH 496
ANTH 480**	ANTH 485**	ANTH 486**
ANTH 491**	ANTH 492**	ANTH 493**
ANTH 495**	ANTH 497**	ANTH 499**

** No more than three credits may be applied to minor

POLICIES/INFORMATION

P/N Grading Policy. Up to 1/4 of the credits for the major may be taken P/N, but caution in using this option in the major is urged.

GPA Policy. Anthropology majors are urged to maintain a 3.0 or better GPA to maximize their options for graduate study and professional employment.

Students majoring in anthropology have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Clark Johnson, student relations coordinator, 111 Armstrong Hall, telephone 507-389-6306 or by the department chair.

COURSE DESCRIPTIONS

101 (3) Introduction to Anthropology

This course surveys human biological and cultural diversity through time and space. You will learn about questions like: "how did humans evolve?" and "how do anthropologists collect and interpret information about human beings and their ancestors?"

F, S

102 (3) Ancient Peoples

A general survey of the evolution of human society from the earliest times to the development of written languages. Topics include the evolution of tools, the agricultural revolution, and the origins of urban life.

F

220 (4) Human Origins

An introduction to the study of human biological evolution and variation. This course focuses on evolutionary theory, mechanisms of evolutionary change, the fossil record of human evolution, and modern human biological variability. Includes significant lab/lecture component.

F

230 (3) People: An Anthropological Perspective

Part one of this two part sequence for anthropology majors covers cultural variability and organization by examining several examples in detail. Both anthropological methodology and theory will be important parts of this course.

F

240 (3) Language and Culture

Language provides not only communication but identification of oneself and one's group. Humans are extremely

Anthropology

sensitive to language, dialect, jargon, and slang. An understanding of language and its relationship to culture is basic to any understanding of human beings.

F

285 (1-3) Special Topics

Courses to be offered just one time or on an irregular basis according to topic demand for a general interest, sophomore level course.

V

290 (1-3) Exploratory Studies

Individual study at an introductory level on the topic of student's choice. Designed for students who wish to pursue independent study at the freshman-sophomore level rather than the more advanced level of the 499 individual study.

Pre: Consent

V

310 (3) Archaeology: Theory and Methods

A comprehensive examination of modern archaeological theory methods and activities, focusing on American archaeology. Emphasis will be given to data collection, data analysis, and museology.

Pre: Consent

S

311 (3) Ancient Egypt

An in-depth study of ancient Egypt, focusing on the relationship between cultural development and the unique Egyptian environment of the time. Emphasis will be placed on the interpretation of archaeological discoveries in the area.

V

320 (3) Biological Anthropology

Advanced coverage of the material presented in ANTH 220, this course focuses on the fossil record of human evolution, as well as the implications of our evolutionary past for an understanding of modern human behavior and biological variation.

Pre: ANTH 220 or consent

S

322 (3) Evolution and Behavior

An examination of the biological basis of human behavior and organization from an evolutionary perspective.

Pre: ANTH 101 or 220 or consent

V

323 (3) Primate Behavior

An examination of the ecology, behavior and biology of living primates.

Pre: ANTH 101 or 220 or consent

V

330 (3) Ethnology: Theory and Methods

Part two extends the concepts introduced in Part I with an increased emphasis on both "doing anthropology": and "thinking about anthropology." Students participate in small scale studies of human behavior. They will also learn the basic elements of anthropological theory, critical examination of data and conclusions.

Pre: ANTH 230 or consent

S

331 (3) Human Adaptation Systems

An examination of the dynamics of human cultural ad-

aptation and change. Cultural systems are analyzed from an evolutionary/ecological perspective tracing development of cultural systems from prehistoric times to the present. Systems modeling will be used to understand cultural systems. A minimum of 10 hours of computer lab time is required.

V

332 (3) Anthropology of Religion

The variability and universality of human religious expression are explored in specific cross-cultural contexts.

V

333 (3) Ethnographic Film

This course emphasizes the wealth of ethnographic information which may be captured by visual media. You will learn how to interpret the final product and how to recognize the limitations of visual presentations.

V

334 (3) Native American Cultures of North America

American Indians adapted to environmental systems in North America with cultures ranging from small groups of forager to cities supported by intensive agriculture. This course presents a variety of perspectives of this cultural diversity from the Ice Age to the 20th century.

V

410 (3) Prehistory of Minnesota

An analysis of the prehistoric societies in Minnesota from the retreat of the last glacier to European contact. Emphasis will be placed on, but not limited to, archaeological results generated in Southern Minnesota.

Pre: ANTH 102 or consent

V

411 (3) Prehistory of North America

An overview of human society in North America north of Mexico from the arrival of the first humans until European contact. Some emphasis will be placed on the north central part of the continent.

Pre: ANTH 101, 102, or consent

V

412 (3) Prehistory of Latin America

An overview of South America and Middle America from the earliest human occupation until European contact. Some emphasis is placed on the development of agriculture and prehistoric state systems.

Pre: ANTH 101, 102, or consent

V

420 (3) Osteology/Forensic Anthropology

An advanced examination of the human skeletal system and the application of this information in forensic (legal, criminal, and epidemiologic) cases. Emphasis on laboratory techniques in osteological/forensic studies.

Pre: ANTH 220 or consent

V

421 (3) Health, Cultural, and Disease

Cross-cultural examination of the response of peoples in non-Western societies to the human universal of illness. Non-Western concepts of disease, health, and treatment.

Pre: ANTH 101, 220, or consent

V

430 (3) Ethnography of Latin America

The contemporary peoples and cultures of Mexico and Central and South America. Emphasis is on cultural patterns and contemporary issues of the region.

Pre: ANTH 101, 103, or 230, or consent V

431 (3) Applied Cultural Research

This course introduces concepts and methods of applying socio-cultural understanding to contemporary problems to bring about the empowerment of affected people. Case/field studies and other research methods in social sciences will change with special attention to its affect on disadvantaged groups of people. Students will also design their own applied projects.

Pre: ANTH 101, 230, or consent; ETHN 100, 101, or 150 or consent. V

432 (3) Social Organization

Family and kinship are the basis for all human organization. This course explores the role of systems of relationship in both simple and complex cultures. It presents modern analysis of kinship systems including sociobiological, evolutionary, and feminist perspectives as well as traditional kin terminology and marriage and residence patterns.

Pre: ANTH 101, 103, or 230, or consent V

433 (3) Anthropology of Gender

Major anthropological theories of gender relations are read, discussed, and applied to a variety of contemporary ethnographic case studies.

Pre: ANTH 101, 103, or 230, or consent V

434 (3) Ethnographic Classics

This course provides an opportunity for students to examine several of the "classic" ethnographies not used in regular course offerings. A different group of ethnographies will be used each year and students may register for the course as many times as they wish.

V

435 (3) Origins of Civilization

The conditions which led to the evolution of complex societies and the ramifications of the continuing processes are the focus of this course.

Pre: ANTH 101, 103, or 230, or consent V

436 (3) Anthropology of Aging

An evolutionary and cross-cultural examination of the aging process, status, and treatment of the elderly.

Pre: ANTH 101, 230, or 220, or consent V

480 (3-6) Fieldwork: Archaeology/Ethnology

Field experience in which method and theory are learned through participation in an ongoing field project.

Pre: Consent, or one of: ANTH 101, 102, 103, or 220 V

485 (1-3) Topics in Anthropology

This course allows faculty the flexibility to consider the challenges of new developments in anthropology. Content will vary from one course to the next. Students may

take the course, with the permission of the instructor, more than one time.

V

486 (1-3) Workshop (variable sub title)

A brief intensive hands-on introduction to an anthropological topic usually as it applies to a particular issue or skill. Topics vary but might include: Understanding that race is not a scientific concept; combating racism and ethnocentrism; participant observation methods; culture shock; cultural diversity and communication; forensics; cultural resource conservation.

Pre: Depends on topic and instructor V

490 (2) Senior Project

Nature and topic of the senior project is jointly determined by the student and faculty members. It may involve writing, laboratory work, fieldwork or various combinations. Planning for this project should begin early in the senior year. Students will present completed projects in a public forum. Must be taken twice/different semesters.

Pre: ANTH core courses and consent F, S

491 (1-3) Archaeology Laboratory

An introduction to archaeological laboratory techniques and museological practice, through participation in the various processes involved.

V

492 (1-3) Biological Anthropology Laboratory

Guided advanced laboratory work in biological/physical anthropology.

Pre: Consent V

493 (1-3) Ethnology Lab

Individual projects are done in close coordination with faculty member.

Pre: Consent V

495 (1-3) Honors Reading

Guided reading in topics of students and instructors interests. For students enrolled in Honors Program only.

Pre: Consent V

496 (1-3) Senior Seminar

A special capstone course on current anthropological theory and method to be offered on demand to interested groups of senior majors and minors. The course will emphasize the integration synthesis and summary of the core course material and students' electives.

Pre: ANTH core courses and/or consent V

497 (1-12) Internship

Positions may vary considerably, but all involve actual working conditions in various field positions such as museums, state parks, archaeological excavations and agencies.

Pre: Consent F, S

499 (1-6) Individual Study

A specialized topic of the students' choices. Coordination with a faculty member is necessary.

Pre: Consent F, S

Art

College of Arts & Humanities

Department of Art

136 Nelson Hall • 507-389-6412

www.mnsu.edu/dept/artdept/

Chair: Roy Strassberg

Harlan Bloomer, Hope Cook, Diana Black, Brian Frink, Ralph Jacobs, James B. Johnson, Elizabeth Menon, Rea Mingeva, David Morano, James Tanner, Nancy Wicker.

The Department of Art program is devoted to the development of concepts, attitudes and skills in the visual arts within a broad university curriculum of liberal arts orientation. There are four objectives: professional training of artists and scholars in chosen areas of specialization, preparation of art educators, elective study for students in all areas of the university, and service to the local communities as a source of cultural enrichment. The Department of Art is accredited by the National Association of Schools of Art and Design.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours;
- a minimum cumulative GPA of 2.00 (C).

In addition to minimum university admission requirements, students requesting admission to the department must complete the following:

- the Drawing/Design sequence (9 credits)
- at least 3 courses in 3 areas of the Studio Elective Sequence
- ART 260 or ART 261

Students may be admitted provisionally while these requirements are being satisfied.

Contact the department for application procedures.

ART BA

The Bachelor of Arts degree in art is a broad-based liberal arts degree that provides a cultural perspective with a strong foundation in studio training.

Required for Major (Core, 33 credits):

- ART 101 Design Foundations (3)
- ART 103 Three Dimensional Design (3)
- ART 110 Drawing Foundations (3)
- ART 260 Art History Survey I (3)
- ART 261 Art History Survey II (3)

Choose 6 courses from at least 5 different areas:

AREA 1:

- ART 200 Introduction to Graphic Design (3)
- ART 203 Digital Typography (3)
- ART 204 Digital Imaging and Layout (3)

AREA 2:

- ART 210 Drawing (3)
- ART 212 Life Drawing (3)

AREA 3:

- ART 230 Fibers (3)
- ART 231 Multi-Media Art Exploration (3)

AREA 4:

- ART 240 Painting (3)
- ART 245 Watercolor (3)

AREA 5:

- ART 250 Ceramics: Wheel and Hand (3)
- ART 251 Ceramic Sculpture (3)

AREA 6:

- ART 270 Printmaking: Relief/Screen (3)
- ART 271 Printmaking: Lithograph/Intaglio (3)

AREA 7:

- ART 275 Photography (3)

AREA 8:

- ART 280 Sculpture (3)

Required Support Courses (Art History, 6 credits):

Choose a minimum of 6 credits from the following:

- | | | |
|---------|---------|---------|
| ART 413 | ART 414 | ART 415 |
| ART 416 | ART 419 | ART 460 |
| ART 462 | ART 463 | ART 466 |
| ART 468 | ART 469 | |

Required Support Courses (Studio or Art History Specialization, 9 credits):

Choose a minimum of 9 credits at the 300/400 level in your specialization area in consultation with the art advisor.

- | | |
|---------|-------------------------|
| ART xxx | 300/400 Course Elective |
| ART xxx | 300/400 Course Elective |
| ART xxx | 300/400 Course Elective |

Required Capstone Experience (1 credits):

Choose one of the following:

- | | |
|---------|-------------------------------|
| ART 495 | Senior Exhibit (1) |
| ART 496 | Art History Senior Thesis (1) |

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

ART BFA

For admission to the BFA programs students must have a minimum GPA of 2.5 and pass ART 391 Portfolio Review. The Bachelor of Fine Arts degree is a program for those students with professional art aspirations.

Required for Major (Core, 33 credits):

- ART 101 Design Foundations (3)
- ART 103 Three Dimensional Design (3)
- ART 110 Drawing Foundations (3)
- ART 260 Art History Survey I (3)
- ART 261 Art History Survey II (3)

Choose 6 courses from at least 5 different areas:

AREA 1:

- ART 200 Introduction to Graphic Design (3)
- ART 203 Digital Typography (3)
- ART 204 Digital Imaging and Layout (3)

AREA 2:

- ART 210 Drawing (3)
ART 212 Life Drawing (3)

AREA 3:

- ART 230 Fibers (3)
ART 231 Multi-Media Art Exploration (3)

AREA 4:

- ART 240 Painting (3)
ART 245 Watercolor (3)

AREA 5:

- ART 250 Ceramics: Wheel and Hand (3)
ART 251 Ceramic Sculpture (3)

AREA 6:

- ART 270 Printmaking: Relief/Screen (3)
ART 271 Printmaking: Lithograph/Intaglio (3)

AREA 7:

- ART 275 Photography (3)

AREA 8:

- ART 280 Sculpture (3)

Required Support Courses (Specialization, 53 cr):

Choose Advanced Art History and Drawing Courses (18 credits):

Advanced Art History Courses (9-12 credits)

- ART 460 Ancient Art (3) **or**
ART 414 Early Medieval Art (3) **or**
ART 415 Later Medieval Art (3) **and**
ART 466 Realism to Postmodernism (3)

Choose 3 or 6 additional credits from:

- | | | |
|---------|---------|---------|
| ART 413 | ART 414 | ART 415 |
| ART 416 | ART 419 | ART 460 |
| ART 462 | ART 463 | ART 468 |
| ART 469 | | |

Advanced Drawing (6-9 credits)

- ART 210 (if not taken as Studio Elective) **or**
ART 410* (3)
ART 212 (if not taken as Studio Elective) **or**
ART 412* (3)

* 410 and 412 may be repeated

Choose Intermediate Studio Specialization (12 cr):

Two specializations are required of 6 credits each. Specializations are selected from the 8 areas listed under Studio Electives in the foundation core. The department specializations are: ceramics, drawing, fibers, graphic design, painting, photography, printmaking, and sculpture. The courses taken in Specializations 1 and 2 are 300 level.

Required:

- ART 391 Portfolio Review (1)

Take with second 3XX course in the intended advanced studio specialization; P/N grade only.

Students must pass the Portfolio Review for admission to the BFA degree program and before beginning 4xx advanced studio specialization.

Choose Advanced Studio Specialization (18 credits):

Choose 4XX level courses for the advanced studio specializations.

Required:

- ART Studio Elective (3)
ART 495 Senior Exhibit (1)

Required Minor: None.

ART BS, TEACHING

The Bachelor of Science degree in Art Education prepares students for careers as art educators teaching at the elementary and secondary levels.

Required for Major (Core, 33 credits):

- ART 101 Design Foundations (3)
ART 103 Three Dimensional Design (3)
ART 110 Drawing Foundations (3)
ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Choose 6 courses from at least 5 different areas:

AREA 1:

- ART 200 Introduction to Graphic Design (3)
ART 203 Digital Typography (3)
ART 204 Digital Imaging and Layout (3)

AREA 2:

- ART 210 Drawing (3)
ART 212 Life Drawing (3)

AREA 3:

- ART 230 Fibers (3)
ART 231 Multi-Media Art Exploration (3)

AREA 4:

- ART 240 Painting (3)
ART 245 Watercolor (3)

AREA 5:

- ART 250 Ceramics: Wheel and Hand (3)*
ART 251 Ceramic Sculpture (3)

AREA 6:

- ART 270 Printmaking: Relief/Screen (3)*
ART 271 Printmaking: Lithograph/Intaglio (3)

AREA 7:

- ART 275 Photography (3)

AREA 8:

- ART 280 Sculpture (3)

* required for BS in Art Education

Required Support Courses (Specialization, 25 cr):

- ART 466 Realism to Postmodernism (3)
ART 495 Senior Exhibit (1)
ART 421 Art Methods Elementary School (2)
ART 426 Art Methods Secondary School (3)
(this should be taken concurrently with Curriculum and Instruction 448)
ART 429 Art Education Seminar (1)
Choose one (as offered):
ART 423 Elementary Art Materials II (3)
ART 424 Art for the Exceptional Child (3)
ART 425 Current Issues in Art Education (3)
ART 428 Teaching Art History and Appreciation (3)

Select a minimum of 12 studio credits in your specialization area at the 300/400 level in consultation with the art advisor:

- | | |
|---------|------------------------|
| ART xxx | 300/400 level elective |
| ART xxx | 300/400 level elective |
| ART xxx | 300/400 level elective |
| ART xxx | 300/400 level elective |

Art

Required for Major (Professional Education, 30 credits):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required Professional Education courses.

Required Minor: None.

ART MINOR

Choose one of the following tracks:

ART STUDIO TRACK (Core, 18 credits):

- ART 100 Elements and Principles of Art (3) **or**
- ART 101 Design Foundations (3) **and**
- ART 110 Drawing Foundations (3)

Select 12 credits of art studio electives in consultation with an art advisor:

ART xxx ART xxx ART xxx
ART xxx

ART HISTORY TRACK (Core, 18 credits):

- ART 260 Art History Survey I (3)
- ART 261 Art History Survey II (3)

Select 12 credits of art history electives in consultation with an art advisor.

ART xxx ART xxx ART xxx ART xxx

POLICIES/INFORMATION

A program planning guide for each major is available in the Art Department office. Students should obtain one to aid in the planning of their program. Advisory services are available.

Drawing and design courses in the art core should be taken during the freshman year.

P/N Grading Policy. A student majoring in art may take a maximum of one-fourth of the art credits for P/N grades and must comply with the college P/N requirements.

GPA Policy. A 2.0 GPA is required. For admission to and graduation from the BFA program students must have a minimum GPA of 2.5. Students on academic probation should refer to the College of Arts and Humanities policy regarding required advising.

Studio courses require two scheduled hours of class meeting time under the direct guidance of the instructor and a minimum of one additional hour of work at the discretion of the student for each credit hour earned. The arranged credits (TBA) shown in the class schedules reflect this requirement.

The frequency of course offerings should be verified with your art advisor or the art department office, since some changes caused by unanticipated circumstances may occur.

Art majors and minors must meet with the Art Department chairperson two semesters prior to their anticipated graduation date so that their graduation credits can be evaluated.

All students should check with the central art office concerning the future availability of courses needed for graduation. ART 421 Art Methods Elementary School, should be taken no sooner than the junior year and is required by state licensure before student teaching. The prerequisite for ART 421 is ART 100.

The total number of transfer credits accepted for each major/minor is as follows: BFA 24, BS 20, BA 16, and Minor 8.

The Department of Art may request the retention of student work for its permanent instructional and exhibition collection. It reserves the right to photograph students and their work. In addition, the department cannot insure student work, material and equipment or take responsibility for its loss or damage.

Art students with junior or senior standing are encouraged to seek internship opportunities in career-related settings that may include museums, production studios, design firms, and other approved venues. Arrangements are made on an individualized basis. A maximum of 6 credits may be applied toward specializations within BA, BS, or BFA degree programs.

Notations showing the costs of individual courses are included in the printed schedules. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

COURSE DESCRIPTIONS

100 (3) Elements and Principles of Art

Basic introduction to art for art minors, education majors (art and elementary) and non-specialists.

F, S

101 (3) Design Foundations

2-D visual problem solving, and artmaking strategies using the elements and principles of design. For Art majors.

F, S

103 (3) Three-Dimensional Design

An introduction to concepts and processes related to the visual and physical organization of three-dimensional form and space.

F, S

110 (3) Drawing Foundations

Introduction to traditional drawing techniques and concepts.

F, S

160 (3) Introduction to Visual Culture

Introduction to Western and non-Western visual arts and the variety of methods by which art is understood. These may include art appreciation, art criticism, the history of art, popular culture, and aesthetic awareness.

F, S

200 (3) Introduction to Graphic Design

A survey of graphic design with information and projects

that explore careers, design and layout form, techniques and processes.

Pre: ART 100, 101 or consent F, S

203 (3) Digital Typography

A survey of typography: history, specifications, applications, effective use, methods of generating.

Pre: ART 200 or consent F, S

204 (3) Digital Imaging and Layout

An introduction to digital imaging and layout procedures as applied to graphic design. Appropriate computer software applications and peripheral devices used in digital imaging and page layout for both print and web publication are emphasized.

Pre: ART 200 or consent F, S

210 (3) Drawing

Continued exploration of drawing techniques and concepts.

Pre: ART 110 F, S

212 (3) Life Drawing

Experience in drawing from the human figure.

Pre: ART 110 F, S

230 (3) Fibers

Experience with various introductory fiber techniques.

Pre: ART 100, 101, or consent F, S

231 (3) Multi-Media Art Exploration

Multimedia art exploration is a problem solving art studio experience involving the use of a variety of traditional and non-traditional art materials.

F, S

240 (3) Painting

Beginning experience with oil and/or acrylic paint. Emphasis upon technical and conceptual development.

Pre: ART 100, 101, 110 or consent F, S

245 (3) Watercolor

Introduction to basic techniques in watercolor.

Pre: ART 100, 101, 110 or consent F, S

250 (3) Ceramics: Wheel and Hand

An introduction to basic wheel throwing techniques exploring the potential of clay as a creative and expressive material.

Pre: ART 100, 101, 103 or consent F, S

251 (3) Ceramic Sculpture

An introduction to basic sculptural hand building techniques exploring the nature of clay as a creative-expressive medium.

Pre: ART 100, 101, 103 or consent F, S

260 (3) Art History Survey I

Introduction to art history from prehistoric and ancient cultures through the Middle Ages. Includes representative examples and styles of art and architecture of Western (Europe and the Near East) and non-Western cultures (China, India, Japan, Southeast Asia, Africa, Mesoamerica, South America, North America, Australia).

F

261 (3) Art History Survey II

Lecture-based survey of the Art and Architecture of both Western and non-Western countries from the thirteenth through twentieth centuries.

S

270 (3) Printmaking: Relief/Screen

Introduction to relief and silkscreen printmaking processes.

Pre: ART 101, 110 or consent F

271 (3) Printmaking: Lithography/Intaglio

Introduction to intaglio and lithographic printmaking processes.

Pre: ART 101, 110 or consent S

275 (3) Photography

Introduction to the techniques and expressive potential of B/W photography.

F, S

280 (3) Sculpture

Exploration of the visual and physical organization of three-dimensional form and space through problems employing varying media and processes.

Pre: ART 103 or consent F, S

301 (3) Intermediate Graphic Design

Problem solving strategies, creative concepting, type manipulation and image development.

Pre: ART 300 or consent F, S

302 (3) Interactive Graphic Design

An introduction to computer-based interactive design. Computer software and peripheral devices used in the creation of motion graphics, sound capture, and design for web will be emphasized.

F, S

303 (3) Illustration

Techniques, skills and concepts to create visual images that clarify or elaborate on text.

Pre: ART 300 V

330 (3) Fibers

Fabrication of textiles using four or multi-harness floor looms and off-loom techniques. Must be taken two times before advancing to 430.

Pre: ART 230 or consent F, S

340 (3) Painting

Intermediate painting. Emphasizing individual creative development. Must be taken twice before advancing to 440.

Pre: ART 240 or consent F, S

345 (3) Watercolor

Experience in advanced watercolor techniques and concepts. Must be taken twice before advancing to 445.

Pre: ART 245 or consent F, S

350 (3) Ceramics

An intermediate course emphasizing personal exploration and creative research relating to hand building,

molding processes and/or the potters wheel. Must be taken twice before advancing to 450.

Pre: ART 250 or 251 F, S

370 (3) Printmaking

Continued exploration of intaglio, lithographic, relief and silkscreen processes. Must be taken twice before advancing to 470.

Pre: ART 270 or 271 F, S

375 (3) Black and White Photography

Intermediate level material on camera work, processing, and calibration. In rotation with ART 376, ART 377.

Pre: ART 275 V

376 (3) Color Photography

Processing of color negatives and prints, color theory and correcting, and other considerations in color photography. In rotation with ART 375, ART 377.

Pre: ART 275 V

377 (3) Digital Photography

Covers the making, manipulation and use of electronically produced photographic images. Topics include Kodak Photo CD, digital camera use, electronic photo retouching, computer image enhancement and combination, and incorporation of traditional techniques for creative solutions of fine and commercial art problems. In rotation with ART 375, ART 376.

Pre: ART 275 V

380 (3) Sculpture

Investigation of three-dimensional form, space and media in search of a personal aesthetic statement. Must be taken twice before advancing to 480.

Pre: ART 280 F, S

391 (1) Portfolio Review

Required of all B.F.A. majors before taking 4xx advanced studio specialization sequence to continue in program.

F, S

401 (3-9) Advanced Graphic Design

Advanced study in graphic design for print-based media such as advertising, brochure, package, poster, identity. Design solutions will be created through study of problem solving and design strategies, design styles and theory, and techniques for type and image development.

F, S

402 (3-9) Interactive Graphic Design

Advanced study of motion, sound, and interactivity in design. Areas of exploration include: graphic design for audiences on the web and for computer-based presentations.

403 (3) Illustration

Expansion of individual techniques, skills and concepts to create visual images that clarify or elaborate on text. May be repeated.

Pre: ART 303 V

410 (3-9) Drawing Workshop

Continued in-depth exploration of drawing techniques and concepts. May be repeated.

Pre: ART 210, 212 F, S

412 (3) Life Drawing

Advanced experience in drawing from the human figure. May be repeated.

Pre: ART 212 F, S

413 (3) Scandinavian Art

Overview of representative examples of the history of Scandinavian art from pre-Viking to modern times, concentrating on elements typical of each country or period and on developments that were particularly influential in the broader history of Western art.

Pre: ART 160, 260, 261 or consent V

414 (3) Early Medieval Art

Introduction to art and architecture of Western Europe, the Byzantine Empire, and the Islamic world from the second to the early twelfth centuries. Examination of representative works of art and major styles of Christian, Jewish, Germanic, Celtic, and Islamic cultures.

V

415 (3) Later Medieval Art

Introduction to the art and architecture of Western Europe from the mid-twelfth through the fifteenth centuries. Examination of representative works of art and major styles of secular and Christian religious medieval art of the Romanesque and Gothic periods.

V

416 (3) Art of Africa, the Americas and the South Pacific

Introduction to the art and architecture of indigenous peoples. Examination of representative works of art and major styles and cultures of preliterate societies in Africa, the Americas, Oceania, and of Pre-Columbian civilizations in the Americas.

Pre: ART 260 and 261 or consent V

419 (3) Gender in Art

Historical survey of the representation of gender with comparison of the artistic efforts of males and females and examination of art used to present gender-based issues including homosexuality, feminism, censorship and pornography.

Pre: ART 261 or consent V

421 (2) Art Methods Elementary School

Art expression related to child growth, development and teaching strategies. (Required for student teaching and certification.)

Pre: ART 100 or 101, Jr. status or consent F, S

423 (3) Elementary Art Materials II

Advanced elementary teaching methods and art materials, emphasis on three-dimensional projects.

Pre: ART 421 V

424 (3) Art for the Exceptional Child

Theory and practice of teaching mentally challenged, physically handicapped and other exceptionals.

Pre: ART 421 V

425 (3) Current Issues in Art Education

Teaching art as related to current trends, philosophies, and issues.

Pre: ART 421 V

426 (3) Art Methods Secondary School

The characteristics of art expression and evaluation at the junior and senior high level: the status, curricula and strategies of teaching. (Required for student teaching) Should be taken concurrently with Curriculum and Instruction 448.

Pre: ART 421 F

428 (3) Teaching Art History and Appreciation

Application of instruction in art history and appreciation to elementary and secondary schools.

Pre: ART 260, 261, 421 or consent V

429 (1) Art Education Seminar

Capstone experience for students preparing to teach art. Explores and emphasizes information and skills appropriate for teaching art.

V

430 (3-9) Fibers

Advanced fabrication of textiles using loom and off loom techniques. May be repeated.

Pre: ART 330 F, S

440 (3-9) Painting

Advanced painting. Continued development of a focused individual expression. May be repeated.

F, S

445 (3-9) Watercolor

Advanced experience in watercolor. May be repeated.

Pre: ART 345 F, S

450 (3-9) Ceramics

An advanced course which emphasizes individual research in technical, aesthetic and conceptual considerations. May be repeated.

Pre: ART 350 F, S

460 (3) Ancient Art

Introduction to the art and architecture of the ancient era in its historical and cultural frameworks. Examination of representative works of art and major styles of ancient Mesopotamian, Egyptian, Aegean, Greek, Etruscan, and Roman cultures.

Pre: ART 260 or consent V

462 (3) Renaissance Art

Origins and development of Northern and Italian Renaissance art and architecture as an expression of historical, cultural and religious issues.

Pre: ART 261 or consent ALT-S

463 (3) Mannerism to Romanticism

Historical survey of art, architecture and urban plan-

ning in Europe and America from the late sixteenth to mid-nineteenth century: Mannerism, Baroque, Rococo, Neoclassicism and Romanticism.

Pre: ART 261 or consent ALT-S

466 (3) Realism to Postmodernism

Historical survey of art, architecture and urban planning in Europe and America from the mid-nineteenth century to the present: Realism, Impressionism, Expressionism, Surrealism, Abstract Expressionism, Minimalism, Op Art, Pop Art, and Postmodern issues and trends.

Pre: ART 261 or consent F

468 (3) Design: History and Theory

Survey of Graphic Design, Industrial Design and Architecture from historical and theoretical perspectives. Design issues examined from formal and contextual points of view, using analysis strategies that consider style, composition, historical context, functional/propagandistic significance and communicative ability.

V

469 (3) Asian Art

Historical survey of the art and architecture of China, India, Korea and Japan from pre-history to the 20th century.

Pre: ART 260, 261 or consent V

470 (3-9) Print Studio

Continued investigation of advanced print making techniques and concepts. May be repeated.

Pre: ART 370 F, S

475 (3-9) Photography

Expanding technical knowledge and visual awareness while building a portfolio in selected areas. May be repeated.

Pre: ART 375, 376 or consent F, S

480 (3-9) Sculpture

Continuing development of a strongly personal means of aesthetic expression in three dimensions. May be repeated.

Pre: ART 380 F, S

492 (1-6) Art History Seminar

Specific problems in art emphasizing both individual research and contributions to the seminar group on advanced, in-depth topics.

Pre: Consent V

494 (3) Topics

Lecture/discussion/studio course on a selected area of discourse relating to the study of Art History, Art Criticism, Art Education or Art Studio. May focus on a specific artist, style period, cultural group or technical or methodological problem.

V

495 (1) Senior Exhibit

A required course in all art major degree programs. Students plan and present art work in an exhibition.

Pre: Consent F, S

Astronomy

496 (1) Art History Senior Thesis

Capstone writing project. Advanced study and research required. Topic of the senior thesis determined jointly by the student and the faculty advisor. Required for art history specialization.

Pre: Consent of advisor F, S

497 (1-6) Internship

Field experience in professional settings relating to the specialization: graphic design, museum or arts administration, etc.

Pre: Jr. standing with consent of advisor and department chair F, S

499 (1-9) Individual Study

Advanced level pursuit of special projects of research on an independent basis. Requires contractual agreement in art office for registration.

Pre: Consent F, S

Astronomy

College of Science, Engineering and Technology

Department of Physics and Astronomy

141 Trafton Science Center N • 507-389-5743

Website: <http://www.mnsu.edu/dept/physast>

Chair: Louis Schwartzkopf

Steven Kipp, James Pierce

The astronomy program serves the needs of a wide range of students, from those with only a casual interest in the subject to those students planning careers in the field. The 100-level courses (which include general education offerings) are designed to introduce astronomy to the student with a minimal background in mathematics and the physical sciences. The courses taken by astronomy majors and minors cover a variety of topics in modern astronomy and astrophysics and require significant preparation in mathematics and physics.

The astronomy major serves as the first step toward a career in teaching or research in astronomy. Students majoring in astronomy are strongly encouraged to consider a double major with physics, mathematics or computer science.

Admission to Major is granted by the department. Minimum university admission requirements are

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

Many courses in the astronomy program require prerequisites. Students should consult the COURSE DESCRIPTIONS section of this bulletin to determine these courses.

ASTRONOMY BA

This major is intended to prepare the student for employment in a variety of roles in support of professional astronomy, rather than for graduate work.

Required General Education (9 credits):

MATH	121	Calculus I (4)
PHYS	221	General Physics I (5)

Required for Major (Support Courses, 21 credits):

MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
PHYS	222	General Physics II (5)
COMS	272	FORTTRAN Programming (4)

Required for Major (Core, 30 credits):

AST	201	Spherical Astronomy (2)
AST	215	Astronomy and Astrophysics I (4)
AST	225	Astronomy and Astrophysics II (4)
AST	351	Telescope Operations (1)
AST	353	Photometry (1)
AST	355	Astrometry (1)
AST	359	CCD Astronomy (3)
AST	420	Stellar Astrophysics (3)
AST	421	Stellar Structure (3)
AST	430	Galactic Structure (3)
AST	440	Relativistic and Nonthermal Astrophysics (5)

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: None.

ASTRONOMY BS

Most professional astronomers hold a doctorate in astronomy or astrophysics; this major is designed to prepare students for graduate studies in these areas.

Required General Education (9 credits):

MATH	121	Calculus I (4)
PHYS	221	General Physics I (5)

Required Support Courses (Prerequisites, 20 cr):

MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
PHYS	222	General Physics II (5)
PHYS	435	Modern Physics I (3)

Required for Major (Core, 48 credits):

AST	201	Spherical Astronomy (2)
AST	215	Astronomy and Astrophysics I (4)
AST	225	Astronomy and Astrophysics II (4)
AST	351	Telescope Operations (1)
AST	353	Photometry (1)
AST	355	Astrometry (1)
AST	359	CCD Astronomy (3)
AST	420	Stellar Astrophysics (3)
AST	421	Stellar Structure (3)
AST	430	Galactic Structure (3)
AST	440	Relativistic and Nonthermal Astrophysics (5)
PHYS	441	Mechanics (4)
PHYS	447	Electricity and Magnetism I (3)
PHYS	448	Electricity and Magnetism II (3)

PHYS 461 Quantum Mechanics (4)
COMS 272 FORTRAN Programming (4)

Required Minor: None.

ASTRONOMY MINOR

Required General Education (9 credits):

MATH 121 Calculus I (4)
PHYS 221 General Physics I (5)

Required Support Courses (Prerequisites, 9 cr):

MATH 122 Calculus II (4)
PHYS 222 General Physics II (5)

Required for Minor (Core, 10 credits):

AST 201 Spherical Astronomy (2)
AST 215 Astronomy and Astrophysics I (4)
AST 225 Astronomy and Astrophysics II (4)

Required Electives for Minor (9 credits):

Choose a minimum of 9 credits from the following courses:

AST 351	AST 353	AST 355
AST 359	AST 420	AST 421
AST 430	AST 440	

POLICIES/INFORMATION

GPA Policy. Astronomy majors or minors must maintain a minimum 2.5 GPA in all coursework for their astronomy program, and in addition must earn a C or better for a course to apply to their major or minor. These standards apply to the courses required for the degree and their prerequisites. A minimum cumulative GPA of 2.0 is required for graduation. There are no prerequisite GPA requirements for internships.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. No more than one-fourth of the total undergraduate degree requirements may be earned in P/NC courses.

Residency and Transfer Credit. At least 30 hours of undergraduate credit must be earned at Minnesota State University, Mankato during the last two academic years.

Students majoring in astronomy have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Angie B. Bomier, student relations coordinator, C125 Trafton Science Center, telephone 389-1521.

The astronomers operate two observatories on the southern edge of the campus: Standeford Observatory contains an 11-inch Schmidt-Cassegrain telescope, used for visual observations by general education students and other observatory visitors. Several other 8- to 13-inch telescopes are also available for instructional use by students in Astronomy 125. Andreas Observatory houses a 0.5-meter computer-controlled Cassegrain telescope.

This instrument, which is equipped with photographic and electronic cameras and photometers, is used primarily for advanced instruction and faculty research. Standeford Observatory is open regularly for students and other visitors during the spring and the fall. Public viewing nights at Andreas Observatory are held occasionally during the year as weather permits.

COURSE DESCRIPTIONS

101 (3) Introduction to Astronomy

Broad survey of astronomy: the night sky, seasons, moon phases, eclipses, light, telescopes, stars, stellar evolution, galaxies, cosmology, the solar system. *General Education Category 3.*

F, S

102 (3) Introduction to the Planets

Survey of our solar system: the sun, planets, moons, asteroids, comets, and meteoroids; history of the discovery and exploration of the solar system. *General Education Category 3.*

F, S

104 (2) Introduction to Experimental Astronomy

Experiments in astronomy; astronomical observations; measurement, interpretation, and analysis of various types of astronomical data. *General Education Category 3.*

Pre or Coreq: AST 101 or 102

S

115 (2) Life in the Universe

The probability of extraterrestrial intelligent life; the chemical basis of life; planetary environments; stellar ecospheres; the Drake equation; UFOs; space travel; interstellar communication; limits on technical civilizations. *General Education Categories 2 and 3.*

F, S

125 (3) Observational Astronomy

Techniques for observing with naked eye, binoculars and small telescopes; constellation and star identification; use of star atlases and handbooks; observations of stars, binaries, clusters, nebulae, etc. Evening observing sessions required.

Pre: AST 101

F

201 (2) Spherical Astronomy

The celestial sphere; coordinate systems; sidereal and solar time; diurnal motion; precession; proper motion; refraction; aberration; parallax. Requires a background in trigonometry.

S

215 (4) Astronomy and Astrophysics I

Celestial mechanics; gravitational and tidal forces; stellar motions and parallax; radiation and matter; magnitudes and stellar spectra; binary stars and stellar masses; stellar structure and evolution.

Pre: MATH 121 and PHYS 221

F

225 (4) Astronomy and Astrophysics II

Stellar endpoints; close binary systems; variable stars; the Milky Way; normal galaxies; galactic evolution; active galaxies and quasars; cosmology.

Pre: AST 215, MATH 122, PHYS 222

S

Athletic Coaching

294 (1-6) Workshop

A short course devoted to a specific astronomical topic.
May be repeated for credit on each new topic.

V

351 (1) Telescope Operations

Telescope optics; operating the 0.5-meter telescope; pointing and guiding; preparation of observing lists and finder charts; operation of the telescope's ancillary equipment.

Pre: AST 201 and 215, consent

S

353 (1) Photometry

Photometric systems; observational techniques; methods of data reduction; interpretation of observations.

Pre: AST 225 and 351, and COMS 272

ALT-F

355 (1) Astrometry

Reduction of digital images to determine positions, proper motions, and parallaxes of stars; analysis of errors.

Pre: AST 201, 225, and 351

ALT-F

357 (1) Spectroscopy

Line identification; radial velocity determinations; spectral classifications.

Pre: AST 225

V

359 (3) CCD Astronomy

CCD camera operation; image processing techniques; reduction of CCD astrometric, photometric and spectroscopic data; use of image processing and reduction software such as IPLab, Vista, SAO Image and IRAF.

Pre: AST 225

ALT-S

420 (3) Stellar Astrophysics

Blackbody radiation; radiative transfer; atomic structure; spectroscopic notation; excitation; ionization; absorption and emission coefficients; line profiles; analysis of stellar spectra.

Pre: AST 225 and PHYS 222

ALT-F

421 (3) Stellar Structure

The gaseous state; degenerate matter; equations of stellar structure; polytropes; models of stellar interiors and atmospheres; stellar evolution; nucleosynthesis; stellar endpoints.

Pre: AST 420

ALT-S

430 (3) Galactic Structure

Structure, kinematics, and dynamics of our galaxy.

Pre: AST 225, PHYS 222, MATH 223, and COMS 272

ALT-F

440 (5) Relativistic and Nonthermal Astrophysics

Radio, infrared, ultraviolet, x-ray, and gamma-ray astronomy; Nonthermal radiation mechanisms; special and general relativity; white dwarfs, neutron stars, and black holes; active galactic nuclei, accretion disks, and quasars; cosmology.

Pre: AST 225, MATH 223 and 321, PHYS 222 and 447

ALT-S

488 (1-4) Seminar

May be repeated for credit on each new topic.

Pre: Consent

V

491 (1-6) In-Service

A course designed to upgrade the qualifications of persons on-the-job.

V

494 (1-6) Workshop

A short course devoted to a specific astronomical topic.
May be repeated for credit on each new topic.

V

495 (1-4) Selected Topics

A course in a particular area of astronomy not regularly offered. May be repeated for credit on each new topic.

Pre: Consent

V

497 (1-16) Internship

Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

Pre: Consent

V

499 (1-8) Individual Study

Individual study under the guidance of an astronomy faculty member.

Pre: Consent

F, S

Athletic Coaching

College of Allied Health & Nursing

Department of Human Performance

122 Highland Center • 507-389-6313

Chair: Harry Krampf

This minor prepares students for coaching positions in Minnesota and other states. For further information, contact the Department of Human Performance.

ATHLETIC COACHING MINOR

Required for Minor (Core, 17-20 credits):

HP	252	Officiating Theory (1)
HP	340	Prevention and Care (2)
HP	470	Psychology of Coaching (3)
HP	462	Sports Administration (2)
HP	482	Coaching Practicum (1)
HLTH	210	First Aid and CPR (3)
BIOL	220	Human Anatomy (4)

Choose one course from the following:

HP	354	Coaches Physiology (1)
HP	414	Physiology of Exercise (3)

Choose one course from the following:

HP	371	Scientific Principles of Sport (2)
HP	348	Structural Kinesiology and Biomechanics (3)

Choose Coaching Theory courses in two different sports (2 cr):

HP	301	HP	302	HP	303
HP	304	HP	305	HP	306
HP	308	HP	309	HP	310

HP 311 HP 316 HP 317
HP 318

POLICIES/INFORMATION

Student must apply for practicum and athletic coaching minor certificate.

Athletic Training

College of Allied Health & Nursing

Department of Human Performance

Chair: Harry Krampf

122 Highland Center • 507-389-6313

Program Director: Patrick Sexton

Kent K. Kalm, Debra Runkle

The Athletic Training major is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP), and prepares students for careers in the Allied Health Care Profession of Athletic Training. The Certified Athletic Trainer (ATC) is a highly educated and skilled professional specializing in health care for the physically active and athletic populations. In cooperation with physicians and other allied health professionals, the athletic trainer functions as an integral member of the athletic health care team in secondary schools, colleges and universities, sports medicine clinics, hospitals, professional sports programs, and corporate and industrial settings.

The broad based major does not require a minor for completion of degree requirements, however students are strongly encouraged to work toward an additional major/minor in a related field. In addition to course requirements, students spend a minimum of 900 hour, evenly distributed over a two-year period, of supervised clinical experience at Minnesota State University, and in approved clinical settings within the community.

Admission to Major

Application for admission to the Athletic Training Major at the junior-level is a selective process, not all students that apply will be accepted. Due to accreditation standards the total number of students accepted into the program at the junior-level will be limited. The selection process is competitive and is based on the student's:

- cumulative GPA
- completion of the general education prerequisites as listed below, and GPA in those courses
- completion of the required major courses as listed below
- evaluation of work performance during pre-athletic training level assignments/observations in the athletic training room
- letters of recommendation and an interview

A minimum cumulative GPA of 2.75, on a 4.00 scale, is required as an admission standard. Each prospective student MUST take HP 140 during the fall of their freshman or sophomore year as an introduction to the profession, the program, and the program application

process. An application packet may be obtained from the program director during spring semester and must be completed and returned by May 1st.

Courses required for program application: HLTH 101, HLTH 210, PSYC 101, BIOL 100, BIOL 220, BIOL 230, HP 140, HP 341, HP 348, and CHEM 111 or higher.

ATHLETIC TRAINING BS

Required General Education (11 credits):

HLTH 101	Health and the Environment (3)
PSYC 101	Psychology (4)
BIOL 100	Our Natural World (4)

Required Major Courses (16 credits):

HLTH 210	First Aid and CPR (3)
BIOL 220	Human Anatomy (4)
BIOL 230	Human Physiology (4)
CHEM 111	Chemistry of Life Processes (5) (or higher)

Required for Major (38 credits):

HP 140	Introduction to Athletic Training (2)
HP 341	Athletic Training Techniques (3)
HP 342	Evaluation Techniques I (3)
HP 346	Evaluation Techniques I Clinical (1)
HP 343	Evaluation Techniques II (3)
HP 347	Evaluation Techniques II Clinical (1)
HP 348	Structural Kinesiology and Biomechanics (3)
HP 414	Physiology of Exercise (3)
HP 436	Nutrition in Exercise and Sport (2)
HP 440	Medical Aspects of Athletic Training (3)
HP 442	Therapeutic Modalities (2)
HP 444	Rehabilitation Techniques (2)
HP 456	Athletic Testing and Conditioning (2)
CSP 471	Interpersonal Helping Skills (3)
HP 480	Senior Seminar (3)
HP 484	Clinical Techniques in Athletic Training I (1)
HP 485	Clinical Techniques in Athletic Training II (1)

Required Minor: None

POLICIES/INFORMATION

GPA Policy. Once accepted into the Athletic Training major, a minimum cumulative GPA of 2.75 must be maintained. Student must also maintain a minimum GPA of 3.0 in all designated major courses. A required major course in which a student receives a grade of D or below must be retaken and improved to a C or better.

P/N Grading Policy. All required general education and major courses must be taken for grade.

Clinical Experiences. All clinical requirements must be completed as scheduled, with the student showing satisfactory progress in clinical skills as evaluated by clinical supervisors.

Automotive Engineering Technology

Automotive Engineering Technology

College of Science, Engineering & Technology
Department of Automotive & Manufacturing Engineering Technology

205 Trafton Science Center E • 507-389-6383

Fax: 507-389-5002

Website: <http://amet.mnsu.edu>

Chair: Kirk Ready

Lee Anderson, Ann Goebel, Andrzej Markowski, Bruce Jones, Harry Petersen, Paul Sullivan

Automotive Engineering Technology students study the design, development, testing, application, modification, and maintenance of vehicles and their components for use in transportation systems. Graduates obtain positions in operations, product research, design and development, technical service, manufacturing, and technical sales. Fields include passenger cars, trucks, off-road vehicles, emissions, safety, fuels and lubricants, industrial and agricultural equipment, and recreational vehicles.

Accreditation. The program is accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).

Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours;
- a minimum cumulative GPA of 2.00 (C).
Contact the department for application procedures.

AUTOMOTIVE ENGINEERING TECHNOLOGY BS

Required General Education (22 credits):

ENG 101	Composition (4)
SPEE 100	Fundamentals of Speech Communication (3) or
SPEE 102	Public Speaking (3)
MATH 115	Precalculus Mathematics (4)
MATH 121	Calculus I (4)
PHYS 211	Principles of Physics I (4)
CHEM 105	Introduction to Chemistry (3)

Required Support Courses (15 credits):

ENG 271	Technical Communication (4)
MATH 127	Calculus II for Engineering Technology: Integration (2)
PHYS 212	Principles of Physics II (4)
STAT 154	Elementary Statistics (3)
COMS 171	Introduction to C++ Programming (2)

Required for Major (Core, 57 credits):

AET 102	Introduction to Automotive Engineering Technology (1)
EET 113	DC Circuits (3)

MET 141	Computer Aided Drafting (4)
MET 144	Industrial Design (2)
AET 160	Automotive Systems (4)
AET 161	Automotive Driveability/Diagnosis (4)
MET 177	Material Processing I and Metallurgy (4)
MET 245	Computer Aided Design (3)
AET 262	Auto Computers and Electronics (4)
AET 264	Vehicle Testing and Chassis Design (4)
MET 322	Statics, Dynamics, and Mechanics of Materials (5)
AET 334	Fluid Power (3)
AET 365	Automotive Laboratory (2)
AET 366	Automotive Thermodynamics (3)
AET 378	Composite Materials (3)
MET 424	Industrial and Construction Safety (2)
AET 468	Automotive Research and Design (3)
AET 488	Senior Design I (1)
AET 489	Senior Design II (2)

Required Minor: None

AUTOMOTIVE ENGINEERING TECHNOLOGY MINOR

Total Credits (16)

Required for Minor (9 credits):

AET 102	Introduction to Automotive Engineering Technology (1)
AET 160	Automotive Systems (4)
AET 161	Automotive Driveability and Diagnosis (4)

Required Electives (7 credits):

Choose 7 credits of AET or MET courses.

POLICIES/INFORMATION

GPA Policy. A minimum GPA of 2.0 is required.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/NC, except those courses offered P/NC only.

Residency: A minimum of 50 percent of the credits for a major or minor in Automotive Engineering Technology must be taken at MSU. In addition to the general transfer-of-credit policies for students transferring to MSU, the following policy will be used in giving credit in Automotive Engineering Technology courses. For students transferring from two-year or four-year colleges, up to 28 AET credits will be accepted if the transcript is from an ABET-accredited school. If the school is not accredited by ABET, MSU will accept up to 16 credits.

Prerequisites and co-requisites must be observed. A flow chart of prerequisites is available at the Department Office.

The scheduling of all department courses is done yearly, based on enrollment and staffing. To obtain a current yearly class schedule, contact the Department.

COURSE DESCRIPTIONS

102 (1) Introduction to Automotive Engineering Technology

An overview of careers, technology and requirements for individuals interested in Automotive Engineering Technology. Hands-on experience is gained in a variety of new technologies. Careers in engineering technology are examined along with professional organizations and ethics. This course is intended as the first step toward an automotive career.

160 (4) Automotive Systems

The theory and maintenance of the modern automobile and automotive design. Covers major automotive systems including: engine cycle operation, lubrication system, cooling system, ignition system, transmissions, brakes, and chassis. Basic diagnosis and repair procedures are also covered. A group vehicle design project is included. Lectures and demonstrations cover the course topics and labs allow students to gain hands-on experience.

161 (4) Automotive Driveability and Diagnosis

The diagnosis of automotive engine problems using a systems approach along with detailed troubleshooting procedures and specific test equipment. Test equipment used in the course includes: Exhaust Gas Analyzers; Compression, Vacuum, and Leakage Testers; Ignition Oscilloscopes, Timing Lights, Engine Analyzers; Crack Detection Equipment; Measuring Tools.

Pre: AET 160

262 (4) Automotive Computers and Electronics

Theory and diagnostic procedures related to modern automobile electrical and electronic management systems. Major emphasis involves the computer as used in today's cars to control the ignition, fuel, emission control, body, and chassis system. Programmable engine management systems are introduced. Hands-on experience on diagnosis is provided.

Pre: AET 161, EET 113 Coreq: COMS 171

264 (4) Vehicle Testing and Chassis Design

The theory and design of chassis systems in addition to the evaluation of such designs. The chassis dynamometer as a research and certification tool. Determination of load, road load testing, and power testing. Emissions and fuel economy measurement. Emphasis placed on Federal Emission Testing, IM 240, OBD II, and State I/M programs.

Pre: AET 161, Coreq: CS 171

334 (3) Fluid Power

Course provides a fundamental understanding of the physical principles of fluid power, along with a practical working knowledge of the components utilized in designing, installing, operating, and maintaining hydraulic and pneumatic power systems.

Pre: MATH 121, PHYS 211

365 (2) Automotive Laboratory

Designed to provide experience in lab organization, supervision instruction and maintenance. Emphasis is also placed on obtaining service experience on a variety of

makes of domestic and import vehicles. Enrollment is limited. Sign up at least one year ahead.

Pre: AET 262

366 (3) Automotive Thermodynamics

The study of thermodynamics and engine theory. Static and dynamic engine measurements along with a technical study of the engine's mechanical, ignition, fuel, cooling and lubrication systems. Engine performance simulation is included.

Pre: AET 161 Coreq: MATH 121, CHEM 105

378 (3) Composite Materials

Fiber reinforced plastic composite materials used in the manufacturing and transportation industries are the focus of this course. Matrix and reinforcement materials are examined and their properties identified. Manufacturing methods, fabrication, assembly techniques, testing, repair, and design of composite products are covered.

Coreq: MET 177, MET 322

435 (1-4) Automotive Design and Construction

Involves designing and building of prototype vehicles. Topics include: vehicle design decisions, rules, budgets, chassis design, body and aerodynamics, drive train choices, construction techniques, and test procedures. An actual experimental car will be built in this class. May be repeated.

468 (3) Automotive Research and Design

Automotive research techniques and equipment form the basis for this course. Environmental measurement, air flow testing, engine dynamometer testing, and vehicle performance measurement are covered. Emphasis is placed on research procedures, data acquisition and interpretation, and technical report writing. Current research projects from the automotive industry are also examined.

Pre: AET 366

488 (1) Senior Design I

An examination of automotive design and research along with topics such as ethics, professionalism, measurement, statistics, and career development/ placement. This course also prepares the student for AET 489, Senior Design Project II, where the design proposal, design project and final report are completed. This course must be taken in the spring semester during the junior year.

Coreq: STAT 154

489 (2) Senior Design II

A continuation of AET 488.

Pre: AET 468, 488, ENG 271

492 (1-4) Automotive Seminar

Selected automotive topics.

497 (1-10) Internship: Automotive

Automotive work experience in an area pertinent to the student's objective. Consent of internship coordinator required prior to the beginning of employment and registration. Typically done between the junior and senior year

Pre: 50% of major

499 (1-4) Individual Study

Aviation

College of Education

Department of Aviation and Business Education

107 Armstrong Hall • 507-389-6116

Chair: John Roberts

Joel Patrick McKinzie, Roger Kontak

The objective of the aviation program is to prepare students for responsible positions in the air transportation industry, including airline operations and management, corporate aviation, airport management and government operations. The goal of the program is to equip students with adequate knowledge and skills in aviation and management in order to compete in the rapidly changing and highly competitive field of aviation.

Admission to Major Students may begin flight training and enroll in 100/200 level aviation courses prior to admission to major. Electronic admission is available in AH 119. Transfer students should submit a copy of their transfer credit evaluation form. Students must meet the following requirements:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

AVIATION BS

Required for Major (Aviation Core, 25 credits):

AVIA	100	World of Aviation (3)
AVIA	150	Private Pilot Ground School (4)
AVIA	151	Private Pilot Flight Lab (3)
AVIA	250	Commercial Pilot Ground School (3)
AVIA	260	Instrument Pilot Ground School (4)
AVIA	334	Aviation Management (4)
AVIA	437	Aviation Safety (4)

Required for Major (Aviation Electives, 12 credits):

Choose 4 courses from the following:

AVIA	333	Airline Operations (3)
AVIA	336	Basic Avionics and Mechanics (3)
AVIA	343	Airport Management (3)
AVIA	432	Aviation Law (3)
AVIA	435	Aviation Insurance (3)
AVIA	436	Advanced Flight Operations (3)
AVIA	438	Flight Engineers Ground School (3)
AVIA	439	Airline Pilot Rating Ground School(3)
AVIA	441	Regional Airlines Operations (3)
AVIA	442	Air Traffic Control (3)
AVIA	443	Airline Dispatch (3)
AVIA	445	Aviation Resource Management (3)

Required for Major (40 credits): Choose Professional Flight or Aviation Management option below:

PROFESSIONAL FLIGHT OPTION I

Required Total 40 credits

Required for Option (AVIA Electives, 10 credits):

Choose 10 credits from the choices listed:

AVIA	251	Commercial Flight Lab (3)
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AVIA	261	Instrument Flight Lab (3)
AVIA	371	Multi Engine Lab (1)
AVIA	380	Flight Instructors Ground School (3)
AVIA	381	Certified Flight Instructor Flight Lab (1)
AVIA	382	Multi Engine Instructor Flight Lab (1)
AVIA	391	Instrument Flight Instructor Flight Lab (1)
AVIA	337	Airline Transport Pilot Flight Lab (1)

Required Focus Area (30 credits):

Students may complete business foundation core (below) or an approved minor offered from any university department. When students complete a minor in lieu of business foundation courses, the balance of the required 30 credits may be aviation electives, internship, or individual study.

AVIATION MANAGEMENT OPTION II (Aviation Management *10 credits):

AVIA	497	Aviation Internship (1-10)
AVIA	499	Individual Study in Aviation (1-10)

Additional Aviation Electives

Required Focus Area (Business Foundation 30 credits)

Students must complete all Business Foundation Courses listed below:

ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
BLAW	200	Legal, Political and Regulatory Environment of Business (3)
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
BED	345	Business Communications (3)
MRKT	310	Principles of Marketing (3)
MGMT	330	Principles of Management (3)
FINA	362	Business Finance (3)
IBUS	380	Principles of International Business (3)

Required Minor: None.

AVIATION MANAGEMENT MINOR

Required for Minor (Core, 14 credits):

AVIA	150	Private Pilot (4)
AVIA	151	Private Pilot Flight Lab (3)
AVIA	250	Commercial Pilot (3)
AVIA	260	Instrument Pilot (4)

Required Electives (10 credits):

Choose 10 credits from the following:

AVIA	251	AVIA	261	AVIA	333
AVIA	336	AVIA	343	AVIA	371
AVIA	432	AVIA	435	AVIA	436
AVIA	438	AVIA	441	AVIA	442
AVIA	443				

POLICIES/INFORMATION

GPA Policy. Admission to College of Education, 2.0.

P/N Grading Policy. Only elective and general education courses may be taken P/N, unless offered P/N only.

COURSE DESCRIPTIONS

100 (3) World of Aviation

A study of how aviation fits into our modern world, relation to business, and contribution to the economy. Study of aviation as a visible alternative in transportation.

F, S

150 (4) Private Pilot

A study of basic aeronautical knowledge including principals of flight, aerodynamics, aviation regulations, weather, visual and instrument navigation, and emergencies. The course meets, but is not limited to, FAR part 61.105 (a, 1-6). Satisfactory completion of this course may result in an endorsement for the FAA Private Pilot written exam.

F, S

151 (3) Private Pilot Flight Lab

Provides beginning flight student with the in-flight requirements needed to obtain the FAA Private Pilot's Certificate.

F, S

250 (3) Commercial Pilot

A study of advanced aeronautical knowledge, including aerodynamics, aviation regulations, weather, visual and instrument navigation, and emergencies. The course meets, but is not limited to, FAR part 61.125 (a, 1-4). Satisfactory completion of this course may result in an endorsement for the FAA Commercial Pilot written exam.

Pre: AVIA 150, or equivalent

F, S

251 (3) Commercial Pilot Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Commercial Pilot's Certificate.

Pre: AVIA 151, or equivalent

F, S

260 (4) Instrument Pilot

A study of the aeronautical knowledge including aviation regulations, weather, instrument navigation, and instrument emergencies. The course meets, but is not limited to, FAR part 61.65 (b, 1-4). Satisfactory completion of this course may result in an endorsement for the FAA Instrument Pilot written exam.

Pre: AVIA 150, or equivalent

F, S

261 (3) Instrument Pilot Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Pilot rating.

Pre: AVIA 151, or equivalent

F, S

333 (3) Airline Operations

Designed to cover the complex area of operation techniques and problems confronting the airlines today. Entails a study of marketing research, passenger trends, feasibility route studies, etc.

F, S

334 (4) Aviation Management

Provides an understanding of management and financial techniques related to aviation businesses. Generally ac-

cepted and proven business techniques and proven business techniques are applied to the aviation setting.

F, S

336 (3) Basic Avionics and Mechanics

Trains the student in the basic radio and navigation procedures, components, and electronic technology. The student also gains an understanding of aircraft engines and systems.

F

337 (2) Airline Transport Pilot Flight Lab

Prepares students who desire careers as professional pilots. Emphasizes complete ground tutoring and flight instruction relating to instrument maneuvers, regulation interpretation, pilot discipline and professional procedures.

F, S

343 (3) Airport Management

Provides an understanding of management and operations techniques related to airports. Aspects of design, finance, planning and public relations are emphasized.

S

371 (1) Multi-Engine Flight Lab

Prepares advanced flight student with the in-flight requirements needed to obtain the FAA Multi-Engine Pilot rating.

Pre: AVIA 151, or equivalent

F, S

380 (3) Certified Flight Instructor

A study of the fundamentals of instruction including the learning process, effective teaching evaluation, course development, lesson planning, and instructing techniques. The course meets, but is not limited to, FAR part 61.187 (a, 1-6). Satisfactory completion of this course may result in an endorsement for the FOI and CFI-A written exam.

Pre: AVIA 150 and 260, or equivalent

F, S

381 (1) Flight Instructor Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Certified Flight Instructor's Certificate.

Pre: AVIA 251 and 261, or equivalent

F, S

382 (1) Multi-Engine Instructor Flight Lab

Prepares advanced flight students for the in-flight requirements needed to obtain the FAA Multi-Engine Flight Instructor's Certificate.

Pre: AVIA 251 and 261, or equivalent

F, S

391 (1) Instrument Flight Instructor Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Flight Instructor's Certificate.

Pre: AVIA 251 and 261, or equivalent

F, S

432 (3) Aviation Law

To instruct the student relative to legal implications of aircraft ownership, leases, rentals, and overall aircraft operation. Emphasis is placed on the understanding of liability and negligence from the operator and pilot standpoints.

S

Biochemistry

435 (3) Aviation Insurance

Identifies the various rudiments of insurance related to aircraft and airport operations including basic insurance principles, non-ownership pilot liability exposures, aircraft hull consideration, fleet insurance and premium costs.

S

436 (3) Advanced Flight Operations

Introduces advanced flight students to the systems and techniques used in high performance and turbine aircraft. Emphasis is on aircraft systems and high altitude flight operations.

437 (4) Aviation Safety

The understanding and implementation of safe operating procedures. Assists the student in arriving at proper decisions related to periods of stress when operating as pilot in command. Various FAA regulations and standard and safe operating procedures are also discussed.

F

438 (3) Flight Engineer

Provides students with the knowledge necessary to pass the FAA flight engineers written exam.

F

439 (3) Airline Transport Pilot

Introduces the technical training required for the operation of large aircraft in airline service. Provide knowledge to pass the FAA written test for Airline Transport Pilot Certificate.

F

441 (3) Regional Airline Operations

Introduces the management and operation of a regional airline including regulatory concerns. Also introduces complex aircraft systems found on the typical regional airline aircraft.

F, S

442 (3) Fundamentals of Air Traffic Control

To provide the student with the basic knowledge of ATC as a career and the fundamentals necessary for FAA certification.

F

443 (3) Airline Dispatch

Introduces the workings of the complex system of air control in the US and abroad. Covers such subjects as radio communications, airspace classification, radar control, and operation as well as aircraft separation. Looks at present and future air traffic control systems.

S

490 (1-10) Aviation Workshop

V

497 (1-12) Aviation Internship

Supervised experience in business, industry, state or federal institutions.

F, S

499 (1-6) Individual Study in Aviation

Allows the student an individual course of study on an

aviation topic to be arranged with the department. This course will be writing intense.

F, S

Biochemistry

College of Science, Engineering and Technology

Department of Chemistry & Geology

242 Trafton Science Center N • 507-389-1963

Chair: Jeffrey R. Pribyl

Brian Groh, Michael J. Lusch, Marie K. Pomije, James Rife, Theresa Salerno, John Thoenke

Biochemistry is a discipline which encompasses both biology and chemistry. This rapidly expanding science focuses on the study of the molecular aspects of living organisms. The tools and concepts of biochemistry are important as a foundation for careers in many areas of research and in medicine. Students considering a BA or BS degree in biochemistry should consult the biochemistry advisor for specific information regarding the program.

Admission to Major. Admission to a program is necessary before a student can enroll in 300- and 400-level courses. To be eligible for admission to the biochemistry program a student must have declared biochemistry as a first major, completed 32 credits, including BIOL 105 and 106 as well as CHEM 201 and 202 and achieved a minimum grade point average of 2.0. Students should also have an assigned biochemistry advisor with whom they have discussed the program. Applications for admission to the biochemistry program are available in the department office.

BIOCHEMISTRY BA

Required for Major (Support Courses, 19 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	270	Microbiology (4)
BIOL	479	Molecular Biology (4)

Required for Major (Core, 34 cr):

CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	320	Organic Chemistry I, includes lab (5)
CHEM	321	Organic Chemistry II (2)
CHEM	331	Organic Chemistry II Lab (1)
CHEM	460	Biochemistry I (3)
CHEM	461	Biochemistry II (3)
CHEM	465	Biochemical Techniques I (1)
CHEM	466	Biochemical Techniques II (2)
CHEM	474	Chromatography (2)
CHEM	495	Senior Seminar (1)

Required Electives (9 credits):

Choose a minimum of 9 credits with approval from the advisor:

BIOL 300/400 Elective
 BIOL 300/400 Elective
 BIOL 300/400 Elective

Required for Bachelor of Arts (BA) degree ONLY:
Language (8)**Required Minor: None.****BIOCHEMISTRY BS****Required General Education (4 credits):**

BIOL 105 General Biology I (4)

Required Support Courses (30-33 credits):

BIOL 106 General Biology II (4)
 BIOL 211 Genetics (3)
 BIOL 270 Microbiology (4)
 BIOL 479 Molecular Biology (4)
 PHYS 211 Principles of Physics I (4) **and**
 PHYS 212 Principles of Physics II (4)

or

PHYS 221 General Physics I (5) **and**
 PHYS 222 General Physics II (5)

Choose a minimum of 7 credits from the following:

MATH 121 Calculus I (4)
 MATH 122 Calculus II (4)
 STAT 154 Elementary Statistics (3)

Required for Major (Core, 40 cr):

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 320 Organic Chemistry I, includes lab (5)
 CHEM 321 Organic Chemistry II (2)
 CHEM 331 Organic Chemistry II Lab (1)
 CHEM 440 Physical Chemistry I (3)
 CHEM 450 Physical Chemistry Lab I (1)
 CHEM 460 Biochemistry I (3)
 CHEM 461 Biochemistry II (3)
 CHEM 465 Biochemical Techniques I (1)
 CHEM 466 Biochemical Techniques II (2)
 CHEM 474 Chromatography (2)
 CHEM 495 Senior Seminar (1)
 CHEM 498 Undergraduate Research (2)

Required Electives (Chemistry or Biology, 8 cr):

Choose a minimum of 8 credits with approval from the biochemistry advisor:

CHEM/BIOL 300/400 Elective
 CHEM/BIOL 300/400 Elective
 CHEM/BIOL 300/400 Elective

Required Minor: None.**POLICIES/INFORMATION**

The first year of coursework for biochemistry majors should include two semesters of chemistry (201, 202), two semesters of biology (105, 106) and one semester of

mathematics (selection of course depends on mathematics background). Organic Chemistry should be taken during the second year. It is important for majors to take the biochemistry sequence during the third year. Participation in chemistry seminar is required of all majors.

GPA Policy: Students obtaining a major in biochemistry must maintain an overall GPA of 2.0 with no more than 5 credits of D work in chemistry or biochemistry courses.

P/N Grading Policy: Courses leading to a major or minor in chemistry or biochemistry may not be taken on a P/N basis, except where P/N grading is mandatory.

The department is recognized by the American Chemical Society and offers a B.S. (Chemistry) major that is approved by that organization. Anyone considering a chemistry or biochemistry major or minor should choose a departmental faculty member as an advisor and consult that advisor often throughout the course of study.

Biology

College of Science, Engineering & Technology
Department of Biological Sciences

242 Trafton Science Center S • 507-389-2786

Website: <http://www.mnsu.edu/dept/biology>

Chair: Gregg Marg, Ph.D.

Daryl Adams, Ph.D., Michael Bentley, Ph.D., Bill Bessler, Ed.D., Christopher Conlin, Ph.D., Keith Klein, Ph.D., Penny Knoblich, DVM, Ph.D., John Krenz, Ph.D., Mark Lyte, Ph.D., John D. Madsen, Ph.D., Alison Mahoney, Brock R. McMillan, Ph.D., Steven Mercurio, Ph.D., Donovan Nielsen, Ph.D., Beth Proctor, Ph.D., Edward Williams, Ph.D., Dorothy Wrigley, Ph.D.

The Department of Biological Sciences offers programs for students preparing for careers in education, laboratory and field research, biotechnology, environmental sciences, clinical laboratory sciences, cytotechnology, food science technology and pre-professional programs including pre-agriculture, pre-forestry, pre-medicine, and pre-veterinary medicine.

The biology major offers a core program intended to develop a common background in biology and additional upper level courses designed to provide specialized options. Students typically take a broad based general biology major or an emphasis in one of the following: general biology, bio-business, cytotechnology, ecology, human biology, microbiology, physiology, plant science, toxicology, or zoology. Programs in biotechnology, environmental sciences, food science technology and science teaching are also offered.

Admission to Major is granted by the department. Admission requirements are 32 earned semester credit hours including BIOL 105 and 106, with a grade of a "C" or better in both BIOL 105 and 106; and a minimum cumulative GPA of 2.00.

BIOLOGY BA (40 credits)

Required for Major (Core, 18-21 cr):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)

Choose two courses from the following:

BIOL	215	General Ecology (4)
BIOL	270	Microbiology (4)

one physiology course [Biol 230(4), Biol 431 (3), Biol 441 (4), or Biol 476 (5)]

Choose one course from the following:

BIOL	230	Human Physiology (4)
BIOL	320	Cell Biology (3)
BIOL	431	Comparative Animal Physiology (3)
BIOL	441	Plant Physiology (4)
BIOL	476	Microbial Physiology and Genetics (5)

Required Electives for Major (Biology, 20-22 cr):

Choose 20-23 credits of electives in consultation with an advisor.

Required for Bachelor of Arts (BA) degree ONLY: Language (8)

Required Minor: Yes. Chemistry

BIOLOGY BS

Students may elect to complete the general non-specialized biology major or select one of the alternative specialized options or emphases.

GENERAL, NON-SPECIALIZED OPTION (40 credits)

Required for Option (Core, 17-20 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)

Choose two courses from the following:

BIOL	215	General Ecology (4)
BIOL	320	Cell Biology (3)

One physiology course [Biol 230 (4), Biol 431 (4), Biol 441 (4), or Biol 476 (5)]

Required Electives (5-8 credits):

Choose two courses from the following:

BIOL	301	BIOL	316	BIOL	403
BIOL	408	BIOL	418	BIOL	430
BIOL	435	BIOL	436	BIOL	442
BIOL	443	BIOL	451	BIOL	452

Additional upper division electives:

Choose additional Biology 300-400 level courses to total 40 credits in this option.

Required Minor: Yes. Chemistry.

BIOBUSINESS OPTION (40 credits)

Required for Option (credits vary):

A student may choose the Biology BA or any BS option or program to satisfy the BioBusiness option.

Required (Chemistry, 10 cr):

A minimum of one year of chemistry is required.

Required Minor: Yes. Any Business Minor.

CYTOTECHNOLOGY OPTION (84 credits)

Required for Option (Core, 48 credits):

Choose 30 credits from the following:

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	220	Human Anatomy (4)
BIOL	230	Human Physiology (4)
BIOL	270	General Microbiology (4)
BIOL	320	Cell Biology (3)
BIOL	420	Diagnostic Parasitology (3)
BIOL	434	Development & Human Embryology (3)
BIOL	435	Histology (4)

Choose 18 credits from the following:

CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	320	Organic Chemistry I (5)
CHEM	360	Principles of Biochemistry (4)

Required Elective (4 credits):

MATH 112 or higher

Professional Education (32 credits):

Clinical Internship at Mayo

ECOLOGY OPTION (48-54 credits)

Required General Education

STAT	154	Elementary Statistics (3)
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Required for Option (Core, 18-20 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	215	General Ecology (4)
BIOL	301	Evolution (2)

Choose one course from the following:

BIOL	320	Cell Biology (3)
BIOL	230	Human Physiology (4)
BIOL	431	Comparative Animal Physiology (3)
BIOL	441	Plant Physiology (4)
BIOL	476	Microbial Physiology and Genetics (5)

Required Electives (20-22 credits):

Choose 20-22 credits from the following courses for a total of 40 credits for the major, including the core courses listed above:

BIOL	217	BIOL	301	BIOL	316
BIOL	402	BIOL	403	BIOL	404
BIOL	405	BIOL	408	BIOL	410
BIOL	412	BIOL	421	BIOL	431
BIOL	432	BIOL	436	BIOL	441
BIOL	442	BIOL	443	BIOL	445
BIOL	460	BIOL	461	BIOL	472
BIOL	497	BIOL	499		

Required for Option (10 cr):

One year of Chemistry

Recommended: Courses in physics, computer science, and mathematics (algebra and trigonometry). These courses may satisfy general education requirements.

Required Minor: Yes. Related Area.

HUMAN BIOLOGY OPTION (39-41 credits)

Required Support Courses (15-18 credits):

Calculus - one semester

Physics - one year

Computer Science - one course

Required for Option (Core, 25-36 credits):

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

BIOL 220 Human Anatomy (4)

BIOL 230 Human Physiology (4)

BIOL 211 Genetics (3)

BIOL 320 Cell Biology (3)

Choose one course from the following:

BIOL 270 Microbiology (4)

BIOL 217 Plant Science (3)

Required Electives (14-15 credits):

Choose a minimum of 14 credits from the following:

BIOL 316* BIOL 324 BIOL 410

BIOL 417 BIOL 418 BIOL 420*

BIOL 430* BIOL 433* BIOL 434

BIOL 435* BIOL 438 BIOL 452*

BIOL 460 BIOL 466 BIOL 474*

BIOL 475* BIOL 479* BIOL 497*#

BIOL 498*# BIOL 499#

* Choose at least one course from these courses

Choose a maximum of 4 credits from these courses

Required Minor: Yes. Chemistry.

MICROBIOLOGY OPTION (38-39 credits)

Required General Education for Option (4 cr):

MATH 112 College Algebra (4)

Required for Option (Core, 18-19 cr):

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

BIOL 211 Genetics (3)

BIOL 270 General Microbiology (4)

Choose one course from the following:

BIOL 215 General Ecology (4)

BIOL 217 Plant Science (3)

BIOL 230 Human Physiology (4)

BIOL 320 Cell Biology (3)

Required Electives (20 credits):

Choose a minimum of 20 credits from the following:

BIOL 420 BIOL 452 BIOL 472

BIOL 474 BIOL 475 BIOL 476

BIOL 478 BIOL 479 BIOL 497

BIOL 499

Required Minor: Yes. Chemistry.

PHYSIOLOGY OPTION (58-68 credits)

Required General Education (11-12 credits):

BIOL 105 General Biology I (4)

MATH 121 Calculus I (4) **or**

STAT 154 Elementary Statistics (3)

PHYS 211 Principles of Physics I (4)

Required Support Courses (7 credits):

BIOL 106 General Biology II (4)

CHEM 460 Biochemistry I (3)

Required for Option (Core, 20 credits):

BIOL 211 Genetics (3)

BIOL 230 Human Physiology (4)

BIOL 320 Cell Biology (3)

BIOL 431 Comparative Animal Physiology (3)

BIOL 441 Plant Physiology (4)

BIOL 460 Introduction to Toxicology (3)

Required Electives (9-10 credits):

Choose at least 9 credits from the following courses:

BIOL 324 BIOL 433 BIOL 438

BIOL 466 BIOL 479 BIOL 499

Required Minor: Yes. Chemistry.

PLANT SCIENCE OPTION

Recommended Support Courses (7 credits):

MATH 121 Calculus I (4)

HLTH 475 Biostatistics (3)

Required for Option (Core, 26-27 credits):

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

BIOL 211 Genetics (3)

BIOL 217 Plant Science (3)

BIOL 441 Plant Physiology (4)

BIOL 442 Plant Taxonomy (4)

Choose one course from the following courses:

BIOL 215 General Ecology (4)

BIOL 270 Microbiology (4)

Required Electives (13-14 credits):

Choose at least 13 credits from the following courses:

BIOL 301 BIOL 403 BIOL 410

BIOL 412 BIOL 440 BIOL 443

BIOL 445 BIOL 452 BIOL 497

BIOL 499

Required Minor: Yes. Related area.

TOXICOLOGY OPTION (67 credits)

Required General Education (17 credits):

BIOL 105 General Biology I (4)

CHEM 201 General Chemistry I (5)

PHYS 211 Principles of Physics I (4)

MATH 121 Calculus I (4)

Required for Major (Support Courses, 32 credits):

BIOL 106 General Biology II (4)

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 320 Organic Chemistry I (5)

CHEM 321 Organic Chemistry II (2)

CHEM 460 Biochemistry I (3)

CHEM 461 Biochemistry II (3)

Biology

CHEM	465	Biochemical Techniques I (1)
CHEM	466	Biochemical Techniques II (2)
HLTH	475	Biostatistics (3)

Required for Option (Core, 35 credits):

BIOL	211	Genetics (3)
BIOL	215	General Ecology (4)
BIOL	230	Human Physiology (4)
BIOL	270	Microbiology (4)
BIOL	460	Introduction to Toxicology (3)
BIOL	461	Environmental Toxicology (4)
BIOL	462	Toxicology Seminar (1)
BIOL	464	Methods of Applied Toxicology (3)
BIOL	465	Applied Toxicology Project (3)
BIOL	466	Principles of Pharmacology (3)
BIOL	467	Industrial Hygiene (3)

Required Minor: None.

ZOOLOGY OPTION (48-50 credits)

Required for Option (Core, 21-33 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	316	Animal Diversity (3)

Choose one course from the following

BIOL	215	General Ecology (4)
BIOL	270	Microbiology (4)

Choose one course from the following:

BIOL	230	Human Physiology (4)
BIOL	320*	Cell Biology (3)
BIOL	431*	Comparative Animal Physiology (3)

*If BIOL 320 or BIOL 431 are taken in this category, they can't be counted in the following required electives.

Required Electives (17-19 credits):

Choose a minimum of 17 credits from the following upper division courses:

BIOL	320	BIOL	324	BIOL	403
BIOL	408	BIOL	420	BIOL	421
BIOL	431	BIOL	435	BIOL	436
BIOL	438				

Required for Option (10 cr.):

One year of chemistry.

Required Minor: Yes. Related Area.

LIFE SCIENCE TEACHING BS

See the SCIENCE TEACHING section of this bulletin.

BIOLOGY MINOR

Required for Minor (Core, 17 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
Choose one course from the following:		
BIOL	215	BIOL 217 BIOL 220
BIOL	270	

Additional Elective :

Any 200 level or above course to total 17 credits in the minor.

POLICIES/INFORMATION

P/N Grading Policy: All courses leading to a major or a minor in biology must be taken for letter grades. Any exception to this policy must be approved by the chairperson of the department.

Refer to the College regarding required advising for students on academic probation.

GPA Policy: In programs where not specifically noted, a minimum GPA of 2.0 must be maintained in biological sciences. A minimum GPA of 2.6 in the sciences must be maintained to meet student teaching requirements.

Several biology scholarships are available for entering freshmen and currently enrolled MSU students who meet the requirements. Application deadline is March 31 of each year.

The Department of Biological Sciences offers a well-balanced summer school program. For details concerning the courses being offered consult the summer bulletin.

COURSE DESCRIPTIONS

100 (4) Our Natural World

Introductory course designed for students not majoring in science. Focuses on basic biological principles with special emphasis on the human species. Includes scientific problem solving, biodiversity, human and social aspects of biology, ecology, cellular processes and organ function, human reproduction, pre-natal development, and heredity. Lecture, laboratory, and small group discussions.

F, S

101 (2-4) Biological Perspectives

Students focus on specific biological perspectives, including environmental science, biology of women, biotechnology, human heredity, etc. May be repeated for credit under different sub-titles.

F, S

102 (3) Biology of Women

Students will study and discuss biological concepts of special interest to women. Information will be presented in lectures, through the text, reserve readings, student projects, etc. Students will acquire information from a variety of sources and will have the opportunity to ask questions, share thoughts, and share experiences.

F, S

103 (3) Introduction to Biotechnology

An introductory course designed for students not majoring in science. Focuses on basic biological principles as applied to biotechnology. Includes basic natural science principles, scientific problem solving, and human and social aspects of biotechnology. Lecture, laboratory, and small group discussions.

F

105 (4) General Biology I

Introduces students to the unifying principles of the cell, its structure and intracellular functions, and to the diversity of cells from prokaryotic and eukaryotic systems. Laboratory and discussion sessions stress problem solving and experimental design.

F, S

106 (4) General Biology II

Expands upon the unity and diversity within life forms expanded into organismal activity. Organ systems and function, intercellular communication, and the relationships established between organisms will be discussed. Laboratory and discussion sessions stress problem solving and experimental design.

Pre: BIOL 105

F, S

175 (1) Orientation to Clinical Laboratory Science

An introduction to the health care profession with special emphasis on clinical laboratory personnel. Course includes presentations by professionals in some of the major health care fields, especially medical technology. Includes lectures, field observations.

S

199 (3-4) CLEP Biology

F, S

201 (3) Ecology and Human Society

Ecological principles as related to current environmental problems. Topics of current interest include energy, human demography, food productions, pollution, and social, political, and economic change. Primarily for general education and non-science majors.

211 (3) Genetics

Introduction to genetic analysis. Topics covered include: crosses, linkage and mapping, Mendelian and Non-Mendelian inheritance, molecular genetics, genetic manipulation of organisms, population genetics and evolution.

Pre: BIOL 105, 106, and MATH 112

F, S

215 (4) General Ecology

Principles of the study of relationships between organisms and the environment. Topics include flow of energy and materials, organism-level interactions, growth and evolution of populations, and community ecology. Field trips to prairie, lake, stream, and forest communities, and training in data collection and analysis, use of equipment, and report writing. Lab included.

Pre: BIOL 105 and 106 or consent

F

217 (3) Plant Science

Biology of plants including unique features of plant cells, life histories, metabolism, anatomy, physiology, and ecology. The course empathizes plants' remarkable adaptations to their environments, their diversity, and the vital roles they play in ecological interactions. For biology and environmental science majors and minors. Lab included.

Pre: BIOL 105 and 106 or consent

S

220 (4) Human Anatomy

Systems approach to the structure of the human body. The course is designed for students majoring in biology or health related programs. Lab included.

F, S

230 (4) Human Physiology

Function of living systems with emphasis on human species. Lab included.

Pre: BIOL 220 and 1 semester of chemistry

F, S

270 (4) Microbiology

An introduction to the general principles and methods used in the study of microorganisms. Lab included.

Pre: 1 BIOL course and 1 CHEM course

F, S

301 (2) Evolution

Evolution is a unifying theory of biology. Students are provided the history of evolutionary thought and the Darwinian revolution, evidence for evolution, mechanics of evolution, and an array of special topics such as speciation, molecular evolution, conservation, and extinction. Readings will include book chapters and journal articles. Lecture/discussion.

Pre: BIOL 105, 106

S

316 (3) Animal Diversity

A comprehensive phylogenetic survey of both invertebrate and vertebrate animals. Emphasis on evolutionary relationships among phyla, the evolution of organ systems, animal organization and function, animal adaptations, and zoogeographical considerations. Research and inquiry of animal unity and diversity will include using the Internet. Lab included.

Pre: BIOL 105 and 106

F

320 (3) Cell Biology

An examination of eukaryotic cellular structure, organization and physiology for students preparing careers in biology, medicine, and related fields. Topics include cell surface, intracellular compartments, cell junctions, cytoskeleton, cell motility, signal transduction mechanisms, energy flow and metabolism, information flow, protein sorting and transport, and common research techniques. Students will research on the Internet. Lab included.

Pre: CHEM 320 or consent

S

324 (3) Neurobiology

Basic anatomy and physiology of the nervous system. The course is designed for students majoring in biology, psychology or health related programs.

Pre: BIOL 220 and 230

F

380 (3) Blood Banking/Urinalysis

Basic understanding of the principles of immunohematology applied to the area of blood banking including major blood group systems, principles for antigen/antibody detection and identification, donor blood collection, transfusion evaluation, theory of renal function in health and disease, specimen collection, handling, and processing, and components of routine urinalysis.

Pre: BIOL 230

S

Biology

403 (3) Conservation Biology

Applications of principles from ecology, genetics, behavior, demography, economics, philosophy, and other fields to the conservation and sustainable use of natural populations of plants and animals. Lectures and discussions address topics such as habitat fragmentation, parks and reserves, genetics diversity, population viability, and extinction.

Pre: BIOL 215 or consent

F

404 (4) Wetlands

To provide students the values and functions of wetlands and to use wetlands as an example of the relationship of ecology to management, and the impact that classification systems have politically. Lab (fieldwork) included.

Pre: BIOL 105, 106, 215, or consent

S

408 (4) Vertebrate Ecology

A field course in the ecology of birds, mammals, amphibians, reptiles, and fishes. Students are trained in sampling techniques such as mark-and-recapture, population size estimation and monitoring, and species identification of live and preserved specimens. Lectures encompass evolution and adaption, origins, energetics, mating systems, morphology, geographical distributions, and population-level phenomena. Lecture and Laboratory.

Pre: BIOL 105, 106, 215 or consent

F

410 (3) Human Ecology

The human species' place in the biological world, effects on various communities and potential methods of correcting the detrimental effects with economic and social implications.

Pre: BIOL 105, 106, 215, or consent

S

412 (4) Soil Ecology

Soil ecology will focus on the physical soil properties as they relate to habitat formation, niches, interactions that exist among soil organisms, human impact on soil systems relative to population pressures and management practices. Lab included.

Pre: BIOL 105, 106, 215, or consent

S

417 (3) Biology of Aging and Chronic Diseases

Emphasis is placed on the biomedical aspects of aging and chronic disease. The course is designed for students majoring in biology, gerontology programs, or other health related programs.

Pre: BIOL 100 or 105

S

418 (4) Macro and Microscopic Imaging

Properties and physical principles underlying biological images. The course provides a survey of macro-imaging techniques (such as x-ray tomography, magnetic resonance imaging, positron emission tomography, and ultrasound) and micro-imaging techniques (such as light microscopy, transmission and scanning electron microscopy, fluorescence microscopy, laser scanning confocal microscopy and atomic force microscopy).

Pre: One Year of Physics

F

419 (2-3) Special Topics in Instrumentation

Instruction in specialized biological instrumentation.

Pre: BIOL 105 and 106

F

420 (3) Diagnostic Parasitology

Clinically important parasites. Protozoans, Flukes, Tapeworms, Roundworms, Ticks, Mites and Insects. Designed for Medical Technology, Pre-Med, Pre-Vet and Biology majors. Identification, clinical disease, epidemiology and ecology are covered. Lab included.

Pre: BIOL 100 or 105, BIOL 106 recommended

F

421 (3) Entomology

Morphological, physiological, medical, and economic significance of insects.

Pre: BIOL 105 and 106 or consent

ALT-F

422 (2) General Principles of Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions designed to teach the principles of cytology. This includes basic (ultra and light microscope) cell structures, cellular biology, including cell division and growth and general mechanisms of pathologic changes. Cytotechnology emphasis only. Permission required.

F, S

423 (4) Gynecologic Cytology

This course involves a study of the normal and abnormal anatomy, physiology, histology, and cytology of the female genital tract. Lectures, demonstrations, and laboratory sessions are given. Normal and abnormal cytology are emphasized. Non-neoplastic changes, such as hormonal abnormalities and inflammatory conditions are discussed. Cytotechnology emphasis only. Permission required.

F, S

424 (3) Advanced Gynecologic Cytology

This course is a continuation of Gynecologic Cytology to include malignant conditions of the endocervix, endometrium, ovary and vagina. Lectures will also be given on special topics including cytology of pregnancy and therapeutic changes. Cytotechnology emphasis only. Permission required.

F, S

425 (3) Pulmonary Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions of the gross and microscopic anatomy, physiology, pathology, and cytology of the respiratory tract. Particular areas covered include benign conditions, inflammatory disorders, malignancies, and therapeutic effects. Cytotechnology emphasis only. Permission required.

F, S

427 (3) Urinary Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions of the gross and microscopic anatomy, physiology, pathology, and cytology of the urinary tract. Areas covered include benign conditions, inflammatory disorders, malignancies, and therapeutic effects. Cytotechnology emphasis only. Permission required.

F, S

428 (1) Gastrointestinal Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions of the gross and microscopic anatomy, physiology, pathology, and cytology of the GI tract. Cytotechnology emphasis only. Permission required. F, S

429 (3) Body Cavity and Miscellaneous Secretion Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions of the gross and microscopic anatomy, physiology, pathology, and cytology of the body cavity fluids (pleural, peritoneal, and pericardial) and other sites including the cerebrospinal fluid and eye. Cytotechnology emphasis only. Permission required. F, S

430 (4) Hematology/Introduction to Immunology

Collection, examination, evaluation, morphology, function and diseases of blood cells. Hemostasis/coagulation of blood. Immunology theory is presented. Lab included.

Pre: BIOL 230 S

431 (3) Comparative Animal Physiology

A comparison of adaptation mechanisms, from cell to organ-system, used by animals in response to environmental conditions such as oxygen, carbon dioxide, food availability, temperature, water, and solutes, and pressure and buoyancy.

Pre: BIOL 105, 106 or consent ALT-F

432 (4) Limnology

Biotic, physical and chemical characteristics of freshwater ecosystems. Lab (fieldwork) included.

Pre: BIOL 105, 106, 215, or consent F

433 (3) Cardiovascular Physiology

This course is a functional study of the heart and circulatory system.

Pre: BIOL 230 S

434 (3) Development and Human Embryology

Understanding the process of cell differentiation and development. These principles are then applied to the descriptive study of human embryology including the basis of congenital malformations.

Pre: BIOL 100 or 105 F

435 (4) Histology

Study of types, arrangements and special adaptations of human tissues. Lab included.

Pre: BIOL 220 S

436 (4) Animal Behavior

An exploration of behavioral strategy, communication, learning, and social systems of animals, with emphases placed on the causes, evolution, ecological implications, and function of behavior at the individual and population level. Laboratory and field sessions will provide practical scientific training in methods of observation, experimentation, and reporting. Lab included.

Pre: BIOL 105, 106, or consent S

438 (3) General Endocrinology

This course provides the basis for understanding hormones and the mechanisms of their actions in both the normal and pathological states. Sample topics to be included are diabetes, osteoporosis, hormones of reproduction and current social and medical issues related to the course.

Pre: BIOL 100 or 105 S

440 (4) Horticulture

Fundamental principles of horticulture: classification, structure, growth and reproduction, technology including propagation, mineral nutrition, training and pruning, growth regulation and protection, horticultural crops and esthetic horticulture. Lab included.

Pre: BIOL 105 and 106 F

441 (4) Plant Physiology

Plant functions such as water relations, mineral nutrition, translocation, metabolisms, photosynthesis, photorespiration, fat and protein metabolisms, respiration, growth and development, phytohormones, reproduction and environmental physiology. Lab included.

Pre: BIOL 105, 106, 217, and 1 Semester Organic Chemistry S

442 (4) Plant Taxonomy

Field identification of plants with emphasis on local flora. History of systematics, techniques, plant biogeography, methods of plant collection, preservation, preparation of herbarium specimens are covered. Lab and field trips included.

Pre: BIOL 105, 106, or consent. BIOL 217 recommended. S

443 (4) Plant Ecology

Expands upon general principles of ecology to focus on the factors that regulate the distribution and abundance of plants, analysis of plant populations, and dynamics of plant communities. Lecture and lab (fieldwork) included.

Pre: Biol 105, 106, 215 or consent. Biol 217 strongly recommended. F

444 (3) Fine Needle Aspiration Cytology

This course consists of a series of lectures, demonstrations, and laboratory sessions of the gross and microscopic anatomy, pathology, and cytology of various areas sampled using fine needle aspiration. Cytotechnology emphasis only. Permission required.

F, S

445 (4) Economic Botany

Introduction to useful plants and plant products: such as fruits and nuts, cereal grains, legumes, medicinal plants, herbs, spices, perfumes, vegetable oils, hydrogels, latex, resins, psychoactive drugs, poisons, stimulating beverages, fibers, dyes, and tannins. Lectures, discussion and lab. Open to non-science majors.

Pre: BIOL 100 or 105 F

Biology

447 (2) Cytopreparation Cytology

Lectures, demonstrations and laboratory sessions will be given in the various procedures carried out in the cytology laboratory. Collection and preparation techniques are described throughout the course series. Assignments in laboratory techniques continue through the year. Cytotechnology emphasis only. Permission required.

F, S

448 (3) Independent Projects

This course includes Check Sample and Journal Club presentations; projects involving literature research, cytopreparation, quality control/assurance, and cytology correlation. These projects will involve knowledge and use of: Maysearch program, photography, computer skills (including Power Point for presentations) and educational methodology for presentation preparation. Cytotechnology emphasis only. Permission required.

F, S

450 (5) Clinical Cytology

This portion of the program includes graded daily screening exercises. Students screen four hours a day at first, then move on to full day screening for approximately 30 days. A management series is presented during the clinical portion of the program, with two projects to be completed during the clinical segment. Cytotechnology emphasis only. Permission required.

F, S

451 (3) Plant Biotechnology

ALT-S

452 (3) Biological Instrumentation

The principle and operation of instruments and their application to biological research. Types of instrumentation examined include spectroscopic, chromatographic, electroanalytic, radiographic, and imaging. Laboratory Information Management systems (LIMS) will also be examined. Emphasis is placed on GLP, GMP, and ISO 9000 practices.

Pre: BIOL 105, 106, or consent

S

453 (4) Biological Engineering Analysis I

The application of engineering principles and skills as applied to fermentation and to biological product recovery. Pre: BIOL 270 and one semester each of calculus, physics, and organic chemistry

F

454 (4) Biological Engineering Analysis II

Continuation of Biological Engineering Analysis I. The application of engineering principles and skills as applied to fermentation and to biological product recovery.

Pre: BIOL 453

S

456 (3) Biotechnology Project I

Practical laboratory experience in biotechnology through the selection and development of a research project. Students are expected to spend an average of 12 hours per week on the project.

Pre: Concurrent enrollment in BIOL 453

F

457 (3) Biotechnology Project II

Continuation of Biotechnology Project/Laboratory I.

Practical laboratory experience in biotechnology through the selection and development of a research project. Students are expected to spend an average of 12 hours per week on the project.

Pre: BIOL 456, taken concurrently with BIOL 454

S

460 (3) Introduction to Toxicology

A lecture course covering basic principles of toxicity evaluation in living organisms, mechanisms of responses to chemicals or physical agents within an overview of practical medical, environmental and science policy implications. Presentation of comparisons of specific organ and tissue reactions to toxins in a variety of species follow these introductory concepts.

Pre: BIOL 105, 106, and 1 year of General Chemistry

ALT-F

461 (4) Environmental Toxicology

A lecture/laboratory course that focuses on anthropogenic and natural toxicants, mathematical modeling of the dispersion of chemical and physical agents in the environment, effects on species and ecosystems with a special section on aquatic risk assessment. The laboratory includes techniques in environmental toxicity and a genuine research project.

Pre: BIOL 460

ALT-S

462 (1) Toxicology Seminar

A seminar course that involves critical evaluation of published studies in toxicology, student presentations of a selected published manuscript and requires students to write a paper on one aspect of the course's topic area that semester. Topic areas vary each time the course is offered.

Pre: BIOL 105, 106, and General Chemistry

ALT-F

464 (3) Methods of Applied Toxicology

A lecture/laboratory course focusing on the steps necessary to start a research project from project definition through methods testing and evaluation, and a final report that includes a project flow chart. Third year students will have senior and/or graduate mentors.

Pre: BIOL 105, 106, and General Chemistry

ALT-F

465 (3) Applied Toxicology Project

A lecture/laboratory course where students perform all aspects of their own designed research topic in toxicology while critically evaluating the progress of other projects as well. Students will be expected to keep timelines or develop modified timelines as necessary. The inverted triangle approach of project design will be examined and then included in all designs.

Pre: BIOL 464

ALT-S

466 (3) Principles of Pharmacology

A lecture course that examines mechanisms of drug action, physiological responses and adverse reactions from sensitivities or allergies through overdose.

Pre: BIOL 105, 106, 230, and 1 year of General Chemistry

ALT-F

467 (3) Industrial Hygiene

A lecture course that examines Minnesota State University, Mankato, as your own work place to develop reports on a selected group of chemical and physical hazards of the workplace. Evaluation methods and solutions to existing problems are developed with concise reporting skills.

Pre: BIOL 105, 106, and 1 year of General Chemistry
ALT-S

472 (4) Microbial Ecology and Bioremediation

Role of microorganisms in soil, air, water, sewage processes as well as methods of measurement and detection. Special emphasis on the role of microorganisms in bioremediation. Lab included.

Pre: BIOL 105, 106, and 270
ALT-S

474 (4) Immunology

Fundamental principles of humoral and cell mediated immunity and the application of these principles. Current experimental work in the different areas of immunology will be discussed. Lab included.

Pre: BIOL 105, 106, and 270
F

475 (4) Medical Microbiology

This course will cover bacterial, fungal, and viral human pathogens: what diseases they cause, how they cause disease, and how humans defend against and prevent those diseases. In the laboratory the student will isolate and identify pathogenic microorganisms using microbiological, biochemical, and immunological techniques.

Pre: BIOL 270
F

476 (5) Microbial Physiology and Genetics

This course presents the physiology and genetics of microorganisms emphasizing those aspects unique to bacteria and archaea. Topics include: energy production; biosynthesis of small molecules and DNA, RNA, and proteins; the formation of cell walls and membranes; microbial differentiation and behavior; and the genetic and biochemical regulation of these processes. Lab included.

Pre: BIOL 105, 106, 270
S

478 (4) Food Microbiology and Sanitation

The role microbes play in production and spoilage of food products, as prepared for mass market. Topics include foodborn pathogens, epidemiology and control, essential principles in sanitation including Hazard Analysis/Critical Control Point and ISO 9000 requirements. Lab included.

Pre: BIOL 105, 106 and 270
S

479 (4) Molecular Biology

This course will cover both eukaryotic and prokaryotic molecular biology including: DNA and RNA structure, transcription, regulation of gene expression, RNA processing, protein synthesis, DNA replication, mutagenesis and repair, recombination, and insertion elements. A number of important techniques used in recombinant DNA technology will be discussed and practiced.

Pre: BIOL 105, 106, or consent
S

480 (2) Biological Laboratory Experiences for Elementary Teachers

Provides experience with a wide variety of biological laboratory exercises to prepare prospective elementary teachers. Emphasis is on building knowledge, skills, and confidence. The course will cover major biological concepts and environmental education through classroom-ready examples selected to illustrate each concept.

Pre: BIOL 100 and CI 322
F, S

481 (1) Lab Supervision and Maintenance

Experience in maintaining and supervising laboratories. For individuals desiring additional experience with students in laboratory situations.

F, S

485 (4) Biology Teaching Methods and Materials

A basic science methods course designed to prepare prospective junior and senior high life science teachers. Course will cover science teaching methods and support materials as they apply to life science teaching situations.

Pre: 16 credits BIOL
F

486 (3) Field-Based Teaching Methods and Materials

A lecture/laboratory course that provides opportunity for prospective junior and senior high life science teachers to observe, practice, and refine their teaching skills. Students will work in a school setting and experience actual classroom.

Pre: BIOL 485
ALT-S

490 (3) Workshop

A variable topic course designed for a selected topic in Biology. Workshops provide an intensive learning experience on a new topic in the Biological Sciences and/or hands-on experiences in a current area not covered by other course offerings. The course involves background reading, demonstrations, and laboratory or field experiences.

F, S

491 (1-4) In-Service

F, S

492 (1-3) Honors Research

F, S

497 (1-12) Internship I

Experience in applied biology according to a prearranged training program for a minimum of five 40 hour weeks.

Pre: Consent
F, S

498 (1-12) Internship II

Experience in applied biology according to a prearranged training program for a minimum of five 40 hour weeks. Only four credits can be applied to the major.

Pre: Consent
F, S

499 (1-4) Individual Study

Descriptions to be determined.

F, S

Biotechnology

College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-5731
Website: <http://www.mnsu.edu/dept/biology>

Director: Gregg Marg, Ph.D.

Biotechnology is the application of recent developments in technology to manipulate the genetic and biochemical characteristics of an organism so that the organism or its metabolites can be economically produced for our benefit. In practice it requires the selection and genetic improvement of an organism for a specific purpose. Organisms may be used to synthesize a desirable product or degrade unwanted materials. The industrialization of this technology is dependent on the development of methods for scaling up processes developed in the laboratory.

Students interested in biotechnology could find careers in a wide variety of industrial applications. Examples of industries that use biotechnology are antibiotic and pharmaceutical; food; energy; agricultural pesticides; herbicides; fertilizers; growth chemicals and breeding programs; industrial chemicals, biocatalysts and diagnostics.

The biotechnologist works with research scientists on the development of processes in the laboratory and with engineers to transfer and scale up laboratory processes for large scale production required by industry. Because of the interdisciplinary nature of biotechnology, biotechnologists must have a strong background in the analytical and quantitative areas of science. In addition, the biotechnologist must be familiar with the theory and practice of genetic engineering and biochemical processes.

Admission to Major is granted by the department. Admission requirements are 32 earned semester credit hours including BIOL 105 and 106, with a grade of a "C" or better in both BIOL 105 and 106; and a minimum cumulative GPA of 2.0.

BIOTECHNOLOGY BS

Required General Education (13 credits):

MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)
CHEM	201	General Chemistry I (5)

Required Support Courses (27 credits):

MATH	122	Calculus II (4)
PHYS	212	Principles of Physics II (4)
CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	320	Organic Chemistry I (4)
CHEM	460	Biochemistry I (3)
CHEM	465	Biochemical Techniques I (1)

Recommended Support Courses:

CHEM	461	Biochemistry II (3)
CHEM	466	Biochemical Techniques II (2)

Required for Major (Core, 51 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	270	Microbiology (4)
BIOL	320	Cell Biology (3)
BIOL	451	Plant Biotechnology (3)
BIOL	452	Biological Instrumentation (3)
BIOL	453	Biological Engineering Analysis I (4)
BIOL	454	Biological Engineering Analysis II (4)
BIOL	474	Immunology (4)
BIOL	476	Microbial Physiology and Genetics (5)
BIOL	479	Molecular Biology (4)

The biotechnology major requires a 6 credit project. This may be taken as:

BIOL	456	Biotechnology Project I (3)
BIOL	457	Biotechnology Project II (3)

OR

BIOL	497	Internship (6)
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Required Minor: None.

POLICIES/INFORMATION

P/N Grading Policy. All courses must be taken for letter grades. Any exception to this policy must be approved by the chairperson of the department.

Refer to the College regarding required advising for students on academic probation.

GPA Policy. A minimum GPA of 2.0 must be maintained in biological sciences.

Several biology scholarships are available for entering freshmen and currently enrolled MSU students who meet the requirements. Application deadline is March 31 of each year.

The Department of Biological Sciences offers a well-balanced summer school program. For details concerning the courses being offered consult the summer bulletin.

Business Administration

College of Business

150 Morris Hall • 507-389-2963

Coordinator: Larry Herke

BUSINESS ADMINISTRATION MINOR

Required for Minor (Core, 31 credits):

MGMT	200	Introduction to MIS (3)
MGMT	330	Principles of Management (3)
ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
BLAW	200	Legal, Political and Regulatory Environment of Business (3)

MRKT 310 Principles of Marketing (3)
FINA 362 Business Finance (3)

POLICIES/INFORMATION

Students who are business minors, non-business majors, or those who are not seeking a four year degree may not complete more than 30 credits from the College of Business.

Residency: Transfer students pursuing a minor in the College of Business must complete 50% (one half) of their minor coursework through Minnesota State University, Mankato.

Information Technology Initiative.

Students enrolled in the Business Administration minor are required to lease a notebook computer from Minnesota State University, Mankato. For further information see the College of Business section at the front of this bulletin.

Assessment Policy. The College of Business believes that the ongoing assessment of its programs makes a vital contribution to the quality of these programs and to student learning. Student participation in as important and expected part of the assessment process.

In addition to the Business Administration Minor, the College of Business offers other majors and minors in the areas of accounting, finance, international business, management, and marketing.

Business Education

College of Education

Aviation and Business Education

Armstrong Hall • 507-389-6116

Chair: John Roberts

Program is suspended. Admissions are not being accepted.

COURSE DESCRIPTIONS

120 (3) Introduction to Business Communication

Introduction to Business Communications emphasizes proofreading, grammar, punctuation, vocabulary, spelling, as well as hands-on approach to writing. In addition to large and small group work, students compose on computers one or two days a week. Is an excellent foundation for all university students as all career choices require excellent written communication.

161 (3) Word Processing/Keyboarding

Develop basic touch keyboarding skills and efficient keyboarding techniques for all persons who will be inputting and retrieving information on alphabetic and numeric keyboards. Prepare personal and business correspondence, manuscripts, and reports on computers. Open to all students—with limited or no touch-typing skills.

162 (3) Intermediate Word Processing/Keyboarding

Develop employment skills and master word processing applications on computers. Recommended for students who wish to enhance skills beyond basic keyboarding and word processing.

Pre: BED 161, or equivalent

163 (3) Advanced Word Processing/Keyboarding/Machine Transcription

Produce business and personal correspondence, tables, macros, templates, manuscripts, and other documents using computers. Use transcription equipment for licensure competency.

Pre: BED 161 or 162, or equivalent

201 (2) Information and Records Management

Establish, manage, maintain, and manipulate a business database. Learn preservation and legal ramifications of paper, microfilm, magnetic, and other media. Learn about computers to maintain records.

206 (3) Spreadsheets and Graphics

Use computers to prepare, create, and illustrate spreadsheet and graphic business information.

215 (2) Information Processing Database Records Management

Use computers for establishing, manipulating, and maintaining a relational database system. Understand management techniques of electronic filing systems.

291 (1-3) Project Study in Business

Provide an opportunity to earn credit by completing a special project or individualized curriculum approved and directed by a faculty member.

Pre: Consent

297 (1-10) Office Experience

Allow students to earn credit for supervised and documented office experience under the direction of their office supervisor and a faculty member. P/N only.

Pre: Consent

320 (1-3) Business Experience

Earn two-for-one clock hours toward business and office education vocational teaching licensure through an apprenticeship program. Students will work as office employees and be supervised by their office supervisor and a faculty member. P/N only.

Pre: Consent

321 (1-3) Business Seminar

Discuss the work flow, team work, decision making, and day-to-day activities for apprenticeship or office experience students. P/N only.

Pre: Consent

325 (3) Office Systems and Technology

Use on-line computer systems in business offices to streamline business operations via electronic messaging, electronic calendaring, electronic data transmission, and other capabilities.

Business Education

345 (3) Business Communications

Develop and apply written and oral business communication skills into a variety of business and personal documents.

Pre: ENG 101; keyboarding/word processing skills, or equivalent, Recommended: BED 120

405 (3) Methods of Teaching Office Skills

Discuss business education methodology regarding keyboarding, office procedures, multimedia, and computer applications. Techniques for topics such as handling discipline, managing a classroom, grading, conducting parent/teacher conferences. Includes school visitations and review of current literature.

Pre: BED 120, 163, 206, 215, 325, 481, or consent

406 (3) Methods of Teaching Business Subjects

Discuss business education methodology regarding bookkeeping, accounting, consumer economics, business law, general business, career exploration, marketing, and other basic business subjects. Includes school visitations and review of current literature.

Pre: ACCT 200 and 210, BED 163 and 482, BLAW 450, FINA 362, MGMT 330, MRKT 310, ECON 201 and 202

415 (2) Student Organizations

Learn the teacher-coordinator role as a vocational club advisor.

420 (2) Methods and Materials of Teaching Integrated Business Simulation

Participate in and learn how to manage an integrated business simulation. Includes presentations and discussions to organize simulations for various teaching situations.

Pre: BED 163, or equivalent, or consent

430 (3) Senior Program Report

A report prepared by experiential employed students to illustrate program objectives, approved projects, and evaluations.

Pre: Consent

431 (2) Materials and Methods of Teaching Cooperative Occupational Experience Programs

Develop special instructional materials and intensive coordination methods.

432 (2) Coordination Techniques for Cooperative Occupational Experience Programs

Develop program operation policies and practices.

434 (2) Principles and Practices of Vocational Technical Education

Analyze the administration, organization, and operation of vocational education at the local, state, and national levels of government.

440 (2) Corporate Men and Women

Designed to develop sensitivity in dealing with interpersonal relationships facing men and women in today's culturally diverse, competitive business world.

451 (3) Business Correspondence and Reports

Write effective business letters and reports emphasizing the psychology of letter and report writing. Format, content, and creativity emphasized.

Pre: ENG 101 or consent; Recommended: BED 120 and 161

453 (3) Office Management

Discuss physical facilities, layout, working conditions, equipment, scientific procedures, work simplification, and work efficiency standards regarding these elements.

460 (4) Office Systems Implementation and Applications

Compare hardware and software for company needs. Plan and implement office automation components.

Pre: BED 325 or consent

470 (4) Integrated Office Systems

A synthesis and application of concepts related to current office systems topics. Networking and consolidating current office systems via an integrated software approach.

Pre: BED 325, 453, 460 or consent

481 (3) Desktop Publishing

Use microcomputer application software for desktop publishing. Planning, layout, production, and graphics features emphasized.

Pre: BED 161 or consent

482 (2) Secondary Computerized Accounting

Learn and evaluate accounting software packages appropriate for secondary classroom instructional purposes.

Pre: ACCT 200 and 210, and BED 161, or equivalent

483 (2) Presentation Graphics

Learn to create and present information by using electronic media.

489 (1-4) Vocational Curriculum Restructuring

Learn formal procedure used to restructure vocational curriculum.

490 (1-3) Workshop

Specialized subject workshops in business education.

491 (1-4) In-Service

Specific topics designed to serve business and vocational teachers.

Pre: Consent

493 (1-4) Preapproved Occupational Update

A directed program to investigate and observe current occupation conditions, qualifications, and patterns.

Pre: Consent

494 (1-4) Directed Occupational Experience

Paid occupational experience following a training plan to qualify for a vocational teaching license.

Pre: Consent

495 (1-4) Internship: Vocational Teaching

In-service supervision during nine weeks of the first 8 weeks of teaching. Satisfies Minnesota vocational teacher licensing requirement (State Plan, Sec. 1-33-2) for first-year secondary vocational teachers. Mandatory for nondegree teachers and those whose degree major is other than education. P/N only.

Pre: Consent

496 (1-10) Internship: Occupational Experience

To qualify, student must demonstrate competency in a technical area through the university test-out procedure. The test must be completed during the student's last quarter of the BS degree program and is applicable only toward the vocational technical major. May be repeated. Maximum 30 credits. P/N only.

Pre: Consent

497 (1-10) Internship

Supervised work experience in business, industry and state or federal institutions according to a prearranged training plan for a minimum of fifteen 40-hour weeks. P/N only.

Pre: Consent

499 (1-4) Individual Study

Pre: Consent

Business Law

College of Business

Department of Accounting and Business Law

150 Morris Hall • 507-389-2965

Chair: Paul Schwinghammer

Penny Herickhoff, Georgia L. Holmes, Dan Levin

BUSINESS LAW MINOR

Required for Minor (Core, 15 credits):

ACCT	200	Financial Accounting (3)
COMS	101	Introduction to Microcomputers (3)
BLAW	200	Legal, Political and Regulatory Environment of Business (3)
BLAW	450	Contracts, Sales and Professional Responsibility (3)
BLAW	452	Employment and Labor Law (3)

Required Electives (6 credits):

Choose two of the following:

BLAW	371	Computer and Technology Law (3)
BLAW	453	The International Legal Environment of Business (3)
BLAW	455	Legal Aspects of Banking and Finance (3)
BLAW	474	Environmental Regulation and Land Use (3)
BLAW	476	Construction and Design Law (3)
BLAW	477	Negotiation and Conflict Resolution (3)
BLAW	483	Special Topics (3)

POLICIES/INFORMATION

Residency: Transfer students pursuing a minor in the College of Business must complete 50% (one half) of their minor coursework through Minnesota State University, Mankato.

Information Technology Initiative

Students enrolled in the Business Law minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges but are required to take BLAW 200, 371, and 476 will be able to enroll in non-notebook classes offered once per year for non-majors/minors. For further information see the College of Business section at the front of this catalog.

COURSE DESCRIPTIONS

131 (3) Consumer Law and Ethics

A survey of the law and ethics governing marriage, family, car ownership and insurance; civil rights (fair credit, fair housing, and equal employment opportunity); planning for illness and death; court procedures and alternative dispute resolution methods; jury service; the landlord-tenant relationship; and the rights of victims and people accused of crimes.

F, S

200 (3) Legal, Political, and Regulatory Environment of Business

The American court system; alternative dispute resolution; ethics and the social responsibility of business; the relationship between common law, statutory law and regulatory law; constitutional, criminal, tort and contract law; product liability; agency and business associations.

Pre: ACCT 200, COMS 101 (MIS majors take COMS 102)

F, S

371 (3) Computer and Technology Law

Fundamentals of patent, copyright and trademark protection; ownership of employee developed software; lease and purchase of computer systems and software. Discusses warranties, acceptance testing, remedies, software licensing, computer crime and legal liability of computer programmers.

F

450 (3) Contracts, Sales and Professional Responsibility

Fundamentals of contracts, the law of sales under the UCC; the legal liability of accountants to clients and third parties. Formation of contracts; statute of frauds and parol evidence rule; contract performance; remedies for breach of contract; scope of UCC Article Two; sales warranties; remedies for breach of contracts.

Pre: BLAW 200

F, S

452 (3) Employment and Labor Law

Federal employment discrimination laws; sexual harassment; first amendment rights; employee safety; work-

Chemical Dependency Studies

ers' compensation; privacy; wrongful termination; federal laws governing the right to organize and bargain collectively; emerging issues.

Pre: BLAW 200

S

453 (3) The International Legal Environment of Business

Legal aspects of United States global trade policies, regulation of imports, contracting in the global marketplace, international marketing concerns, structure of various international organizations and treaties. Legal aspects of international licensing and technology transfers risks of nationalization and expropriation, international dispute resolution, comity, the Act of State, and sovereign immunity doctrines.

Pre: BLAW 200

V

455 (3) Legal Aspects of Banking and Finance

Legal aspects of checks and promissory notes, forgery and the use of counterfeit currency. Discusses the Federal Reserve check collection process, electronic banking, the purchase and sale of commercial paper, debtor and creditor rights, securities regulation, fundamentals of collateral foreclosure, the federal bankruptcy code and insurance law.

Pre: BLAW 200

V

474 (3) Environmental Regulation and Land Use

Legal aspects of land use planning, drainage, surface water rights and boundaries, mining and land reclamation, clean air, clean water, waste disposal, noise control and environmental permit processes. Discussion of legal aspects of Historic Landmark Preservation, National Environmental Policy, CERCLA, the Superfund, liability for environmental contamination and emerging environmental issues.

Pre: BLAW 200

V

476 (3) Construction and Design Law

Legal responsibilities of architects, engineers and contractors in dealing with each other, the project's owner, sureties and subcontractors. Special emphasis on performance problems, forms of business association, legal relationships with independent contractors, the AIA contract documents, mechanics liens, AAA Construction Arbitration Rules, dispute avoidance, claims management and collection strategies.

Pre: BLAW 200

F, S

477 (3) Negotiation and Conflict Resolution

Negotiation theory and techniques, mediation theory and techniques, use of neutrals, limits of confidentiality and ethical duties. Rule 114 and laws governing arbitration and management of the arbitration process. Extensive use of cases and role play.

Pre: BLAW 200

V

483 (1-3) Special Topics

Seminar topics may include women and the law, legal aspects of entrepreneurship, mergers and acquisitions, legal rights in computer software, investigating sexual harassment claims, copyright on the internet, immigra-

tion law, steps to become an IPO, privacy rights on computer networks, case studies in deregulation, legal aspects of leveraged buyouts, corporate takeover and ESOP's, complying with NAFTA.

V

497 (1-8) Internship

V

498 (1-3) Internship

V

499 (1-3) Individual Study

V

Chemical Dependency Studies

College of Allied Health & Nursing

Department of Health Science

213 Highland Center N • 507-389-1527 or 389-5937

Coordinator: Linda Marshall

The Department of Health Science administers an interdisciplinary chemical dependency studies minor (this replaces the previous chemical dependency certificate program). It would be most appropriate for students seeking majors in any of the associated disciplines or health service areas to apply for a minor in chemical dependency studies.

CHEMICAL DEPENDENCY STUDIES MINOR

Required for Minor (Core, 24 cr):

HLTH	225	Introduction to Chemical Dependency (3)
HLTH	456	Assessment of Chemical Dependency (3)
HLTH	469	Chemical Dependency: Dual Diagnosis (3)
CSP	470	Group Procedures (3)
CSP	471	Interpersonal Helping Skills (3)
CSP	473	Counseling the Chemically Dependent Family (3)
PSYC	429	Drug Dependence (3)
SOC	465	Law and Chemical Dependency (3)

Professional Education (12 credits):

HLTH	497	Internship: Chemical Dependency
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POLICIES/INFORMATION

Students will need to satisfy any prerequisites in conjunction with the suggested sequence of required courses.

Students must be admitted to the CDS minor and all coursework must be satisfactorily completed before registering for the internship experience.

GPA Policy. Students must satisfactorily complete all required courses earning a C or better in each. Overall, undergraduates must have a minimum grade-point average of 2.5 in the required coursework in order to be eligible for an internship experience (HLTH 497) in the field of chemical dependency.

Prior to beginning the minor, students are requested to meet with the CDS director (389-5937). At this meeting, students will be asked to complete an application packet and set up a time for a formal screening.

The chemical dependency studies minor offers an 880-clock-hour internship experience (HLTH 497) with an approved public or private health agency. Registration must be approved by the health science intern.

The CDS minor with the internship experience satisfies the academic qualifications for credentialing as Board Certified Chemical Dependency Counselor through the Minnesota Board of Certification. Students will also be eligible for licensing as an Alcohol and Drug Counselor through the State of Minnesota Department of Occupational Health.

Chemistry

College of Science, Engineering and Technology
Department of Chemistry & Geology
 242 Trafton Science Center N • 507-389-1963

Chair: Jeffrey R. Pribyl

Brian L. Groh, Michael J. Lusch, Marie K. Pomije, James Rife, Theresa Salerno, John Thoenke

The department is recognized by the American Chemical Society and offers a B.S. major that is approved by that organization. Anyone considering a chemistry or biochemistry major or chemistry minor should choose a departmental faculty member as an advisor and consult that advisor often throughout the course of study.

Admission to Major. Admission to a program is necessary before enrolling in 300- and 400-level courses. Admission is granted by the department. To be eligible for admission to the chemistry program, a student must have declared Chemistry or Chemistry Teaching as a first major, completed 32 credits including CHEM 201 and 202 and achieved a minimum GPA of 2.0. Students should also have an assigned chemistry advisor with whom they have discussed the program. Applications for admission to the chemistry program are available in the department office.

CHEMISTRY BS

The Chemistry B.S. major offers students a choice of two options: Option I and Option II: ACS Approved.

OPTION I

Option I is for students who want a rigorous preparation in chemistry, but who do not need as comprehensive a program as that prescribed for the A.C.S. option.

Required General Education (9 credits):

MATH 121 Calculus I (4)
 PHYS 221 General Physics I (5)

Required for Major (Support, 9 credits):

MATH 122 Calculus II (4)
 PHYS 222 General Physics II (5)

Required for Major (Core, 41 credits):

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 320 Organic Chemistry I (with lab) (5)
 CHEM 321 Organic Chemistry II (2)
 CHEM 331 Organic Chemistry II Lab (1)
 CHEM 381 Introduction to Research (2)
 CHEM 413 Advanced Inorganic Chemistry (3)
 CHEM 423 Chemical and Spectroscopic Determination of Structure (5)
 CHEM 440 Physical Chemistry I (3)
 CHEM 441 Physical Chemistry II (3)
 CHEM 450 Physical Chemistry Laboratory I (1)
 CHEM 451 Physical Chemistry Laboratory II (1)
 CHEM 495 Senior Seminar (1)

Required Electives for Major (Chemistry, 4 cr):

Choose a minimum of 4 credits from chemistry or biochemistry courses except CHEM 479 and CHEM 482:

CHEM xxx 300/400 Elective
 CHEM xxx 300/400 Elective

Required Minor: None.

OPTION II: A.C.S. APPROVED

The B.S. Chemistry, A.C.S. option approved by the American Chemical Society is intended for professional chemists and provides an excellent preparation for graduate or professional school, industry or business. Any deviations from this program requires prior approval from the department.

Required General Education (9 cr):

MATH 121 Calculus I (4)
 PHYS 221 General Physics I (5)

Required Support Courses (9 cr):

MATH 122 Calculus II (4)
 PHYS 222 General Physics II (5)

Required for Major (Core, 50-51 cr):

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 320 Organic Chemistry I, includes lab (5)
 CHEM 321 Organic Chemistry II (2)
 CHEM 331 Organic Chemistry II Lab (1)
 CHEM 360 Principles of Biochemistry (4) or
 CHEM 460 Biochemistry I (3)
 CHEM 381 Introduction to Research (2)
 CHEM 413 Advanced Inorganic Chemistry (3)
 CHEM 415 Inorganic Preparations (2)
 CHEM 423 Chemical and Spectroscopic Determination of Structure (5)
 CHEM 440 Physical Chemistry I (3)
 CHEM 441 Physical Chemistry II (3)
 CHEM 450 Physical Chemistry I Lab (1)
 CHEM 451 Physical Chemistry II Lab (1)
 CHEM 475 Instrumental Analysis (4)
 CHEM 495 Senior Seminar (1)

Chemistry

Required Electives for Major (Chemistry, 1 cr):

Students opting for CHEM 460 must choose at least 1 credit from the following:

CHEM 407	CHEM 412	CHEM 424
CHEM 434	CHEM 461	CHEM 465
CHEM 474	CHEM 485	CHEM 496
CHEM 497	CHEM 498	CHEM 499

Required Electives (Physics or Mathematics, 3-4 cr):

Choose a minimum of 3 credits from the following courses:

PHYS 441	PHYS 447	PHYS 453
PHYS 473	MATH 321	MATH 455

Required Minor: None.

CHEMISTRY BA

Required General Education (3-4 cr):

MATH 113	Trigonometry (3) or
MATH 115	Precalculus Mathematics (4) or
MATH 121	Calculus I (4)

Required Support Courses (4-5 cr):

PHYS 211	Principles of Physics (4) or
PHYS 221	General Physics I (5)

Required for Major (Core, 27 cr):

CHEM 201	General Chemistry I (5)
CHEM 202	General Chemistry II (5)
CHEM 305	Analytical Chemistry (4)
CHEM 320	Organic Chemistry I (5)
CHEM 321	Organic Chemistry II (2)
CHEM 331	Organic Chemistry II Lab (1)
CHEM 381	Introduction to Research (2)
CHEM 412	Intermediate Inorganic Chemistry (2)
CHEM 495	Senior Seminar (1)

Required Electives for Major (Chemistry, 6 cr):

Choose a minimum of 6 credits from chemistry or biochemistry courses except CHEM 479 and CHEM 482:

CHEM 300/400	Elective
CHEM 300/400	Elective

Required for Bachelor of Arts (BA) degree ONLY: Language (8)

Required Minor: Yes.

CHEMISTRY MINOR

Required for Minor (Core, 19 cr):

CHEM 201	General Chemistry I (5)
CHEM 202	General Chemistry II (5)
CHEM 305	Analytical Chemistry (4)
CHEM 320	Organic Chemistry I (5)

CHEMISTRY TEACHING BS

Requirements for the Chemistry Teaching BS can be found in the SCIENCE TEACHING section of the bulletin. For information, consult the chemistry education advisor, Jeffrey Pribyl.

POLICIES/INFORMATION

GPA Policy. Students obtaining a major or minor in chemistry must maintain an overall GPA of 2.0 with no more than 5 credits of D work in chemistry courses.

P/N Grading Policy. Courses leading to a major or minor in chemistry or biochemistry may not be taken on a P/N basis except where P/N grading is mandatory.

The first year of coursework for all chemistry and biochemistry majors should include two semesters of chemistry (201, 202) and two semesters of mathematics (selection of courses depends on mathematics background). During the second year, the recommended courses include organic chemistry, advanced mathematics, physics, analytical chemistry. It is important for B.S. chemistry majors that the calculus and physics sequences be completed by the end of the second year since they are prerequisites for physical chemistry. Physical chemistry and instrumental analysis should be taken during the third year. The advanced courses in chemistry and biochemistry can be taken in the junior and senior years. Participation in chemistry seminar is required of all majors. The coursework in mathematics and physics that is required for a major may be credited toward a major or minors in these areas. For this reason it is often desirable and convenient to choose a joint major or minor with physics or mathematics.

COURSE DESCRIPTIONS

100 (4) Chemistry in Society

This lecture and laboratory course investigates the world of chemistry, the nature of matter and our interactions with chemicals on a daily basis. This course is intended for non-science majors and is not a preparation for CHEM 111 or 201.

F, S

105 (3) Introduction to Chemistry

Introduction to inorganic chemistry. This is a non-laboratory class designed for the student unprepared to enroll in CHEM 111 or CHEM 201.

F, S

111 (5) Chemistry of Life Processes

Introduction to organic chemistry and biological chemistry for students in nursing, dental hygiene, dietetics and athletic training. Laboratory will reinforce lecture concepts.

Pre: CHEM 105 or High School Chemistry F, S

131 (3) Forensic Science

This course explores the scientific basis of crime-fighting using physical evidence. The material is presented intuitively, with no mathematics. Course topics will include discussions of different kinds of evidence, how evidence must be preserved in order to be of value, how to select and analyze samples, how to interpret results of scientific tests, and case studies used as examples through-

out the course. There will also be discussions of ethical questions about the modern uses of forensic data.

V

132 (3) Chemistry of Energy

This course explores and evaluates energy sources from a chemical perspective. In addition to discussion of chemical processes associated with traditional energy sources such as fossil fuels, alternative sources such as solar energy and “next generation” batteries will be presented. In conjunction with this information the environmental and societal consequences for each alternative will be explored.

V

133 (3) Challenges to Our Global Environment

This course will examine two of the most significant environmental challenges facing modern society: stratospheric ozone depletion and global climate change, from an interdisciplinary perspective. The course will start by examining, with a minimum of mathematics, the scientific basis and evidence for these phenomena, and then go on to consider the potential implications of and solutions to these challenges. In order to understand these potential implications and solutions, we must realize and understand the interdisciplinary nature of these challenges.

V

134 (3) Mind Altering Substances

This course will explore the scientific, pharmacological, neurochemical and cultural aspects of psychoactive substances. The material is presented intuitively, with no mathematics. Course topics will include discussions of the major classes of pharmaceutical and psychoactive substances, basic neurochemistry, the role of psychoactive substances in medicine, the ritual use of psychoactive substances by traditional cultures, the FDA approval process, the significance and implications of drug testing, the controversy of drug-induced behavioral modification, national and global perspectives of substance abuse and the ethics of legalization.

V

201 (5) General Chemistry I

Introduction to the basic principles of chemistry including atomic and molecular structure, bonding, chemical reactions, stoichiometry, thermodynamics and states of matter. Laboratory will reinforce lecture concepts.

Pre: MATH 112 or equivalent; high school Chemistry, CHEM 105 or instructors consent

F, S

202 (5) General Chemistry II

Continuation of the basic principles of chemistry including properties of solutions, kinetics, acids and bases, equilibria, buffers, precipitation reactions, electron transfer reactions, electrochemistry, entropy and free energy. Laboratory will reinforce lecture concepts.

Pre: CHEM 201

F, S

299 (1-6) Individual Study

305 (4) Analytical Chemistry

Introduction to the principles of chemical analysis, with emphasis on classical methods of analysis. Lectures will stress the theory of chemical measurements and sample handling. Laboratory exercises will provide students with opportunities to explore calibration methods, method development, and established procedures for volumetric and gravimetric analyses. Basic atomic spectroscopy is also presented.

Pre: CHEM 202

F, S

320 (5) Organic Chemistry I

Introduction to organic structure, bonding, chemical reactivity, reactions as acids and bases, mechanisms and stereochemistry. The chemistry of alkanes, alkyl halides, alkenes, alkynes, alcohols, ethers, aldehydes and ketones, carboxylic acids and their derivatives, and amines will be covered. Laboratory illustrates synthetic techniques and the preparation and reactions of functional groups discussed during lecture.

Pre: CHEM 202

F, S

321 (2) Organic Chemistry II

The chemistry of aromatic compounds, free radicals, polyenes, macromolecules, heterocyclic compounds, carbohydrates, amino acids, peptides, and proteins will be covered. This will include a study of mechanisms, synthetic transformations, and concerted reactions.

Pre: CHEM 320

S

331 (1) Organic Chemistry II Lab

Laboratory illustrating electrophilic aromatic substitutions and other reactions of aromatic compounds, synthetic transformations as well as qualitative organic analysis.

Pre: CHEM 321 previously or concurrently S

360 (4) Principles of Biochemistry

Analysis of the structure and metabolism of biologically important compounds. This intermediate-level course is designed for students in the medical technology, food science, chemistry education, and pre-professional health major. The laboratory teaches basic biochemical techniques.

Pre: CHEM 320

S

381 (2) Introduction to Research

Introduction to the use of chemical literature, in print and electronic media, to current departmental faculty research interests, to safe and ethical conduct of laboratory research, and to proper recording of research results in laboratory notebooks. Students perform a literature search and write a proposal for an undergraduate research project.

Pre: CHEM 321

F

407 (3) Water Chemistry

A broad introduction to the chemistry of natural waters and chemical analysis of such systems. Topics covered may include: macromolecular analytes, organic analytes, inorganic analytes, major component/minor component/trace component determinations, matrix effects, equi-

librium processes, modeling of chemical/physical transport, regulatory monitoring, and compliance issues. Laboratory exercises will provide students with goal-oriented, cooperative experiences in sampling and measurement of complex samples.

Pre: CHEM 305

V

412 (2) Intermediate Inorganic Chemistry

Use of the principles of chemistry such as atomic structure, bonding, thermodynamics and acid-base behavior to focus on the properties of the more interesting, important and unusual elements and compounds. Emphasis will be placed on the representative elements and selected transition elements.

Pre: CHEM 320

S

413 (3) Advanced Inorganic Chemistry

A survey of topics in inorganic chemistry including quantum mechanics, symmetry and group theory, solid state chemistry, molecular structure and geometry, bonding theories, and coordination chemistry, emphasizing the theoretical foundation.

Pre: CHEM 440

F

415 (2) Inorganic Preparations

The preparation and study of inorganic/organometallic compounds utilizing a variety of synthetic techniques including common Schlenk techniques. The studies will include characterization by common instrumental methods such as IR, NMR and UV-vis spectroscopy. Additional studies using instrumental techniques such as IR, NMR, UV-vis, electrochemistry and magnetic susceptibility will also be conducted.

Pre: CHEM 413

S

423 (5) Chemical and Spectroscopic Determination of Structure

Wet chemical and nuclear magnetic resonance, infrared, and mass spectral techniques for determining structural features of molecules. Spectroscopic methods emphasize interpretation of spectra, and also provide hands-on operation of the corresponding electronic instruments. The laboratory uses these techniques for the determination of the structures of a series of unknown compounds.

Pre: CHEM 321 and 331

F

424 (3) Advanced Organic Chemistry

Advanced synthetic organic reactions and their mechanisms. Laboratory will include examples of some of this chemistry, and techniques for reaction monitoring and product purification.

Pre: CHEM 423

S-EVEN

434 (2) Industrial Chemistry

The synthesis and properties of organic macromolecules, especially industrially important polymers, and the chemistry of other industrially important chemical reactions and processes.

Pre: CHEM 321

S-ODD

440 (3) Physical Chemistry I

Detailed treatment of thermodynamics and chemical kinetics. Topics include equations of state, laws of thermo-

dynamics, statistical thermodynamics, phase and reaction equilibrium, thermodynamics of solutions and electrochemistry, transport properties, and reaction kinetics.

Pre: CHEM 305, 321, one year of physics, MATH 121

F

441 (3) Physical Chemistry II

Detailed treatment of quantum mechanics, spectroscopy, and statistical mechanics. Topics include the foundations of quantum mechanics, application of quantum mechanics to atomic and molecular structure, foundations of spectroscopic techniques and statistical mechanics.

Pre: CHEM 440, MATH 122

S

445 (2) Advanced Physical Chemistry

Integrated application of the content from 440 and 441 to an applied topic of interest to the instructor. The course will depend heavily on reading and discussion of current primary literature of physical chemistry. Possible topics include: atmospheric chemistry, thermodynamics of protein folding, catalytic processes, or molecular processes at interfaces.

Pre: CHEM 441

V

450 (1) Physical Chemistry Laboratory I

Laboratory to accompany 440. An advanced treatment of measurement theory and data analysis precedes a series of thermodynamic and kinetic experiments designed to complement topics treated in lecture to help students' independence and sophistication in planning, performing, and reporting experimental work.

Pre: CHEM 440 previously or concurrently

F

451 (1) Physical Chemistry Laboratory II

Laboratory to accompany 441. Experiments and computational projects in quantum mechanics, spectroscopy, and statistical mechanics. The experiments and projects will continue to work toward the goal of increasing the students' independence and sophistication.

Pre: CHEM 441 previously or concurrently

S

460 (3) Biochemistry I

Detailed analysis of the structures, properties, and functions of proteins, carbohydrates, lipids, and nucleic acids; theory for the purification and analysis of proteins and nucleic acids. Concurrent enrollment in CHEM 465 is recommended.

Pre: CHEM 320, and BIOL 106

F

461 (3) Biochemistry II

Detailed analysis of the reactions involved in intermediary metabolism, translation, and replication.

Pre: CHEM 460

S

465 (1) Biochemical Techniques I

A lecture/laboratory course which presents methodology and instrumentation used to purify and analyze biomolecules. Techniques include chromatography, autoradiography and radioisotope techniques, agarose and polyacrylamide gel electrophoresis, ultracentrifugation, and spectrophotometry.

Pre: CHEM 460 previously or concurrently, CHEM 305 is recommended.

F

466 (2) Biochemical Techniques II

Students work in teams to solve biochemical research problems by conducting and analyzing experiments which they design.

Pre: CHEM 460 and 465 S

474 (2) Chromatography

Theory and applications of thin layer, paper, liquid, gas and supercritical fluid chromatography and capillary electrophoresis.

Pre: CHEM 320 previously or concurrently is recommended F-EVEN

475 (4) Instrumental Analysis

Theory and practice of modern instrumental methods including basic electronics. Special emphasis placed on sampling methods, analog and digital electronics, electrochemistry, spectrophotometric and chromatographic methods, surface and thin-film analysis and computer acquisition and data processing techniques.

Pre: CHEM 305; PHYS 212 or 222 is recommended S

477 (1-3) Special Topics in Instrumental Analytical Chemistry

Detailed study and focused discussion of a specific analytical technique such as electrochemistry, X-ray analysis, etc. or an area of analysis such as metals, bioanalytical, etc. May be taken more than once for credit.

Pre: CHEM 305 V

479 (4) Teaching Physical Science

Methods and materials for teaching physical sciences in middle school through high school. Clinical experiences required for the course.

Pre: Consent S

482 (1-3) Problems in Teaching Science

V

485 (1-2) Seminar in Environmental Chemistry

Study of current environmental problems or issues with emphasis on the relevant chemical needs and understanding necessary to monitoring or alleviating the problems.

Pre: CHEM 305 V

490 (1-6) Workshop

495 (1) Senior Seminar

Capstone course for majors in Chemistry, Biochemistry and Chemistry Teaching. During this course students will present the results of their research in several different forums including oral presentations and poster sessions.

Pre: Consent S

496 (1-6) Senior Thesis

497 (1-16) Internship

498 (1-6) Undergraduate Research

499 (1-6) Individual Study

Civil Engineering

College of Science, Engineering and Technology

Department of Mechanical & Civil Engineering

205 Trafton Science Center E • 507-389-6383

Fax 507-389-5002

Web-site: <http://ce.mnsu.edu>

Chair: Saeed Moaveni, Ph.D., P.E.

Vance Browne, Ph.D., P.E., Jerzy Fiszdon, Ph.D., P.E., Charles W. Johnson, Ph.D., P.E., Vojin Nikolic, Ph.D.

Civil engineers design and supervise the construction of roads, buildings, airports, tunnels, dams, bridges, and water supply and sewage systems. Major specialities within civil engineering are structural, water resources, environmental, construction, transportation, and geotechnical engineering.

Many civil engineers hold supervisory or administrative positions, from supervisor of a construction site to city engineer. Others may work in design, construction, research, and teaching.

The primary objective of the program is to train students to be competent civil engineers and also to provide a basis for students who wish to further their education at the graduate level. To this end, the program at Minnesota State University, Mankato, includes the following:

- Students are encouraged to take the Fundamentals of Engineering exam in their senior year - a precursor to professional registration.

- Students are encouraged to work in engineering related areas for exposure to civil engineering practice. Internships are strongly recommended.

- Senior students must take a senior design class to work in a team similar to teams in civil engineering practice.

- Students are informed about possibilities of graduate study. Faculty provide assistance to students who wish to pursue graduate study.

- Students are encouraged to become active in the ASCE and other professional societies and to attend and participate in student conferences.

- Ethical, safe and professional conduct is emphasized.

- Elements of engineering design are introduced early in the program in courses such as Introduction to Engineering. The integration of engineering design continues in the upper division courses in the professional component of the curriculum.

- The program has an Advisory Board which is periodically consulted on trends and needs.

Recommended high school preparation is two years of algebra, one year of geometry, one-half year of trigo-

Civil Engineering

nometry, one-half year of college algebra, and a year each of physics and chemistry. Engineering drafting and a computer language, such as BASIC, are also recommended. Without this background it may take longer than four years to earn the degree.

Admission to Major is necessary before enrolling in 300- and 400-level courses. Admission to the program is granted by the department. Near the end of the sophomore year, students should submit an application for admission to the civil engineering program. Applications to the program may be obtained from the Department of Mechanical and Civil Engineering Office or downloaded from the department homepage.

Admission to the program is based on GPA and performance in selected courses and is subject to approval by the Department of Mechanical and Civil Engineering. Only students admitted to the program are permitted to enroll in upper-division Civil Engineering courses. Generally, no transfer credits are allowed for upper-division Civil Engineering courses. For any exceptions to this policy, special written permission must be obtained and will be reviewed by the department. The department makes a special effort to accommodate transfer students. Transfer students are encouraged to contact the department as soon as possible to facilitate a smooth transition. If local information is insufficient, write, call or visit the department.

Before being admitted to upper-division civil engineering courses, a student must complete a minimum of 49 credits, including the following courses: General Physics (calculus based) 10 cr.; Calculus and Differential Equations 16 cr.; Introduction to Engineering 1 cr.; Computer Graphics 2 cr.; Computer Science (C++ or FORTRAN) 2 cr.; Engineering Mechanics (Statics and Dynamics) 6 cr.; Electrical Engineering (Circuits, including lab) 4 cr.; Chemistry 5 cr.; and English Composition 3 cr.

For transfer students the distribution of credits specified in the previous paragraph may vary, but the total credits must satisfy departmental transfer requirements. Transfer students should contact department for individual evaluation.

All courses and credits shown above must be completed before enrollment in 300-level engineering courses. All of the above courses except Introduction to Engineering and any internship credits must be taken for "grade". It is not acceptable for the student to take any of these courses on a pass/no credit basis. A grade of "C" or better must be achieved in each course. To be considered for admission, the student must have a cumulative GPA of 2.5 for all science, math, ME and EE courses. Admission to the Civil Engineering Program is selective and subject to approval of the Civil Engineering Academic Standards Committee. Failure to submit an application could result in the student being denied admission to the program and registration in junior or higher level classes in the Civil Engineering Program, he/she can reapply to the Civil Engineering Program

for admission in subsequent years. If the applicant has attended Minnesota State University, Mankato only the application form is submitted to the Department of Mechanical and Civil Engineering along with a copy of that student's MSU transcript obtained from "The Hub". If the applicant has transfer credits from another college or university, or expects to be admitted as a transfer student, all transfer courses/credits must be evaluated by the Office of Admissions at Minnesota State University, Mankato. The transfer student will need to refer to the Supplemental Information and/or the Minnesota State University, Mankato Undergraduate Bulletin for information about procedures that need to be followed when making application for admission as a transfer student. Applicants for admission to the program must also submit a complete plan of study.

CIVIL ENGINEERING BS

Required (Special General Education, 23 cr):

The Bachelor of Science in Civil Engineering degree does NOT adhere to the 44 credits of general education required by other colleges. Rather it requires a special distribution of communication, humanities, and social science courses. Courses should be chosen to simultaneously satisfy the university cultural diversity requirement.

Required Communication Courses (7 cr):

ENG 101 Composition (4) and
SPEE 102 Public Speaking (3) or
SPEE 240 Special Topics (3) or
ENG 271 Technical Communication (4)

Required Humanities and Social Science Courses (minimum of 16 cr):

In the interest of making engineers fully aware of their social responsibilities and better able to consider related factors in the decision-making process, course work in the humanities and social sciences is required as an integral part of our civil engineering program. To satisfy this requirement, the courses selected must provide both breadth and depth and not be limited to a selection of unrelated introductory courses. Not all courses in humanities and social sciences are acceptable, i.e. skill developing courses are not acceptable. Courses should be chosen to simultaneously satisfy the university cultural diversity requirement. Each student should discuss with his/her civil engineering advisor selection of courses to meet this requirement. All students are urged to discuss this plan with their civil engineering advisors early in their academic year. An updated list of acceptable courses is posted in the department office.

Specifically, the minimum requirements consist of (a) three credits of microeconomics or macroeconomics, (b) at least 6 credits in the humanities area, and (c) at least 6 credits in the social science area; again (a), (b), and (c) must total at least 16 credits.

To provide the measure of depth to the course of study, at least 3 credits at the 300-level or above must be included

in the 16 credit requirement. At least one upper division course must follow a course in the same subject area.

Required for Major (Prerequisites, 53 cr):

Mathematics (16 cr):

- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)
- MATH 223 Calculus III (4)
- MATH 321 Ordinary Differential Equations (4)

Physics (10 cr):

- PHYS 221 General Physics I (5)
- PHYS 222 General Physics II (5)

Chemistry (5 cr):

- CHEM 201 General Chemistry I (5)

Biology (4 cr):

- BIOL 270 Microbiology (4)

Computer Science & Graphics (4 cr):

- COMS 171 Introduction to C++ Programming (2)
- MET 145 Computer Graphics (2)

Electrical Engineering (7 cr):

- EE 101 Introduction to Engineering (1)
- EE 230 Circuits Analysis (3)
- EE 240 Evaluation of Circuits (1)
- EE 250 Engineering Economics (2)

Mechanical Engineering (7 cr):

- ME 103 Introduction to Engineering III (1)
- ME 212 Statics (3)
- ME 214 Dynamics (3)

Required for Major (51 cr):

- BLAW 450 Contracts, Sales, & Professional Responsibility (3)
- CIVE 315 Transportation Engineering (3)
- CIVE 422 Structural Mechanics (3)
- CIVE 426 Reinforced Concrete (3)
- CIVE 451 Water Resources (3)
- ENVR 450 Environmental Pollution Control (3)
- GEOL 121 Physical Geology (4)
- GEOL 350 Environmental Geology (4)
- IDCM 212 Surveying and Site Planning (2)
- IDCM 312 Foundations and Concrete Structure (3)
- ME 291 Engineering Analysis (3)
- ME 303 Materials Science (3)
- ME 319 Thermodynamics (3)
- ME 321 Fluid Mechanics (3)
- ME 323 Mechanics of Materials (3)
- ME 336 Mechanical Engineering Experimentation I (2)
- ME 428 Design Project I (3)
- ME 436 Mechanical Engineering Experimentation II (2)

Required Minor: None.

POLICIES/INFORMATION

GPA Policy. To maintain satisfactory progress in the upper-division civil engineering program, a student must: (1) maintain a cumulative GPA of at least 2.3; and (2) achieve a GPA of at least 2.0 each semester.

P/N Grading Policy. P/N credit may not be applied to any 200-level or higher required course in the civil engineering curriculum except for internship credits and courses designated as P/N only.

Probation Policy. A student who does not maintain satisfactory progress as defined above will be placed on academic probationary status for a maximum of one semester. During the probationary period, the student must maintain satisfactory progress in addition: (a) must complete at least 8 credits for grade from the prescribed Civil Engineering curriculum; and (b) shall not receive a degree without first conforming to the satisfactory progress criteria. A student who does not maintain satisfactory progress during the probationary period will not be allowed to continue in the program. The student may later reapply for admission to the program.

Refer to the College regarding advising for students on academic probation.

Appeals. A student has the right to appeal a department decision in writing. The department will consider such appeals individually.

The Civil Engineering Program was approved by MnSCU in the Fall of 2000. Since the Civil Engineering Program is currently under development, please see the updated list of Civil Engineering courses on our website at ce.mnsu.edu. Also see the mechanical engineering program for detailed description of ME courses that are required for the Civil Engineering Program.

315 (3) Transportation Engineering

Introductory overview of transportation systems with emphasis on the highway mode of transportation. Topics include: fundamentals of transportation economics, land-use and transportation interaction, elements of transportation planning, traffic operations, concepts of highway location and geometric design, and introduction to flexible and rigid pavements.

Pre: ME 214, IDCM 212

422 (3) Structural Mechanics

Analysis of structural systems. Design loads; stability and determinacy of trusses, beams and frames; member forces and deflection of statically determinate trusses; shear and moment diagrams, slopes and deflections of statically determinate beams and frames; influence lines and moving loads; force methods of indeterminate beams and frames; approximate methods of indeterminate structures; computer in structural analysis.

Pre: ME 323

426 (3) Reinforced Concrete

Design of flexural members using working stress and ultimate strength design methods. Ultimate strength considerations for the design of flexural members for: shear, deflection, and development of reinforcement. Design of short compression members.

Pre: CIVE 422

Clinical Laboratory Sciences/Medical Technology

451 (3) Water Resources

Population and water requirements; wastewater quantities; water distribution systems; storage reservoirs and pump stations; computer analysis of distribution system; treatment of municipal water supplies, including sedimentation, softening, filtration and disinfection; design of sanitary and storm sewers; primary, secondary, and tertiary treatment plant design; sludge handling and disposal.

Pre: ME 321, ENVR 450

Clinical Laboratory Sciences/ Medical Technology

College of Science, Engineering & Technology

Department of Biological Sciences

246 Trafton Science Center S • 507-389-2417

Website: <http://www.mnsu.edu/dept/biology>

Director: Lois Anderson, MT(ASCP)

The four-year clinical laboratory sciences & medical technology curriculum leads to the degree of Bachelor of Science in clinical laboratory sciences & medical technology. The first three years are spent at the university. The fourth year is spent at one of the affiliated hospital schools of clinical laboratory sciences/medical technology. Upon successful completion of this year, the B.S. degree is awarded by the university and graduates are then eligible to take a certifying examination.

Because the clinical laboratory sciences/medical technology curriculum closely parallels that of other majors, such as biology, students from other majors are encouraged to apply.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

Students should contact the Department of Clinical Laboratory Sciences & Medical Technology early in their college career for admission to the program, for academic and career counseling, and for information on the process and standards for admission to the professional curriculum, including registration procedures. Because enrollment in the fourth year is limited by the size of classes in the affiliated hospital schools, admission to the program does not ensure admission to the fourth year of the curriculum. Admission into the fourth year hospital clinical internship is competitive.

CLINICAL LABORATORY SCIENCE/ MEDICAL TECHNOLOGY BS

Required General Education (9 credits):

CHEM 201 General Chemistry I (5)

MATH 112 College Algebra (4)

Required Support Courses (18 credits):

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 320 Organic Chemistry I (5)

CHEM 360 Principles of Biochemistry (4)

Required for Major (Core, 31 credits):

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

BIOL 175 Orientation to Clinical Laboratory Science (1)

BIOL 211 Genetics (3)

BIOL 230 Human Physiology (4)

BIOL 270 Microbiology (4)

BIOL 420 Diagnostic Parasitology (3)

BIOL 430 Hematology/Introduction to Immunology (4)

BIOL 475 Medical Microbiology (4)

Required for Major (Internship, 32-39 cr):

Complete up to 32-39 credits from the following courses:

MEDT 410 MEDT 411 MEDT 412

MEDT 413 MEDT 414 MEDT 415

MEDT 416 MEDT 417 MEDT 418

MEDT 419 MEDT 420 MEDT 499

Required Minor: None.

Special Requirements:

If internship is at Hennepin County Medical Center students must complete:

BIOL 380 Blood Banking/Urinalysis (3)

If internship is at the University of Minnesota, students must complete: A second math class either in pre calculus, calculus, or biostatistics. The University of Minnesota does not require BIOL 420, BIOL 430, or BIOL 475, but highly recommends BIOL 220 Human Anatomy and PHYS 211 Principles in Physics I for admission to their internship program.

This is in addition to degree requirements.

POLICIES/INFORMATION

Students majoring in Clinical Laboratory Sciences & Medical Technology have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Angie B. Bomier, student relations coordinator, C125 Trafton Science Center, telephone 389-1521.

GPA Policy. A GPA of 2.5 is required in both sciences courses and cumulative coursework.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. No P/N grades are accepted toward the major except BIOL 175.

Agencies participating in the Clinical Laboratory Sciences/Medical Technology program include, but are not

limited to: Hennepin County Medical Center, Minneapolis, John T. Crosson, M.D., Patricia J. Ellinger, MT(ASCP); Mercy Hospital Medical Center, Des Moines, Iowa, Vijaya Dhanwaza, M.D., Stacy Sime, MT(ASCP); St. Luke's Methodist Hospital, Cedar Rapids, Iowa, Kinsley Grant, M.D., Nadine Sojka, MT(ASCP); University of Minnesota, Minneapolis, MN, Carol Wells, Ph.D., CLS., Patricia Solberg, MT(ASCP). Hennepin County Medical Center and the University of Minnesota are required by law to do background checks on all students admitted to their medical technology internship program.

COURSE DESCRIPTIONS

410 (1-10) Clinical Hematology I

Theory of blood cell formation; disease states; hemostasis, microscopic examination of blood/bone marrow films; practical experience with instruments and techniques which determine major hematologic and clotting parameters; quality control.

411 (1-10) Clinical Immunochemistry I

Major blood group systems; principles and procedures for antigen/antibody detection, identification; donor blood collection, preservation, processing; component therapy; transfusion reaction evaluation; Rh immune globulin; quality control.

412 (1-10) Clinical Immunology

Antigen/antibody structure function and interaction; basic principles and procedures of humoral and cellular immunology; performance and clinical correlation of serological testing; quality control.

413 (1-10) Clinical Chemistry I

Identification and quantification of specific chemical substances in blood and body fluids by analytical techniques; clinical correlation with disease states; principles of instrumentation; data processing; toxicology; quality control.

414 (1-10) Clinical Microbiology I

Theory and techniques of cultivation, isolation and identification of bacteria, fungi, parasites and viruses; determination of sensitivity to antimicrobial agents; clinical correlation to disease states; sepsis; environmental monitoring; quality control.

415 (1-10) Clinical Microscopy I

Theory of renal function in health and disease; renal function tests including chemical and microscopic examination of urine; analysis of fecal specimens, gastric, spinal fluid and other body fluids; quality control.

416 (1-10) Clinical Hematology II

A continuation of Clinical Hematology I.

417 (1-10) Clinical Immunochemistry II

A continuation of Clinical Immunochemistry I.

418 (1-10) Clinical Chemistry II

A continuation of Clinical Chemistry I.

419 (1-10) Clinical Microbiology II

A continuation of Clinical Microbiology I.

420 (1-10) Clinical Microscopy II

A continuation of Clinical Microscopy I.

499 (1-6) Individual Study

Related topics in medical technology.

Communication Disorders

College of Allied Health & Nursing

Department of Speech, Hearing and Rehabilitation Services

103 Armstrong Hall • 507-389-1414

Website: http://www.mnsu.edu/dept/comdis/dept/MSU_Dept_ComDis.html

Chair: Bruce J. Poburka

Patricia Hargrove, Judith Kuster, Carol Myhre, Bruce Poburka, Wayne Quirk

The Communication Disorders Department provides a program for a major in communication disorders, pre-professional preparation in speech-language pathology or audiology, and supportive coursework for majors from other departments with interests in human communication or its disorders.

The beginning courses concern the normal aspects of speech, language and hearing—its nature and development, as well as introducing the student to the disorders of speech, language and hearing. Advanced courses are devoted to specific disorders in terms of their nature and treatment. The undergraduate training culminates with supervised practicum experiences in which the student works with people who have communication disorders. The Communication Disorders program is accredited by the Council on Academic Accreditation of the American Speech Language-Hearing Association.

Admission to Major is granted by the department. Students should seek admission to the program during their sophomore year. Full admission to the major requires a 3.0 average in the following courses: CDIS 201, 212, 222, 292, 294. Majors cannot enroll in other CDIS coursework until these five courses have been passed with a 3.0 average. Application forms and complete information can be obtained from the department or during enrollment in CDIS 290, 222, 212.

Students planning to major in an area of study in the College of Allied Health and Nursing have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Mark Schuck, student relations coordinator, 162 Highland Center, 507-389-5486.

COMMUNICATION DISORDERS BA, BS

General Education Courses (12 credits):

Choose a minimum of 6 recommended lower division credits from Departments of Math and Biology/Physics.

Communication Disorders

Choose a minimum of 6 recommended lower division credits from Ethnic Studies and Anthropology/Sociology/Psychology/Women's Studies. These courses may include some that are not applicable to general education. See Departmental Program of Study Bulletin for suggestion.

Required for Major (Core, 52 credits):

CDIS 201	Observation of Human Communication (3)
CDIS 212	Speech and Language Development (3)
CDIS 220	Basic Audiology (3)
CDIS 222	Speech and Hearing Science (3)
CDIS 290	Introduction to Communication Disorders (3)
CDIS 292	Phonetics (3)
CDIS 294	Applied Anatomy and Physiology (3)
CDIS 402	Child Language Disorders (2)
CDIS 403	Child Language Disorders Lab (1)
CDIS 416	Voice and Resonance Disorders (3)
CDIS 417	Stuttering (3)
CDIS 421	Aural Rehabilitation (3)
CDIS 422	Clinical Practicum: Audiology (2)
CDIS 431	Orientation Lab (1)
CDIS 434	Orientation to Clinical Practicum (2)
CDIS 438	Speech Sound Disorders (3)
CDIS 444	Appraisal and Diagnosis (3)
CDIS 445	Grand Rounds Foundations (1)
CDIS 446	Grand Rounds Presentations (2)
CDIS 495	Clinical Practicum: Speech/Language (2)

Required for Bachelor of Arts (BA) degree ONLY:

Language (8 cr)

Required Minor: None.

POLICIES/INFORMATION

Students completing course requirements under previous catalogs are advised to consult the department chairperson for appropriate course substitutions.

The minimum level of professional preparation in communication disorders requires the master's degree. The department does not recommend bachelor degree graduates for professional employment in the field nor for teacher or health licensure or registration.

The Department of Communication Disorders is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language Hearing Association (ASHA).

GPA Policy. A minimum GPA of 2.8 is required to enroll in practicum courses (CDIS 422, 495).

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. All courses must be taken for letter grades by majors except those offered on a P/N only basis.

COURSE DESCRIPTIONS

201 (3) Observation of Human Communication

Procedures for observing, describing, analyzing behaviors associated with human communication. Open to non-majors.

F

205 (3) Beginning Sign Language

The first in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

V

206 (3) Intermediate Sign Language

The second in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Pre: CDIS 205

V

207 (3) Advanced Sign Language

The third in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Pre: CDIS 206

V

212 (3) Speech and Language Development

Acquisition and sequences of phonological, syntactical, morphological and semantic features of language across the lifespan. Theory and research.

F

220 (3) Basic Audiology

Functional anatomy of the ear, common pathologies, and measurement of hearing and sound.

Pre: CDIS 222

F

222 (3) Speech and Hearing Science

Anatomy and physiology of the hearing and speech mechanisms, signals and types of signal transmission relevant to hearing, and instrumentation/measurement pertaining to hearing.

Pre: Concurrent or completed college math.

F

230 (2) Speech/Language Foreign Students

Modification of oral communication and listening of speakers who are learning English as a foreign language. Individualized, clinical model is employed.

V

290 (3) Introduction to Communication Disorders

Classification and management of speech, language and hearing disorders.

S

291 (1-4) Individual Study

F, S

292 (3) Phonetics

Articulatory and acoustic phonetics.

F

294 (3) Applied Anatomy and Physiology

Anatomy and physiology of respiration, phonation, articulation, and neuroanatomy.

F

402 (2) Child Language Disorders

Types and characteristics of language disorders in children.

F

403 (1) Child Language Disorders Lab

Lab associated with CDIS 402. Practice in applying course content to the language of children.

F

416 (3) Voice and Resonance Disorders

Description, etiology, assessment and management of voice and resonance disorders.

S

417 (3) Stuttering

Description, etiology, assessment and management of fluency disorders.

S

421 (3) Aural Rehabilitation

Habilitative audiology and the instruction of the hearing-impaired, including hearing aids, speech reading and auditory training.

S

422 (2) Clinical Practicum: Audiology

Clinical practice with hearing-handicapped children and adults.

Pre: CDIS 220

F, S

424 (1) Overview of Dysphagia

This course presents the anatomy and physiology of the normal swallow and the normal development of oral motor and feeding skills. It describes signs, assessment, and treatment of feeding a swallowing problems in children and adults.

V

426 (1) Advanced Diagnosis and Treatment of Dysphagia

This course presents assessment and therapy guidelines for dysphagia management. The team approach, actual case studies and video fluoroscopic studies will be presented.

V

431 (1) Orientation Lab

Supervised observation of the diagnostic and remedial management of speech and language disorders.

Pre: Concurrent enrollment in CDIS 434

S

434 (2) Orientation to Clinical Practicum

Procedures and operation of the clinical program in communication disorders.

Pre: Consent, concurrent enrollment in CDIS 431

S

435 (3) Augmentative Communication

A study of alternative and augmentative communication systems. Tests, measures and procedures for evaluation and management.

tion systems. Tests, measures and procedures for evaluation and management.

V

438 (3) Speech Sound Disorders

Description, etiology, assessment and management of speech sound problems.

F

444 (3) Appraisal and Diagnosis

Tests, measures, procedures and processes for the evaluation and diagnosis of speech and language.

S

445 (1) Grand Rounds - Foundation

Observation of clinical case studies.

V

446 (2) Grand Rounds - Presentations

Presentation of clinical case studies.

V

490 (1-4) Independent Study

F, S, SU

491 (1-6) Inservice

Study of a specific disorder or aspects of communication disorders that are not provided in the current curriculum.

495 (2) Clinical Practicum: Speech/Language

A practicum course designed to train the student to provide competent clinical services to persons with communication disorders. The student will develop skills to conduct diagnostic sessions, design and implement intervention plans and write clinical reports.

Pre: 3 of the following: 402, 416, 417, 438 (completion of or concurrent enrollment in 444). GPA of 2.8 in major courses.

F, S

Computer & Information Sciences

*College of Science, Engineering & Technology
Department of Computer & Information Sciences
273 Wissink Hall • 507-389-2968*

Chair: Colin Wightman

Gregg Asher, Cyrus Azarbod, Lee Cornell, David Haglin, Dean Kelley, Ann Quade, Richard Roiger, Hamed Sallam, Julio Sanchez, Susan Schilling, James Slack, Mahbubur Syed, Leon Tietz, Christophe Veltsos, Michael Wells

Bachelor's degree programs offered by the Department of Computer and Information Sciences prepare computer and information scientists for positions in computer-related fields. The department offers majors in Computer Science (CS), Computer Information Science (CIS), Management Information Systems (MIS), and three minors.

MIS Note: Management Information Systems (MIS) is a cross-disciplinary field of study which combines the technical aspects from computer science with the resource management techniques from business. To reflect this cross-disciplinary nature of the field, there are two MIS

Computer & Information Sciences

programs at MSU: one is offered in the Department of Computer and Information Sciences; the other offered in the Department of Management. Students who have an interest and an aptitude for the technical aspects of MIS should consider the MIS major in the Department of Computer and Information Sciences. This program has about two-thirds courses in the Department of Computer and Information Sciences and one-third Business courses. Students who have an interest and an aptitude for the resource management component of MIS should consider the Management major, MIS option in the Department of Management. This program has about two-thirds courses in the College of Business and one-third Computer and Information Sciences courses.

Admission to Major is granted by the department. Admission to the Major is required before the student is permitted to take 300- and 400-level courses. Requirements are:

- A minimum of 32 earned semester credits
- Completion of either MATH 180 or MATH 121 with a grade of C or better
- Completion of ENG 101 with a grade of C or better
- Completion of COMS 110 with a grade of "B" or better
- Completion of COMS 111 and COMS 112 with a grade of C or better and a GPA of 2.5 in these courses (or their equivalents).

COMPUTER SCIENCE BS

COMPUTER SCIENCE OPTION

Required General Education (7 credits):

- ENG 101 Composition (4)
SPEE 100 Fund. of Speech Communication (3)

Required Support Courses (7 credits):

- ENG 271 Technical Communication (4)
Choose one of the following Speech courses:
101, 102, 202, 203, 315, 325, 333, or 403.

Required for Major (Core, 51 credits):

- COMS 111 Fundamentals of Computer Science I (4)
COMS 112 Fundamentals of Computer Science II (4)
COMS 210 Data Structures and Algorithms (4)
COMS 260 Assembly Language Programming (4)
COMS 320 Computer Organization I (4)
COMS 370 Concepts of Programming Languages (4)
COMS 410 Abstract Machines and Grammars (4)
COMS 460 Operating Systems (4)
MATH 121 Calculus I (4)
MATH 122 Calculus II (4)
MATH 247 Linear Algebra I (4)
STAT 354 Concepts of Probability and Statistics (3)
MATH 375 Introduction to Discrete Mathematics (4)

Required Electives (COMS, 8 credits):

Choose one of the following sequences:

- COMS 371 Applications Programming (4)
COMS 481 Rapid Application Development (4)

or

- COMS 230 Applied Expert Systems (4)
COMS 430 Artificial Intelligence (4)
or
COMS 462 Data Communications and Networks I (4)
COMS 463 Data Communications and Networks II (4)
or
COMS 350 Operations Research I (4)
COMS 450 Operations Research II (4)
or
COMS 280 Systems Analysis and Design (4)
COMS 480 Software Engineering (4)
or
COMS 340 Database Management Systems I (4)
COMS 440 Database Management Systems II (4)
or make a sequence from any of the above courses plus other courses listed below:
COMS 202 Computers in Society (4)
COMS 360 Systems Programming (4)
COMS 411 Parallel & Distributed Processing (4)
COMS 412 Graphics (4)
COMS 420 Computer Organization II (4)
COMS 432 Robotics (4)
COMS 470 Compiler Construction (4)
COMS 497 Internship (4)

Required Electives (Science, 12 credits):

Choose one of the following sequences:

- BIOL 105 General Biology I (4)*
BIOL 106 General Biology II (4)

or

- CHEM 201 General Chemistry I (5)*
CHEM 202 General Chemistry II (5)

or

- GEOL 121 Physical Geology (4)*
GEOL 122 Earth History (4)*

or

- PHYS 221 General Physics I (5)*
PHYS 222 General Physics II (5)

and

Any class numbered 200 or above in Astronomy, Biology, Chemistry, Geology, or Physics or one class from another sequence listed above.

Elective xxx Elective xxx

* May be used to fulfill General Education requirements.

Required Minor: Yes. Any. Note that the Mathematics requirements specified above fulfill the requirements for a mathematics minor.

COMPUTER INFORMATION SCIENCE BS

Required General Education (10 credits):

- ENG 101 Composition (4)
SPEE 100 Fund. of Speech Communication (3)
STAT 154 Elementary Statistics (3)

Required Support Courses (11 credits):

- ENG 271 Technical Communication (4)
Choose one of the following Speech courses:
101, 102, 202, 203, 315, 325, 333, or 403.
Choose one course from the following:
MATH 180 Mathematics for Computer Science (4)
MATH 121 Calculus I (4)

Required for Major (Core, 30 credits):

COMS 111	Fundamentals of Computer Science I (4)
COMS 112	Fundamentals of Computer Science II (4)
COMS 260	Assembly Language Programming (4)
COMS 280	Systems Analysis and Design (4)
COMS 320	Computer Organization I (4)
COMS 340	Database Management Systems I (4)
COMS 497	Internship (6)

Required Electives (Sequence, 16 credits):

Choose two of the following sequences:

COMS 371	Applications Programming (4)
COMS 481	Rapid Application Development (4)

or

COMS 230	Applied Expert Systems (4)
COMS 430	Artificial Intelligence (4)

or

COMS 462	Data Communications and Networks I (4)
COMS 463	Data Communications and Networks II (4)

or

COMS 350	Operations Research I (4)
COMS 450	Operations Research II (4)

or make a sequence from any of the above courses or from the following courses:

COMS 202	Computers in Society (4)
COMS 210	Data Structures and Algorithms (4)
COMS 360	Systems Programming (4)
COMS 370	Concepts of Programming Langs. (4)
COMS 411	Parallel & Distributed Processing (4)
COMS 412	Graphics (4)
COMS 420	Computer Organization II (4)
COMS 432	Robotics (4)
COMS 440	Database Management Systems II (4)
COMS 460	Operating Systems (4)
COMS 470	Compiler Construction (4)
COMS 480	Software Engineering (4)

No more than one 200-level course can be part of the 16 elective credits.

Required Minor: Yes. Any.

MANAGEMENT INFORMATION SYSTEMS BS

Required General Education (10 credits):

ENG 101	Composition (4)
SPEE 100	Fund. of Speech Communication (3)
STAT 154	Elementary Statistics (3)

Required Support Courses (11 credits):

ENG 271 Technical Communication (4)

Choose one of the following Speech courses:

101, 102, 202, 203, 315, 325, 333, or 403

Choose one course from the following:

MATH 180	Mathematics for Computer Science (4)
MATH 121	Calculus I (4)

Required for Major (Core, 60 credits):

COMS 111	Fundamentals of Computer Science I (4)
COMS 112	Fundamentals of Computer Science II (4)

COMS 280	Systems Analysis and Design (4)
COMS 480	Software Engineering (4)
COMS 340	Database Management Systems I (4)
COMS 440	Database Management Systems II (4)
COMS 497	Internship (6)
ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
BLAW 371	Computer and Technology Law (3)
FINA 362	Business Finance (3)
IBUS 380	Principles of International Business (3)
MGMT 200	Introduction to MIS (3)
MGMT 330	Principles of Management (3)
MGMT 346	Production and Operations Management (3)
MGMT 458	Corporate Information Systems (3)
MRKT 310	Principles of Marketing (3)

Required Electives (Sequence, 16 credits):

Choose two of the following sequences:

COMS 371	Applications Programming (4)
COMS 481	Rapid Application Development (4)

or

COMS 230	Applied Expert Systems (4)
COMS 430	Artificial Intelligence (4)

or

COMS 260	Assembly Language Programming (4)
COMS 320	Computer Organization I (4)

or

COMS 462	Data Communications and Networks I (4)
COMS 463	Data Communications and Networks II (4)

or

COMS 350	Operations Research I (4)
COMS 450	Operations Research II (4)

or make a sequence from any of the above courses or from the following courses:

COMS 202	Computers in Society (4)
COMS 210	Data Structures and Algorithms (4)
COMS 360	Systems Programming (4)
COMS 370	Concepts of Programming Langs. (4)
COMS 411	Parallel & Distributed Processing (4)
COMS 412	Graphics (4)
COMS 420	Computer Organization II (4)
COMS 432	Robotics (4)
COMS 460	Operating Systems (4)
COMS 470	Compiler Construction (4)

No more than one 200-level course can be part of the 16 elective credits.

Required Minor: None.

COMPUTER SCIENCE MINOR

Required for Minor (Core, 20 cr):

COMS 111	Fundamentals of Computer Science I (4)
COMS 112	Fundamentals of Computer Science II (4)
COMS 260	Assembly Language Programming (4)
COMS 320	Computer Organization I (4)
COMS 210	Data Structures and Algorithms (4)

Computer & Information Sciences

COMPUTER INFORMATION SCIENCE MINOR

Required for Minor (Core, 20 cr):

- COMS 111 Fundamentals of Computer Science I (4)
COMS 112 Fundamentals of Computer Science II (4)
COMS 280 Systems Analysis and Design (4)
COMS 340 Database Management Systems I (4)
Choose one course from the following:
COMS 260 Assembly Language Programming (4)
COMS 320 Computer Organization I (4)

COMPUTER TECHNOLOGY MINOR

Required for Minor (Core, 20 cr):

- COMS 111 Fundamentals of Computer Science I (4)
COMS 280 Systems Analysis and Design (4)
Choose one course from the following:
COMS 321 Micro Configuration and Maintenance (4)
COMS 200 Microcomputer Applications (4)
Choose any two 300-400 level courses (one of which may be either COMS 103 or COMS 202).

POLICIES/INFORMATION

GPA Policy. A GPA of 2.5 or higher in courses required for a major or minor in the Department of Computer and Information Sciences is required for graduation. This GPA requirement is calculated and must be maintained for each of the following areas: 1) for the combined Required General Education and Required Support Courses, or their substitutions, if any; 2) for the Required for Major and Required Electives courses. When pursuing the Management Information Systems major, this second requirement must be maintained in the COMS component of the major as well as in the overall major. Prior to beginning an internship, students should have completed COMS 112, the Required General Education and Required Support Courses, and COMS 340 (CIS and MIS) and COMS 210 (CS) as well as all the specified prerequisites of these courses while maintaining the 2.5 GPA as specified above. It is recommended that students who cannot maintain a GPA of 3.0 in required 100 and 200 level courses see their advisor for a program review.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. All Required for Major and Required Elective Courses, with the exception of any internship courses, must be taken for letter grades. Exceptions to this policy will be made on a limited basis and must be approved in writing by the chairperson of the department. When calculating the GPA (see GPA Policy) for the Required General Education and the Required Support Courses, one of these courses may be taken P/N and thus excluded from the GPA calculation. Any additional courses with a P grade will be included in this GPA calculation as a C.

An incomplete grade for a course will generally be given only under two conditions. The first condition is illness — a doctor's written recommendation must be supplied.

The second condition arises when a death in the student's family has caused the student to be away from the campus for an extended period of time. The student must have a satisfactory grade (C or better) in the course at the time of the onset of the condition.

The Department of Computer and Information Sciences continuously strives for improvements in the academic program. Coursework, coupled with extensive laboratory experience, play an important part in the student's educational program. However, application of the concepts discussed in class to on-the-job situations is equally important. As a result, the department requires an internship for all CIS and MIS majors.

COMS 100, 101, 160, 171, 492, and 493 do not count toward a major or minor in the computer and information sciences.

Residency: At least 50 percent of the computer and information sciences credits required for a major or minor from this department must be earned at Minnesota State University, Mankato.

COURSE DESCRIPTIONS

100 (4) Introduction to Computer Science

Provides a basic foundation in computer concepts and literacy. Topics include the development of computers, hardware, software, and their social implications. Course includes a hands-on lab which introduces students to various systems and applications software including graphical user interfaces, word-processing, drawing and painting programs, electronic mail, the Internet, spreadsheets, and databases.

F, S

101 (3) Introduction to Microcomputers

An introductory course in personal computer use for business majors. Provides an understanding of what personal computers are, how they are controlled, and their usefulness in the business world. Lab work includes work on word-processing, spreadsheets, presentation packages, communications and graphics. Does not apply for major credit in computer science.

F, S

110 (4) Foundations of Computer Science

Provides a comprehensive introduction to the algorithmic foundations of computer science, computer hardware, computer software, computer applications, and social issues. Lab work develops familiarity with a variety of software and hardware. Intended to provide knowledge and skills applicable to all disciplines while providing specialized preparation for further study in Computer & Information Sciences.

Co-Req: MATH 112

F, S

111 (4) Fundamentals of Computer Science I

The first course in a two-course sequence for students who are planning to major or minor in computer science. Emphasizes concepts that provide a basic background for continuing study in computer science.

High-level language programming, use of abstraction in program design.

Pre: MATH 112 and a B or better in COMS 110 or equivalent F, S

112 (4) Fundamentals of Computer Science II

A continuation of 102. Introduction to object-oriented programming techniques and essential data structures such as stacks and queues.

Pre: COMS 111 F, S

160 (1) Introduction to Selected Operating System

Terminal operation methods. Creation, manipulation and editing of files using a selected operating system, such as VAX-MS, WINDOWS, MS-DOS, UNIX, AS/400. May be repeated for different operating systems. V

171 (2) Introduction to C++ Programming

This course provides an introduction to programming using C++. Emphasis on structured programming concepts, with a brief discussion of object-oriented programming. Control structures, expressions, input/output, arrays, and functions.

F, S

200 (4) Microcomputer Applications

Using both a lecture and lab environment, this course seeks to provide students with additional personal computer experience on both IBM and Macintosh platforms in these areas: operating systems, graphics, WWW page development, telecommunications, utility software, networking, file transfer, presentation software.

Pre: COMS 100, 110, or 101 or consent of instructor F

201 (2) Introduction to Assistive Technology

This course introduces students to assistive technology and its applicability to people with various disabilities. Hardware and software demonstrations with an emphasis placed on inexpensive and readily available solutions. Extensive use of the Internet will be employed to keep current with latest technology and to facilitate a continuing dialogue with instructor.

S

202 (4) Computers in Society

This course seeks to confront participants with complex social and ethical issues associated with computers. Through thoughtful questions, informative readings, and the analysis of dichotomous viewpoints, courses participants will gain insight into the complexity of technology-related issues discussed as well as the lack of simplistic solutions to the problems.

S

210 (4) Data Structures and Algorithms

Study of trees, hashing, and graph algorithms. Analysis of algorithms, memory management, and proof techniques.

Pre: COMS 112, MATH 180 or 121 F

230 (4) Applied Expert Systems

Provides the student with an introduction to problem solving using artificial intelligence techniques. Empha-

sis is placed upon the design of rule-based expert systems to deal with problems that cannot be solved using traditional methods.

Pre: COMS 100, 101, or 110 S

260 (4) Assembly Language Programming

Assembly language programming techniques. Machine level data representations, instructions, and addressing modes. Accessing operating system facilities using assembly language, writing and using macros.

Pre: COMS 112 F, S

270 (1-4) Introduction to Selected Programming Language

This course provides an overview of a selected high-level programming language. Special features of the language will be emphasized, along with its control structures, input/output, storage structures, and abstraction mechanisms. May be repeated for different languages.

Pre: COMS 111 V

271 (4) C++ Programming

This course is intended to provide an overview of object oriented programming using C++. The coverage of material ranges from traditional structured programming features of C++ such as functions, pointers, and arrays to object oriented features such as classes, inheritance, and polymorphism. The course also includes real-world application examples.

F, S

272 (4) FORTRAN Programming

To learn the algorithmic programming language FORTRAN to solve scientific, engineering and mathematical problems.

Pre: COMS 100 or 111 S

280 (4) Systems Analysis and Design

This course explores both structured as well as object oriented systems analysis and design. Use of upper and lower CASE tools are employed in the analysis, design and implementation of a team oriented term project.

Pre: COMS 110 On Demand

320 (4) Computer Organization I

Introduction to computer hardware and its design including Boolean logic, basic digital circuits, number representations and digital arithmetic, instruction set design, digital storage, performance metrics, processor datapath and control, pipelining, memory hierarchy, busses and I/O interfacing, parallel processors.

Pre: COMS 112, MATH 180 or 121 F, S

321 (4) Micro Configuration and Maintenance

Provides a working knowledge and hands-on experience with configuring, upgrading, optimizing, troubleshooting and repairing personal computer hardware, networks and system software. Preventative maintenance and emergency recovery techniques.

Pre: Jr/Sr status or consent F

340 (4) Database Management Systems I

Introduction to the concept of database systems; database

Computer & Information Sciences

models; database management systems; file organization; design of databases using data modeling and normalization; conversion of data model into relational, network, and hierarchical data models; extensive coverage of SQL and implementation of an application using a relational database in a team environment.

Pre: COMS 280

F, S

350 (4) Operations Research I

A first course in decision theory and linear programming. Topics covered include problem modeling, decision analysis, forecasting, inventory systems, and linear programming, including the SIMPLEX method, duality, sensitivity analysis, and various applications such as the transportation problem, network flow problems, and project management.

Pre: COMS 112, MATH 180 or 121, and STAT 154

F

360 (4) Systems Programming

Machine level I/O and operating system file processing. Structure of systems programs including assemblers, linkers, and object oriented utilities and interfaces. Writing utility programs and extensions to an operating system.

Pre: COMS 260

ALT

370 (4) Concepts of Programming Languages

A comparative approach to general concepts of current higher-level programming languages. Various programming language paradigms will be covered, including imperative, object-oriented, functional, and logical.

Pre: COMS 210

F, S

371 (4) Applications Programming

This course emphasizes structured applications development concepts using COBOL with an introduction to object-oriented COBOL programming. Topics including program structure, table and file manipulation, interactive programming, sub programming and object orientation. Team projects are used throughout the semester.

Pre: COMS 112

F, S

410 (4) Abstract Machines and Grammars

This course studies the computational ability of a variety of computational models including finite state machines, regular expressions, context-free grammars, and Turing machines. For each model, the student will develop, study and apply techniques for determining those languages which are computable using the particular model.

Pre: MATH 375

F

411 (4) Parallel and Distributed Processing

Practical parallel programming experiences. Parallel programming languages, parallel algorithm design and analysis, parallel architectures.

Pre: COMS 210

ALT

412 (4) Graphics

Concepts and algorithms used in computer graphics, including polygonal and curved images in both 2 and 3 dimensions, representation of solid objects, and color and illumination models.

Pre: COMS 210, MATH 247

ALT

420 (4) Computer Organization II

Advanced topics in computer architecture including a major emphasis on measuring and improving computer performance. Topics include advances in pipelining and analysis and optimization of storage systems and networks, multiprocessor challenges and trends.

Pre: COMS 320

S

430 (4) Artificial Intelligence

Artificial intelligence problem solving techniques including predicate logic and the resolution principle. Artificial intelligence programming languages, machine learning, neural network models and object oriented methods are discussed.

Pre: COMS 230

S

432 (4) Robotics

Current practice and future directions in robotics including robot anatomy, kinematics, sensors, sensor interfacing and fusion, mobile robotics, real-time programming, vision and image processing algorithms, subsumption architecture.

Pre: COMS 260 or 320, MATH 247

ALT

440 (4) Database Management Systems II

Extensive coverage of query processing and optimization; concurrence control and recovery and security and integrity in centralized/distributed environments. Team-oriented projects in heterogeneous client server environment.

Pre: COMS 112 and 340

S

450 (4) Operations Research II

A second course in operations research for majors and non-majors. Topics include computer simulation, game theory, stochastic processes, queuing theory, Markov processes, and reliability. Simulation topics include Monte Carlo methods, discrete and continuous simulations, simulation languages and packages.

Pre: COMS 350 and STAT 354

S

460 (4) Operating Systems

This course covers basic operating systems concepts including processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, scheduling, performance evaluation, file systems, storage, devices, protection, security, privacy and distributed systems.

Pre: COMS 320

F

462 (4) Data Communications and Networks I

An introduction to the basic foundations of computer networking. The course encompasses telecommunications, local area networks, wide area networks, and wireless communication. Topics covered include the OSI model, TCP/IP, network topologies and associated hardware, error detection and correction, protocols, and security.

Pre: COMS 112

F

463 (4) Data Communications and Networks II

This course concentrates on providing system administration and client/server development experience. It uses

the client/server networking lab to provide exposure to Netware, Windows NT and UNIX network operating systems as well as client/server applications development.
Pre: COMS 462 (recommended) and COMS 280
S

470 (4) Compiler Construction

Principles and techniques of compiler construction. Development of efficient parsers and scanners; manual and automatic approaches. Optimization techniques and code generation.
Pre: COMS 370
ALT

480 (4) Software Engineering

The software life cycle from specification and design phases through construction and maintenance. Object-oriented design and analysis techniques. Software testing, reliability assessment. Software modularity, portability, reusability. Project management.
Pre: COMS 280 and 340
F, S

481 (4) Rapid Application Development

In-depth understanding of low and high CASE tools and rapid application development. CASE tools will range from the traditional software development life cycle to object-oriented client/server environments. Extensive team-oriented applications will be developed using tools such as SYNON, OBSYDIAN, Power Builder, and MS-SQL server.
Pre: COMS 280
F, S

490 (1-8) Computer Science Workshop

Workshops vary in content as announced in class schedule.
Pre: Consent
V

491 (1-6) In-Service in Computer Science

This course is designed to meet the needs of kindergarten through twelfth grade practicing teaching majors who wish to enhance their technology-related skills and knowledge. Both lab and lecture activities are used to provide participants guided experiences with current applications of technology.
Pre: Consent
V

492 (3) Computers in the Classroom

Using both a lecture and lab format, this course provides students with a foundation for developing computer-delivered instruction within the classroom by examining the hardware and software which are part of emerging technologies, and the research issues associated with the developing effective instruction using the computer.
Pre: Senior status
V

493 (3) Computer Based Instructional Systems

This course provides participants with opportunities to develop, implement, and assess formative and summative evaluation instruments; identify researchable issues in computer-delivered instruction; develop computer-delivered instruction using a sophisticated authoring tool.
Pre: Senior status
V

495 (1) Seminar in Computer Science

Provides Computer Science majors and minors an opportunity to explore a topic not normally covered in the curriculum in a small-group setting.
Pre: Consent
V

496 (1-4) Selected Topics in Computer Science

Special topics not covered in other courses. May be repeated for credit on each new topic.
Pre: Consent
V

497 (1-12) Internship

This course is designed to provide students with an opportunity to utilize their training in a real-world business environment. Participants are placed and supervised in selected locations by the internship coordinator for a minimum period of one semester while working under the guidance and direction of a full-time staff member. (At most 6 hours toward a major in this department)
Pre: Admission to the CS, CIS, or MIS major, completion of the required General Education and support courses, completion of Computer Science core and consent.
V

499 (1-2) Individual Study

Problems on an individual basis.
Pre: Consent
V

Computer Engineering

*College of Science, Engineering & Technology
Department of Electrical and Computer Engineering and Technology
137 Trafton Science Center S • 507-389-5747
Website: <http://www.ee.mnsu.edu>*

Chair: Tom Hendrickson, Ph.D.
Program Coordinator: Rajiv Kapadia, Ph.D

Carl Gruber, Ph.D., Tom Hendrickson, Ph.D., Han-Way Huang, Ph.D., Bill Hudson, Ph.D., Rajiv Kapadia, Ph.D., Muhammad Khaliq, Ph.D., Paul Lindfors, Ph.D., Julio Mandojana, Ph.D., Ramakrishna Nair, Ph.D., George O'Clock, Ph.D.

Computer Engineering (CE) encompasses the research, development, design and operation of computers and computerized systems and their components. The primary objective of the Computer Engineering program is to educate engineering professionals who possess a sound design and analytical background coupled with a strong laboratory experience. This means that the department expects to prepare its graduates equally for:

1. Entry into the engineering work environment with well developed design and laboratory skills.
2. Further study toward advanced degrees in engineering and other related disciplines.
3. Advancement into managerial ranks and/or entrepreneurial endeavors.

In support of this objective, the program provides a curriculum including the following components:

1. A strong background in the physical sciences, math-

Computer Engineering

- ematics, and the engineering sciences including extensive hands-on laboratory instruction.
2. An integrated design component to the curriculum including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the freshman year and concludes with a capstone design project.
 3. A choice of several subdisciplines in their senior level elective.
 4. Courses in business and economics to promote awareness of management and the economic aspects of engineering.
 5. Preparation for continuing study and professional development.

The curriculum offers students the opportunity to emphasize a number of specialized areas including advanced digital systems, communications, digital signal processing, networking, and system design.

The recommended high school preparation is two years of algebra, one year of geometry, one-half year of trigonometry, one-half year of college algebra, and a year each of physics and chemistry plus a programming language. Without this background it may take students longer than four years to earn a degree. During the first two years students take science and mathematics courses common to all branches of engineering (pre-engineering), as well as supporting work in English, humanities, and social sciences. Second-year computer engineering students complete physics, mathematics and 200-level engineering and computer science courses.

Admission to Major. Admission to the college is necessary before enrolling in non-engineering 300- and 400-level courses. Admission to the college is granted by the department. Minimum college requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).
Please contact the department for application procedures.

During spring semester of the sophomore year, students should submit an application form for admission to the junior-level computer engineering program. Admission to the program is selective and, following applications to the department, subject to approval from the faculty. The department makes a special effort to accommodate transfer students and has joint admissions agreements with many community colleges. Only students admitted to the program are permitted to enroll in upper-division engineering courses. No transfer credits are allowed for upper-division engineering courses except by faculty review followed by written permission.

Before being accepted into the program and admitted to 300-level engineering courses (typically in the fall semester), a student must complete a minimum of 48 semester credits as follows:

- General Physics (calculus-based) (10 cr.)
- Calculus and Differential Equations (16 cr.)

- Electrical Engineering Circuit Analysis I and II (including laboratory) (7 cr.)
- Chemistry (5 cr.)
- English Composition (4 cr.)
- Computer Sciences (Java and C++) (6cr.)

A cumulative GPA of 2.5 for all science and math courses must have been achieved for program admittance. Grades must be "C" or better for courses to be accepted.

GPA Policy. Students graduating with a degree in Computer Engineering must have:

- 1) completed a minimum of 20 semester credit hours of upper division EE and COMS courses at MSU.
- 2) have a cumulative GPA of 2.25 on all upper division EE and COMS courses, and
- 3) have completed their senior design sequence at MSU.

COMPUTER ENGINEERING BS

Required for Major (Prerequisites, 60 cr):

CHEM	201	General Chemistry I (5)
COMS	110	Fundamentals of Computer Sci. (4)
COMS	111	Fundamentals of Computer Sci. II (4)
COMS	112	Fundamentals of Computer Sci. III (4)
COMS	171	Intro. to C++ Programming (2)
EE	230	Circuit Analysis I (3)
EE	231	Circuit Analysis II (3)
EE	240	Evaluation of Circuits (1)
EE	244	Intro. to Digital Systems (2)
EE	254	Digital and Circuits Lab (1)
ENG	101	Composition I (4)
ENG	271	Technical Communication (4) or
SPEE	240	Tech Presentations (3) or
SPEE	102	Public Speaking (3)
MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
MATH	321	Ordinary Differential Equations (4)
MATH	354	Concepts of Probability and Statistics (3) or
ME	291	Engineering Analysis (3)
PHYS	221	General Physics I (5)
PHYS	222	General Physics II (5)

Required for Major (additional General Studies) Additional Supporting Studies (13 cr.)

Choose a minimum of 13 credits from the following Humanities and Social Sciences courses:

Humanities (6-7 credits)

Courses acceptable by department or program include: ART 160, 260, 261, 413, 416, 419, 460, 462, 463, 466, 469; ENG 112, 113, 114, 320, 321, 325, 327, 328, 331, 332, 400, 401, 402, 403, 405, 406, 416, 478, 479, 481; FOREIGN LANGUAGE 200 level or above; HIST all except 490 and higher; HUM 150, 155, 250*, 251, 280, 281, 282; MASS 110, 411, 412; MUS 120, 125, 126, 220, 221, 222, 422, 423, 424, 425, 426, 429, 432; PHIL all except 490 and higher; SPEE 100-203, 300, 315-403, 412, 413; THEA 100, 252, 283, 285, 481, 482.

* Note: EET 125 may be substituted for HUM 250

Social Sciences (6-7 credits)

Courses accepted by department or program include:

ANTH all courses except 480 and above; GEOG 100, 101, 103, 340, 341, 425, 430, 435, 437, 445, 446, 450, 454, 456; POL all except 420, 421, 422, 490 and above; PSYC all except 201, 202, 291, 303, 390, 391, 473 and above; SOC all except 201, 202, 466, 469, 470, 485 and above; URSB all except 301, 302, 481 and above; WOST all except 260, 277, 290, 320, 430, 460 and above.

In general, graduation credits toward the humanities requirement is not allowed for any course in subject areas such as speech communication, writing, art, music or theater that involve performance or practice of basic skills.

At least 3 credits of the courses selected to complete the above requirements must be 300-level or above. At least one 300-level course must follow a lower level course in the same subject area.

In addition, you must select one course from the following:

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)

Required for Major (Engineering Plus Computer Science, 52 cr):

COMS	210	Data Structures and Algorithms (4)
COMS	280	Systems Analysis and Design (4)
COMS	360	Systems Programming (4) or
COMS	432	Robotics (4)
COMS	460	Operating Systems (4)
COMS	462	Data Communications and Networks I (4)
EE	250	Engineering Economics (2)
EE	332	Electronic Circuits and Devices (4)
EE	333	Digital and Analog Electronic Systems (4)
EE	334	Microprocessor Engineering (3)
EE	337	Principles of Engineering Design (1)
EE	342	Electronics Design Laboratory (1)
EE	344	Design and Evaluation of Microprocessors (1)
EE	353	Communication Systems Engineering (2)
EE	363	Communication Systems Laboratory (1)
EE	380	Advanced Digital System Design (2)
EE	462	Advanced Digital System (4)
EE	467	Principles of Engineering Design I (2)
EE	477	Principles of Engineering Design II (2)
EE	453	Advanced Communications Systems Engineering (3)
		or
EE	484	VLSI Design (3)

Required Minor: None.

GPA: A cumulative grade-point average of 2.5 for all science, math and engineering courses must have been maintained. Grades must be C or better for course to be accepted. MSU students should complete the pre-engineering courses listed under the major.

COURSE DESCRIPTIONS

Computer Science:

110 (4) Introduction to Computer Science

Provides a comprehensive introduction to the algorithmic foundations of computer science, computer hardware, computer software, computer applications, and social issues. Lab work develops familiarity with a variety of software and hardware. Intended to provide knowledge and skills applicable to all disciplines while providing specialized preparation for further study in Computer & Information Sciences.

Co-Req: MATH 112

F, S

111 (4) Fundamentals of Computer Science I

The first course in a two-course sequence for students who are planning to major or minor in computer science, computer engineering, or computer engineering technology. Emphasizes concepts that provide a basic background for continuing study in computer science. High-level language programming, use of abstraction in program design.

Pre: MATH 112 and COMS 110 or equivalent.

F, S

112 (4) Fundamentals of Computer Science II

A continuation of COMS 111. Introduction to object oriented programming techniques and essential data structures such as stacks and queues.

Pre: COMS 111

F, S

171 (2) Introduction to C++ Programming

This course provides an introduction to programming using C++. Emphasis on structured programming concepts, with a brief discussion of object-oriented programming. Control structures, expressions, input/output, arrays, and functions.

F, S

210 (4) Data Structures and Algorithms

Study of trees, hashing, and graph algorithms. Analysis of algorithms, memory management, and proof techniques.

Pre: COMS 103, MATH 180 or 121

F

280 (4) Systems Analysis and Design

This course explores both structured as well as object oriented systems analysis and design. Use of upper and lower CASE tools are employed in the analysis, design and implementation of a team oriented term project.

Pre: COMS 102

F, S

360 (4) Systems Programming

Machine level I/O and operating system file processing. Structure of systems programs including assemblers, linkers, and object oriented utilities and interfaces. Writing utility programs and extensions to an operating system.

Pre: COMS 260

ALT

460 (4) Operating Systems

This course covers basic operating systems concepts including processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, schedul-

Computer Engineering

ing, performance evaluation, file systems, storage, devices, protection, security, privacy and distributed systems.
Pre: COMS 320 F

462 (4) Data Communications and Networks I

Computer communication networks. OSI model. Local area networks. Data transmission strategies. Error detection and recovery. Flow control.
Pre: COMS 103 F

Electrical Engineering:

101 (1) Introduction to Engineering I

Discussion of historical, educational, and professional aspects of engineering. Problem solving, study approaches and techniques, and the motivation behind modern engineering education and practices. Lab sessions cover the basics of word processing, spreadsheets, databases, drawing, and graphing programs.
F

230 (3) Circuit Analysis I

This course is meant to develop Electrical Engineering Circuit Analysis skills in DC and AC circuits. It includes circuit laws and theorems, mesh and node analysis, sinusoidal steady state analysis, impedance/admittance concepts, resonant circuits, frequency response, and first order circuit transients.
Pre: PHYS 222 or concurrent; MATH 321 or concurrent F

231 (3) Circuit Analysis II

Continuation of Circuit Analysis I to include special topics in circuit analysis.
Pre: EE 230 and 240 S

240 (1) Evaluation of Circuits

Laboratory support for EE 230. Experimental evaluation of circuits including operational amplifier circuits. Verification of the theoretical concepts covered in EE 230 will be realized in the laboratory.
Pre: Must take concurrently with EE 230 F

244 (2) Introduction to Digital Systems

A study of theoretical and practical aspects of digital systems including Boolean algebra, number systems, logic devices, Karnaugh maps, and sequential machines.
Pre: MATH 122 S

250 (2) Engineering Economics

Overview of accounting and finance and their interactions with engineering, manufacturing, marketing, R&D and sales. Lectures include the development and analysis of financial statements, time value of money, decision making tools (stochastic and non-stochastic), ratio analysis, cost of capital, cash flow, rate of return and forecasting techniques.
F

254 (1) Digital and Circuits Lab

Laboratory support for EE 231 and EE 244. Experimental evaluation of AC and transient circuits, digital logic devices including logic gates, flip flops, and sequential machines. Some simulation and testing of PAL

devices and memory IC's.

Pre: EE 230, 240 and concurrently with EE 231 and 244 S

332 (4) Electronic Circuits and Devices

Electronic amplifier concepts and real operational amplifier networks. Semiconductor device characteristics including Diodes, BJT's, JFET's, MOSFET's, and GaAsFET's. Also discuss DC bias circuits, along with small signal, large signal, and PSPICE device modeling and analysis. Small-signal amplifiers (single and multi-stage), power amplifiers, differential amplifiers, and feedback amplifiers, concepts and design will all be discussed.
Pre: EE 231, admission to EE program F

333 (4) Digital and Analog Electronic Systems

EE electronics sequence with EE 332. Feedback systems/stability; oscillator concepts and systems. Filters and tuned amplifiers. Design of IC operational amplifier. Hysteresis, bi-stability and nonlinear functional circuits; 555 timer. A/D and D/A converters. MOS and bipolar digital electronic circuits; memory. Electronic noise. Power switching devices.
Pre: EE 332 S

334 (3) Microprocessor Engineering

Use of microprocessors and microcontrollers in engineering applications. Topics include assembly language programming, smart and programmable controllers, memory design including dynamic memory and direct memory access, bus standards and protocol, serial and parallel I/O, interfacing with other programmable systems, maskable and non-maskable interrupts.
Pre: EE 244 F

337 (1) Principles of Engineering Design

Application of the design techniques in the engineering profession. Electrical engineering project and program management and evaluation including computer assisted tools for planning and reporting, design-to-specification techniques and economic constraints.
Pre: Admission to EE program S

342 (1) Electronics Design Laboratory

Properties of materials; measurement of electronic device characteristics. Experimental evaluation of electronic amplifier designs. Experimental characteristics of feedback topologies; oscillator and op-amp circuit design and design verification. Power amplifier graphical design.
Pre: EE 231; 303 and 332 taken concurrently F

344 (1) Design and Evaluation of Microprocessors

Laboratory support for EE 334. Study of various single board computers through assembly language programming. Basic input/output, ports, memory, addressing, timers, A/D converters, serial and parallel communication protocol, and interrupt processing. One half design credit.
Pre: Concurrent with EE 334 F

353 (2) Communication Systems Engineering

Signals and Systems, Fourier transforms, Parseval's theorem. Autocorrelation functions and spectral density functions. Information theory. Noise and noise figure, probability and statistics. Transformation of random variables, probability of error and bit error rate. Modulation and demodulation. Overview of analog, sampled analog and digital communication systems. Spread spectrum systems.

Pre: EE 333 and 341 S

363 (1) Communication Systems Laboratory

Measurement techniques using the oscilloscope, spectrum analyzer and network analyzer. Signals and spectra. Frequency response. Noise and noise figure measurements. Intermodulation products. Amplitude and frequency modulation/demodulation. Sampling, aliasing, and intersymbol interference. Bit error measurement.

Pre: Concurrent with EE 353 S

380 (2) Advanced Digital System Design

Combinatorial circuit design with Karnaugh map and tabular method; using MSI chip as building blocks in a digital system; circuits of latches, flip-flops, and registers; design of counters; types of sequential circuits; design process of sequential circuits; minimization of sequential circuit design by performing state reduction and state encoding optimization; syntax and semantics of VHDL language; using VHDL in modeling and simulation digital circuits; implementation of digital system in complex programmable logic devices (CPLDs).

F

462 (4) Advanced Digital System

A study of finite state machine design, hardware description language, principles of instruction execution, instruction pipe lining, superscalar processor design, multiprocessor systems and memory system design.

Pre: EE 333 and 334 F

467 (2) Principles of Engineering Design I

Design and organization of engineering projects. Project proposals, reporting, feasibility studies, and interpretation. Specification preparation, interpretation, and control. Issues involving creativity, project planning and control, and intellectual property rights. Students enrolled in this course must initiate and complete a design project in a small team format.

Pre: EE 337 and senior standing F

477 (2) Principles of Engineering Design II

Completion of design projects and reports. Lectures on ethics, issues in contracting and liability, concurrent engineering, ergonomics and environmental issues, economics and manufacturability, reliability and product lifetimes. Lectures by faculty and practicing engineers.

Pre: EE 467 S

481 (1) VLSI Design Laboratory

Laboratory to accompany EE 484 VLSI design. Individual IC design projects will be assigned using IC layout tools and simulation software. Culminates in a group

project fabricatable under MOSIS.

Pre: Concurrent with EE 484 S

484 (4) VLSI Design

VLSI technology. MOS and Bipolar transistor theory, SPICE models. Transistor structure and IC fabrication processes; layout design rules. Custom CMOS/BICMOS logic design and layout topologies; cell layout/chip partitioning/clocking. Bipolar/MOS analog circuit design and layout. Group design project. Library research study.

Pre: EE 333 S

Computer Engineering Technology

*College of Science, Engineering & Technology
Department of Electrical and Computer Engineering and Technology*

137 Trafton Science Center S • 507-389-5747

Chair: Tom Hendrickson, Ph.D.

Program Coordinator: Lindsay Hess, Ph.D.

Carl Gruber, Ph.D., Tom Hendrickson, Ph.D., Lindsay Hess, Ph.D., Han-Way Huang, Ph.D., Bill Hudson, Ph.D., Rajiv Kapadia, Ph.D., Muhammad Khaliq, Ph.D., Paul Lindfors, Ph.D., Julio Mandojana, Ph.D., Ramakrishna Nair, Ph.D., George O'Clock, Ph.D.

Computer Engineering Technology is a technological field requiring the application of scientific and engineering knowledge and methods, combined with technical skills, in support of computer activities. A computer engineering technologist is a person who is knowledgeable in computer hardware and software theory and design and who can apply them to a variety of industrial and consumer problems. Computers, controls/automation, robotics, instrumentation, and communications are just a few fields open to computer engineering technologists.

The program strives to prepare students for successful entry into the technical workforce. This means that the curriculum prepares students to:

1. Apply knowledge of mathematics, science, and computer engineering to problems.
2. Design and construct experiments and analyze and interpret the resulting data.
3. Design systems, components, or processes to meet specified needs.
4. Function effectively in teams.
5. Identify, formulate, and solve problems in computer engineering technology.
6. Understand their professional and ethical responsibilities.
7. Communicate effectively.

Admission to Major is granted by the department. Minimum program admission requirements are:

Computer Engineering Technology

- a minimum of 32 earned semester credit hours.
 - a minimum cumulative GPA of 2.00 (C).
- Contact the department for application procedures.

Students who do not have the required background for MATH 115 may have to take additional preparatory coursework as well. Consult with your major adviser to plan your general education and major requirements.

All students must complete a minimum of 12 semester credits of mathematics starting with Precalculus math and a minimum of 24 semester credits of mathematics and science courses.

COMPUTER ENGINEERING TECHNOLOGY BS

It is strongly recommended that all CET students enroll in EET 101 Introduction to EET/CET in their freshman year.

Required for Major (Communication, Mathematics and Science, 36 cr):

ENG 101	Composition (4)
ENG 271	Technical Communication (4)
MATH 115	Precalculus Mathematics (4)
MATH 121	Calculus I (4)
MATH 127	Calculus II for Engineering Technology: Integration (2)
MATH 180	Math for Computer Science (4)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4)
SPEE 102	Public Speaking (3)

Choose one of the following:

STAT 154	Elementary Statistics (3)
MATH 354	Concepts of Probability and Statistics (3)
CHEM 105	Introduction to Chemistry (3)

Required for Major (COMS, 20 cr):

COMS 110	Introduction to Computer Science (4)
COMS 111	Fundamentals of Computer Science I (4)
COMS 112	Fundamentals of Computer Science II (4)
COMS 280	Systems Analysis and Design (4)
COMS 340	Database Systems Management I (4)

Required for Major (EET, 46 cr):

EET 113	DC Circuits (3)
EET 114	AC Circuits (3)
EET 221	Electronic CAD (3)
EET 222	Electronics I (4)
EET 223	Electronics II (4)
EET 225	Digital Principles (3)
EET 241	Electronic Shop Practices (2)
EET 400	Network Analysis (3)
EET 454	Microprocessors I (4)
EET 456	Communications I (4)
EET 480	Automatic Controls (3)
EET 484	Microprocessors II (4)
EET 488	Senior Project Design I (1)
EET 489	Senior Project Design II (2)
EET 497*	Internship (3)

* You may substitute one EET advanced elective for internship. Permission required.

Required Minor: None.

NETWORKING OPTION

Required for Option (Communication, Mathematics, and Science, 36 cr):

CHEM 105	Introduction to Chemistry (3)
ENG 101	Composition (4)
ENG 271	Technical Writing (4)
MATH 115	Precalculus Mathematics (4)
MATH 121	Calculus I (4)
MATH 127	Calculus II for Engineering Technology: Integration (2)
MATH 180	Math for Computer Science (4)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4)
SPEE 102	Public Speaking (3)

Required for Option (COMS, 22 cr):

COMS 110	Introduction to Computer Science (4)
COMS 111	Fundamentals of Computer Science I (4)
COMS 112	Fundamentals of Computer Science II (4)
COMS 171	Introduction to C++ Programming (2)
COMS 280	Systems Analysis and Design (4)
COMS 340	Database Systems Management I (4)

Required for Option (EET, 48 cr):

EET 113	D C Circuits (3)
EET 114	A C Circuits (3)
EET 221	Electronic CAD (3)
EET 222	Electronics I (4)
EET 225	Digital Principles (3)
EET 230	Microcomputer Technology (4)
EET 241	Electronic Shop Practices (2)
EET 430	Computer Networking I (4)
EET 431	Computer Networking II (4)
EET 454	Microprocessors I (4)
EET 456	Communications I (4)
EET 484	Microprocessors II (4)
EET 488	Senior Project Design I (1)
EET 489	Senior Project Design II (2)
EET 497*	Internship (3)

* You may substitute one EET advanced elective for internship. Permission required.

Required Minor: None

POLICIES/INFORMATION

GPA Policy. Students graduating with a degree in Computer Engineering Technology must have (1) completed a minimum of 20 semester credit hours of upper division EET and COMS at MSU, (2) have a cumulative GPA of 2.0 or better on all upper division EET and COMS courses, and (3) have completed their senior design sequence at MSU.

P/N Grading Policy. A student who majors in CET must elect the grade option for all required courses including general education courses listed by number even if offered by another department.

If the credits earned for composition, technical writing and speech courses equal less than 9 credits, either an advanced speech course or a course in English language literature must be selected as a general elective.

Transfer of credit to the CET major is subject to policies described in this bulletin for all students transferring to MSU and to the following department policies:

1. All transfer students must take EET 221 if not proficient with current MSU software.
2. For courses taken at technical colleges/vocational technical schools and pertinent courses taken in the military the student may receive up to 8 credits upon review of course materials, grades and written approval by the program coordinator. These credits may be used for EET 112, 113, and 114. The student may also attempt to test out of EET 114, 222, 223 and 225.
3. For courses taken at community colleges and four-year colleges, up to 25 credits may be accepted if the transcript is from an ABET-accredited program. If the program is not accredited by ABET, up to 20 credits may be accepted. Grades of transfer credits must be C or better to be acceptable for substitution for required courses.

Testing for course credit will be available via prior application made with the program coordinator. Students may not apply for credit by examination for an EET course in which they were previously enrolled at MSU or for any EET course above EET 225.

COURSE DESCRIPTIONS

Electronic Engineering Technology:

101 (1) Introduction to EET/CET

Information and hands-on experiences regarding EET/CET courses and careers, creative problem solving, reverse engineering, group projects, introduction to EET/CET laboratories, computers and software, speakers from industry, and technical communications. One hour lecture and one hour lab per week. F

113 (3) DC Circuits

A study of DC electrical circuits, Kirchhoff's laws, series and parallel circuits, inductors, capacitors, Thevenin's equivalent circuit theorem, and other network analysis theorems.

Pre: MATH 115, or concurrent F, S

114 (3) AC Circuits

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems.

Pre: EET 113 and MATH 115 F, S

221 (3) Electronic CAD

Drafting Principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation data, and printed circuit board layout and construction. F

222 (4) Electronics I

An introduction to semiconductor theory and circuits; includes characteristics curves, biasing techniques and

small signal analysis of FETs and MOSFETs, feedback concept, BJT and FETs frequency response.

Pre: EET 114 or concurrent F

223 (4) Electronics II

Differential amplifier, linear and nonlinear operational amplifier, power amplifier, linear digital ICs, oscillators, power supplies, D/A, A/D conversion, four layered devices and their applications.

Pre: EET 222 S

225 (3) Digital Principles

A study of number systems, Boolean algebra, switching function minimization techniques, binary arithmetic, small scale and medium scale logic chips, programmable logic devices, latches, flip-flops, registers and counters, and sequential circuit design. S

230 (4) Microcomputer Technology

An introduction to the installation, configuration, upgrading, troubleshooting, and repair of microcomputers. Basic knowledge of desktop systems, basic networking concepts and printers will be introduced. Safety and common preventive maintenance procedures will be covered.

Pre: EET 113 S

241 (2) Electronic Shop Practices

An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards.

Pre: EET 222 and 221 S

393 (1-4) Practicum

Elective credit for approved experience in off-campus work related to CET major. Permission required.

F, S

400 (3) Network Analysis

A course in network analysis that stresses time, frequency and Laplace transform domain techniques.

Pre: EET 114 and MATH 127 S

425 (3) Advanced Digital Design

A study of multiple-output switching functions optimization, flip-flops, registers and counters, programmable logic devices, synchronous sequential circuit design and synthesis, pulse mode and fundamental model sequential circuit design, test methods, and test vector generation.

Pre: EET 225 S

430 (4) Computer Networking I

An introduction to the basic foundations of computer networking. The course will encompass telecommunications, local area networks, and wireless communication. Topics covered include the OSI model, the TCP/IP model, different network topologies and associated hardware, error detection and correction, protocols and security.

Pre: EET 230 and COMS 112 F

431 (4) Computer Networking II

A continuation of EET 430. Router configurations, advanced LAN topologies, network configurations, pro-

ocols, and switching designs. Network troubleshooting and threaded case studies.

Pre: EET 430 S

454 (4) Microprocessors I

A study of microcomputer hardware and software fundamentals, the instruction set and the addressing modes of a microprocessor/microcontroller, assembly programming, basic I/O concepts, parallel I/O methods, asynchronous serial I/O method, synchronous serial I/O methods, A/O conversion, timer applications, etc.

Pre: EET 225 S

456 (4) Communications I

Communications principles & systems, practical engineering aspects involved in modulation demodulation, receivers, transmitters & filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.

Pre: EET 223 S

480 (3) Automatic Controls

Servomechanism analysis under transient and steady state conditions. Negative and positive feedback. Laplace transform analysis of feedback systems. Frequency response. System stability analysis using Bode plots and Root locus. Lead and velocity compensation. Analog computers. Microprocessor control and the analog/digital interface.

Pre: EET 400 F

484 (4) Microprocessors II

A study of a high performance microprocessor architecture, bus cycles, memory system design, DMA controller, hard disk drive, system bus, PC architecture and subsystems, PC programming assembly and C++.

Pre: EET 454 F

486 (3) Communications II

State-of-the-art in communication technology, RF/microwaves, transmission lines, applications, Mobile communications, cellular communications, satellite communications, optical fiber communications.

Pre: EET 456 F

488 (1) Senior Project Design I

An individual design project performed in consultation with the instructor. Phase I includes the acceptance of the proposal, defining, and limiting the project objectives, initial source contacts and procurement of materials.

Pre: EET 241, four 400-level EET courses F, S

489 (2) Senior Project Design II

Phase II includes completion of the project with evidence of extensive laboratory performance. A final oral report to the class and a standard formal written report are required.

Pre: EET 488 F, S

497 (1-6) Internship

Should be taken at end of junior year. Permission required.

Pre: 40 hrs EET credit F, S

499 (1-4) Individual Study F, S

Computer and Information Science:

110 (4) Introduction to Computer Science

Provides a comprehensive introduction to the algorithmic foundations of computer science, computer hardware, computer software, computer applications, and social issues. Lab work develops familiarity with a variety of software and hardware. Intended to provide knowledge and skills applicable to all disciplines while providing specialized preparation for further study in Computer & Information Sciences. F, S

111 (4) Fundamentals of Computer Science I

The first course in a two-course sequence for students who are planning to major or minor in computer science. Emphasizes concepts that provide a basic background for continuing study in computer science. High-level language programming, use of abstraction in program design.

Pre: MATH 112 and COMS 110, or equivalent

F, S

112 (4) Fundamentals of Computer Science II

A continuation of 102. Introduction to object-oriented programming techniques and essential data structures such as stacks and queues.

Pre: COMS 111 F, S

171 (2) Introduction to C++ Programming

This course provides an introduction to programming using C++. Emphasis on structured programming concepts, with a brief discussion of object-oriented programming. Control structures, expressions, input/output, arrays, and functions.

F, S

280 (4) Systems Analysis and Design

This course explores both structured as well as object-oriented systems analysis and design. Use of upper and lower CASE tools are employed in the analysis, design, and implementation of a team oriented term project.

Pre: COMS 111 F, S

340 (4) Database Management Systems I

Introduction to the concept of database systems; database models; database management systems; file organization; design of databases using data modeling and normalization; conversion of data model into relational, network, and hierarchical data models; extensive coverage of SQL and implementation of an application using a relational database in a team environment.

Pre: COMS 280 F, S

Corporate & Community Fitness/Wellness

College of Allied Health & Nursing
Department of Human Performance
 Chair: Harry Krampf
 122 Highland Center • 507-389-6313

Coordinator: Mary Visser

This minor is designed to prepare individuals for a corporate or community-based position requiring basic exercise programming and personal training skills.

CORPORATE & COMMUNITY FITNESS MINOR

Required General Education (4 credits)

HP 175 Fitness Activity (1)
 HLTH 210 First Aid and CPR (3)

Required Support Courses (8 credits)

BIOL 220 Human Anatomy (4)
 BIOL 230 Human Physiology (4)

Required for Minor (Core, 17-24 credits)

HP 348 Structural Kinesiology and Biomechanics (3)
 HP 414 Physiology of Exercise (3)
 HP 436 Nutrition in Exercise and Sport (2)
 HP 465 Legal Aspects of Physical Education and Sport (3)
 HP 466 Graded Exercise Testing and Exercise Prescription (3)
 HP 492 Internship: Corporate and Community Fitness (3-10)

POLICIES/INFORMATION

GPA Policy. Maintain an overall minimum GPA of 2.00.

P/N Grading Policy. Courses required must be taken for a grade. Except for the Internship (492/692) which is graded P/N.

Corrections

College of Social & Behavioral Sciences
Department of Sociology & Corrections
 113 Armstrong Hall • 507-389-1561
 Website: <http://www.mnsu.edu/dept/soccor/web/sc.html>

Chair: William Wagner

Barbara Carson, Joe W. Davis, Kim Greer, James Robertson, Pedro Thomas, William Wagner

The Corrections major is designed to prepare students for entry level professional work in corrections. The major is built upon a foundation of general education, sociological concepts, and a commitment to understanding and trans-

forming correctional practice. The major achieves its objectives through the melding of academic learning with experiential education. This program is further expected to promote, within corrections and to the community at large, a commitment to the principles of social justice, respect, tolerance, dignity and worth of all persons.

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

CORRECTIONS BS

Required General Education (6 credits):

SOC 101 Introduction to Sociology (3)
 CORR 106 Introduction to Criminal Justice Systems (3)

Required for Major (Core, 33 credits):

CORR 255 Juvenile Delinquency (3)
 CORR 300 Foundations and Orientation to Corrections (3)
 CORR 442 Criminology (3)
 CORR 443 Penology (3)
 CORR 447 Community Corrections (3)
 CORR 448 Correctional Law (3)
 CORR 449 Correctional Counseling (3)
 CORR 496 Field Practice in Corrections (10)
 CORR 497 Capstone Seminar (2)

Required Electives (15 credits):

Choose six credits from the following:

SOC 409 Family Violence (3)
 CORR 441 Social Deviance (3)
 CORR 451 Law and Justice in Society (3)
 CORR 452 Victimology (3)
 CORR 453 Treatment Methods in Corrections (3)
 CORR 459 Issues in Corrections (3)
 CORR 465 Law and Chemical Dependency (3)

Choose one course from Social and Behavioral:

SOC 351 Social Psychology (3)
 SOC 486 Modifying Behavior in Social Settings (3)

Choose one course from Methods of Research:

SOC 201 Social Research I (3)
 SOC 469 Survey Research (3)
 SOC 479 Sociological Ethnography (3)
 SOC 480 Social Observation (3)

Choose one course from Inequality, Race, Gender and Ethnicity:

SOC 463 Social Stratification (3)
 SOC 446 Race, Culture and Ethnicity (3)
 SOC 485 Selected Topics:
 - Women, Crime, and Social Control (3)
 - Race, Crime, and Justice (3)

or other approved diversity course

Required Minor. Yes.

Corrections

CORRECTIONS MINOR

Required for Minor (Core, 9 cr):

CORR 106 Introduction to Criminal Justice Systems (3)

Choose at least two courses from the following:

CORR 255 Juvenile Delinquency (3)

CORR 441 Social Deviance (3)

CORR 442 Criminology (3)

Required Electives for Minor (12 cr):

CORR 300-400 Level

CORR 300-400 Level

CORR 300-400 Level

CORR 300-400 Level

POLICIES/INFORMATION

GPA Policy: A minimum grade-point average of 2.0 is required for all coursework in the major. A minimum cumulative grade-point average of 2.5 for courses taken in the major to be eligible for field practice or internship.

P/N Grading Policy: Courses leading to a major or minor in Corrections may not be taken on a P/N basis, except where P/N grading is mandatory.

COURSE DESCRIPTIONS

106 (3) Introduction To Criminal Justice Systems

Examines the making of criminal law, the evolution of policing, the adjudication of persons accused of criminal law violations, and the punishment of adult offenders.

F, S

132 (3) Crime and Punishment

An interdisciplinary course which explores crime and punishment utilizing and developing critical thinking skills. Emphasis is placed on the process of developing and critiquing one's own hypotheses as they relate to crime and punishment.

F

250 (3) Social Justice in School and Community

Analyzing justice as it relates to (1) education, and (2) the criminal justice system. Emphasis is on comparing Retributive Systems with the "newer" Restorative Justice. Active learning methods in the classroom, schools and communities, including Service-Learning.

V

255 (3) Juvenile Delinquency

A critical consideration of definitions of juvenile delinquency, emphasis on micro and macro level of struggle in which delinquent behavior takes place, critique of current theories on delinquency, and the juvenile justice response to delinquency.

F, S

291 (1-3) Exploratory Studies

May be used to explore areas of interest not covered in regular courses. A maximum of three hours applicable toward a major or minor in the department with consent of

an advisor.

Pre: Consent

F, S

300 (3) Foundations and Orientation To Corrections

To introduce majors to academic concepts and policy issues in Corrections. Begin student portfolios to connect learning across classes. Participate in service-learning experiences working with clients in corrections.

Pre: CORR 106 and SOC 101

F, S

417 (3) Program Administration

Implications of Sociological Knowledge for the administration of Human Services programs. Theoretical and practical aspects of administration with the Social Service systems.

Pre: SOC 101

S

441 (3) Social Deviance

Sociological perspective on social deviance; overview of theoretical approaches; emphasis on symbolic interactionism; issues of social control; research examples and policy implications.

Pre: SOC 101

F, S

442 (3) Criminology

A critical consideration of myths concerning crime, perspectives on crime and their assumptions, current criminology theory, and construction of alternative explanations related to crime.

Pre: SOC 101

F, S

443 (3) Penology

Addresses the justifications and the historical development of punishment, the legal and policy issues concerning capital punishment, and the use of incarceration as a response to crime.

Pre: CORR 106 and 300

F, S

447 (3) Community Corrections

Philosophy, historical developments, and theoretical basis of probation, parole, and other community corrections programs. Evaluation of traditional and innovative programs in Community Corrections.

Pre: SOC 101 and CORR 106

F, S

448 (3) Correctional Law

Examines the rights of inmates, probationers, and parolees.

Pre: CORR 106 and 300

F, S

449 (3) Correctional Counseling

Principles and methods of individual and group counseling with juvenile and adult offenders; development of interpersonal helping skills.

F, S

451 (3) Law and Justice In Society

A critical look at the construction of the concepts of law and justice as it operates in the United States and an application of the principles of justice to community issues.

Pre: SOC 101 and CORR 106

S

452 (3) Victimology

Historical overview of characteristics of victims, victim-offender relationships, societal victimization, victim's rights

and services, and restorative justice.

Pre: SOC 101 and CORR 106 F

453 (3) Treatment Methods In Corrections

Examination of major correctional treatment models, e.g., individual and group counseling approaches, behavior modifications, reality therapy and transactional analysis. Considerations in planning, implementation and evaluating juvenile and adult treatment programs. Critical evaluation of research on the effectiveness of various treatment methods.

Pre: CORR 449 S

459 (3) Issues In Corrections

A critical examination of current issues in the correctional field.

S

465 (3) Law and Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse.

F

485 (2-6) Topics: Selected Topics

Topics vary as announced in class schedule. May be retaken for credit if topic varies.

Pre: SOC 101 V

491 (1-6) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

V

492 (1) Honors Reading

For Honors students only.

V

496 (10) Field Practice In Corrections

Full time experience in a corrections agency with an emphasis on the development of skills. For Corrections majors only. Required for major. Formal application required.

Pre: Consent F, S

497 (2) Capstone Seminar

Capstone is an evaluative course which allows students to document their learning and provide an assessment of their personal learning and the effectiveness of the Corrections Program. To be taken concurrently with CORR 496.

Pre: Completion of all other required CORR courses

F, S

498 (3-6) Internship In Corrections

The internship in Corrections is designed to provide opportunities to apply classroom learning, to practice and enhance skills, to experience professional socialization, and to explore a career. It also serves as a vehicle for the student to become more aware of personal strengths and to identify areas in which further growth is needed.

Pre: Consent F, S

499 (1-6) Individual Study

A maximum of six credits is applicable toward a single major in the department; three credits toward a minor.

Pre: Consent

Dance

College of Arts & Humanities

Department of Theatre and Dance

201 Performing Arts Center • 507-389-2118

Fax: 507-389-2922

Website: <http://www.msutheatre.com>

Coordinator: Julie Kerr-Berry

The minor in dance emphasizes the importance of the artist as both performer and educator through diverse technical and theoretical dance preparation. In their program of study, students are required to participate in a variety of dance forms, namely, modern dance, ballet, jazz, Afro-Caribbean and tap. They also choose from a variety of other coursework which includes: world dance, creative dance and dramatics, pedagogy, and composition. At the culmination of all coursework, seniors are required to complete a senior project or dance practicum. Through an audition, students may be selected to participate in performance and choreographic opportunities as a member of the University Repertory Dance Theatre or perform in mainstream musical theatre productions.

DANCE MINOR

Required for Minor (Core, 15 credits):

THEA	123	Beginning Jazz Dance (1)
THEA	125	Afro-Caribbean Dance Forms (1)
THEA	126	Beginning Ballet (1)
THEA	127	Beginning Tap Dance (1)
THEA	128	Beginning Modern Dance (1)
THEA	223	Intermediate Jazz Dance (2)
THEA	226	Intermediate Ballet (2)
THEA	227	Intermediate Tap Dance (2)
THEA	228	Intermediate Modern Dance (2)
THEA	328	Advanced Modern Dance/Company Class (2)

Choose ONE of the following tracks:

Performance (6 credits):

THEA	225	World Dance in Cultural Perspectives (3)
THEA	321	Dance Composition and Improvisation (2)
THEA	429	Senior Dance Project (1)

Teaching Track (6 credits):

THEA	324	Methods and Materials for Teaching Creative Dance and Dramatics (2)
THEA	329	Dance Practicum (1)
THEA	424	Dance and Theatre Pedagogy (3)

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for minor credit.

P/N Grading Policy. Required courses must be taken for a grade.

Dental Hygiene

COURSE DESCRIPTIONS

Descriptions and offerings of dance courses are listed under the THEATRE AND DANCE section. For other electives see appropriate departments.

Dental Hygiene

College of Allied Health & Nursing

Department of Dental Hygiene

3 Morris Hall • 507-389-1313

Website: <http://cahn.mnsu.edu/dentalhygiene/>

[hygienehomepage.html](http://cahn.mnsu.edu/dentalhygiene/hygienehomepage.html)

Chair: Esther Andrews

Terri Brown, Lynnette Engeswick, Lisa Fleck, Nancy Geistfeld, Karon Metz

The dental hygiene curriculum is designed to provide opportunities for the student to develop a sound clinical and theoretical foundation for the practice of dental hygiene. The graduate is prepared to fulfill the dental hygiene roles as clinician, change agent, educator, researcher and consumer advocate as put forth by the American Dental Hygienists' Association.

The program is designed to meet the American Dental Association's Commission on Dental Accreditation Standards for Dental Hygiene, and offers a Bachelor of Science degree upon completion.

Admission to Major. Application for admission to the Dental Hygiene program is a separate process in addition to being admitted to the University. Requirements for admission to the dental hygiene major are:

- 1) completion of at least 42 semester credits.
- 2) a minimum career grade-point average of 2.0.
- 3) successful completion of prerequisites of SPEE 100 or 102, ENG 101, PSYC 101, SOC 100 or 101, BIOL 220, and two of these three courses: BIOL 270, BIOL 230, or CHEM 111.
- 4) successful completion of Category 4: Mathematical/Logical Reasoning from the general education program.

Prior to enrollment in dental hygiene courses, students must have completed all general education and required support courses for the dental hygiene major. The application form may be obtained from the dental hygiene department secretary or a dental hygiene faculty member. The number of students admitted to the dental hygiene major is limited to 24 students admitted each fall semester. Applications are accepted primarily based on their academic achievement in prerequisite courses with an emphasis placed on the science courses. Students will be accepted for the Associate of Science degree in dental hygiene for two more years ending with the fall of 2002. Students interested in the Associate of Science in dental hygiene should refer to the 2000-2001 Undergraduate Bulletin for specific requirements.

DENTAL HYGIENE BS

Required General Education (44 credits):

Required General Education Courses:

ENG	101	Composition (4)#
SPEE	100	Fundamentals of Speech Communications (3)# or
SPEE	102	Public Speaking (3)#
CHEM	111	Chemistry of Life Processes (5)^
BIOL	270	Microbiology (4)^
PSYC	101	Psychology (4)#
SOC	100	Social Problems (3)# or
SOC	101	Introduction to Sociology (3)#
HLTH	101	Health and the Environment (3) ~
REHB	110	Sensitivity to Disability (3) ~
PHIL	222	Medical Ethics (3) ~

Recommended for Major (4 credits):

COMS	100	Intro to Computer Science (4) ~
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Required for Support Courses (23 credits):

BIOL	220	Human Anatomy (4) #
BIOL	230	Human Physiology (4) ^
FCS	240	Nutrition I (3) ~
HLTH	455	Health and Aging (3) ~
or		
BIOL	417	Biology of Aging and Chronic Diseases (3) ~
HLTH	475	Biostatistics (3) ~
HLTH	321	Medical Terminology (3) ~
HLTH	361	Health Communications (3) ~

#Prerequisites

^Two of these three courses must be successfully completed prior to submitting an application to the Dental Hygiene Program. The third course must be successfully completed prior to enrolling in dental hygiene courses.

~ Must be successfully completed prior to enrolling in dental hygiene courses.

Dental Hygiene Core (53 credits):

DHYG 311	DYHG 313	DHYG 319
DHYG 321	DHYG 325	DHYG 326
DHYG 327	DHYG 328	DHYG 329
DHYG 331	DHYG 332	DHYG 333
DHYG 421	DHYG 422	DHYG 423
DHYG 425	DHYG 427	DHYG 431
DHYG 432	DHYG 433	DHYG 435
DHYG 437		

Required Electives:

Electives to yield a total of 128 semester credits are required.

POLICIES/INFORMATION

Pass/No Credit Policy. All courses required for Dental Hygiene must be taken for a letter grade and a letter grade of C or higher must be achieved. A grade of D or F in a Dental Hygiene course will result in academic suspension from the program. Completion of course numbers

326 forward requires successful completion of previous Dental Hygiene courses obtaining a "C" or better in order to continue in the Dental Hygiene program.

Costs. A student in the dental hygiene program should be prepared to spend about \$300 each semester for books and supplies. An additional \$2,200+ will be spent for instruments, gloves, uniforms, etc. Approximately 50 percent is paid before beginning the program. Upon acceptance to the program a deposit of \$100.00 is required. The remainder is due in July of the following year. Students are also required to be vaccinated against Hepatitis B. This may be done at the Student Health Service or any medical clinic. Currently the vaccine series costs approximately \$150.

The Dental Assisting program is offered by South Central Technical College. The curriculum program is conducted on the Minnesota State University, Mankato campus in the Dental Hygiene area. Students are selected competitively and admitted fall semester only. Information and application forms for the dental assisting program can be obtained from SCTC., 1920 Lee Blvd., No. Mankato, MN 56003 507-625-3441.

COURSE DESCRIPTIONS

311 (3) Preclinical Orientation

This course includes an introduction to dental terminology and clinical aspects of dental hygiene treatment including care and use of equipment/instruments, infection control and preparation of patient records.

Pre: Admission into Dental Hygiene and Dental Terminology packet F

319 (2) Head and Neck Anatomy

Head and Neck Anatomy is the study of the hard and soft tissues of the head and neck including bones, muscles, nerves, blood supply, and glands, and how they function.

Pre: Admission into Dental Hygiene F

325 (2) Dental Anatomy

This course includes the study of the permanent, mixed and deciduous dentitions including each individual tooth's morphology, function and occlusion.

Pre: Admission into Dental Hygiene F

321 (3) Radiography

This course includes production of dental radiographs, physics of x-radiation, biologic effects, interpretation, processing, mounting, and laboratory practice on mannequins and patients. Special attention is given to infection control, safety precautions, and patient selection.

Pre: Admission into Dental Hygiene F

313 (3) Clinical Skill Development

This course will teach the operative techniques needed to perform oral prophylactic procedures and health education through laboratory/clinical practice.

Pre: Admission into Dental Hygiene F

326 (4) Dental Materials

Dental materials is the study of the fundamental elements, purposes and uses of the materials used in the modern dental office.

S

327 (2) Periodontology I

This course will include a study of supporting tooth structures, identification, classification, etiology, progression and treatment of periodontal diseases.

S

328 (1) Radiography Practicum

This course provides practical experience in the production of radiographs on patients in the clinical setting. This course also includes interpretation of radiographs.

S

331 (2) Clinical Dental Hygiene I

This course provides an opportunity for dental hygiene students to develop their roles as educators, clinicians, consumer advocates, change agents, researchers, and administrators in a clinical setting.

S

332 (2) Clinical Seminar I

This course includes the study of treatment planning, oral health education, ultrasonic scalers, cardiology, sealants, and new products. Library use and writing a research paper are also included.

S

329 (4) Oral Histology, Oral Embryology, Oral Pathology

Oral Histology and Embryology deals with the development of the face and the hard and soft tissues of the oral cavity. Oral Pathology deals with the causes and mechanisms of disease with special emphasis on common oral lesions and neoplasms stressing their etiology and clinical manifestations.

S

333 (2) Clinical Dental Hygiene IS

This course offers the student continued practice of dental hygiene treatment procedures in the MSU Dental Clinic.

S

421 (3) Clinical Dental Hygiene II

This course offers the student continued practice of dental hygiene treatment procedures in the MSU Dental Clinic. It includes several mandatory off-campus experiences.

F

422 (2) Clinical Seminar II

This course focuses on clinical procedures, educational techniques and legal and ethical issues as they apply to the patient-dental hygiene provider relationship.

F

425 (3) Community Dental Health

This course introduces second year dental hygiene students to the disciplines and basic principles of community dental health, epidemiologic methods and

Developmental/Adapted Physical Education

biostatistical measurement analysis. Preventive oral health measures and program development is included to provide a background for the practical application of dental public health methods to the community.

F

423 (3) Pharmacology

Pharmacology is the study of drugs used in dentistry or medicine for the treatment, prevention and diagnosis of disease.

F

433 (2) Pain Control

Pain control deals with methods of alleviating or controlling pain and discomfort during dental and dental hygiene services, focusing on local anesthesia and nitrous oxide sedation.

S

431 (3) Clinical Dental Hygiene III

This course offers the student continued practice of dental hygiene treatment procedures in the MSU Dental Clinic. It includes several mandatory off-campus experiences.

S

432 (2) Clinical Seminar III

This course focuses on the development of a personal sense of responsibility for the well-being and development of one's workplace from an employee perspective.

S

427 (2) Periodontology II

Didactic and clinical study of etiology, diagnosis, preventive and therapeutic procedures involved with periodontal disease.

F

435 (2) Community Practicum

This course focuses on the role of dental hygiene practitioners in promoting optimal oral health at the individual level and in the community.

S

437 (1) Patients with Special Needs

This course addresses the care of patients with major disabling conditions.

S

499 (1-6) Individual Study

Developmental/Adapted Physical Education

*College of Allied Health & Nursing
Department of Human Performance
122 Highland Center • 507-389-6313*

Chair: Harry Krampf

Sherry Folsom-Meek

**DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION, TEACHING MINOR
(Must be completed before Fall 2001)**

Required for Minor (Core, 16 cr):

- HP 411 Developmental Adapted Physical Education (3)
 - HP 412 Assessment in Adapted PE (2)
 - HP 413 Early Childhood Motor Development (2)
 - HP 445 Physical Education for Students with Mental and Emotional Disabilities (3)
 - HP 493 Internship in Developmental/Adapted Physical Education (2)
- Choose two courses from the following:
- HP 419 Teaching Dance to Individuals with Special Needs (2)
 - HP 421 Teaching Sport to Individuals with Disabilities (2)
 - HP 422 Teaching Adapted Aquatics (2)

Required Support Courses for Minor (Special Education, 5-6 cr):

- Choose one course from the following:
- SPED 405 Individuals with Exceptional Needs (3)
 - SPED 407 The Special Education Learner in the Regular Classroom (2)
- Choose one course from the following:
- SPED 304 Young Children with Individual Needs (3)
 - SPED 420 Education of Young Children with Exceptional Needs (3)
 - SPED 448 Behavior Management (3)

Early Childhood Education

*College of Education
Department of Curriculum & Instruction
328 Armstrong Hall • 507-389-1516*

Advisor: Steve Reuter

The Early Childhood Education minor is being re-designed for approval as a major. Minor options listed below may be completed only by students who were enrolled in an accredited teacher preparation program by June 1, 2000, and will apply for license before January 1, 2003.

Prekindergarten teacher licensure may be recommended after completion of the following tracks. Track I is for a student with any major other than Elementary Education; track II is for a student majoring in elementary education and qualifying for elementary teacher licensure in Minnesota. In order for teaching minors to qualify for licensure, they must accompany an approved major.

EARLY CHILDHOOD EDUCATION MINOR

Professional Education Admission Required
Choose one of the following options:

Required Core for Option (Option I, 30 cr):

- This option is available for any major.
- HLTH 310 Drug Education (3)
 - EDFN 222 Human Relations and Cultural Diversity (4)

CI	201	Introduction to Early Childhood Education (2)
CI	203	Introduction to Early Childhood Education Lab (1)
FCS	301	Child Development (3)
FCS	303	Working with Families (2)
SPED	304	Young Children with Individual Needs (3)
CI	365	Early Learning Environments I (2)
CI	366	Early Learning Environments I Lab (1)
CI	370	Early Learning Environments II (2)
CI	371	Early Learning Environments II Lab (1)
CI	466	Prekindergarten Student Teaching and Seminar (6)

Required Core for Option (Option II, 29 cr):

This option is for students pursuing the Elementary Education major.

CI	201	Introduction to Early Childhood Education (2)
CI	203	Introduction to Early Childhood Education Lab (1)
FCS	301	Child Development (3)
FCS	303	Working with Families (2)
SPED	304	Young Children with Individual Needs (3)
CI	365	Early Learning Environments I (2)
CI	366	Early Learning Environments I Lab (1)
CI	370	Early Learning Environments II (2)
CI	371	Early Learning Environments II Lab (1)
CI	466	Prekindergarten Student Teaching and Seminar (6)
CI	471	Kindergarten Student Teaching and Seminar (6)

POLICIES/INFORMATION

Student Teaching Options I and II. Students apply for student teaching 1 year in advance. Early childhood student teaching is completed at the Children's House.

GPA Policy. Early Childhood Education coursework requires a C or better. All courses in minor must be taken for grade with the exception of CI 466 and 471.

Earth Science

College of Social & Behavioral Sciences
Department of Geography
 7 Armstrong Hall • 507-389-2617

Director: Donald Friend

The earth science program covers a wide range of scientific disciplines and their relationship with our environment and our lives. Courses in chemistry, geography, astronomy, physics, geology, and biology are needed to fulfill degree requirements. The program is administered through the Department of Geography.

Admission to Major is granted by the department. Minimum university admission requirements are:
 - a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).
 Contact the department for application procedures.

EARTH SCIENCE BA, BS

Required for Major (Core, 43 cr):

AST	101	Introduction to Astronomy (3)
AST	102	Introduction to the Planets (3)
BIOL	100	Our Natural World (4)
CHEM	201	General Chemistry I (5)
GEOG	101	Introductory Physical Geography (3)
GEOG	315	Geomorphology (3)
GEOG	317	Weather (3)
GEOG	410	Climatic Environments (3)
GEOL	121	Physical Geology (4)
GEOL	122	Earth History (4)
GEOL	201	Elements of Mineralogy (4)
PHYS	211	Principles of Physics I (4)

Required Electives for Major (6 cr):

Choose six credits from the following:

AST	125	Observational Astronomy (3)
BIOL	432	Limnology (4)
GEOG	370	Cartographic Techniques (4)
GEOG	412	Advanced Weather (3)
GEOG	420	Conservation of Natural Resources (3)
GEOG	480	Seminar (3)
GEOL	270	Structural Geology (4)
GEOL	350	Environmental Geology (4)
GEOL	370	Geotectonics (2)

Required for Bachelor of Arts (BA) degree ONLY:
 Language (8)

Minor Required: None.

EARTH SCIENCE BS TEACHING

Requirements for the Earth Science, Teaching major can be found in the SCIENCE TEACHING section of this bulletin.

EARTH SCIENCE MINOR

Required General Education for Minor (17 cr):

AST	101	Introduction to Astronomy (3)
PHYS	100	Cultural Physics (3)
CHEM	100	Chemistry in Society (4)
BIOL	100	Our Natural World (4)
GEOG	101	Introductory Physical Geography (3)

Required for Minor (Core, 14 cr):

GEOL	121	Physical Geology (4)
GEOL	122	Earth History (4)
GEOG	315	Geomorphology (3)
GEOG	317	Weather (3)

Required Electives for Minor (3 cr):

Choose one from the following:

AST	102	Introduction to the Planets (3)
GEOG	410	Climatic Environments (3)
GEOG	420	Conservation of Natural Resources (3)

Economics

EARTH SCIENCE, TEACHING MINOR

Requirements for the Earth Science, Teaching minor can be found in the SCIENCE TEACHING section of this bulletin.

POLICIES/INFORMATION

GPA Policy. A GPA of 2.0 or higher in a major or minor is required for graduation.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. All courses in earth science must be taken for a letter grade.

Economics

College of Social & Behavioral Sciences,

Department of Economics

150 Morris Hall • 507-389-2969

Website: <http://www.mnsu.edu/dept/economics>

Chair: Ved Sharma

David R. Abel, Ashok Chowdhury, Steven Hickerson, Donald Renner, Richard Schiming, Robert Simonson, Arlen Skorr, Gerald Smith, Arnold Wells

Economics aims to provide the student with the basic materials and tools of analysis used to understand our present economic system, and to organize data for decision-making purposes in both short and long-range planning. It is designed to help those contemplating business or other careers as well as those who are preparing to teach in the social studies.

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

ECONOMICS BA

Required for Major (Core, 22 cr):

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
ECON	355	Intermediate Microeconomics (3)
ECON	356	Intermediate Macroeconomics (3)
ECON	445	Survey of Economic Ideas (3)
ECON	482	Senior Seminar (3)

Required Electives for Major (9 cr):

ECON xxx ECON xxx ECON xxx

Required for Bachelor of Arts (BA) degree ONLY: Language (8)

Required Minor: Yes. Any.

ECONOMICS BS

Required for Major (Business Foundation Requirements, 38 cr):

MATH	112	College Algebra (4)
COMS	101	Introduction to Microcomputers (3)
MGMT	200	Introduction to MIS (3)
BLAW	200	Legal, Political and Regulatory Environment of Business (3)
ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
MRKT	310	Principles of Marketing (3)
MGMT	330	Principles of Management (3)
MGMT	346	Production and Operations Mgmt (3)
MGMT	395	Personal Adjustment to Business (1)
MGMT	481	Business Policy and Strategy (3)
BED	345	Business Communications (3)
FINA	362	Business Finance (3)

Required for Major (Core, 25 cr):

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
ECON	355	Intermediate Microeconomics (3)
ECON	356	Intermediate Macroeconomics (3)
ECON	420	International Economics (3)
ECON	445	Survey of Economic Ideas (3)
ECON	482	Senior Seminar (3)

Required Electives for Major (6 cr):

ECON xxx ECON xxx

Required Minor: None.

ECONOMICS SPECIALIZATIONS

LABOR ECONOMICS

Labor economics provides a useful and necessary focus leading toward employment in a variety of occupations such as personnel specialist manpower analyst, contract compliance specialist and labor-management relations.

Recommended Courses for Specialization

ECON	403	Labor Problems (3)
ECON	406	Collective Bargaining (3)
ECON	408	Government Regulation of Labor Relations (3)
MGMT	440	Human Resource Management (3)
MGMT	442	Compensation Management (3)
MGMT	444	Organization Design (3)
MGMT	480	Human Behavior in Organizations (3)

ECONOMICS OF THE PUBLIC INTEREST

A background useful in securing positions in many federal, state and city government departments. In addition, many large corporations have full-time staff employees to handle areas of public interest.

Recommended Courses for Specialization

ECON	314	Current Economic Issues (3)
ECON	411	Urban Economics (3)
ECON	412	Resource and Environmental Economics (3)
ECON	420	International Economics (3)

- ECON 425 Social Control of Economic Activity (3)
 ECON 440 Public Finance (3)
 ECON 462 Econometrics (3)

FINANCIAL ECONOMICS

An emphasis useful in the pursuit of careers in financial institutions and government agencies. Banks and other financial intermediaries hire economics majors for various roles. Internships can often be arranged.

Recommended Courses for Specialization

- ECON 305 Money and Banking (3)
 ECON 405 Monetary Analysis (3)
 ECON 420 International Economics (3)
 FINA 464 Financial Institutions and Markets (3)
 FINA 482 Commercial Bank Management (3)
 BLAW 455 Legal Aspects of Banking and Finance (3)

ECONOMICS MINOR

Required for Minor (Core, 6 cr)

- ECON 201 Principles of Macroeconomics (3)
 ECON 202 Principles of Microeconomics (3)

Required Electives for Minor (12 cr)

- | | | | |
|------|-----|------|-----|
| ECON | xxx | ECON | xxx |
| ECON | xxx | ECON | xxx |

POLICIES/INFORMATION

Center for Economic Education. The Center for Economic Education seeks to improve the teaching of economics in elementary and secondary schools. Working in close cooperation with the Minnesota Council on Economic Education and the National Council on Economic Education, the center provides teacher instruction, research, library lending and other services to area schools. Begun in 1964, the Center conducts an annual Economics Challenge in which teams of high school students compete to demonstrate their understanding of economics.

COURSE DESCRIPTIONS

100 (3) An Introduction to the US Economy

Brief description of the operation of the US economic system illustrated by a discussion of current economic policies, issues, and problems. No credit toward a major, minor, or area with economics as a core, or if credit has been earned in ECON 201 and/or 202, or equivalent. F, S

199 (1-2) Clep Economics

201 (3) Principles of Macroeconomics

Emphasis on forces influencing employment and inflation. Current problems of the economy are stressed along with tools government has to cope with them. F, S

202 (3) Principles of Microeconomics

Examines decision making by the individual firm, the determination of prices and wages, and current problems facing business firms. F, S

207 (4) Business Statistics

Basic statistical methods including measures of central tendency and dispersion, probability, probability distributions, sampling, problems of estimation and hypothesis testing in the case of one and two sample means and proportions. Chi-Square, one-way analysis of variance, simple regression and correlation analysis, and brief introduction to multiple regression analysis. Use of computer statistical packages required. F, S

Pre: MATH 112 or equivalent

300 (3) Statistics for Social Sciences

Basic statistical methods including sampling design, research methods, measures of central tendency and dispersion, sampling, problems of estimation and hypothesis testing, also Chi-Square, ANOVA and simple regression and correlation. Use of computer statistical packages. V

305 (3) Money and Banking

A descriptive and analytical study of the basic principles of money, banking, and finance as they are related to business and public policy. Pre: ECON 201 and 202 F, S

314 (3) Current Economic Issues

Elementary economic background and analysis of housing, medical care, inflation, unemployment dilemma, pollution, poverty and affluence, balance between public and private sectors, transportation, urban problems, and other issues will be covered in this course. ALT-S

355 (3) Intermediate Microeconomics

A survey of imperfect competition, multiple-product firms, multiple-plant firms, and interest theory, designed to develop a system of economic thought. F, S

Pre: ECON 201 and 202

356 (3) Intermediate Macroeconomics

Study of factors determining aggregate level of production, employment, inflation, and implications of monetary and fiscal policies. F, S

Pre: ECON 201 and 202

403 (3) Labor Problems

Employment, wages, and economic security. The structure and impact of labor organizations and labor legislation. F, S

Pre: ECON 201 and 202

404 (3) Economics of Human Resources

Quantitative and qualitative aspects of human resources; human capital; changing population structures; economic decisions within the household; intergenerational transfers; earnings differentials by race and gender; pensions and social security; public policy towards human resources. Pre: ECON 201 and 202

405 (3) Monetary Analysis

A detailed examination of the Federal Reserve System and monetary policy. The topics will include a history of the Federal Reserve and its monetary tools and strat-

Economics

egies: Monetarism, the demand for money, the money supply process, and the impact of financial deregulation on federal policy.

Pre: ECON 305 F

406 (3) Collective Bargaining

Emphasis on philosophy, structure, process of negotiation, grievances, arbitrations, important developments and trends, and economic impact of collective bargaining.

Pre: ECON 201 and 202 S

408 (3) Government Regulation of Labor Relations

A historical review of the past public policy concerning labor organizations, an analysis of the economic causes and effects of the negotiations of labor, current economic problems in labor legislation, and the role of federal and state governments in the industrial relations.

Pre: ECON 201 and 202 F

410 (3) Quantitative Analysis in Economics

This course will introduce the student to the use of mathematics in economic analysis. Topics include equilibrium analysis, metric algebra and linear models, comparative statistics and derivatives, optimization, dynamics and integration, and first-order differential equations.

Pre: ECON 201, 202, 207, 355, 356, and MATH 112 V

411 (3) Urban Economics

Economics forces which account for the development of cities and application of principles to some of the major problems of the modern urban community.

Pre: ECON 201 and 202 F

412 (3) Resource and Environmental Economics

Concepts and techniques for evaluating the alternative uses, management and development of natural resources.

Pre: ECON 201 and 202 F

420 (3) International Economics

The economic rationale for interregional trade: emphasis on current problems.

Pre: ECON 201 and 202 F

425 (3) Social Control of Economic Activity

Considers the role of government in the implementation of social values such as freedom, equality, efficiency and justice in those areas where markets are imperfect or fail. Theoretical, historical and philosophical treatment of these issues as manifested in the development of the antitrust laws and economic and social regulation.

Pre: ECON 201 and 202 ALT-S

429 (3) Economic Education

Fundamental ideas and structure of economics with emphasis on the application of such ideas in the K-12 school curriculum.

V

440 (3) Public Finance

Public expenditures, taxes and other revenues, debts and financial administration at federal, state, and local levels.

Pre: ECON 201 and 202 S

445 (3) Survey of Economic Ideas

A survey and analysis of the development of economic ideas treated in historical perspective.

Pre: ECON 201 and 202 F

446 (3) American Economic Development

An examination of major trends and events of US history from colonial times to the present, using tools of economic analysis. Major topics include role of transportation, economic impact of the Civil War, role of government in the economy, trends in money and banking, and the Great Depression.

Pre: ECON 201 and 202 V

450 (3) Economic Development

Economic underdevelopment and the relationships between mature economies and developing nations.

Pre: ECON 201 and 202 F

462 (3) Econometrics

The study of methods and techniques for building econometric models with the goal of forecasting and measurement of the economic relationships by integrating economic theory and statistics in it.

Pre: ECON 201, 202, and 207 ALT

471 (3) Economic, Ethics and Society

Analysis of theoretical constructs of society and economics. Specific attention will be given to economic questions which have a specific relationship to policy questions and the discrimination of values.

Pre: ECON 201 and 202 S

480 (1-3) Seminar in Economics

Pre: ECON 201 and 202 V

481 (1-3) Readings in Economics

F, S

482 (3) Senior Seminar

This course will be required of all economics majors and is intended to facilitate the synthesis of the economics concepts learned in other courses. Students will undertake a research and writing assignment as a course requirement.

Pre: ECON 355 and 356 S

497 (1-8) Internship

Supervised experience in business, industry, state institutions or federal institutions for economics students.

Pre: ECON 201 and 202 F, S

498 (3) Internship

Pre: ECON 201 and 202 F, S

499 (1-3) Individual Study

Pre: ECON 201 and 202 F, S

Electrical Engineering

*College of Science, Electrical and Computer
Department of Engineering & Technology*
137 Trafton Science Center S • 507-389-5747
Website: <http://www.ee.mnsu.edu>

Chair: Tom Hendrickson, Ph.D.

Program Coordinator: Rajiv Kapadia, Ph.D.

Carl Gruber, Ph.D., Tom Hendrickson, Ph.D., Han-Way Huang, Ph.D., Bill Hudson, Ph.D., Rajiv Kapadia, Ph.D., Muhammad Khaliq, Ph.D., Paul Lindfors, Ph.D., Julio Mandojana, Ph.D., Ramakrishna Nair, Ph.D., George O'Clock, Ph.D.

Electrical Engineering (EE) encompasses research, development, design and operation of electrical and electronic systems and their components. This program leads to a Bachelor of Science in Electrical Engineering (BSEE). The primary objective of the Electrical Engineering program is to educate engineering professionals who possess a sound design and analytical background coupled with a strong laboratory experience. This means that the department expects to prepare its graduates equally for:

1. Entry into the engineering work environment with well developed design and laboratory skills.
2. Further study toward advanced degrees in engineering and other related disciplines.
3. Advancement into managerial ranks and/or entrepreneurial endeavors.

In support of this objective, the program provides a curriculum including the following components:

1. A strong background in the physical sciences, mathematics, and the engineering sciences including extensive hands-on laboratory instruction.
2. An integrated design component to the curriculum including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the freshman year and concludes with a capstone design project.
3. A choice of several subdisciplines in their senior level elective offerings (digital, controls, communications, microelectronics design and fabrication).
4. Courses in business and economics to promote awareness of management and the economic aspects of engineering.
5. Preparation for continuing study and professional development.

The curriculum offers students the opportunity to emphasize a number of specialized areas including digital systems, wireless communications, controls, and material sciences. During the senior year, students must take the first step toward registration as a professional engineer by taking the Fundamentals of Engineering, FE or EIT, examination. The electrical engineering program is accredited by the Engineering Accreditation Board for Engineering and Technology.

MSU offers a 3/2 program with regional Liberal Arts colleges. Contact the department for more information.

Recommended high school preparation is two years of algebra, one year of geometry, one-half year of trigonometry, one-half year of college algebra, and a year each of physics and chemistry. Without this background it may take longer than four years to earn the degree. The first two years students take science and mathematics courses common to all branches of engineering (pre-engineering), as well as supporting work in English, humanities and social sciences. Second-year electrical engineering students complete physics, mathematics and 200-level engineering science courses. Some specialization for a particular engineering major occurs in the second year.

Admission to Major. Admission to the college is necessary before enrolling in 300- and 400-level courses. Admission to the college is granted by the department. Minimum college admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

During the sophomore year, students should submit an application form for admission to the junior-level electrical engineering program. Admission to the program is selective and, following application to the department, subject to approval of the faculty. The department makes a special effort to accommodate transfer students and has joint admissions agreements with most community colleges. Only students admitted to the program are permitted to enroll in upper-division EE courses. No transfer credits are allowed for upper-division EE courses except by faculty review followed by special written permission.

Before being accepted into the program and admitted to 300-level electrical engineering courses (typically in the fall semester), a student must complete a minimum of 46 semester credits as follows:

- General Physics (calculus-based) (10 cr)
- Calculus and Differential Equations (16 cr)
- Electrical Engineering Circuit Analysis I and II (including laboratory) (7 cr)
- Chemistry (5 cr)
- English Composition (4 cr)
- Computer Sciences (FORTRAN, C, or C++) (2 cr)
- Statics and/or Dynamics (3 cr)

A cumulative grade-point average of 2.5 for all science, math and engineering courses must have been maintained. Grades must be C or better for courses to be accepted. MSU students should complete the pre-engineering courses listed under the major.

GPA Policy: Students graduating with a degree in Electrical Engineering must have 1) completed a minimum of 20 semester credit hours of upper division EE course work; 2) have a cumulative GPA of 2.25 or higher on all upper division MSU EE coursework; 3) have com-

Electrical Engineering

pleted their senior design sequence at MSU; and 4) have taken the FE exam and achieved the competency level set by the department.

ELECTRICAL ENGINEERING BS

Required for Major (Prerequisites, 47 cr):

CHEM	201	General Chemistry I (5)
COMS	171	Intro. to C++ Programming (2)
EE	230	Circuit Analysis I (3)
EE	231	Circuit Analysis II (3)
EE	240	Evaluation of Circuits (1)
ENG	101	Composition (4)
MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
ME	212	Statics (3)
PHYS	221	General Physics I (5)
PHYS	222	General Physics II (5)

Required for Major (General Studies, 19 cr):

ENG	271	Technical Communication (4) or
SPEE	240*	Technical Communication (3)

* SPEE 102 Public Speaking (3) may be substituted.

Choose a minimum of 13 credits from Humanities and Social Sciences courses:

Humanities (6-7 credits)

HUM xxx HUM xxx HUM xxx

In general, graduation credit toward the humanities requirement is not allowed for any course in subject areas such as speech communication, writing, art, music, or theatre that involve performance or practice of basic skills. Courses acceptable by department or program include: ART 160, 260, 261, 413, 416, 419, 460, 462, 463, 466, 469; ENG 112, 113, 114, 271, 320, 321, 325, 327, 328, 331, 332, 400, 401, 402, 403, 405, 406, 416, 478, 479, 481; FOREIGN LANGUAGE 200 level or above; HIST all except 490 and higher; HUM 150, 155, 250, 251*, 280, 281, 282; MASS 110, 411, 412; MUS 120, 125, 126, 220, 221, 222, 422, 423, 424, 425, 426, 429, 432; PHIL all except 490 and higher; SPEE 100-203, 300, 315-403, 412, 413; THEA 100, 252, 283, 285, 481, 482. For other acceptable courses, please consult with your advisor.

*Note: EET 125 may be substituted for HUM 250

Social Sciences (6-7 credits)

SS xxx SS xxx SS xxx

Courses acceptable by department or program include: ANTH all courses except 480 and above; GEOG 100, 101, 103, 340, 341, 425, 430, 435, 437, 445, 446, 450, 454, 456; POL all except 420, 421, 422, 490 and above; PSYC all except 201, 202, 291, 303, 390, 391, 473 and above; SOC all except 201, 202, 466, 469, 470, 485 and above; URBS all except 301, 302, 481 and above; WOST all except 260, 277, 290, 320, 430, 460 and above. For other acceptable coursework, please consult your advisor.

At least 3 credits of the courses selected to complete the above requirements must be 300 level or above. At

least one 300 level course must follow a lower level course in the same subject area.

Choose one course from the following:

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)

Required Core for Major (Engineering, 49 cr):

EE	101	Introduction to Engineering I (1)
ME	103	Introduction to Engineering III (1)
EE	244	Introduction to Digital Systems (2)
EE	254	Digital and Circuits Lab (1)
EE	303	Introduction to Solid State Devices (3)
EE	332	Electronic Circuits and Devices (4)
EE	333	Digital and Analog Electronic Systems (4)
EE	334	Microprocessor Engineering (3)
EE	337	Principles of Engineering Design (1)
EE	341	Signals and Systems (3)
EE	342	Electronics Design Laboratory (1)
EE	344	Design and Evaluation of Microprocessors (1)
EE	350	Engineering Electromagnetics (4)
EE	353	Communication Systems Engineering (2)
EE	358	Control Systems (3)
EE	363	Communication Systems Laboratory (1)
EE	368	Control Systems Laboratory (1)
EE	467	Principles of Engineering Design I (2)
EE	477	Principles of Engineering Design II (2)
EE	482	Electromechanics (3)
EE	488	Thermal Systems Engineering (2) or ME 299 Thermal Systems Engineering (2)
ME	291	Engineering Analysis (3) or MATH 354 Concepts of Probability and Statistics (3)

Required for Major (Business, 5 cr):

EE	250	Engineering Economics (2)
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Choose one course from the following list:

BLAW 200, FIRE 362, MGMT 330 or 440, MRKT 310

Required Electives for Major (9 cr):

Choose a minimum of 9 credits from the following courses. Two courses must be in sequence (same subject area):

EE	453	EE	462	EE	471
EE	472	EE	475	EE	476
EE	479	EE	480	EE	481
EE	484	EE	487		

Required Minor: None.

COURSE DESCRIPTIONS

101 (1) Introduction to Engineering I

Discussion of historical, educational, and professional aspects of engineering. Problem solving, study approaches and techniques, and the motivation behind modern engineering education and practices. Lab sessions cover the basics of word processing, spreadsheets, databases, drawing, and graphing programs.

F

102 (1) Introduction to Engineering II

Basic engineering drafting principles and conventions, such as orthogonal projection, isometric drawing, dimensioning, and section views. Introduction to and use computer aided drafting system. V

230 (3) Circuit Analysis I

This course is meant to develop Electrical Engineering Circuit Analysis skills in DC and AC circuits. It includes circuit laws and theorems, mesh and node analysis, sinusoidal steady state analysis, impedance/admittance concepts, resonant circuits, frequency response, and first order circuit transients.

Pre: PHYS 222 or concurrent, MATH 321 or concurrent F

231 (3) Circuit Analysis II

Continuation of Circuit Analysis I to include special topics in circuit analysis.

Pre: EE 230 and 240, MATH 321, PHYS 222 S

240 (1) Evaluation of Circuits

Laboratory support for EE 230. Experimental evaluation of circuits including operational amplifier circuits. Verification of the theoretical concepts covered in EE 230 will be realized in the laboratory.

Pre: Must take concurrently with EE 230 F

244 (2) Introduction to Digital Systems

A study of theoretical and practical aspects of digital systems including Boolean algebra, number systems, logic devices, Karnaugh maps, and sequential machines.

Pre: MATH 122 S

250 (2) Engineering Economics

Overview of accounting and finance and their interactions with engineering, manufacturing, marketing, R&D and sales. Lectures include the development and analysis of financial statements, time value of money, decision making tools (stochastic and non-stochastic), ratio analysis, cost of capital, cash flow, rate of return and forecasting techniques.

F

253 (1) Logic Circuits Lab

Laboratory support to complement EE 244. Experimental evaluation of digital logic devices including logic gates, flipflops, sequential machines, and other devices as needed. Some simulation and testing of PAL devices and memory IC's will be attempted.

Pre: EE 230 and concurrently with EE 244 S

254 (1) Digital and Circuits Lab

Laboratory support for EE 231 and EE 244. Experimental evaluation of AC and transient circuits, digital logic devices including logic gates, flip flops, and sequential machines. Some simulation and testing of PAL devices and memory IC's.

Pre: EE 230, 240 and concurrently with EE 231 and 244 S

303 (3) Introduction to Solid State Devices

Crystal structure, energy band theory, conduction and optical phenomenon in semiconductors, metals and insulators. Equilibrium and non-equilibrium charge distribution, generation, injection, and recombination. Analysis and design of pn junctions, bipolar transistor, junction and MOS field-effect transistors. Introduction to transferred electron devices and semiconductor diode laser.

Pre: PHYS 222, and MATH 321 F

332 (4) Electronic Circuits and Devices

Electronic amplifier concepts and real operational amplifier networks. Semiconductor device characteristics including Diodes, BJT's, JFET's, MOSFET's, and GaAsFET's. Also discuss DC bias circuits, along with small signal, large signal, and PSPICE device modeling and analysis. Small-signal amplifiers (single and multi-stage), power amplifiers, differential amplifiers, and feedback amplifiers, concepts and design will all be discussed.

Pre: EE 231, admission to EE program F

333 (4) Digital and Analog Electronic Systems

EE electronics sequence with EE 332. Feedback systems/stability; oscillator concepts and systems. Filters and tuned amplifiers. Design of IC operational amplifier. Hysteresis, bi-stability and nonlinear functional circuits; 555 timer. A/D and D/A converters. MOS and bipolar digital electronic circuits; memory. Electronic noise. Power switching devices.

Pre: EE 332 S

334 (3) Microprocessor Engineering

Use of microprocessors and microcontrollers in engineering applications. Topics include assembly language programming, smart and programmable controllers, memory design including dynamic memory and direct memory access, bus standards and protocol, serial and parallel I/O, interfacing with other programmable systems, maskable and non-maskable interrupts.

Pre: EE 244 F

337 (1) Principles of Engineering Design

Application of the design techniques in the engineering profession. Electrical engineering project and program management and evaluation including computer assisted tools for planning and reporting, design-to-specification techniques and economic constraints.

Pre: Admission to EE program S

341 (3) Signals and Systems

Analysis of linear systems and signals in the time and frequency domain. Laplace and Fourier transforms. Z-transform and discrete Fourier transform.

Pre: MATH 321 F

342 (1) Electronics Design Laboratory

Properties of materials; measurement of electronic device characteristics. Experimental evaluation of electronic amplifier designs. Experimental characteristics of feedback topologies; oscillator and op-amp circuit design and

Electronic Engineering

design verification. Power amplifier graphical design.

Pre: EE 231; 303 and 332 taken concurrently

F

344 (1) Design and Evaluation of Microprocessors

Laboratory support for EE 334. Study of various single board computers through assembly language programming. Basic input/output, ports, memory, addressing, timers, A/D converters, serial and parallel communication protocol, and interrupt processing. One half design credit.

Pre: Concurrent with EE 334

F

350 (4) Engineering Electromagnetics

Vector fields. Electrostatic charges, potential and fields; displacement. Steady current/current density; magnetostatic fields, flux density. Materials properties. Faraday's Law and Maxwell's equations. Skin effect. Wave propagation, plane waves, guided waves. Radiation and antennas. Transmission line theory.

Pre: MATH 223 and PHYS 222

S

353 (2) Communication Systems Engineering

Signals and Systems, Fourier transforms, Parseval's theorem. Autocorrelation functions and spectral density functions. Information theory. Noise and noise figure, probability and statistics. Transformation of random variables, probability of error and bit error rate. Modulation and demodulation. Overview of analog, sampled analog and digital communication systems. Spread spectrum systems.

Pre: EE 333 and 341

S

358 (3) Control Systems

Theory and principles of linear feedback control systems. Analysis of linear control systems using conventional techniques like block diagrams, Bode plots, Nyquist plots and root-locus plots. Introduction to cascade compensation: proportional, derivative and integral compensation. State space models.

Pre: EE 341

S

363 (1) Communication Systems Laboratory

Measurement techniques using the oscilloscope, spectrum analyzer and network analyzer. Signals and spectra. Frequency response. Noise and noise figure measurements. Intermodulation products. Amplitude and frequency modulation/demodulation. Sampling, aliasing, and intersymbol interference. Bit error measurement.

Pre: Concurrent with EE 353

S

368 (1) Control Systems Laboratory

Laboratory support for EE 358. Experimental evaluation of basic control system concepts including transient response and steady state performance. Analog and digital computers.

Pre: EE 341 and concurrent with EE 358

S

380 (2) Advanced Digital System Design

Combinatorial circuit design with Karnaugh map and tabular method; using MSI chip as building blocks in a digital system; circuits of latches, flip-flops, and registers; design of counters; types of sequential circuits;

design process of sequential circuits; minimization of sequential circuit design by performing state reduction and state encoding optimization; syntax and semantics of VHDL language; using VHDL in modeling and simulation digital circuits; implementation of digital system in complex programmable logic devices (CPLDs).

F

439 (4) Electronics for Non-Electrical Engineering Majors

Topics covered include power supplies, operational amplifiers and feedback circuits, linear and nonlinear circuits and applications, analog switches, digital logic gates and devices, A/D and D/A converters, microprocessors, and basic control systems.

Pre: PHYS 221 and 222

V

453 (3) Advanced Communications Systems Engineering

Fundamentals of RF, microwave, and optical communication systems. Advanced information theory. Digital modulation techniques. Phase-lock loop receivers and frequency synthesizers. Characterization of digital data transmission systems. Equalization. Synchronization. Coding. Data compression. Nonlinear systems analysis. Amplitude and phase distortion. AM-PM conversion. Intermodulation and cross-modulation. Advanced spread spectrum systems.

Pre: EE 353 and 363

F

462 (4) Advanced Digital System

A study of finite state machine design, hardware description language, principles of instruction execution, instruction pipe lining, superscalar processor design, multiprocessor systems and memory system design.

Pre: EE 333 and 334

F

467 (2) Principles of Engineering Design I

Design and organization of engineering projects. Project proposals, reporting, feasibility studies, and interpretation. Specification preparation, interpretation, and control. Issues involving creativity, project planning and control, and intellectual property rights. Students enrolled in this course must initiate and complete a design project in a small team format.

Pre: EE 337 and senior standing

F

471 (3) Advanced Control Systems

Develop design and analysis techniques for continuous and discrete time control systems including pole placement, state estimation and optimal control.

Pre: EE 358 and 368

F

472 (3) Digital Signal Processing

Develop design and analysis techniques for discrete signals and systems via Z-transforms, Discrete Fourier Transforms, implementation of FIR and IIR filters. The various concepts will be introduced by the use of general and special purpose hardware and software for digital signal processing.

Pre: EE 341

S

475 (3) Integrated Circuit Engineering

Introduction to theory and techniques of integrated circuit fabrication processes, oxidation, photolithography, etching, diffusion of impurities, ion implantation, epitaxy, metallization, material characterization techniques, and VLSI process integration, their design and simulation by SUPREM. Same as PHYS 467.

Pre: EE 303 and 332

F

476 (4) Antennas, Propagation, and Microwave Engineering

Principles of electromagnetic radiation, antenna parameters, dipoles, antenna arrays, long wire antennas, Microwave antennas, Mechanisms of radiowave propagation, scattering by rain, sea water propagation, guided wave propagation, periodic structures, transmission lines, microwave/millimeter wave amplifiers and oscillators, MIC & MMIC technology.

Pre: EE 350

V

477 (2) Principles of Engineering Design II

Completion of design projects and reports. Lectures on ethics, issues in contracting and liability, concurrent engineering, ergonomics and environmental issues, economics and manufacturability, reliability and product lifetimes. Lectures by faculty and practicing engineers.

Pre: EE 467

S

479 (3) Superconductive Devices

Magnetic and superconducting properties of materials, microscopic theory of superconductivity and tunneling phenomenon. Josephson and SQUID devices, survey of computer memories, memory cell and shift register, A/D converters and microwave amplifiers. Integrated circuit technology and high temperature superconductors.

Pre: EE 303

V

480 (1) Integrated Circuit Fabrication Laboratory

Introduction to integrated circuit fabrication processes, device layout, mask design, and experiments related to wafer cleaning, etching, thermal oxidation, thermal diffusion, photolithography, and metallization. Fabrication of basic integrated circuit elements pn junction, resistors, MOS capacitors, BJT and MOSFET in integrated form. Use of analytic tools for in process characterization and simulation of the fabrication process by SUPREM. Same as PHYS 468.

Pre: Concurrent with EE 475

F

481 (1) VLSI Design Laboratory

Laboratory to accompany EE 484 VLSI design. Individual IC design projects will be assigned using IC layout tools and simulation software. Culminates in a group project fabricatable under MOSIS.

Pre: Concurrent with EE 484

S

482 (3) Electromechanics

An introduction to the processes, devices, and systems of electromechanical energy conversion. Transformers, dc machines, induction, and synchronous machines.

Pre: EE 230

F

484 (4) VLSI Design

VLSI technology. MOS and Bipolar transistor theory, SPICE models. Transistor structure and IC fabrication processes; layout design rules. Custom CMOS/BICMOS logic design and layout topologies; cell layout/chip partitioning/clocking. Bipolar/MOS analog circuit design and layout. Group design project. Library research study.

Pre: EE 333

S

487 (3) RF Systems Engineering

Overview of wireless communication and control systems. Characterization and measurements of two-port RF/IF networks. Transmission lines. Smith chart. Scattering parameters. Antenna-preselector-preamplifier interface. Radio wave propagation. Fading. RF transistor amplifiers, oscillators, and mixer/modulator circuits. Multiple access techniques. Transmitter/receiver design considerations. SAW matched filters.

Pre: EE 353 and 363

V

488 (2) Thermal Systems Engineering

Thermodynamic concepts, properties and laws. Thermodynamic cycles and energy conversion; control volume analysis. Heat transfer by conduction, convective flow and radiation. Heat sink design. Design problems in electronics packaging, reliability, thermoelectric effects and cooling devices. Environmental property sensors.

Pre: PHYS 222 and EE 333

V

491 (1-4) In-Service

497 (1-6) Internship

499 (1-6) Individual Study

Electronic Engineering Technology

College of Science, Engineering & Technology

Department of Electrical & Computer Engineering Technology

137 Trafton Science Center S • 507-389-5747

Chair: Tom Hendrickson, Ph.D.

Program Coordinator: Lindsay Hess, Ph.D.

Carl Gruber, Ph.D., Tom Hendrickson, Ph.D., Lindsay Hess, Ph.D., Han-Way Huang, Ph.D., Bill Hudson, Ph.D., Rajiv Kapadia, Ph.D., Muhammad Khaliq, Ph.D., Paul Lindfors, Ph.D., Julio Mandojana, Ph.D., Ramakrishna Nair, Ph.D., George O'Clock, Ph.D.

Electronic Engineering Technology is a technological field requiring the application of scientific and engineering knowledge and methods, combined with technical skills, in support of engineering activities. An electronic engineering technologist is a person who is knowledgeable in electronics theory and design and who understands state-of-the-art practices on digital and analog circuits and systems. Computers, controls/automation, robotics, instrumentation, and communications are just a few fields open to engineering technologists.

Electronic Engineering Technology

Overall the program strives to prepare students for entry into the technical workforce with well developed skills. In particular, the department strives to ensure that its graduates have an ability to:

1. Apply knowledge of science, mathematics, and engineering
2. Design, and conduct experiments as well as analyze and interpret data
3. Design a system, component, or process to meet specified needs
4. Function effectively in teams
5. Identify, formulate, and solve engineering problems
6. Have an understanding of professional and ethical responsibilities
7. Communicate effectively

This program is accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).

Admission to Major is granted by the department.

Minimum program admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

ELECTRONIC ENGINEERING TECHNOLOGY BS

It is strongly recommended that all EET students enroll in EET 101 Introduction to EET/CET (1) during their freshman year.

Students who do not have the required background for MATH 115 may have to take additional preparatory coursework as well. Consult with your major advisor to plan your general education and major requirements.

All students must complete a minimum of 12 semester credits of mathematics starting with Precalculus math and a minimum of 24 semester credits of combined mathematics and science courses.

Required General Education (15 cr):

ENG	101	Composition (4)
SPEE	102	Public Speaking (3)
MATH	115	Precalculus Math (4)
PHYS	211	Principles of Physics I (4)

Required Support Courses (18 cr):

COMS	110	Introduction to Computer Science (4)
COMS	111	Fundamentals of Computer Science I (4)
MATH	121	Calculus I (4)
MET	427	Quality Assurance (2)
Choose one of the following:		
COMS	112	Fundamentals of Computer Science II (4)
COMS	230	Applied Expert Systems (4)
COMS	271	C++ Programming (4)
COMS	280	System Analysis and Design (4)

Required for Major (Communication, Mathematics and Science, 16 cr):

ENG	271	Technical Communication (4)
MATH	127	Calculus II for Engineering Technology: Integration (2)
PHYS	212	Principles of Physics II (4)
CHEM	105	Introduction to Chemistry (3)
Choose one of the following:		
STAT	154	Elementary Statistics (3)
MATH	354	Concepts of Probability and Statistics (3)

Required Core for Major (EET, 55 cr):

EET	113	DC Circuits (3)
EET	114	AC Circuits (3)
EET	221	Electronic CAD (3)
EET	222	Electronics I (4)
EET	223	Electronics II (4)
EET	225	Digital Principles (3)
EET	241	Electronic Shop Practices (2)
EET	355	Electrical Power Systems (3)
EET	400	Network Analysis (3)
EET	452	Operational Amplifier Applications (3)
EET	454	Microprocessors I (4)
EET	456	Communications I (4)
EET	458	Advanced Instrumentation (1)
EET	480	Automatic Controls (3)
EET	488	Senior Project Design I (1)
EET	489	Senior Project Design II (2)
EET	497*	Internship (3)

Choose a minimum of 6 credits from the following courses:

EET	425	EET	455	EET	484
EET	486	EET	487	EET	492

* You may substitute one EET advanced elective for internship.

Required Minor: None.

ELECTRONIC ENGINEERING TECHNOLOGY MINOR

Required for Minor (Core, 13 cr):

EET	112	Elementary Electronics (3)
EET	113	DC Circuits (3)
EET	114	AC Circuits (3)
EET	222	Electronics I (4)

Required for Minor (Elective Options, 7-8 cr):

DIGITAL OPTION

EET	225	Digital Principles (3)
EET	454	Microprocessors I (4)

ELECTRONICS OPTION

EET	223	Electronics II (4)
Choose one of the following:		
EET	452	Operational Amplifier Applications (3)
EET	455	Advanced Power Electronics (3)
EET	492	Integrated Circuit Technology (4)

COMMUNICATIONS OPTION

EET 223 Electronics II (4)
EET 456 Communications I (4)

POWER OPTION

EET 223 Electronics II (4)
EET 355 Electrical Power Systems (3)

POLICIES/INFORMATION

Graduation Policy. Students graduating with a degree in Electronic Engineering Technology must have: 1) completed a minimum of 20 semester credit hours of upper division EET courses; 2) have a cumulative GPA of 2.0 or higher for all MSU EET coursework; and 3) have completed their senior design sequence at MSU.

P/N Grading Policy. A student who majors or minors in EET must elect the grade option for all required courses including general education courses listed by number even if offered by another department.

If the credits earned for composition, technical writing and speech courses equal less than 9 credits, either an advanced speech course or a course in English language literature must be selected as a general elective.

In addition to the transfer of credit policy described in this bulletin for students transferring to MSU from other schools, the electronic engineering program has additional policies:

1. All transfer student must take EET 221.
2. For courses taken at technical colleges/vocational technical schools and pertinent courses taken in the military the student may receive up to 8 credits upon review of course materials, grades and written approval by the program coordinator. The credit can be used for EET 112, 113 and 114. The student may also attempt to test out of EET 114, 222, 225 and 223.
3. For courses taken at community colleges and four-year colleges, up to 25 credits may be accepted if the transcript is from an ABET-accredited program. If the program is not accredited by ABET, up to 20 credits may be accepted. Grades of transfer credits must be C or better to be acceptable for substitution for required courses.

Testing for course credit will be available via prior application made with the program coordinator. Students may not apply for credit by examination for an EET course in which they were previously enrolled at MSU or for any EET course above EET 225.

COURSE DESCRIPTIONS

101 (1) Introduction to EET/CET

Information and hands-on experiences regarding EET/CET courses and careers, creative problem solving, reverse engineering, group projects, introduction to EET/CET laboratories, computers and software, speakers from industry, and technical communications. One hour lecture and one hour lab per week.

F

112 (3) Elementary Electronics

Hands-on experiences in elementary electronics to easily and quickly develop basic knowledge of electronics related to everyday applications. A self paced format with an open laboratory is used.

F, S

113 (3) DC Circuits

A study of DC electrical circuits, Kirchhoff's laws, series and parallel circuits, inductors, capacitors, Thevenin's equivalent circuit theorem, and other network analysis theorems.

Pre: MATH 115, or concurrent

F, S

114 (3) AC Circuits

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems.

Pre: EET 113 and MATH 115

F, S

115 (3) Understanding Computers

A self-paced, interactive, multi-media course, for non-engineering students, exploring the basics of computer hardware. The course will cover concepts behind computer design and operation, exploring issues such as the need for RAM, Hard Drive memory, ROM, etc., the interaction between computer software and hardware, and related issues.

F, S

116 (3) Communication - Past, Present & Future

This is an introductory course in the use of technology for communication. During the semester students will study the evolution of communications technology from early days to the present. This course will cover wireless, analog, and digital techniques including telephony, the internet, and mobile formats. For each topic the student will study theory and principles involved in the different types of communications. Modern techniques in digital communications will be discussed and demonstrated through simulation. A consumer example of digital communication will be given.

F, S

117 (3) Introduction to Digital Electronics

Hands-on experiences in the use of digital integrated circuits, logic families. Students will study logic gates, number systems, flip flops, latches, registers, computer arithmetic and memory. A self paced format with an open laboratory format.

V

125 (3) Perspective on Technology

Historical, cultural, ethical, philosophical, developmental, and creative aspects of engineering and technology as a discipline are explored. Course also provides a rudimentary examination of concepts and events leading to important innovations of recent times, including the use of AC voltages, microwave ovens, FAX machines, personal computers, traffic signals, and video games. Available for general education.

F

Electronic Engineering Technology

221 (3) Electronic CAD

Drafting Principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation data, and printed circuit board layout and construction.

F

222 (4) Electronics I

An introduction to semiconductor theory and circuits; includes characteristics curves, biasing techniques and small signal analysis of FETs and MOSFETs, feedback concept, BJT and FETs frequency response.

Pre: EET 114 or concurrent

F

223 (4) Electronics II

Differential amplifier, linear and nonlinear operational amplifier, power amplifier, linear digital ICs, oscillators, power supplies, D/A, A/D conversion, four layered devices and their applications.

Pre: EET 222

S

225 (3) Digital Principles

A study of number systems, Boolean algebra, switching function minimization techniques, binary arithmetic, small scale and medium scale logic chips, programmable logic devices, latches, flip-flops, registers and counters, and sequential circuit design.

S

230 (4) Microcomputer Technology

An introduction to the installation, configuration, upgrading, troubleshooting and repair of microcomputers. Basic knowledge of desktop systems, basic networking concepts and printers will be introduced. Safety and common preventive maintenance procedures will be covered.

Pre: EET 113 or permission of instructor

S

241 (2) Electronic Shop Practices

An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards.

Pre: EET 222 and 221

S

355 (3) Electrical Power Systems

Generation and transmission of electrical energy. The study includes energy sources, generation of electrical energy, single and multiphase power, transformers, motors, generators, and energy distribution systems.

Pre: EET 114

F

393 (1-4) Practicum

Elective credit for approved experience in off-campus work related to EET major. Permission required.

F, S

400 (3) Network Analysis

A course in network analysis that stresses time, frequency and Laplace transform domain techniques.

Pre: EET 114 and MATH 127

S

425 (3) Advanced Digital Design

A study of multiple-output switching functions optimization, flip-flops, registers and counters, programmable logic

devices, synchronous sequential circuit design and synthesis, pulse mode and fundamental model sequential circuit design, test methods, and test vector generation.

Pre: EET 225

S

430 (4) Computer Networking I

An introduction to the basic foundations of computer networking. The course will encompass telecommunications, local area networks, wide area networks and wireless communication. Topics covered include the OSI model, the TCP/IP model, different network topologies and associated hardware, error detection and correction, protocols, and security.

Pre: EET 230 and COMS 112

F

431 (4) Computer Networking II

A continuation of EET 430. Router configurations, advanced LAN topologies, network configurations, protocols, and switching designs. Network troubleshooting and threaded case studies.

Pre: EET 430

S

452 (3) Operational Amplifier Applications

Operational amplifier circuits utilized in filters, sensors, comparators, voltage regulators, device testing, measurement systems, multipliers, phase-locked loops, and A/D converters. Differential amplifier basics. Linear integrated circuit processing.

Pre: EET 223 and MATH 121

F

454 (4) Microprocessors I

A study of microcomputer hardware and software fundamentals, the instruction set and the addressing modes of a microprocessor/microcontroller, assembly programming, basic I/O concepts, parallel I/O methods, asynchronous serial I/O method, synchronous serial I/O methods, A/O conversion, timer applications, etc.

Pre: EET 225

S

455 (3) Advanced Power Electronics

The half-wave rectifier with power loads, power semiconductor switches, thyristor states, controlled rectifiers, commutating circuits, AC voltage controllers (poly and single phase), motor controllers, DC-DC converters, and inverters.

Pre: EET 223 and 355

V

456 (4) Communications I

Communications principles & systems, practical engineering aspects involved in modulation-demodulation, receivers, transmitters & filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.

Pre: EET 223

S

458 (1) Advanced Instrumentation

Experiences with electronic equipment and instrumentation including maintenance, repair, calibration, safety and component identification.

Pre: 30 hours of EET courses, or consent

S

480 (3) Automatic Controls

Servomechanism analysis under transient and steady

state conditions. Negative and positive feedback. Laplace transform analysis of feedback systems. Frequency response. System stability analysis using Bode plots and Root locus. Lead and velocity compensation. Analog computers. Microprocessor control and the analog/digital interface.

Pre: EET 400

F

484 (4) Microprocessors II

A study of a high performance microprocessor architecture, bus cycles, memory system design, DMA controller, hard disk drive, system bus, PC architecture and subsystems, PC programming assembly and C++.

Pre: EET 454

F

486 (3) Communications II

State-of-the-art in communication technology, RF/microwaves, transmission lines, applications, Mobile communications, cellular communications, satellite communications, optical fiber communications.

Pre: EET 456

F

487 (3) RF Systems Technology

Overview of wireless communication and control systems. Characterization and measurement of RF networks. Transmission lines. Antennas. Radio wave propagation. Fading. Smith Chart. RF transistor amplifiers, oscillators and mixer/modulator circuits. Klystrons, magnetrons and TWTs. Spread spectrum techniques. SAW matched filters.

Pre: EET 456

V

488 (1) Senior Project Design I

An individual design project performed in consultation with the instructor. Phase I includes the acceptance of the proposal, defining, and limiting the project objectives, initial source contacts and procurement of materials.

Pre: EET 241, four 400-level EET courses F, S

489 (2) Senior Project Design II

Phase II includes completion of the project with evidence of extensive laboratory performance. A final oral report to the class and a standard formal written report are required.

Pre: EET 488

F, S

491 (1-4) In-Service

492 (4) Integrated Circuit Technology

Semiconductor industry and overview of integrated circuit manufacturing, integrated circuit types, crystal growth and wafer manufacturing, physics of semiconductor materials, detail of major IC fabrication steps, process yield, semiconductor devices and integrated circuit formation, packaging, and semiconductor measurements, introduction to layout tools.

Pre: EET 223

S

497 (1-6) Internship

Should be taken at end of junior year. Permission required. Pre: 40 hrs EET creditor written permission of program coordinator

F, S

499 (1-4) Individual Study

F, S

Elementary Education

College of Education

Department of Curriculum & Instruction

328 Armstrong Hall • 507-389-1516

Chair: Peg Ballard

Ronald Browne, Andrew Johnson, Marla Mastin, Karl Matz, Sandra Mullins, Scott Page, Steven Reuter, Sheila Wright

The Department of Curriculum and Instruction has a major responsibility for providing professional education for elementary and secondary teachers. The general goals of this program are to acquaint students with attitudes, methods and technology applicable to a variety of teaching-learning situations; to make available pre-professional clinical experiences in order to introduce students to the total school milieu; to provide the direct experience of classroom teaching under supervision; and to develop understanding of curriculum design in its theory and process of formulation. Emphasis shall be on the acquiring of knowledge, professional skills and learning environment awareness.

Advising. The College of Education serves Elementary Education students through developmentally appropriate levels of advising. Several small group advising sessions by level are offered each semester. Sessions are posted and announced in the *Reporter*.

100/First Year Students-All students are assigned to the Student Relations Coordinator (SRC) during their first year. The SRC initially conducts the orientation programs and approves the first semester schedule. Students during their first year then also have an identifiable location for immediate advising assistance (COE Academic Advising Office, directed by the SRC). Sessions focus on program expectations, general education, and an early clinical school experience.

Level 200/Second Year Students-Students are admitted to the major and assigned a Level 200 advisor in their program. Sessions focus on program expectations, prerequisite completion, second year service learning and diversity clinical experiences and professional education admission. **Level 300/Plan of Study**-Sessions focus on program expectations, sequential program blocking and specialty area licensure options.

Level 400/Program Completion-Students are eligible for level 400 sessions when a plan of study is complete and application for student teaching and graduation have been made. Sessions focus on program completion, application for graduation deficiencies and licensure application.

Transfer Student Advising. Formal evaluation of prior academic preparation follows transfer orientation. The Department Chairperson of Curriculum and Instruction formally approves the coursework based on course descriptions and syllabi, samples of completed work, and/or field experience evaluations.

Elementary Education

Admission to Major (AH 119). All elementary education students must be admitted to the major and to Professional Education. All students must submit an unofficial MSU transcript. Transfer students should submit a copy of their transfer credit evaluation form, which is available from the Campus Access HUB. Elementary Education students must complete the following admission requirements:

1. Completion of 30 credits.
2. Cumulative 2.0 GPA.

Admission to Professional Education (AH 119) Coordinator: Cheryl Kalakian. All students working toward any teaching degree, elementary, secondary, or K-12, must be admitted to Professional Education prior to enrollment in upper division coursework in professional education. Application to Professional Education should be made when the following requirements have been met:

1. Completion of 30 credits.
2. Cumulative career GPA of 2.5.
3. Evidence of completion of the Pre-Professional Skills Test (PPST).
4. Completion of faculty recommendation folder.

Alternative Admission Policy. An alternative admission policy exists to encourage the participation of individuals from under-represented groups. The Student Relations Coordinator has the responsibility of hearing appeals for admission to the Professional Education program and may make exception to the published admission criteria.

Background Check (AH 118) Secretary: Gail Orcutt. Effective January 1, 1996 Minnesota State Law requires that all candidates applying for initial licensure submit one fingerprint card with the application for national background checks. There is a \$25 fee for the criminal background check. A state background check will also be conducted. The licensure packet is available in AH 118, Gail Orcutt, secretary.

ELEMENTARY EDUCATION BS, TEACHING

The program below is designed to meet the new Minnesota state licensure standards, which will affect all graduates applying for licensure on or after September 1, 2001.

Required General Education (42 cr):

ENG	101	Composition (4)
BIOL	100	Our Natural World (Lab) (4)
ART	100	Elements and Principles of Art (3)
MATH	201	Elements of Math I (3)
PHYS	101	Introductory Physics (Lab) (3)
THEA	101	Acting for Everyone (3)
THEA	128	Beginning Modern Dance (1)
EDFN	222	Human Relations and Cultural Diversity (4)
HLTH	310	Drug Education (3)
Choose one HIST course from the following:		
HIST	190	United States to 1877 (4)
HIST	191	United States Since 1877 (4)

Choose one SPEE course from the following:

SPEE	100	Fundamentals of Speech Communication (3)
SPEE	102	Public Speaking (3)

Required Support Courses (Core, 18 cr):

BIOL	480	Biological Laboratory Experiences for Elementary Teachers (2)
PHYS	480	Laboratory Experiences in Physical Science (2)
MATH	202	Elements of Math II (3)

Choose one course from the following:

GEOG	340	United States (3)
GEOG	341	World Regional Geography (3)

Choose one course from the following:

HIST	190*	U.S. to 1877 (4)
HIST	191*	U.S. Since 1877 (4)
HIST	450	Minnesota to 1880 (3)
HIST	451	Minnesota Since 1880 (3)

* HIST 190 or 191 may count for General Education and Support Course

Choose one course from the following:

LME	412	Materials for Children (3)
ENG	325	Children's Literature (3)

Required for Major (Professional Education, 16 cr):

CI	200	Intro to Elementary Teaching (2)
ART	421	Art Methods/Materials (2)
MUS	340	Music Materials/Methods (3)
HP	323	Elementary PE Methods (2)
LME	401	Instructional Media Utilization (2)
EDFN	333	Classroom Learning & Assess (3)

BLOCK I- Literacy*

Required for Major (Core, 10 cr):

CI	303	Classroom Methods (1)
CI	320	Social Studies in Elementary (2)
CI	321	Social Studies/Literacy Clinical (1)
CI	334	Literacy Methods (4)
CI	355	Curriculum & Management (2)
ED/SPED	407	Special Student in General Class (2)

* Permission required for entry to Block I

BLOCK II- Inquiry*

CI	322	Science/Health in Elementary (3)
CI	323	Science/Math Clinical (1)
CI	324	Mathematics in Elementary (2)
CI	421	Literacy Interventions (2)
GEOL	305	Earth and Space Systems (2)
SPED	444	Behavior Management in Classroom (2)

Choose one course from the following:

ED	410	Middle School Classroom (3)
CI	370/371	Kindergarten Methods & Mat. (3)

* Permission required for entry to Block II

BLOCK III

EDFN	400	Social Context of Learning (1)
CI	473	Student Teaching Elementary (8)
CI	466	Pre-Kinder. Student Teach (6) or
CI	494	Middle School Student Teach (6)

Student Teaching (AH 118) Director of Clinical and Field Experience: Tracy Pellett. Student teaching is a requirement for the completion of any elementary education option. Students teach in their senior year after they have completed all methods courses and at least 95 semester credits. All methods and professional education courses except EDFN 400 must be completed prior to student teaching. Written application must be submitted February 1 for fall teaching assignments and September 1 for spring teaching assignments. Attendance at an application information session is required prior to submission of application materials. Application folders are available in AH 307D.

Required for Major (Specialty Area, 15-17 cr)

Select one of the following specialties:

Pre-Primary - Age 3 and above (15 cr):

PSYCH	433	Child Psychology (4)
CI	368	Preprimary Methods & Materials (3)
CI	369	Preprimary Methods & Materials Lab (1)
CI	435	Teacher/Parent Relations (3)
THEA	324	Music in Early Childhood (2)
MUS	441	Music in Early Childhood (2)

Middle School Mathematics (15 cr):

STAT	154	Elementary Statistics (3)
MATH	112	College Algebra (4)
MATH	181	Intuitive Calculus (3)
MATH	303	Elements of Mathematics (3)
CI	342	Teach Sci/Tech/Soc in Middle School (2)

Middle School Science (17 cr):

AST	101	Intro to Astronomy (3)
CHEM	201	General Chemistry I (5)
GEOL	121	Physical Geology (4)
GEOL	310	Earth & Space Systems (3)
CI	342	Teach Sci/Tech/Soc in Middle School (2)

Note: MS Science Students do not take GEOL 305

Middle School Social Studies (15 cr):

ECON	201	Principles of Macroeconomics (3)
POL	111	US Government (3)
ANTH	230	People: An Anthropological Perspective (3)
SOC	100	Social Problems (3)
CI	342	Teach Sci/Tech/Soc in Middle School (2)

Elective Cr in Social Studies Area (1)

Middle School Communication Arts and Literature (15 cr):

ENG	242	Intro to Creative Writing (3)
ENG	285	Practical Grammar (2)
CI	428	Teach Read/Writing in Content Area (3)
ENG	463	Adolescent Literature (2)
ENG	464	Teach Literature in Middle School (3) or

ENG 425 Topics in Children's Literature (3)
Elective Cr in Communication Arts and Literature (2)

Modern Language: French (15 cr):

Prerequisites:

1. French 101, 102, 201, 202 or equivalent.

Students may demonstrate their language proficiency level through coursework or through credit by examination. Credit by examination for French 101, 102, 201, and 202 can be arranged with a faculty member in the French program.

2. Students **must** demonstrate a level of intermediate-mid on the Proficiency Interview before they are admitted to FLES 462, 463. Contact the Department of Modern Languages or a member of the French faculty for details.

Required Language Courses: 11-12 credits

Language credits may be completed on the MSU campus or, in part, while on the MSU program in La Rochelle, France.

MSU Mankato Campus

366 Oral Communication 1-3 cr.

302 Composition 1-3 cr.

323 French Phonetics and Applied Linguistics 1-3 cr.

305 France Today 1-4 cr. OR

402 French Civilization 3-4 cr.

MSU in La Rochelle, France

316 Conversation 1-3 cr.

315 Composition 1-3 cr.

317 Modern France 1-3 cr.

Required Methods: 4 credits

FLES METHODS 462 (3 cr.) and 463 Practicum (1 cr.) Offered on MSU campus only.

Required Cultural Experience:

Students must demonstrate that they have had first-hand experience with the culture(s) represented by the French language. The La Rochelle program provides students with this first-hand experience. When study-abroad is not possible for students, Curriculum and Instruction students will need to conduct their practicum in a school setting and interact with a community that has a significant number of speakers of French.

Students who complete the "specialization" do not meet the MN BOT requirements for World Language Teachers K-12 with a major in French.

Elementary Education

Modern Language: German (15 cr.):

Prerequisites:

1) German 101, 102, 201, 202 or equivalent.

Students may demonstrate their language proficiency level through coursework or through credit by examination. Credit by exam for 101, 102, 201, 202 can be arranged with Birgitta Hendrickson, a faculty member in the German program.

2) Students **must** demonstrate a level of Intermediate-Mid on the Proficiency Interview before they will be admitted to FLES 462, 463. Contact the Department of Modern Languages for details at 507-389-2116 or Birgitta Hendrickson at 389-2917.

Required Language Courses: 11-12 credits

(Language credit may be completed on MSU campus or may be transferred from a study abroad experience with prior approval by the German program. The following courses are offered on the MSU campus.

Ger 300 Intermediate Composition (2 cr)

Ger 303 Modern Germany (2 cr)

Ger 304 German Conversation/Composition I (2 cr)

Ger 305 German Conversation/Composition II (2 cr)

Ger 310 Selected Topics (1-4 cr)

Ger 404 German Literature II (2 cr)

Required Methods, 4 credits:

FLES METHODS 462 (3 cr.) and 463 Practicum (1 cr.) Offered on MSU campus only.

Required Cultural Experience:

Students must demonstrate that they have had first-hand experience with the culture represented by the German language. A study-abroad program in a German speaking-country provides students with a first-hand experience. If study-abroad is not possible for the student, Curriculum and Instruction students will need to conduct their practicum in a school setting and interact with a community that has a significant number of heritage speakers of German.

Students who complete the “specialization” do not meet the MN BOT requirements for World Language Teachers K-12 with a major in German.

Modern Language: Spanish (15 cr.):

Prerequisites:

1) Spanish 101, 102, 201, 202, or equivalent.

Students may demonstrate their language proficiency level through coursework or through credit by examination. Credit by exam for 101, 102, 201, 202 is conducted one time each Fall and Spring semester. Contact the Department of Modern Languages for details at 507-389-2116.

2) Students **must** demonstrate a level of Intermediate-Mid on the Proficiency Interview before they will be admitted to FLES 462, 463. Contact the Department of Modern Languages for details at 507-389-2116.

Required Language Courses: 11-12 credits

(Language credits may be completed on MSU campus or while on MSU program in Mexico).

MSU Mankato campus

310 Advanced Conversation and Conversation 1-4 cr.

356 Latin American Civilization 4 cr.

365 Selected Readings 1-4 cr.

MSU in Mexico campus

394 Supervised Study in Mexico: Advanced Spanish 1-6 cr.

496 Supervised Study: Themes in Hispanic Culture 1-6 cr.

494 Supervised Study in Mexico: Themes in Spanish American Literature 1-6 cr.

Required Methods, 4 credits:

FLES METHODS 462 (3 cr.) and 463 practicum (1 cr.)

Offered on MSU campus only.

Required Cultural Experience:

Students must demonstrate that they have had first-hand experience with the culture(s) represented by the target language. The Mexico program provides students with this first-hand experience. When study-abroad is not possible for the student, Curriculum and Instruction students will need to conduct their practicum in a school setting **and** interact with a community that has a significant number of heritage speakers of Spanish.

Students who complete the “specialization” do not meet the MN BOT requirements for World Language Teachers K-12 with a major in Spanish.

POLICIES/INFORMATION

GPA Policy. All coursework listed in the Elementary Education degree requires a cumulative career GPA of 2.5 and a grade of “C” or better. Students must achieve at least a 2.5 GPA in professional education courses and be admitted to Professional Education.

P/N Grading Policy. With the exception of student teaching, all courses that meet program requirements must be taken for a grade.

COURSE DESCRIPTIONS

Course descriptions with the following prefixes are listed in this section: Curriculum & Instruction (CI), Education (ED) and Educational Foundations (EDFN).

Curriculum & Instruction

200 (2) Introduction to Elementary Teaching

A first course for elementary education majors. Experience in elementary classrooms, understanding children as learners, levels of instruction and the teaching role.

F, S

201 (2) Introduction to Early Childhood Education

A first course for early childhood minors. Experience in pre-Kindergarten classrooms, understanding young learners, levels of instruction and the teaching role.

F

203 (1) Introduction to Early Childhood Education Lab

Lab experiences in preschool settings; to be taken concurrently with 201.

F

205 (3) Service Learning: Society and the Environment

The purpose of this course is to help students develop the critical thinking, problem solving, and decision making skills necessary to make informed decisions on environmental issues. Students will be engaged in readings in preparation for class lecture/discussion, field trips and research on environmental issues. The course will have two action-oriented requirements, developing a proposal for environmental action in the southern Minnesota area and the other carrying out an environmental action activity requiring six to eight hours of community service.

V

301 (1-2) September School Experience

Participation in public or private school classrooms for two or three weeks at the beginning of the school year.

F

302 (1) Extended School Experience

Participation in public school classrooms prior to student teaching.

S

303 (1) Classroom Methods

Elementary classroom structure and organization across academic disciplines. To be taken concurrently with 320 and 321.

Coreq: CI 320, CI 334 F, S

320 (2) Social Studies in Elementary School

Selection and organization of content, materials, activities, procedures for the elementary classroom. To be taken concurrently with 321 and 303.

Pre: Admission to Professional Education, EDFN 333; Coreq: CI 303, 321 and 334 F, S

321 (1) Social Studies/Literacy Clinical

Experiences in elementary classrooms. To be taken concurrently with 320+303

Coreq: CI 320, 334 F, S

322 (3) Science/Health in the Elementary School

Designed to help future teachers understand the role of science education in the school curriculum and to become familiar with some of the trends, issues and problems associated with it.

Pre: EDFN 333, Coreq: CI 323 F, S

323 (1) Science/Math Clinical

Science/health experience in elementary classrooms. To be taken concurrently with 322.

Coreq: CI 322 F, S

324 (2) Teaching Elementary School Mathematics

To prepare elementary level mathematics teachers to use appropriate context materials and methods in teaching.

Pre: CI 320, EDFN 333 F, S

325 (1) Math Clinical Lab

Math experiences in elementary classrooms.

Coreq: CI 324 F, S

332 (2) Developmental Reading

Principles and organization of the reading program. Instructional materials and procedures. This course does not meet requirement for elementary education.

F

334 (4) Literacy Methods for Elementary School

Curriculum and methods for teaching literacy in elementary schools, K-6.

Pre: EDFN 333; Coreq: CI 320, CI 321, CI 303 F, S

335 (1) Reading and Language Arts Lab Experience

Reading and language experiences in the elementary classroom.

Coreq: CI 334 F, S

342 (2) Teaching Science, Technology, and Society in the Middle School

Project-based interdisciplinary instruction infusing technology in middle school mathematics, social studies, and science classrooms.

Pre: CI 322 S

352 (2) Reading in the Middle School

Development and definition of literacy in the middle school.

Pre: EDFN 333 V

355 (2) Curriculum and Management

Considerations of historical, theoretical and educational perspective on curriculum development and practice selecting, organizing and developing curriculum units and writing lesson plans. Managing the unique and developmental needs of the learner and group dynamics will be discussed.

Pre: EDFN 333; Coreq: CI 320, 321, 303, 334 F, S

365 (2) Teaching Infants and Toddlers

Develop curriculum, design environment, for young children at three ages: infant, toddler, three and four year olds.

Pre: CI 201, FCS 301, FCS 303, Coreq: CI 366 S

366 (1) Teaching Infants and Toddlers: Lab

Clinical experiences to accompany 365

Interaction strategies, learning environments, parent communications.

Coreq: CI 365 S

Elementary Education

368 (3) Preprimary Methods and Materials

Instructional strategies theories of curriculum and development, integrated curriculum for 3, 4, and 5 year olds.

Coreq: CI 369 F, S

369 (1) Preprimary Methods and Materials

Clinical experience to accompany CI 368.

Coreq: CI 368 F, S

370 (2) Kindergarten Methods and Materials

Instructional strategies theories of curriculum and development, integrated curriculum for kindergarten children.

Pre: CI 365; Coreq: CI 371 F, S

371 (1) Kindergarten Methods and Materials: Lab

Clinical experiences to accompany 370.

Coreq: CI 370 F, S

401 (2) Teaching the Culturally Different

Adaptation of curriculum, classroom organization and teaching practices.

V

402 (3) Introduction to Teaching the LEP Student

For teachers of students whose dominant language is other than English.

V

404 (2) Curriculum Applications of Technology in Education

To prepare pre-service and in-service teachers to use technology in the elementary classroom. Applications to each content area will be considered.

V

410 (2) Middle School Classroom

The middle school concept, curriculum and teaching methods.

Pre: EDFN 333 F

414 (2-4) Diagnosis and Corrective Instruction in Elementary Math

Diagnostic teaching, evaluating deficiencies, skill analysis, use of case studies and tools of diagnosis.

Pre: CI 324 V

417 (3) Reading for the ESL Student

This course presents the theoretical base for the reading process, strategies for vocabulary development, methods for content area learning as applied to second language learners.

S

418 (2) Elementary School Science Activities

Identification of appropriate science equipment, process skills, concepts and instructional attitudes for science in the elementary school.

Pre: CI 322 V

420 (3) Reading Difficulties

Foundation level of knowledge concerning the characteristics, causes, diagnosis and treatment of reading difficulties.

Pre: CI 332 or 334 V

421 (2) Literacy Interventions

Assessment and strategies for helping struggling readers and English language learners be successful with text. Provides strategies for assisting all students in comprehending content topics through reading and writing.

F, S

422 (2) Reading and Writing in the Secondary School

Concepts, objectives, procedures and reading in subject matter field.

F

428 (3) Teaching Reading and Writing in the Content Areas

Presents strategies for teaching and reading knowledge, attitudes and skills in the various teaching content areas.

F

430 (2) The Elementary Classroom

Historical foundations, influencing factors, issues. Projects in curricular organization. Deals with educational values. Awareness of current elementary school issues.

Pre: Admission to Professional Education V

435 (3) Teacher-Parent Relationships in Education

Emphasis on parent-teacher relationships for effective learning of children through the elementary grades. Includes Introduction to Early Childhood Family Education.

F, S

440 (4) Language and Literacy Development

Relationship between speaking, listening, reading and writing. Role and techniques of assessment; language development in literacy and writing; effective literacy programs.

ALT

447 (3) Teaching in the Secondary School

Analysis of teaching/learning strategies used in today's secondary schools. Allows students to develop an awareness of working conditions.

Pre: Admission to Professional Education, CI 202, EDFN 333 F, S

448 (3) Teaching in the K-12 Schools

Analysis of teaching/learning strategies used in today's K-12 curriculum. Allows students to develop an awareness of working conditions.

Pre: Admission to Professional Education, CI 202, EDFN 333; K-12 licensure major

F, S

451 (2) Middle School Experience

Middle school visitations, observations participation; understanding characteristics of students.

466 (6) PreKindergarten Student Teaching and Seminar

Student teaching with prekindergarten children; weekly seminar.

Pre: CI 365

467 (2) Interdisciplinary Teaching and Learning

This course focuses on cross disciplinary planning and teaching. Rationale, strategies and techniques are emphasized.

Pre: EDFN 333 F

471 (6) Kindergarten Student Teaching and Seminar

Full responsibility of classroom with university supervision.

Pre: CI 370 and 473 or 474, and admission to student teaching

472 (11) Student Teaching: Moderately/Severely Mentally Handicapped

Student teaching in special education. (TMH)

Pre: Special Ed. Methods

473 (8) Student Teaching Elementary

Student teaching in the elementary school including weekly seminar.

Pre: Methods Courses; admission to student teaching
Coreq: EDFN 400, CI 466, CI 494 F, S

474 (6) Student Teaching Elementary

To provide the experienced teacher an opportunity to use skills learned in previous experiences.

Pre: Admission to student teaching

475 (3-6) Enrichment Experiences Elementary

Student teaching projects determined jointly by student and advisor.

Pre: CI 474 or 473

476 (6) Supplementary Student Teaching Secondary

Student teaching in the secondary school including weekly seminar.

Pre: Admission to student teaching

477 (11) Student Teaching Secondary

Student teaching in the secondary school including weekly seminar.

Pre: CI 447 and admission to student teaching

478 (5) Supplementary Student Teaching Elementary

Student teaching in the elementary school including weekly seminar for K-12 majors.

Pre: Admission to student teaching
Co: CI 476 and EDFN 400 F, S

479 (11) Student Teach Mild/Moderate Mentally Handicapped

Student teaching in special education. (EMH)

Pre: Admission to student teaching F, S

482 (3-6) Enrichment Experience Secondary

Student teaching projects determined jointly between student and advisor.

Pre: CI 477-01 F, S

483 (2) Supervision of Student Teachers

To assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers.

V

486 (1-3) Topics in Environmental Education

How to develop curriculum for educational purposes.

V

490 (1-3) Workshop

The workshop format provides teachers and others opportunity to study a specific topic in a shortened, hands-on course.

V

491 (1-4) In Service

493 (5) Student Teaching Middle School

Student teaching full days for half-semester in a middle school setting in one content area for secondary students.

Pre: Required methods and admission to student teaching

494 (6) Student Teaching Middle School

Student teaching in a second content area for a full-day, half-semester, in a middle school setting. For elementary students student teaching in middle school.

Pre: CI 473 or CI 474

495 (2-4) Internship: Early Child Family Education

Principals and practices in Early Childhood/Family Education and programs. On-site experiences are required.

Pre: FCS 483, 488

496 (3-6) Internship

To provide clinical experiences for pre-service teachers; to extend laboratory experiences for those who have completed pre-student teaching experiences.

Pre: Required methods

497 (3 or 6) Reading Internship

Student directed learning; project determined jointly between student and advisor.

Pre: CI 332 or 334, 420, 422 or 428

499 (1-4) Individual Study

By contract between student and faculty member.

Education

210 (1-10) Independent Study

Student directed learning; project jointly determined between student and advisor.

220 (1-10) Field Study

Student directed learning; project jointly determined between student and advisor.

230 (1-10) Individual Study

Student directed learning; project jointly determined between student and advisor.

EDFN 333, CI 410; K-12 licensure major

F, S

240 (1-10) Research

Student directed learning; project jointly determined between student and advisor.

Elementary Education

250 (1-10) Internship

Student directed learning; project jointly determined between student and advisor.

300 (1-10) Seminar

Student directed learning; project jointly determined between student and advisor.

310 (1-10) Independent Study

Student directed learning; project jointly determined between student and advisor.

320 (1-10) Field Study

Student directed learning; project jointly determined between student and advisor.

330 (1-10) Individual Study

Student directed learning; project jointly determined between student and advisor.

340-01 (6) Elementary Education I

Student directed learning; project jointly determined between student and advisor.

340-02 (1-10) Research

Student directed learning; project jointly determined between student and advisor.

350 (1-10) Internship

Student directed learning; project jointly determined between student and advisor.

361 (10-13) General and Content Methods

Gain initial knowledge of elementary classroom settings; build a strong teaching style in math, social studies, science and literature.

F, S

362 (13) Literacy and Special Needs

One part of this block focuses on literacy (reading, writing, speaking and listening). Another portion is designed to provide students with a foundation level of knowledge concerning reading difficulties and the special needs students.

F, S

400 (1-10) Seminar

Student directed learning; project jointly determined between student and advisor.

407 (2) Special Student in Regular Class

Provides regular education majors with information and strategies including the special needs students in the regular classroom. This course is required of all education majors except those in Physical Education.

F, S

410 (3) Middle School Classroom

This course is designed to provide pre-service educators with insight into the middle school philosophies in the U.S., and the unique and transitional nature of the early adolescent learner. This course offers an opportunity to explore topics relevant to the middle school environment as well as licensure in Minnesota.

F, S

420 (1-10) Field Study

Student directed learning; project jointly determined between student and advisor.

430 (1-10) Individual Study

Student directed learning; project jointly determined between student and advisor.

440 (1-10) Research

Student directed learning; project jointly determined between student and advisor.

450 (1-10) Internship

Student directed learning; project jointly determined between student and advisor.

490 (1-3) Workshop

The workshop format provides teachers and others an opportunity to study a specific topic in a shortened hands-on course.

499 (1-4) Individual Study

Student directed learning; project jointly determined between student and advisor.

Educational Foundations

101 (3) Exploring and Applying Values

This course focuses on students' personal history, ethical views and values. Students will be asked to state and apply those views and values to current political and social issues. A service-learning experience is required for this class.

V

106 (1) Education and Culture in the United States

Course gives students new to this country and to U.S. higher education a broad overview of the U.S. educational system and provides a forum for discussion and comparison of customs and beliefs as they affect relationships among students and with professors.

Pre: International student

V

222 (3-4) Human Relations and Cultural Diversity

Study of interpersonal skills, motivation, and group skills. Applied to educational settings. Requires 18 hours clinical experiences (out-of-class). Meets State of Minnesota human relations requirement for teacher licensure.

F, S

235 (3) Human Development

Designed for non-teacher education students, this is a general education course considering human development from a life-span perspective. It is not appropriate for professional education credit.

V

250 (3) Social Justice in School and Community

Analyzing justice as it relates to education and the criminal justice system. Emphasis is on comparing Retributive Systems with the newer Restorative Justice. Active learning methods in the classroom, schools and communities, including Service-Learning.

V

290 (1-2) Workshop

Short-term workshops dealing with specific subjects germane to the broader disciplines within Educational Foundations: Social/Philosophic Issues in Education, Development and Learning Psychology, Human Relations and Cultural Diversity, Research and Assessment/Evaluation, and Teaching in Higher Education.

V

333 (3) Classroom Learning and Assessment - Elementary

Focus on principles of psychology and techniques of learning-behavioristic, cognitive and humanistic. Emphasis on a variety of formal and informal/strategies for assessment and student growth and learning. Requires twenty-four hours of out-of-class clinical experience.

Pre: Admission to Professional Education F, S

400 (1) The Social Context of Learning: Secondary

The Social Context of Learning explores the relationship of the school and community as well as the relationships and roles of the teacher, student, and the school. Knowledge of the social, historical, philosophical foundations of education, school law, finance and governance, ethics, democracy and multi-culturalism is explored. Requires twelve hours of out-of-class clinical experience.

Pre: Recommended for final semester of Professional Education F, S

423 (3) Sexist Influences in Human Development

Examination of issues of gender and sexism in society and education, including focus on the experience of women of color.

V

444 (3) The Social Context of Learning

The Social Context of Learning explores the relationship of the school and community as well as the relationships and roles of the teacher, student, and the school. Knowledge of the social, historical, philosophical foundations of education, school law, finance and governance, ethics, democracy and multi-culturalism is explored. Requires twelve hours of out-of-class clinical experience.

Pre: Recommended for final semester of Professional Education F, S

450 (4) Human Relations and Cultural Diversity

Study of interpersonal communication skills, self-esteem, classroom relationships, and cultural diversity applied to educational settings. This course meets the State of Minnesota human relations requirements for teacher licensure.

V

451 (1-2) Cultural Diversity Clinical Experience

Opportunity for "hands-on" learning experience working with students of culturally diverse backgrounds, one-to-one, small group, tutoring, activities supervision and lesson planning, and implementation. Lower division students may take this course with instructor permission. Pre: EDFN 222 or EDFN 450

V

461 (3) Service-Learning: Theory and Practice

A focus on service-learning: planning, implementation, evaluation and celebration of service-learning as program, activity, class and integration into academic study.

V

477 (1-4) Individual Study

Intensive, semester-long individualized study, conducted under the supervision of Educational Foundations faculty in areas germane to the broader disciplines within Educational Foundations: Social/Philosophic Issues in Education, Human Development and Learning, Human Relations and Cultural Diversity, Research and Assessment, Teaching in Higher Education.

Pre: Undergraduate students

V

479 (3) Grant Writing and Program Funding

Procedures for designing research, writing proposals and requests for grants, contracts and funding from external sources; grant administration.

V

490 (1-2) Workshop

Short-term workshops dealing with specific subjects germane to the broader disciplines within Educational Foundations: Social/Philosophic Issues in Education, Development and Learning Psychology, Human Relations and Cultural Diversity, Research and Assessment Evaluation, and Teaching in Higher Education.

V

491 (1-4) In-Service

Offered as more intensive, often semester-long, study in areas germane to the broader disciplines within Educational Foundations: Social/Philosophic Issues in Education, Development and Learning Psychology, Human Relations and Cultural Diversity, Research and Assessment Evaluation, and Teaching in Higher Education.

Pre: Admittance to Higher Education

V

Special Education

444 (2) Behavior Management in the Classroom

Changes to accommodate state standards and student need assessment, undergraduate general education teaching. This course is designed to assist teachers and prospective teachers in managing the behavior of individual students in a general education classroom. Teacher education students will learn to use individual and group management skills to create a motivating learning environment that encourages positive social interaction.

F, S

English

College of Arts & Humanities

Department of English

230 Armstrong Hall • 507-389-2117

Chair: Anne O'Meara

John Banschbach, Suzanne Bunkers, Donna Casella, Terry Davis, William Dyer, Tina Edstam, Terrance Flaherty, Gwen Griffin, Kathleen Hurley, Mary Susan Johnston, Donald F. Larsson, Nancy MacKenzie, JoAnna Mink, Roland Nord, David Popowski, Kay Puttock, Richard Robbins, Roger Sheffer, Louisa Smith, Harry Solo, Stephen Stoyhoff, Richard Terrill

The aims of the courses in English are fourfold: to cultivate accuracy and effectiveness in the use of the English language, both spoken and written; to suggest the satisfactions which may be experienced from contemplating a work of literary art; to gain experiences with masterpieces devoted to answering some of life's most important questions; and to help prepare students in professions requiring knowledge of the English language and literature. Writing is required in all courses so that the student may learn to write effectively and to practice the difficult but invaluable art of thinking a problem through.

The department's undergraduate programs prepare graduates for a wide variety of careers, including secondary English teaching, technical writing, editing, and publishing. A student with a strong background in literature, language and writing will be prepared to enter many other fields of study, including law, journalism, religion, business—in short, English is also the “pre-professional” major.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

ENGLISH BA

Choose one of the following options:

LITERATURE OPTION (32 cr)

Required for Major (Core, 24-26 cr):

ENG 275 Introduction to Literary Studies (4)

Choose three courses from the following:

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to the Present (4)

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to the Present (4)

Choose one course from the following:

ENG 416 Film Criticism (4)

ENG 441 Literary Criticism (4)

Choose one course from the following:

ENG 405 Shakespeare: Comedies and Histories (2)

ENG 406 Shakespeare: Tragedies (2)

Choose one course from the following:

ENG 331 World Literature: Ancient - Medieval (2)

ENG 332 World Literature: Renaissance - Contemporary (2)

ENG 435 The World Novel (2-4)

Required Electives for Major (6-8 cr):

Choose a minimum of 6 credits of 300-400 level English courses (except 361, 362) :

ENG xxx ENG xxx

3-4 credits from the following Humanities courses may be included as electives:

HUM 250 HUM 251 HUM 280

HUM 281 HUM 282 HUM 450

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

WRITING OPTION (32 cr)

Required for Major (Core, 32 cr):

ENG 448 Contemporary Literature (4)

Choose one of the following:

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to Present (4)

Choose one of the following:

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to the Present (4)

Choose a minimum of 4 credits from the following:

ENG 275 Introduction to Literary Studies (4)

ENG 381 Introduction to English Linguistics (4)

ENG 405 Shakespeare: Comedies and Histories (2)

ENG 406 Shakespeare: Tragedies (2)

ENG 416 Film Criticism (4)

ENG 441 Literary Criticism (4)

ENG 481 History of the English Language (4)

ENG 482 English Phonetics and Grammar for TESL (4)

ENG 485 Language and Culture in TESL (4)

Choose one course from the following:

ENG 496 Form and Technique in Prose (4)

ENG 497 Form and Technique in Poetry (4)

Choose 2 if primary genre is prose:

ENG 342 Creative Writing: Nonfiction (4)

ENG 343 Creative Writing: Fiction (4)

ENG 442 Advanced Prose Nonfiction Writing (4)

ENG 443 Advanced Fiction Writing (4)

ENG 445 Advanced Critical Writing (4)

ENG 446 Screenwriting (4)

Choose one if primary genre is prose:

ENG 344 Creative Writing: Poetry (4)

ENG 444 Advanced Poetry Writing (4)

Choose both if primary genre is poetry:

ENG 344 Creative Writing: Poetry (4)

ENG 444 Advanced Poetry Writing (4)

Choose one if primary genre is poetry:

ENG 342 Creative Writing: Nonfiction (4)

ENG 343 Creative Writing: Fiction (4)

ENG 442 Advanced Prose Nonfiction Writing (4)

ENG 443 Advanced Fiction Writing (4)

ENG 445 Advanced Critical Writing (4)

ENG 446 Screenwriting (4)

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

ENGLISH BS

Choose one of the following options:

GENERAL OPTION (34 cr)

Required for Major (Core, 16 cr):

ENG 275 Introduction to Literary Studies (4)

Choose 3 courses from the following:

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to Present (4)

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to the Present (4)

Required Electives for Major (18 cr):

Choose 18 credits of English electives (exclusive of 361 and 362). Only four hours at the 100-level and four hours at the 200-level are allowed.

ENG xxx ENG xxx ENG xxx

ENG xxx ENG xxx ENG xxx

3-4 credits from the following humanities courses may be selected:

HUM 250 HUM 251 HUM 280

HUM 281 HUM 282 HUM 450

Required Minor: Yes. Any.

WRITING OPTION (34 cr)

Required for Major (Core, 32 cr):

ENG 275 Introduction to Literary Studies (4)

ENG 448 Contemporary Literature (4)

Choose one course from the following:

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to Present (4)

Choose one course from the following:

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to the Present (4)

Choose one course from the following:

ENG 496 Form and Technique in Prose (4)

ENG 497 Form and Technique in Poetry (4)

Choose two or more if primary genre is prose:

ENG 342 Creative Writing: Nonfiction (4)

ENG 343 Creative Writing: Fiction (4)

ENG 442 Advanced Prose Nonfiction Writing (4)

ENG 443 Advanced Fiction Writing (4)

ENG 445 Advanced Critical Writing (4)

ENG 446 Screenwriting (4)

Choose one or more if primary genre is prose:

ENG 344 Creative Writing: Poetry (4)

ENG 444 Advanced Poetry Writing (4)

Both are required if primary genre is poetry:

ENG 344 Creative Writing: Poetry (4)

ENG 444 Advanced Poetry Writing (4)

Choose one or more if primary genre is poetry:

ENG 342 Creative Writing: Nonfiction (4)

ENG 343 Creative Writing: Fiction (4)

ENG 442 Advanced Prose Nonfiction Writing (4)

ENG 443 Advanced Fiction Writing (4)

ENG 445 Advanced Critical Writing (4)

ENG 446 Screenwriting (4)

Required Electives for Major (2 cr):

Choose a minimum of 2 credits of 300/400 level English courses:

ENG xxx 300/400 level elective

Required Minor: Yes. Any.

TECHNICAL WRITING OPTION (37 cr)

Required for Major (Core, 27-28 cr):

ENG 271 Technical Communication (4)

ENG 474 Researching and Writing Technical Reports (4)

ENG 475 Editing Technical Publications (4)

ENG 477 Technical Documentation, Policies and Procedures (4)

ENG 498 Internship (3-4)

Choose two courses from the following three courses:

ENG 471 Visual Technical Communication

ENG 472 Topics in Technical Communication (4)

ENG 476 Online Documentation

ENG 478 Technical and Scientific Literature (4)

ENG 479 Rhetorical Theory Applied to Technical Documents (4)

Required Electives for Major (9-10 cr):

Choose a minimum of 4 credits from the 300/400 level English writing, linguistics, or publications courses; 5-6 credits may come from supporting areas, such as speech, educational technology, mass communications or computer science.

ENG xxx ENG xxx ENG xxx

Required Minor: Yes. Technical.

Several are recommended: Electronic Engineering Technology, Manufacturing Engineering Technology, Computer Science (choice of 3), Mathematics, Biology, Chemistry, Physics, Community Health, Psychology or other approved on an individual basis.

ENGLISH/SPEECH TEACHING OPTION:

ENGLISH CONCENTRATION BS (60 cr.)

Required General Education Courses

SPEE 102 Public Speaking (3)

MASS 110 Introduction to Mass Communication (3)

ENG xxx English Elective (4)

Required for Major (English Core, 30-33 cr):

ENG 275 Introduction to Literary Studies (4)

ENG 285 Practical Grammar (2)

ENG 361 Teaching English in the High School (2)

ENG 362 Teaching Literature and Writing (4)

ENG 381 Introduction to English Linguistics (4)

Choose one course from the following:

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to Present (4)

English

Choose one course from the following:

- ENG 327 American Literature to 1865 (4)
ENG 328 American Literature: 1865 to the Present (4)

Choose one course from the following:

- ENG 463 Adolescent Literature (2)
ENG 464 Teaching Literature in the Middle School (3)

Choose one course from the following:

- ENG 331 World Literature: Ancient through Medieval (2)
ENG 332 World Literature: Renaissance through Contemporary (2)
ENG 435 The World Novel (2-4)

Choose one course from the following:

- ENG 405 Shakespeare: Comedies and Histories (2)
ENG 406 Shakespeare: Tragedies (2)

Required English Electives for Major (3-6 cr):

Choose elective credits in English, with three credits required to be at the 3/400 level.

Required for Major (Speech Core, 21 cr):

- SPEE 101 Interpersonal Communication (3)
SPEE 201 Small Group Communication (3)
SPEE 310 Performance of Literature (3)
SPEE 315 Effective Listening (3)
SPEE 321 Argumentation and Debate (3)
SPEE 404 Teaching of Speech Communication (3)
SPEE 430 Directing Forensic Activity (3)

Required Speech Electives for Major (3 cr)

Choose one course from the following:

- SPEE 202 Nonverbal Communication (3)
SPEE 203 Intercultural Communication (3)
SPEE 220 Forensics (3)
SPEE 333 Advanced Public Speaking (3)
SPEE 403 Gender and Communication (3)

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

ENGLISH MINOR

GENERAL OPTION

Required Total: 16 credits

Required for Minor (Core, 12 cr):

- ENG 275 Introduction to Literary Studies (4)

Choose one course from the following:

- ENG 320 British Literature to 1785 (4)
ENG 321 British Literature: 1785 to Present (4)

Choose one course from the following:

- ENG 327 American Literature to 1865 (4)
ENG 328 American Literature: 1865 to the Present (4)

Required Electives for Minor (4 cr):

Choose a minimum of 4 credits in English courses:

Students may not select ENG 325, 361, 362, 463 or 464. None may be at the 100-level.

WRITING OPTION

Required Total: 16 credits

Required for Minor (Core, 8 cr):

Choose a minimum of 8 credits from the following courses:

- ENG 242 ENG 342 ENG 343
ENG 344 ENG 442 ENG 443
ENG 444 ENG 445 ENG 446

ENG 494 may be chosen when topic is appropriate.

Required Electives for Minor (8 cr):

Choose an additional 8 credits from any 300/400 English courses (except ENG 361, 362, 470):

ENG xxx ENG xxx ENG xxx

LINGUISTICS MINOR

Required for Minor (Core, 16 cr):

Choose 8-16 credits from the following:

- ENG 358 ENG 381 ENG 481
ENG 482 ENG 485

ENG 494 or 495 may be chosen when topic is appropriate (see advisor).

Choose up to 8 credits from the following courses.

- FREN 323 FREN 404 SPAN 301
SPAN 401 GERM 405 CDIS 201
CDIS 212 CDIS 290 CDIS 292
CDIS 402/403 CDIS 438

TECHNICAL WRITING MINOR

Required for Minor (Core, 16 cr):

- ENG 271 Technical Communication (4)
ENG 474 Researching and Writing Technical Reports (4)

ENG 475 Editing Technical Publications (4)

Choose one course from the following:

- ENG 472 ENG 477 ENG 478
ENG 479

POLICIES/INFORMATION

GPA Policy. Candidates for the major degrees in the department must maintain a 2.5 grade-point average in all coursework in the major field, in addition to the 2.0 overall average required by the university for graduation. Students must earn a C or better for a course to apply to their major or minor.

P/N Grading Policy. Courses leading to a major or minor in English may not be taken on a P/N basis, except where P/N is mandatory.

ENG 101 is not a prerequisite to other 100 level courses. ENG 101 should be completed during the freshman year.

Supporting Coursework. It is advisable for English majors to be acquainted with a foreign language, especially so for students who plan to do graduate work in English. One or more courses in British or American history are desirable.

Most English teachers are responsible for directing some extracurricular activity; consequently, the English major with experience and training in one or more of these activities in college (e.g., dramatics, forensics, journalism) will make a stronger candidate for teacher positions.

Honors Reading. In order to provide broad preparation for graduate study, English majors of superior ability may read for honors in eight different areas. See ENG 350-358. To be eligible, a student must have completed at least 15 credits of English courses and earned a grade-point average of 3.5 in English. Usually the student will enroll for no more than two honors courses a semester. Honors credits may be counted as electives for an English major. Students who successfully complete at least five of these courses with a grade-point average of 3.5 for all English courses (and who have met the other degree requirements) will be eligible for graduation "with distinction in English."

COURSE DESCRIPTIONS

100 (4) Basic Writing

A remedial writing course that progresses from the personal writing to writing about readings and the use of sources.

101 (4) Composition

Students will practice strategies for generating and developing ideas, locating and analyzing information, analyzing audience, drafting, writing sentences and paragraphs, evaluating drafts, revising, and editing in essays of varying lengths.

110 (4) Introduction to Literature

Study and analysis of elements of prose, poetry and drama in English from earlier periods through contemporary. Emphasizes critical reading of literature. May include such genres as short story, novel, memoir, nonfiction, biography, autobiography, poem, play, screenplay.

112 (4) Introduction to Poetry and Drama

Study and analysis of elements of poetic and dramatic literature in English, including translations, from earlier periods through contemporary. Emphasizes critical reading of and writing about literature.

113 (4) Introduction to Prose Literature

Study and analysis of prose literature in English from earlier periods through contemporary. Works will be chosen from the following forms: short stories, essays, novellas, novels, memoirs, autobiographies, and other long forms. Emphasizes critical reading of and writing about literature.

114 (4) Introduction to Film

Study and analysis of the elements basic to a critical understanding of film: story elements; visual design; cinematography and color; editing and special effects; functions of sound and music; styles of acting and directing; and functions of genre and social beliefs.

211 (4) Perspectives: Human Diversity and Literature/Film

Courses will explore various specialized topics in literature and/or film to increase understanding of literary and cinematic contributions made by under-represented peoples, to develop critical thinking, reading, and writing skills, and to increase appreciation of the diversity of human experience. Typical courses include: Multicultural Literature, Women's Literature. May be repeated as topics change.

212 (4) Perspectives: World Literature/Film

Courses will introduce students to works of literature and/or film from a variety of world cultures. Designed to increase knowledge of world cultures and appreciation and understanding of cultural differences in representation, and in seeing, believing, and being. Emphasizes critical thinking, reading, and writing.

213 (4) Perspectives: Ethics and Civic Responsibility in Literature/Film

Courses will focus on some characteristic ways in which literature and/or film address and explore the ethical dimensions of citizenship and the relationships between works and their cultural contexts. Emphasizes critical thinking, reading and writing. Typical courses include: War and Peace; Utopias and Dystopias. May be repeated as topics change.

214 (1-4) Perspectives in Literature/Film

Courses will explore various specialized topics in literature and/or film. May be repeated as topics change.

215 (1-3) Topics

Varied topics in literature and film. May be repeated as topics change.

242 (3) Introduction to Creative Writing

An introduction to writing poetry and short fiction. This course does not assume previous creative writing experience on the part of the student.

270 (4) Advanced Composition

Continued practice in expository writing with emphasis on further development of style and organization.

271 (4) Technical Communication

Introduction to learning the written and oral communication of technical information. Assignments include writing and presenting proposals, reports, and documentation. Emphasis on use of rhetorical analysis, computer applications, collaborative writing, and usability testing to complete technical communication tasks in the workplace. Pre: ENG 101

275 (4) Introduction to Literary Studies

An introduction to literary genre and to the techniques of writing about literature. Pre: ENG 101

285 (2) Practical Grammar

A review of traditional grammar designed to prepare students for advanced work in language and grammar. This course will run for a half-semester.

English

318 (2-4) Selected Studies in Multicultural Literature

Specific topics in multicultural literature with detailed study of a particular period, region, or group in the United States and their contributions to a diverse literature. Topics include African American Literature, American Indian Literature, Southern Writers of Color, and others. May be repeated as topics change.

320 (4) British Literature to 1785

Representative works from British literature encompassing Beowulf through the Eighteenth Century.
Pre or Coreq: ENG 275 F

321 (4) British Literature: 1785 to Present

Representative works from British Literature, the Romantic Period to the present.
Pre or Coreq: ENG 275 S

325 (3) Children's Literature

Introduction to authors, genres, illustrations, and works of literature published for elementary age children. Current and classic works.

327 (4) American Literature to 1865

A survey of American Literature from its beginnings to the end of the Civil War.
Pre or Coreq: ENG 275 F

328 (4) American Literature: 1865 to the Present

A survey of American Literature from the end of the Civil War to the present.
Pre or Coreq: ENG 275 S

331 (2) World Literature: Ancient through Medieval

A survey of literature from a variety of world cultures from ancient through medieval times, with an emphasis on the epic genre and the cultural myths it carries. The course will run for a half-semester.
Pre or Coreq: ENG 275 F

332 (2) World Literature: Renaissance through Contemporary

A survey of literature from a variety of world cultures from renaissance through contemporary times, with an emphasis on the epic genre and the cultural myths it carries. The course will run for a half-semester.
Pre or Coreq: ENG 275 F

342 (4) Creative Writing: Nonfiction

Introduction to writing personal essays and literary journalism.

343 (4) Creative Writing: Fiction

Introduction to writing short stories.
S

344 (4) Creative Writing: Poetry

Introduction to writing poems.
F

350 (1) Reading for Honors

Medieval and Sixteenth Century English Literature. Consent required.

351 (1) Reading for Honors

17th Century English Literature. Consent required.

352 (1) Reading for Honors

18th Century English Literature. Consent required.

353 (1) Reading for Honors

Nineteenth Century English Literature. Consent required.

354 (1) Reading for Honors

Nineteenth Century American Literature. Consent required.

355 (1) Reading for Honors

Twentieth Century English and American Literature. Consent required.

356 (1) Reading for Honors

Literature in translation, from any period, any language. Consent required.

358 (1) Reading for Honors

Linguistics. Consent required.

361 (2) Teaching English in the High School

Methods of and materials for teaching English in the 7-12 language arts curriculum, with emphasis on curriculum, especially the new state curriculum assessment package, lesson and unit plans, clinical experience, professional issues and responsibilities.
S

362 (4) Teaching Literature and Writing

Methods of and materials for teaching writing and literature (fiction, nonfiction, poetry) in the 7-12 language arts curriculum. Emphasis on computer assisted writing, computer assisted research, and assessment.
F

381 (4) Introduction to English Linguistics

The English language considered structurally (phonology, morphology, syntax, semantics) and sociolinguistically (geographical and social dialects, gender issues, acquisition of first and second language, standard and nonstandard forms).
F

400 (4) Chaucer

Readings in the major works of Chaucer, including The Canterbury Tales and Troilus and Criseyde.

401 (4) Milton

A study of Milton's development as a poet and prose writer, from his minor poetry to Paradise Lost, Paradise Regained, Samson Agonistes, Areopagitica, and selections from On Christian Doctrine.

402 (2-4) Women in Literature

Selected topics course on literature by and about women.

403 (2-4) Selected Authors

Content changes. May be repeated.

405 (2) Shakespeare: Comedies and Histories

A study of Shakespeare's comedies and histories. This course will run for a half-semester.

S

406 (2) Shakespeare: Tragedies

A study of Shakespeare's tragedies. This course will run for a half-semester.

S

416 (4) Film Criticism

Trends in film theory and criticism. Practice in critical analysis and reviews.

ALT-F

425 (2-4) Topics in Children's Literature

Topics have included genres such as fantasy or historical fiction and thematic topics such as survival or journeys.

F

426 (2-4) Selected Periods

Selected periods of literary study.

430 (1-3) Independent Reading

Extensive reading in an area for which the student has had basic preparation. Consent required.

432 (2-4) Selected Studies in the Novel

Content changes. May be repeated.

435 (2-4) The World Novel

A study of selected novels from a variety of time periods and cultures, including Eastern and Western Europe, Asia, Africa, and Latin America.

S

441 (4) Literary Criticism

Theories of literature and its production and use.

Pre: 6 semester credits in literature

ALT-S

442 (4) Advanced Prose Nonfiction Writing

Advanced workshop in writing personal essays and literary journalism.

Pre: Writing course or consent

ALT-F

443 (4) Advanced Fiction Writing

An advanced course in writing short stories and novels.

Pre: Writing course or consent

ALT-S

444 (4) Advanced Poetry Writing

An advanced course in writing poems.

Pre: Writing course or consent

ALT-S

445 (4) Advanced Critical Writing

An advanced course in writing critical essays.

Pre: Writing course or consent

V

446 (4) Screenwriting

Introduction to writing for the screen.

Pre: Writing course or consent

S

448 (4) Contemporary Literature

Selected works of fiction, nonfiction, and poetry since 1945.

S

463 (2) Adolescent Literature

Motivation and interests of and materials for adolescent readers. This course will run a half-semester.

F

464 (3) Teaching Literature in the Middle School

Survey of books suitable for the Middle School classroom, covering a variety of topics and genres.

S

470 (1-3) Independent Writing

Writing in an area and of a type for which the student has demonstrated ability. May be repeated. Consent required.

471 (4) Visual Technical Communication

This course provides analysis and training focused on concepts and practices of visual design as they relate to technical and professional communication.

472 (4) Topics in Technical Communication

Overview of technical communication theory with emphasis on contemporary approaches. Hands-on workshop which implements the theories discussed.

F

473 (4) Desktop Publishing

Brief history of publishing and typography, conventions of desktop publishing, and hardware and software application tools for desktop publishing. Students need not have prior experience with DTP, but some word processing and microcomputer experience will be helpful.

474 (4) Researching and Writing Technical Reports

Practice in writing various types of reports for a variety of purposes and audiences. Includes primary and secondary research methods, data analysis/information to be used in reports.

Pre: ENG 271 or equivalent

S

475 (4) Editing Technical Publications

Editing the content, organization, format, style, and mechanics of documents, managing the production cycle of documents, and discovering and learning microcomputer and software applications for technical editing tasks.

S

English As A Second Language

476 (4) Online Documentation

This course serves as an introduction to the conventions and strategies for publishing online documentation and for managing online documentation projects. Topics will include: 1. analyzing users and tasks; 2. designing and writing documents to be published online; 3. testing online documents; and 4. managing online documentation projects.

477 (4) Technical Documentation, Policies, and Procedures

Creating both online and print documentation for products, with emphasis on computer software and hardware documentation for users. Attention also to policies and procedures as written for a range of uses (e.g., employee handbooks, manufacturing processes, usability testing).

F

478 (4) Technical and Scientific Literature

Reading and analysis of stories, novels, poems, essays, and nonfiction accounts that deal with scientific and technological topics. Focus on the role of technology in communication forms and tools.

ALT-F

479 (4) Rhetorical Theory Applied to Technical Documents

Overview of prominent rhetorical theories, from classical to contemporary, which are applicable to technical communication. Practical application and implications of the theories emphasized. Additional attention given to current issues such as risk communication and ethics.

ALT-S

481 (4) History of the English Language

The development of English from its origins as a dialect of Proto-Indo-European to its current form, with consideration of its social history as well as its formal development.

482 (4) English Phonetics and Grammar for TESL

The English sound system and English sentence structure studied for the purpose of discovering how they can be taught to students of English as a second or foreign language.

F

485 (4) Language and Culture in TESL

A consideration of the cultural issues encountered by teachers of English as a second or foreign language in the US and abroad.

S

492 (2-4) Selected Topics

Various topic-oriented courses in literature.

494 (1-6) English Workshop

Specialized workshops in topics such as computer assisted writing, teaching the writing of poetry in the secondary school, or discipline specific writing.

495 (1-4) Special Studies

Specialized, in-depth study of topics such as Holocaust literature, environmental literature, or regional literature.

496 (4) Form and Technique in Prose

Study of the technical underpinnings of fiction and non-fiction genres.

ALT-F

497 (4) Form and Technique in Poetry

Study of the technical underpinnings of poetry.

ALT-F

498 (1-6) Internship

Students gain experience in technical communication by working on site for corporations, institutions, or non-profit organizations performing technical communication duties.

499 (1-4) Individual Study

Extensive reading and writing in an area for which the student has had basic preparation. Consent required.

English As A Second Language

College of Arts & Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Chair: Kimberly Contag

Tina Edstam, Patricia Wilcox Peterson, Steve Stoyanoff

Courses in English as a second language (ESL) are intended to help international students and other students who are non-native speakers of English at Minnesota State University, Mankato. These courses are advanced level second language courses which prepare students to meet the language demands of academic study. Placement into the ESL program occurs at the beginning of each semester for newly admitted students, including students who have transferred to Minnesota State University, Mankato from other institutions. International students must register for and complete any required ESL courses during their first semester of study in Mankato. Specific information regarding the testing and placement process may be secured from the office of the Department of Modern Languages and also from the Office of International Student.

Students interested in teaching English as a second language should see the Teaching English as a Second Language (TESL) section of this bulletin.

POLICIES/INFORMATION

GPA Policy. A grade of "P" must be earned in order for the student to fulfill the ESL requirement.

P/N Grading Policy. All ESL courses are offered on a P/N basis only.

COURSE DESCRIPTIONS

101 (4) Advanced Academic English for Non-Native Speakers

Listening to academic lectures, taking notes, reading textbook material, summarizing and relating information from various sources. Study skills, writing answers to essay questions, and practice giving oral presentations.

F, S

201 (4) Advanced Composition for Non-Native Speakers I

Grammar topics on the sentence level, sentence combining, and discourse structures. Writing skills include paraphrase, paragraph organization, library work, editing and revising.

F

202 (4) Advanced Composition for Non-Native Speakers II

Same as ESL 201, with further work in writing as a way to process information.

F, S

Environmental Sciences

College of Science, Engineering & Technology

Department of Biological Sciences

242 Trafton Science Center S • 507-389-2786

Website: <http://www.mnsu.edu/dept/biology>

Program Coordinator: Beth Proctor, Ph.D.

507-389-5697

Environmental science is an applied science designed to study those factors that impact our environment. Major areas of environmental concern include, but are not limited to, water (surface and ground water) quality, air quality, and solid and hazardous waste issues. This program is designed to encourage students to use the resources of all the colleges of Minnesota State University, Mankato. The program is oriented toward developing the individual for leadership positions in industry, government, and public concern groups, as well as providing a foundation for individual community involvement as an informed citizen.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

ENVIRONMENTAL SCIENCE MAJOR BS

There are two different ways to earn a BS degree in Environmental Sciences.

OPTION I: COMPLETION OF TWO MAJORS

Required for Major (Core, 28-32 cr):

BIOL 215 General Ecology (4)

BIOL 410 Human Ecology (3)

ENVR 440 Environmental Regulations (3)

ENVR 450 Environmental Pollution and Control (3)

ENVR 460 Analysis of Pollutants (4)

ENVR 498 Internship/Research (1-3)

Choose **one** of the following:

BIOL 217 Plant Science (3)

BIOL 316 Animal Diversity (3)

BIOL 412 Soil Ecology (4)

Plus two 300-400 level courses from **one** of the following emphases in Biology:

Aquatic Ecology, Terrestrial Ecology, Plant Sciences, Toxicology, Microbiology, or Techniques.

Required for Major (Elective Option):

Elective Option A (6-8 cr, second major in a science):

1. Two 300-400 level courses from one of the following areas: Geography, Political Science, Urban and Regional Studies, Business, or Economics.

2. Electives may be taken from the 300-400 level that are compatible with Environmental Sciences Major. A maximum of **15 credits** from one major can be used in the second major.

Elective Option B (8-10 cr, second major in a non-science):

1. Complete **one** of the following Chemistry sequences:

CHEM 105 **and** CHEM 111

or

CHEM 201 **and** CHEM 202

2. Electives from the 300-400 level that are compatible with Environmental Sciences Major. A maximum of 15 credits from one major can be used in the second major.

Required Minor: None.

OPTION II: COMPLETION OF MAJOR PLUS 2 MINORS

Required for Major (Core, 28-32 cr):

See requirements under Option I.

Required for Major (Chemistry, 8-10 cr):

Choose **one** of the following sets to complete one year of Chemistry:

CHEM 105 **and** CHEM 111

or

CHEM 201 **and** CHEM 202

Required (Two Minors, minimum of 40 cr):

Select two minors from the following: Anthropology, Business Administration, Chemistry, Community Health, Computer Science, Economics, Geography, Geology, International Business, Law Enforcement, Mass Communication, Physics, Political Science, Technical Writing, Urban & Regional Studies

ENVIRONMENTAL SCIENCE MINOR

Required for Minor (Core, 21 cr):

BIOL 101 Perspectives in Environmental Science (4)

BIOL 215 General Ecology (4)

Ethnic Studies

ENVR	440	Environmental Regulations (3)
ENVR	450	Environmental Pollution and Control (3)

OPTION A: SCIENCE MAJOR

ENVR	460	Analysis of Pollutants (4)
BIOL	410	Human Ecology (3)

OPTION B: NON-SCIENCE MAJOR

Choose **one** set of CHEMISTRY courses from the following:

CHEM	105	and	CHEM	111
or				
CHEM	201	and	CHEM	202

POLICIES/INFORMATION

P/N Grading Policy: All courses leading to a major or a minor in environmental sciences must be taken for letter grades.

Refer to the College regarding required advising for students on academic probation.

GPA Policy: A minimum grade of "C" is required in all courses applied to the Environmental Sciences B.S. degree.

Several scholarships in the Department of Biological Sciences are available for entering freshmen and currently enrolled MSU students who meet the requirements. Application deadline is March 1 of each year.

COURSE DESCRIPTIONS

101 (4) Perspectives in Environmental Science

This course is designed to introduce students to the complex field of environmental science. Reading assignments, lectures, discussions and other class assignments will introduce students to the structure and functions of ecosystems, the concept of sustainability, issues in environmental protection with an emphasis on global commons, the interrelationships between environment, culture, government and economics and what individuals or groups can do to influence environmental policy/rules.

F, S

440 (3) Environmental Regulations

This is a lecture course introducing students to major federal environmental laws and regulations. Discussions include the cause(s) that prompted the enactment of various environmental legislation as well as intent and implementation of the legislation. Both Federal and State of MN environmental statutes will be discussed.

F

450 (3) Environmental Pollution and Control

This is a lecture course that introduces students to sources and controls for pollutants in air, water, and soils including hazardous waste. Chemical and biological mechanisms that are important in nature and used to control/treat various types of pollutants are emphasized.

Pre: 1 year CHEM

F

460 (4) Analysis of Pollutants

The purpose of this lecture/lab class is to introduce students to standard practices and procedures used in sampling and analysis of environmental matrices and to develop an environmental research project. Standard quality control/quality assurance procedures per EPA are emphasized.

S

480 (1-6) Senior Research

Participate in an independent research project with advisory support and with a focus on the student's career objective.

F, S

483 (1-2) Environmental Science Seminar

A seminar course that involves a critical evaluation of an area in Environmental Science. Topics vary from year to year. Students are usually required to make a presentation to the class.

ALT

491 (1-2) In-Service

F, S

498 (1-6) Internship

Only three credits can be counted toward major. Experience in applied Environmental Sciences according to a prearranged training program.

F, S

499 (1-6) Individual Study

Individual Research Project.

F, S

Ethnic Studies

College of Social & Behavioral Sciences

Department of Ethnic Studies

109 Morris Hall • 507-389-2798

Fax 507-389-6377

Website: <http://www.mnsu.edu/dept/ethnic>

Chair: Yueh-Ting Lee

Hanh Huy Phan, Luis Posas

Academically, the Ethnic Studies Department provides students with an interdisciplinary approach to dominant-subordinate relations. A major in ethnic studies gives students an exposure to and an understanding of those historical, economic, social and political forces which have contoured the multicultural and ethnic experience in and outside the United States. It will prepare the students to function in and cope with racism, discrimination and stresses of a multicultural world.

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C) overall.

Contact the department for application procedures.

ETHNIC STUDIES BS**Required for Major (Core, 9 cr):**

ETHN 100	American Racial Minorities (3)
ETHN 400	Cultural Pluralism (3)
ETHN 410	Foundations of Oppression (3)

Required Electives for Major (15 cr):

Select 6 credits from the following courses:

ETHN 110	ETHN 120	ETHN 130
ETHN 140		

Select 9 credits from the following courses:

ETHN 101	ETHN 150	ETHN 200
ETHN 220	ETHN 240	ETHN 296
ETHN 299	ETHN 300	ETHN 401
ETHN 420	ETHN 430	ETHN 440
ETHN 450	ETHN 460	ETHN 470
ETHN 480	ETHN 486	ETHN 490
ETHN 495	ETHN 496	ETHN 497
ETHN 499		

Required Support Courses (12 credits):

Students must select 12 credits from courses approved by the department of Ethnic Studies in Anthropology (e.g., Language and Culture), History (e.g., Advanced African American Culture and Ethnicity), Political Science (e.g., Early US Political Thought), Sociology (e.g., Race, Culture and Ethnicity), Urban Studies (e.g., Urban Housing Policy), and/or Women's Studies (e.g., Perspectives on Women and Change). No more than one course from any of the above departments may apply toward the major.

Required Minor: Yes**ETHNIC STUDIES MINOR****Required for Minor (Core, 3 credits):**

ETHN 100	American Racial Minorities (3)
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Required Electives (18 credits):

Select 3 credits from the following:

ETHN 110	ETHN 120	ETHN 130
ETHN 140		

Select 9 credits from the following:

ETHN 401	ETHN 410	ETHN 420
ETHN 430	ETHN 440	ETHN 450
ETHN 460	ETHN 470	

Select 6 credits from the following:

ETHN 101	ETHN 150	ETHN 200
ETHN 220	ETHN 240	ETHN 296
ETHN 300	ETHN 400	ETHN 480
ETHN 486	ETHN 490	ETHN 495
ETHN 496	ETHN 497	ETHN 499

POLICIES/INFORMATION

GPA Policy. 2.0 GPA.

P/N Grading Policy. No more than 1/4 of total undergraduate credits required.

COURSE DESCRIPTIONS**100 (3) American Racial Minorities**

A study of American racial/ethnic minorities, especially the histories of Native Americans, African Americans, Hispanic Americans, and Asian Americans. Their roles and contributions to American society will be emphasized.

F, S

101 (3) Introduction to Ethnic Studies

This course will introduce students to the study of ethnic issues and inter-ethnic relations in the United States from the perspectives of persons of color identified within the four broad American racial minority groups: Native American, African American, Latino/Hispanic, and Asian American. This course integrates the curricular priorities of the field of Ethnic Studies.

F, S

110 (3) Introduction to African American Studies

This course examines the history and culture of African Americans from 1619 to the present. It is specifically concerned with the discrimination which African Americans faced from 1619 to the present.

V

120 (3) Introduction to American Indian Studies

This course is an examination of the historical and contemporary issues and forces affecting American Indian peoples.

V

130 (3) Introduction to Asian American Studies

Introduction to the history and cultures of the major Asian American ethnic groups with a comparative approach to their similarities and differences.

V

140 (3) Introduction to Latino/Hispanic Studies

A survey of the history and present status of Hispanics/Latinos in the United States from 1848. Emphasis will be on culture, history, and socio-political patterns.

V

150 (2) Multi-Cultural/Ethnic Experience

Students will participate in activities that will enable them to interact with people ethnically (race, religion, lifestyle, etc.) different from the students, to understand their perspectives and to appreciate their unique experiences and/or contributions to the U.S. pluralistic society.

F, S

200 (3) Interracial/Interethnic Dating/Marriage

This course deals with the history of interracial/interethnic and intergroups (sex, age, religion, etc.) dating and marriage in the U.S. It will explore dating patterns, mate selection theories and impacts on multi-racial children in the area of identity and adjustment.

V

220 (3) Civil Rights in the U.S.

This course examines the role of the Supreme Court and the Constitution in the lives of African Americans and other minority groups in the United States. Civil

Ethnic Studies

Rights of Americans from the days of slavery (1619) to the present time are studied through case law.

V

240 (3) Rural Studies

Students will explore some of the major variables that impact the lives of rural populations. Emphasis will be placed on understanding the diversity in experiences and history of both national and international rural communities, as well as on understanding which public policies can maximize the success of rural environments.

F or S

296 (1-3) Workshop

Courses will employ changing topics from year to year and will deal with cogent issues of current interest to one or more minority communities.

V

299 (1-3) Individual Study

Exploratory independent study and research. Areas of interest not addressed in regular courses are given priority. Maximum three credits toward the major; one credit toward the minor.

Pre: Two other ETHN courses.

F, S

300 (3) American Indian Leaders

The course surveys the social and cultural dimensions of traditional and contemporary American Indian leadership. This leadership is understood through a study of the lives, strategies, and words of American Indian leaders who played significant roles in the history of contact between Euro-American and indigenous North American peoples.

Pre: ETHN 120, or consent

V

400 (3) Cultural Pluralism

This course will examine issues confronted in a multi-cultural society. It will study ethnic/minority groups not usually included in mainstream society, including their uniqueness and harmonious coexistence with other ethnic groups.

F, S

401 (3) Applied Cultural Research

This course introduces concepts and methods of applying socio-cultural understanding to contemporary problems to bring about the empowerment of affected people. Case/field studies and other research methods in social sciences will be used to illustrate the impact and problems of cultural change with special attention to its affect on disadvantaged groups of people. Students will also design their own applied projects.

Pre: ANTH 101, 103 or 230 or consent; ETHN 100, 101 or 150 or consent

F, S

410 (3) Foundations of Oppression

Students will examine the forces which create and maintain prejudice, discrimination and racism within global perspectives. Special attention will be given to the work of Paulo Freire.

Pre: ETHN 100 or 400

F

420 (3) African American Studies

This course examines contemporary topics in the lives of African Americans. These topics include slavery, Reconstruction, Post-Reconstruction, Separate-But-Equal, Desegregation and Resegregation.

Pre: ETHN 110 or 400 or consent

S

430 (3) American Indian Studies

This course will provide multiple perspectives about the issues facing American Indian peoples today. Topics to be considered are education, health care, gender, land rights, religious freedom, cultural identity, natural resource management, law enforcement, economic development, self-determination, and mass media images.

Pre: ETHN 400, or consent

V

440 (3) Asian American Studies

Examination of current issues affecting the status of Asian Americans. The focus of this course will vary to reflect students' interests in the area of politics, education, economics, social and/or cultural dealing with Asian Americans.

Pre: ETHN 400, or consent

V

450 (3) Latino/Hispanic Studies

Thematic examination of major issues surrounding Latino/Hispanic communities in the United States. Emphasis will be on education, labor, politics, social welfare and migration.

Pre: ETHN 400, or consent

V

460 (3) Urban Minority Problems

This course is concerned with racial/ethnic minorities who live in large urban (inner city) areas. It is especially concerned with the roles that culture and discrimination play in the shaping of America's ghettos, barrios, reservations, and chinatowns.

S

470 (3) Women of Color

Examines the effects of sexism and racism on women of color and provides an understanding of the significant contributions they have made in their struggle against oppression.

Pre: ETHN 400, or consent

S

480 (3) Social Justice in Ethnicity and Gender

Survey of institutional sexism and racism including their impact on U.S. society. Special attention will be given to their interconnectedness.

Pre: ETHN 400 or consent

V

486 (3) Racial and Ethnic Politics

The course examines racial and ethnic minorities, and the mutual influences between these groups and the structures, procedures and issues of US politics. Major topics include: opinion on racial issues, the representation of minorities in elective and appointive offices, and the nature of value conflicts underlying contemporary racial issues, including affirmative action, immigration, welfare, language policies and Native American tribal issues.

V

490 (3) Racial/Ethnic Families in the U.S.

This course will examine the different definitions of "family" through time in the United States. It will focus on changes in the African-, Native-, Hispanic/Latino, and Asian-American families. It will compare and contrast differences and similarities among ethnic minority families as well as between them and white ethnic families.

Pre: ETHN 400, or consent V

495 (3) Selected Topics

Multiple perspectives on the selected topic(s) will be addressed. Student scholars may contribute to the selection and/or refinement of the topic(s). Highly motivated seniors will join with graduate students in a graduate-type seminar.

Pre: ETHN major V

496 (1-3) Workshop

Courses will employ changing topics from year to year and deal with cogent issues of current interest to one or more minority communities.

V

497 (1-10) Internship

Supervised, scholarly experience to which the theories and methodologies of ethnic studies can be applied. Opportunities may be on-campus and/or off-campus, including work in other countries.

Pre: ETHN major or minor F, S

499 (1-3) Individual Study

Advanced independent study and research. Maximum of three credits toward the major; one credit toward the minor.

Pre: 2 ETHN courses at 300/400 level F, S

Family Consumer Science

College of Allied Health & Nursing

Department of Family Consumer Science

102 Wiecking Center • 507-389-2421

Website: <http://www.mnsu.edu/dept/fcs>

Chair: Grace Keir

Joye Bond, Kelley Brigman, Sally Weerts Thomas, Lois Hughes, Betty Young

The focus of the Department of Family Consumer Science is to promote the well-being of people, the enrichment of quality environments, and to prepare men and women to assume essential professional roles in a culturally diverse global society. The comprehensive program provides training for professional roles within family consumer science education; family life; early childhood education; nutrition education; dietetics; clothing; textiles; and housing.

Admission to Major is granted by the department.

Minimum admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

FAMILY CONSUMER SCIENCE, BS

Required for Major (Core, 16 credits):

This core is required for all options **except** Dietetics.

FCS	100	Personal and Family Living (3)
FCS	101	Introduction to Family Consumer Science (2)
FCS	120	Clothing and People (2)
FCS	140	Introduction to Nutrition (3)
FCS	275	Consumers in the Economy (3)
FCS	270	Family Housing (3)

Required for Major (Option):

Select one of the following options to correspond with personal and professional objectives:

DIETETICS OPTION

This option prepares men and women for career advancement as registered dietitians in health-related foods and nutrition services. The American Dietetic Association approves the curriculum which readies students for application to dietetic internship following successful completion of the undergraduate degree. Regular advising, high academic achievement, work experience in a related area, and extracurricular participation are necessary for satisfactory career advancement upon graduation.

Required General Education (43 credits):

BIOL	220	Human Anatomy (4)
CHEM	105	Intro. to Chemistry (3)
CHEM	111	Chemistry of Life Processes (5)
COMS	100	Intro. to Computer Science (4)
ECON	100	Intro. to U.S. Economy (3)
ENG	101	Composition (4)
HLTH	475	Bio Statistics (3) or
STAT	154	Statistics (3)
MATH	112	College Algebra (4)
POL	101	Intro. to Public Life (3) or
POL	103	Thinking About Politics (3) or
POL	111	United States Government (3)
PSYCH	101	Psychology (4)
SOC	101	Intro. to Sociology (3)
SPEE	102	Public Speaking (3)

Required Support Courses (17 credits):

ACCT	110	Accounting for Non-Business Majors (3)
BIOL	230	Human Physiology (4)
BIOL	270	Microbiology (4)
HLTH	321	Medical Terminology (3)
MGMT	330	Principles of Management (3)

Required for Major (Core, 9 credits):

FCS	100	Personal and Family Living (3)
FCS	140	Introduction to Nutrition (3)
FCS	270	Family Housing (3) or
FCS	275	Consumers in the Economy (3)

Required For Option (37 credits):

EDFN	235	Human Development (3) or
FCS	301	Child Development (3)

Family Consumer Science

FCS	240	Nutrition I (3)
FCS	252	Food Service Systems I (3)
FCS	340	Food Science (4)
FCS	342	Meal Management (3)
FCS	350	Food Service Systems II (3)
FCS	440	Nutrition II (3)
FCS	442	Clinical Dietetics I (3)
FCS	443	Older Adult Nutrition (3) or
FCS	446	Child Nutrition (3)
FCS	444	Experimental Foods (3)
FCS	448	Clinical Dietetics II (3)
FCS	483	Adult Education (2)
FCS	492	Dietetics Seminar (1)

Required Minor: None.

FAMILY LIFE AND CHILD DEVELOPMENT OPTION

This option is interdisciplinary and prepares men and women to work with agencies in government, business and industry to provide services for families. Students interested in pursuing early childhood and parenting licensure should consult with an advisor.

Required for Major (3-8 credits):

Advisor approval is required for each interdisciplinary course.

Required for Major (Core, 16 credits):

See Core Courses at the beginning of this section.

Required For Option (17-18 credits):

FCS	301	Child Development (3)
FCS	401	Family Life Development (3)
FCS	416	Pre-School Child (2)
FCS	474	Resource Management for Families and Special Needs People (4)
FCS	488	Parenting Education (3)
FCS	496	Selected Topics: FLCD (2-3)

Required Electives (13-18 credits)

Choose 13-18 credits from the following courses:

FCS	230	FCS	303	FCS	400
FCS	408	FCS	443	FCS	446
FCS	482	FCS	483	FCS	497

Required Minor: None.

FOOD AND NUTRITION OPTION

This option prepares graduates for various careers in foods, foodservices, and/or nutrition, such as restaurant or school lunch management; public relations, marketing or sales in business and industry, such as grocers, or with public utilities and government agencies; nutrition educator with the public or in public health agencies; and/or in corporate food distribution, production, sales and service. A minor in a related area and supervised internship during the major allow students to gain experience in a particular area of interest.

Required for Major (Core, 16 credits):

See Core Courses at the beginning of this section.

Required for Option (32 credits):

FCS	240	Nutrition I (3)
FCS	252	Food Service Systems I (3)
FCS	340	Food Science (4)
FCS	342	Meal Management (3)
FCS	350	Food Service Systems II (3)
FCS	440	Nutrition II (3)
FCS	443	Older Adult Nutrition (3)
FCS	444	Experimental Foods (3)
FCS	446	Child Nutrition (3)
FCS	483	Adult Education in FCS (2)

Choose a minimum of 2 credits from one of the following courses:

FCS	497	Internship (1-6)
FCS	498	Internship (1-6)

Required Electives (7 credits):

Choose from the following courses:

FCS	376	Household Equipment (2)
FCS	442	Clinical Dietetics I (3)
FCS	445	Food Preservation (2)
FCS	448	Clinical Dietetics II (3)

Required Minor: None.

HOUSING AND CONSUMER OPTION

This option is for students who are interested in an interdisciplinary approach to the study of housing and the relationship to other disciplines such as economics, political science, urban studies, sociology, gerontology, social work, and interior design. Career opportunities for graduates include placement in government, community planning, urban development offices, and numerous public and private housing related organizations.

Required for Major (Core, 16 credits):

See Core Courses at the beginning of this section.

Required for Option (23 credits):

FCS	331	Textiles (3)
FCS	370	Housing and Lifestyle (3)
FCS	376	Household Equipment (2)
FCS	472	Residential Management (2)
FCS	474	Resource Management for Families and Special Needs People (4)
FCS	475	Family Policy (2)
FCS	478	Family Finance (2)
FCS	497	Internship (1-6)

Required Electives (6 credits):

Choose a minimum of 6 credits from the following courses:

FCS	342	Meal Management (3)
FCS	401	Family Life Development (3)
FCS	443	Older Adult Nutrition (3)
FCS	446	Child Nutrition (3)
FCS	483	Adult Education in Family Consumer Science (2)

Required Support Courses (6 credits):

URBS	415	Urban Housing Policy (3)
MRKT	316	Consumer Behavior (3)

Required Minor: None.

FAMILY CONSUMER SCIENCE EDUCATION BS TEACHING

Required for Major (Core, 16 credits):

See Core Courses at the beginning of this section.

Required for Option (40 credits):

- FCS 121 Apparel Construction and Evaluation (3)
- FCS 240 Nutrition I (3)
- FCS 280 Orientation to Family Consumer Science Education (2)
- FCS 301 Child Development (3)
- FCS 331 Textiles (3)
- FCS 340 Food Science (4)
- FCS 376 Household Equipment (2)
- FCS 401 Family Life Development (3)
- FCS 416 Pre-School Child (2)
- FCS 474 Resource Management for Families and Special Needs People (4)
- FCS 482 Teaching Family Life/Parenting Education (2)
- FCS 483 Adult Education in Family Consumer Science (2)
- FCS 484 Program Development in Family Consumer Science (4)
- FCS 488 Parenting Education (3)

Required Elective (3 credits):

Choose one course from the following:

- HLTH 311 Family Life and Sex Education (3)
- SOC 209 Human Sexuality (3)

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

Additional Occupational Licensures Available:

CHILD CARE/GUIDANCE & EDUCATION

Required for Licensure (15 cr):

- FCS 230 Child Care Psychology (3)
- FCS 301 Child Development (3)
- FCS 416 Pre-School Child (2)
- FCS 488 Parenting Education (3)

Choose a minimum of 4 credits from the following courses:

- ENG 325 Children's Literature (3)
- LME 412 Materials for Children (3)
- MUS 441 Music in Early Childhood (2)
- SPED 405 Individuals with Exceptional Needs (3)
- SPED 415 Teaching Strategies: Gifted/Talented (4)

FOOD SERVICES

Required for Licensure (20 cr):

- FCS 240 Nutrition I (3)
- FCS 252 Food Service Systems I (3)
- FCS 340 Food Science (4)
- FCS 342 Meal Management (3)

- FCS 350 Food Service Systems II (3)
- FCS 376 Household Equipment (2)
- FCS 491 Inservice (1-4)

Family consumer science-supervised internships and student teaching in the career cluster will be planned with an advisor. Individuals planning to teach an occupational cluster in secondary schools must have the equivalent of 2,000 clock hours of related work experience. Students desiring to become a coordinator of cooperative occupational programs should consult a family consumer science advisor about the current criteria for licensure.

FAMILY CONSUMER SCIENCE MINOR

Required for Minor (20 cr):

Two variations of the minor are possible in Family Consumer Science. First, the Family Consumer Science core courses can be taken with an additional 4-6 credits in FCS to complete the minor. Second, an individualized minor is possible in a program concentration area, i.e., family life and child development, FCS education, foods and nutrition, or housing and consumer. Students should consult with a Family Consumer Science advisor for assistance with the FCS minor.

POLICIES/INFORMATION

GPA Policy. All FCS courses required for an option must be at C level or higher.

P/N Grading Policy. All FCS courses required for an option must be taken for a grade, except where P/N grading is mandatory.

COURSE DESCRIPTIONS

100 (3) Personal and Family Living

Emphasizes individual growth and interpersonal relationships within our diverse society. Focuses on issues such as interpersonal communication, conflict resolution, mate selection, marriage and family issues, family strengths, stress and crises, parenting decision-making and parent-child relationships, resource management, and personal and family financial issues.

F, S

101 (2) Introduction to Family Consumer Science

An overview of the scope of family consumer sciences and the career potentials of the profession.

F, S

120 (2) Clothing and People

Relationship of clothing to people from cultural, social, psychological, economic and aesthetic perspectives.

F, S

121 (3) Apparel Construction and Evaluation

Principles of clothing construction and alteration of ready-to-wear as related to fabric, style, and fit. Analysis of ready-to-wear apparel. Use of commercial patterns.

F

Family Consumer Science

140 (3) Introduction to Nutrition

An introductory nutrition class which emphasizes the scientific method and natural science principles from biochemistry, physiology, chemistry, and other sciences to explain the relationships between food and its use by the human body for energy, regulation, structure, and optimal health.

F, S

221 (3) Apparel Design: Flat Pattern

Creative design and fitting of patterns using flat pattern technique.

Pre: FCS 121 or consent

V

230 (3) Child Care Psychology

Principles of psychology applied to child rearing.

240 (3) Nutrition I

The science of six nutrient classes, including digestion through metabolism, and weight loss from body fat.

Pre: Chemistry background

F, S

252 (3) Food Service Systems I

Principles of foodservices operations related to menu planning, food purchasing, production and service for profit and nonprofit settings. Includes a quantity foods work experience component.

F

270 (3) Family Housing

Physical, psychological, social, and managerial aspects of housing. Reciprocal relationship between housing and people. Guidelines and basic principles in planning for individual and family needs.

F, S

275 (3) Consumers in the Economy

Economic decision making related to achieving maximum satisfaction from resources spent in the marketplace on housing, food, clothing, transportation, and other dimensions of the family. Basic information about the functions and responsibilities of the consumer, laws and agencies affecting consumer well-being and sources of help.

F, S

280 (2) Orientation to Family Consumer Science Education

Nature and scope of family consumer science education as a professional career. Identification of personal competencies and interests. Presentation of varied teaching methods and techniques.

S

281 (3) Aesthetic Applications in Family Consumer Science

Hands on applications of aesthetics in family consumer science using family consumer science computer software. Exploration of the historical, cultural, behavioral and technological influences on aesthetics within the context of family consumer science.

V

301 (3) Child Development

Development from conception to young adulthood. Emphasis on social, emotional, physical, intellectual and motor development. Observation and documentation of sequences, characteristics and interrelationships of children.

F

303 (2) Working With Families

Study of the role of the family in the development of the young child. Provide teachers and care providers with knowledge and understanding of family systems and appropriate interactions with families.

S

331 (3) Textiles

Fibers, yarns, weaves/knits, finishes, and design used in apparel and in commercial and residential interior design fabrics.

S

340 (4) Food Science

Study of why, how, and when physical and chemical phenomena occur during the preparation of food and its products. Includes discussion and laboratory experience demonstrating how preparation methods affect food quality, composition, and nutritive value

Pre: CHEM 105 or consent

F

342 (3) Meal Management

Planning, preparing and serving meals with emphasis on effective management, nutritive needs, food habits and socio-economic aspect. Includes quantity food service laboratory.

F

350 (3) Food Service Systems II

Principles of foodservices management related to food safety and operational sanitation, analysis and control of quality and quantity in institutional and public foodservice operations. A national sanitation examination is taken, leading to certification as a safe food handler by the National Restaurant Association.

S

370 (3) Housing and Lifestyle

Issues in lifestyle housing, e.g. aging, children, special needs, low income, head of family, and single person households. Study of housing types and designs including solar and earth sheltered. Constraints, deficiencies and evaluation of housing issues.

Pre: FCS 270

V

376 (2) Household Equipment

Principles of operation, care and design of equipment used in the home; understanding of the nature of the tasks for which equipment is used and the principles involved in accomplishing those tasks. Basic information about kitchen planning and home lighting.

F

400 (3) Culturally Diverse Family Systems

An analysis of culturally diverse family systems in

America; emphasis on relationships within the family and with the larger community across the family life cycle.

F

401 (3) Family Life Development

The course is a study of development through the family life cycle. Emphasis on developmental interaction and systems theory.

S

408 (3) Family Life Dynamics

Same as SOC 408.

415 (1-2) Student Organization

The teacher-coordinator's role as a vocational club advisor.

V

416 (2) Pre-School Child

Study of preschool child by observation and participation in nursery school setting.

S

437 (1-3) Topic: Textiles and Clothing

Topics of current interest. May be repeated.

V

440 (3) Nutrition II

An advanced nutrition course in the function and interaction of nutrients in metabolic processes. Contains a nutrition research component and research case study, focusing on metabolism in persons selected by the student.

Pre: FCS 240 or consent

S

442 (3) Clinical Dietetics I

The role and influence of dietetics in society, nutritional assessment and care plans, dietetic principles applied to normal and malnourished states. Case-based approach.

Pre: FCS 440

F

443 (3) Older Adult Nutrition

Investigation of the effect of physical, psychological, and social factors on the nutritional status of the adult and older adult. Experience with elderly clients, including group participation in a community-based nutrition education project.

S

444 (3) Experimental Foods

Foods research; proposal writing, execution and interpretation of results of original foods experiments. Presentation of results orally and by posters. Investigation of subjective and objective evaluation techniques.

Pre: FCS 340

S

445 (2) Food Preservation

Principles of and laboratory experience in food preservation by drying, freezing, canning, pickling, and jelly making.

S

446 (3) Child Nutrition

Study of nutritional needs of the pregnant woman, well infant, child and adolescent. Experience in group dynamics in providing nutritional education to a target population.

Pre: FCS 140 or consent

F

448 (3) Clinical Dietetics II

The pathophysiological, nutrient assessment, planning and counseling aspects of biliary, surgical, endocrine, cardiovascular and renal conditions. Case-based approach.

Pre: FCS 442

S

472 (2) Residential Management

An in-depth exploration into planning and managing a variety of residential property facilities. Specifically addresses employment as a manager of such properties.

Pre: FCS 270 and 370

F

474 (4) Resource Management for Families & Special Needs People

The system approach to analyzing family situations to make decisions and correlate resources in the resolution of family managerial problems. Emphasis on the application of managerial skills to lifestyle situations: young-families, elderly, special needs, singles and low income.

S

475 (2) Family Policy

Housing is affected and influenced by government policies; zoning, codes, and other regulatory practices; legislation involving incentives, financing, subsidies, etc. The role of related public and private sector activities and their relationship with housing needs and production.

Pre: FCS 270 and 370

V

478 (2) Family Finance

Introduce students to the how's and why's of family financial management to reduce mistakes made in successfully managing financial aspects of life. For non-business majors.

V

482 (2) Teaching Family Life/Parenting Education

Analyze issues and concerns related to family life education. Investigate teaching strategies and methods of evaluation. Preparation of appropriate lesson plans.

F

483 (2) Adult Education in Family Consumer Science

Philosophy and objectives of adult education in family consumer sciences with emphasis on informal teaching-learning environments; procedures for planning and developing programs with an advisory committee; and teaching experiences with the adult learner.

F, S

484 (4) Program Development in Family Consumer Science

Philosophy, scope, and administration of programs for

Finance

youth of varied abilities, interests and socioeconomic levels. Curriculum development and evaluation procedures.
F

487 (1-3) Topic: Family Consumer Science Education
Current issues and/or research findings to be announced as offered. May be repeated.
V

488 (3) Parenting Education
A systems perspective on parent-child relationship. This course covers parent-child issues during the stages of human development. It also focuses on special needs children and families, cross-cultural issues and family violence. Emphasis is on research and theory and parenting education strategies.
F

490 (1-3) Workshop
Workshop topics vary as announced in class schedule. May be repeated.
V

491 (1-4) Inservice
May be repeated on each new topic.
V

492 (1) Dietetics Seminar
Preparation for advancement in a career as a registered dietitian, including a first draft of the dietetic internship application.
Pre: Graduation by the following May to December
F

495 (3-4) Intern: Early Child Family
A scheduled work assignment that will include on-site experiences with parents in early childhood family education.
F, S

496 (2-3) Selected Topics: FLCD
Topics announced as offered. May be repeated.
S

497 (1-6) Internship
A scheduled work assignment with supervision in private business, industry and government agency appropriate to each area of concentration.
Pre: Consent
F, S

498 (1-6) Internship
A scheduled work assignment with supervision in private business, industry, and government agency appropriate to each area of concentration.
Pre: Consent
F, S

499-00 (1-4) Individual Study
Arranged with the instructor.
Pre: Consent
F, S

499-02 (1-4) Individual Study
Arranged with instructor in Family Life Child Development.
Pre: Consent
F, S

499-03 (1-4) Individual Study
Arranged with instructor in Food and Nutrition.
Pre: Consent
F, S

499-04 (1-4) Individual Study
Arranged with instructor in Family Consumer Science Education.
Pre: Consent
F, S

499-05 (1-4) Individual Study
Arranged with instructor in Textiles and Clothing.
Pre: Consent
F, S

499-06 (1-4) Individual Study
Arranged with department chair.
Pre: Consent
F, S

Finance

College of Business
Department of Finance, Insurance, and Real Estate
150 Morris Hall • 507-389-1319

Chair: Harold Thiewes
John Genter, Chan Lee, Henry M. Okleshen, Roger Severns, Richard Swanson, Steve Wilcox.

The objective of the department is to prepare students for entry-level positions in finance, insurance or real estate. Five areas of emphasis are available within this major.

The undergraduate finance program deals with the theory, organization and operations of the financial system from both the social and managerial perspectives. Students are expected to develop expertise in making organizational and personal judgments and decisions involving financial data. Additionally, students present their analyses in both written and oral form.

Students may select and complete one or more of the following emphases: Corporate Finance, Institutional Finance, Insurance, Financial Planning, Investment Analysis.

Admission to the College of Business typically occurs at the beginning of the student's junior year. A student must be admitted for permission to register for 300-400 level courses. A student can only expect one temporary admission to the College of Business before permanent admission.

1. GPA of 2.5 for admission.
2. Completion of 33 credits of general education requirements. Consult bulletin for cultural diversity requirements.
3. Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers, or equivalent.
4. Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; MATH 112; BLAW 200; Second Year Experience 201.
5. Completion of math and English competencies.
6. Completion of, or in progress, 60 semester credits.

FINANCE, BS

Required General Education (7 credits):

- ECON 201 Principles of Macroeconomics (3)
MATH 112 College Algebra (4)

Required Support Courses (25 credits):

- ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BED 345 Business Communications (3)
BLAW 200 Legal, Political and Regulatory Environment of Business (3)
COMS 101 Introduction to Microcomputers (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
MGMT 200 Introduction to MIS (3)

Required for Major (Core, 34 cr):

- MRKT 310 Principles of Marketing (3)
MGMT 330 Principles of Management (3)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 346 Production and Operations Management (3)
MGMT 395 Personal Adjustment to Business (1)
MGMT 481 Business Policy and Strategy (3)
FINA 460 Investments (3)
FINA 462 Strategic Financial Management (3)
FINA 464 Financial Institutions and Markets (3)
FINA 467 Insurance and Risk Management (3)
Choose one of the following:
FINA 477 Real Estate (3)
FINA 478 Real Estate Investment (3)

Required for Major (Option, 12 credits):

Select one of the following options:

CORPORATE FINANCE

- FINA 461 Short-Term Financial Management (3)
ACCT 300 Intermediate Financial Accounting I (3)
ACCT 310 Management Accounting I (3)
Choose one of the following:
FINA 463 Security Analysis (3)
ACCT 301 Intermediate Financial Accounting II (3)
ACCT 311 Management Accounting II (3)
ACCT 410 Business Income Tax (3)
ACCT 411 Individual Income Tax (3)

FINANCIAL PLANNING

- FINA 459 Personal Financial Planning (3)
FINA 470 Life and Health Insurance (3)
ACCT 411 Individual Income Tax (3)
Choose one of the following:
FINA 463**Security Analysis (3)
FINA 466**Employee Benefit Planning (3)
FINA 468 Commercial Property/Liability Insurance (3)
FINA 477* Real Estate (3)
FINA 478* Real Estate Investment (3)
ACCT 410**Business Income Tax (3)
MRKT 412 Professional Selling (3)

INSTITUTIONAL FINANCE

- FINA 461 Short-Term Financial Management (3)
FINA 463 Security Analysis (3)
FINA 482 Commercial Bank Management (3)
Choose one of the following:
FINA 468 Commercial Property/Liability Insurance (3)
FINA 470 Life and Health Insurance (3)
FINA 477* Real Estate (3)
FINA 478* Real Estate Investment (3)
FINA 480 Options and Futures (3)
ACCT 310 Management Accounting I (3)

INSURANCE

- FINA 466 Employee Benefit Planning (3)
FINA 468 Commercial Property/Liability Insurance (3)
FINA 470 Life and Health Insurance (3)
Choose one of the following:
FINA 459 Personal Financial Planning (3)
FINA 477* Real Estate (3)
FINA 478* Real Estate Investment (3)
FINA 480 Options and Futures (3)
ACCT 411 Individual Income Tax (3)
MRKT 412 Professional Selling (3)

INVESTMENT ANALYSIS

- FINA 463 Security Analysis (3)
FINA 480 Options and Futures (3)
ACCT 300 Intermediate Financial Accounting I (3)
Choose one of the following:
FINA 459 Personal Financial Planning (3)
FINA 466 Employee Benefit Planning (3)
FINA 470 Life and Health Insurance (3)
FINA 476 Real Estate Appraisal (3)
FINA 477* Real Estate (3)
FINA 478* Real Estate Investment (3)
ACCT 301 Intermediate Financial Accounting II (3)
ACCT 411 Individual Income Tax (3)

* 477 or 478, whichever not taken in core

** Students who wish to meet the education requirements to sit for the Certified Financial Planner (CFP) are required to take FINA 463, FINA 466, and ACCT 410 in addition to completing the Finance, Insurance and Real Estate core requirements and the required courses in the Financial Planning area of emphasis.

Required Minor: None.

FINANCIAL PLANNING MINOR

Required for Minor (18 credits):

- FINA 100 Personal Financial Management (3)
or
FINA 362 Business Finance (3)
FINA 459 Personal Financial Planning (3)
FINA 467 Insurance and Risk Management (3)
FINA 477 Real Estate (3)

Finance

Choose a minimum of 6 credits from the following:

FINA 460	FINA 464	FINA 466
FINA 470	FINA 497	FINA 498
ACCT 411	MKT 412	

POLICIES/INFORMATION

Students have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

College of Business students must complete a minimum of 64 credits outside the College of Business.

Students who are non-business majors, business minors, or those who are not seeking a four year degree may not complete more than 30 credits in the College of Business.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business.

Information Technology Initiative. Students with a Finance major or Financial Planning minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges but are required to take FINA 362 will be able to enroll in a non-notebook class offered once per year for non-majors/minors. For further information see the College of Business section at the front of this bulletin.

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment. The College of Business believes that the assessment of its programs makes a vital contribution to those programs and student learning. Student participation is an important and expected part of the assessment process.

Student Organizations Delta Sigma Pi is a coeducational business fraternity organized to further the camaraderie of business students and professionals. Delta Sigma Pi provides members the opportunity to network with current business students and alumni throughout the United States.

The Finance Club provides students with a direct link to professionals employed in finance, insurance, or real estate positions. This is a professional and social club and all majors are welcome.

The Financial Planning Club is a student chapter for the International Association for Financial Planning (IAFP) at MSU. It maintains strong ties with the IAFP-MN chapter, as well as with other practitioners in the field.

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the seven organizations and the college representative to the Student Sen-

ate, works directly with the Dean's office in the coordination of activities of the various organizations and sponsors activities of their own.

COURSE DESCRIPTIONS

100 (3) Personal Financial Management

Fundamental concepts of managing cash flows: preparation of personal budget, personal debt management, financial goal establishment, savings and investments, insurance. F

362 (3) Business Finance

An introduction to finance relating to problems, methods, and policies in financing business enterprise. Pre: ACCT 200- Jr. Standing F, S

459 (3) Personal Financial Planning

Fundamental concepts of personal financial management: insurance, budgeting, credit, savings, investments, retirement and estate planning, and consumer debt management. S

460 (3) Investments

Formulation of investment policy of individuals and institutions, factors influencing the values of securities, and techniques of portfolio selection and management. Pre: FINA 362 S

461 (3) Short-Term Financial Management

This course describes the nature and types of credit, instrument and agencies. It deals with the management and analysis of consumer and commercial credit and control. Pre: FINA 362 F

462 (3) Strategic Financial Management

Applications of financial principles and analytical tools through the use of case studies and problems from local businesses. Pre: FINA 362 F, S

463 (3) Security Analysis

Tools and techniques to aid in individual and institutional portfolio management. Pre: FINA 362 and FINA 460 S

464 (3) Financial Institutions and Markets

Introduction to money and capital markets, instruments and institutions. Consideration of the management problems of financial institutions. Pre: FINA 362 F, S

466 (3) Employee Benefit Planning

Fundamental concepts of employee benefits in relation to pertinent legislation, modern management techniques, and financial constraints that affect the formulation and implementation of a benefit plan. Pre: FINA 362 S

467 (3) Insurance and Risk Management

Principles and practices of risk management in the recognition and treatment of exposure to potential financial loss and with primary emphasis on property and liability insurance for individuals and families. F

468 (3) Commercial Property/Liability Insurance

Principles and practices of risk management in the recognition and treatment of exposure to potential financial loss. With primary emphasis on property and liability insurance for business firms.

Pre: FINA 467

V

469 (3) International Business Finance

Financing investments and working capital management problems in multi-national environments.

Pre: FINA 362

V

470 (3) Life and Health Insurance

Nature and uses of various economic security devices in protecting and/or replacing the earning power of the human life at the personal family and business levels.

F

476 (3) Real Estate Appraisal

Principles and techniques of real estate valuation. The market, cost and income methods for the basic structure of the course. A professional appraisal report is required.

Pre: FINA 477 or 478

S

477 (3) Real Estate

Fundamental principles: valuation, brokerage, financing, law, property management, land descriptions and basic investment.

S

478 (3) Real Estate Investment

Property productivity analysis utilizing discount cash flow methodology, urban growth and taxation factors, and economic base analysis.

Pre: FINA 362

F

479 (3) Executive Lectures

Guest lecturers and discussions with students by visiting senior executives of major companies coordinated by faculty. The course will include analysis of several individual companies. May be repeated.

480 (3) Options and Futures

Trading practices and procedures utilizing these contracts in hedging and risk management policies for business.

Pre: FINA 362

F

482 (3) Commercial Bank Management

Fundamental concepts of commercial bank management: banking trends and performance evaluations. Managing the balance sheet and evaluating loan requests.

Pre: FINA 362

S

491 (1-4) In-Service

F, S

497 (1-12) Internship

Supervised experience in business, industry, state or federal institutions.

F, S

498 (3) Internship

Supervised experience in business, industry, state or federal institutions.

F, S

499 (1-3) Individual Study

F, S

Food Science Technology

College of Science, Engineering & Technology

Department of Biological Sciences

242 Trafton Science Center S • 507-389-2786

Program Director: Dorothy Wrigley, Ph.D. (Biology)

Faculty: Joye Bond, Ph.D. (Family and Consumer Science), Gregg Marg, Ph.D. (Biology), Dorothy Wrigley, Ph.D. (Biology).

The food industry in the United States is highly competitive and innovative. There is an increasing need for degreed employees with a background in science and foods. The Food Science Technology major is designed to prepare for future employment in several of the major aspects of the food industry: production, quality assurance and management; sanitation; research and development; and laboratory analysis.

FOOD SCIENCE TECHNOLOGY BS**Required General Education (4 credits):**

MATH 112 College Algebra (4)

Required Support Courses (4 credits):

Choose one of the following:

CHEM 360 Principles of Biochemistry (4)

or

CHEM 460 Biochemistry I (3) and

CHEM 465 Biochemical Techniques I (1)

Recommended Support Course (4 credits):

MATH 121 Calculus I (4)

Required for Major (Core, 39-41 credits):

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

FCS 240 Nutrition I (3)

FCS 340 Food Science (4)

BIOL 230 Human Physiology (4)

BIOL 270 Microbiology (4)

BIOL 453 Biological Engineering Analysis I (4)

BIOL 478 Food Microbiology and Sanitation (4)

FCS 444 Experimental Foods (3)

Choose one course from the following:

BIOL 497 Internship I (2-4)

BIOL 499 Independent Study (2-4)

Required Electives (3 credits):

Choose one course from the following:

BIOL 452 Biological Instrumentation (3)

BIOL 467 Industrial Hygiene (3)

Required Minor: Yes. Chemistry.

Refer to the College regarding required advising for students on academic probation.

Policy. All major courses must be taken for grade.

French

College of Arts & Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Website: <http://www.mnsu.edu/dept/modernlang/Welcome.html>

Chair: Kimberly Contag

Damon DiMauro, John J. Janc

Education in the French language provides insight into the literature and culture of France. It also gives students a knowledge of language that enables them to work and travel in areas of the world where French is spoken. To facilitate these goals, the department sponsors a summer program in France. Students choosing to take advantage of this program, or who acquire language experience on their own initiative, may receive credit if arrangements are made in advance.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

FRENCH BA, BS

Required for Major:

Elementary French or other proof of skill is needed.

The intermediate sequence counts toward the major.

Required for Major (Core, 36 cr):

FREN 302 Composition (2-4)

FREN 323 French Phonetics and Applied Linguistics (2-4)

FREN 350 Introduction to French Literature (3)

FREN 366 Oral Communication (2-6)

FREN 404 French Syntax (2-4)

Choose two courses from the following:

FREN 420 French Seminar (1-3)

FREN 432 French Literature I (3-4)

FREN 442 French Literature II (3-4)

FREN 452 French Literature III (3-4)

Choose one course from the following:

FREN 305 France Today (3-4)

FREN 402 French Civilization (3-4)

Required Minor: Yes. Any.

FRENCH BS, TEACHING

Required for Major:

Elementary French or other proof of skill is needed.

Intermediate sequence counts toward the major.

Required for Major (Core, 40 cr):

FREN 302 Composition (2-4)

FREN 323 French Phonetics and Applied Linguistics (2-4)

FREN 350 Introduction to French Literature (3)

FREN 366 Oral Communication (2-6)

FREN 404 French Syntax (2-4)

MODL 460 Methods of Teaching A Modern Language (3)

MODL 461 Applied Modern Language Teaching Methods (1)

MODL 462 Foreign Language Elementary School Methods (3)

MODL 463 Applied Foreign Language Elementary School Methods (1)

Choose two courses from the following:

FREN 420 Seminar (1-3)

FREN 432 French Literature I (3-4)

FREN 442 French Literature II (3-4)

FREN 452 French Literature III (3-4)

Choose one course from the following:

FREN 305 France Today (3-4)

FREN 402 French Civilization (3-4)

Required for Major: Students must “demonstrate intermediate-high level speaking proficiency as defined in the ACTFL Proficiency Guidelines established by the American Council on the Teaching of Foreign Languages. Also required for the major are first-hand experiences with the target cultures.

Required for Major: (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

FRENCH MINOR (non-teaching)

Required for Minor:

Elementary French or other proof of skill is needed.

Intermediate sequence counts toward the minor.

Required for Minor (Core, 24 cr):

FREN 302 Composition (2-4)

FREN 323 French Phonetics Applied Linguistics (2-4)

FREN 350 Introduction to French Literature (3)

FREN 366 Oral Communication (2-6)

FREN 404 French Syntax (2-4)

Choose one course from the following:

FREN 305 France Today (3-4)

FREN 402 French Civilization (3-4)

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade beyond the second-year level. A grade of P must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students with high school language experience may take the CLEP test for a maximum of 12 credits. Students who wish to receive credit

by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

Fulfilling B.A. Language Requirement. Students who wish to validate the B.A. language requirement may take a language competency test from the Department of Modern Languages at no cost. If they are evaluated as being proficient, they need not take any more language courses, but they receive no credit. Students will not be considered exempt from the language requirement merely because they have taken two years of high school language. Students may receive elective credit for fewer than 8 credits of an elementary language sequence, if these are satisfactorily completed. Such credits do not apply toward the 8-credit requirement for the B.A. degree.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of Modern Languages for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State University, Mankato as follows. Major: a minimum of three upper division courses other than Independent or Individual Study, for a total of at least 8 credits. At least two of these courses must be at the 400 level. Minor: a minimum of two upper division courses other than Independent or Individual Study, for a total of at least six credits.

Courses not required for a student's specific baccalaureate degree should be chosen according to these general guidelines:

- BA: Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS: Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.
- BS (teaching): Emphasis on communication (four skills plus culture and language analysis).

For students majoring or minoring in the College of Business, the French program offers two courses designed to introduce them to various aspects of the business community in France: FREN 405 and 406.

COURSE DESCRIPTIONS

101 (5) Elementary French I

An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing.

102 (5) Elementary French II

An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing.
Pre: FREN 101 or equivalent

200 (2-4) Entry-Level Intermediate French

Review of grammar and vocabulary learned in elementary sequence.

Pre: FREN 101, 102, or equivalent

201 (4) Intermediate French I

Grammar review, oral practice, written composition and development of reading and listening skills within a cultural context.

Pre: One year university French or equivalent

202 (4) Intermediate French II

Grammar review, oral practice, written composition and development of reading and listening skills within a cultural context.

Pre: FREN 201 or equivalent

204 (2-4) Advanced Intermediate French

Review of grammar and vocabulary learned in intermediate sequence.

Pre: FREN 101, 102, or equivalent

211 (1-3) Intermediate Readings

A beginning reading course designed to help students improve their comprehension of written French.

214 (1-3) Paris et L'ÎLE de France

Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.

Pre: FREN 101, 102, or equivalent

215 (1-3) Composition

Practice in descriptive and narrative prose. Acquisition of basic grammatical structures and vocabulary.

Pre: FREN 101, 102, or equivalent

216 (1-4) Conversation

Practice in intermediate-level conversational skills.

Pre: FREN 101, 102, or equivalent

217 (1-3) Modern France

Introduction to contemporary French civilization.

Pre: FREN 101, 102, or equivalent

218 (1) On Y Va

Preparation for study in France.

221 (1-2) Independent Listening Comprehension

Development of listening comprehension through the use of tapes, videos, films, compact discs, and other recorded materials.

261 (1-3) Conversation and Pronunciation

Systematic development of conversational idiom and vocabulary. Intensive work on pronunciation. May be taken by majors and minors up to three times.

Pre: FREN 201, 202, or equivalent

293 (1-6) Supervised Study in French-Speaking Countries

Topics will vary. Study for credit must be approved by the department prior to departure.

Pre: FREN 101, 102, or equivalent

299 (1-4) Individual Study

Topics will vary.

301 (3) Third-Year Vocabulary Review

Systematic review of French vocabulary.

Pre: FREN 201, 202, or equivalent

302 (2-4) Composition

Review of grammar and vocabulary. Practice in description, narrative, and expository prose.

Pre: FREN 201, 202, or equivalent

304 (3) Third-Year Grammar Review

Systematic review of French grammar.

Pre: FREN 201, 202, or equivalent

305 (1-4) France Today

Social, political, and economic trends in contemporary France.

Pre: FREN 201, 202, or equivalent

313 (1-4) Third-Year French

Acquisition of grammar and vocabulary beyond the intermediate sequence.

Pre: FREN 201, 202, or equivalent

314 (1-3) Paris et L'ILE de France

Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.

Pre: FREN 201, 202, or equivalent

315 (1-3) Composition

Practice in descriptive and narrative prose. Acquisition of grammatical structures and vocabulary beyond the intermediate sequence.

Pre: FREN 201, 202, or equivalent

316 (1-4) Conversation

Practice in conversational skills.

Pre: FREN 201, 202, or equivalent

317 (1-3) Modern France

Introduction to contemporary French civilization.

Pre: FREN 201, 202, or equivalent

318 (1-4) Introduction to Business French

Introduction to basic concepts associated with French business practices.

Pre: FREN 201, 202, or equivalent

320 (1-3) Seminar

Study of an author, genre, movement, theme or period.

Pre: FREN 201, 202, or equivalent

322 (1) Independent Listening Comprehension

Development of listening comprehension through the use of tapes, videos, films, compact discs, and other recorded materials.

Pre: FREN 201, 202, or equivalent

323 (2-4) French Phonetics and Applied Linguistics

A study of the sound system in French. Intensive oral practice.

Pre: FREN 201, 202, or equivalent

350 (3) Introduction to French Literature

A beginning literature course designed to teach students to read with understanding and critical ability.

Pre: FREN 201, 202, or equivalent

366 (1-6) Oral Communication

Intensive practice in advanced conversational skills. May be repeated for credit.

Pre: FREN 201, 202, or equivalent

393 (1-6) Supervised Study in French-Speaking Countries

Topics will vary. Study for credit must be approved by the department prior to departure.

Pre: FREN 201, 202, or equivalent

402 (3-4) French Civilization

Survey of historical, philosophical, literary and artistic development of France from the beginning to the present.

Pre: FREN 201, 202, or equivalent

404 (2-4) French Syntax

Systematic review of French grammar.

Pre: FREN 201, 202, or equivalent

405 (2-4) Business French I

Study of current vocabulary, terminology and practices used in the business world. Study of developments affecting the French business, industrial and agricultural communities.

Pre: FREN 201, 202, or equivalent

406 (2-4) Business French II

Study of France's position in the European Economic Community and of the development of French business law with emphasis on the obligations and rights of business people, the classification and organization of the various types of companies, the emission of contracts and other documents.

Pre: FREN 201, 202, or equivalent

414 (1-3) Paris et L'ILE de France

Visits to the major churches, cathedrals, castles, monuments, museums and neighborhoods in and around Paris.

Pre: FREN 201, 202, or equivalent

415 (1-3) Composition

Practice in descriptive, narrative and expository writing. Acquisition of vocabulary and advanced grammatical structures.

Pre: FREN 201, 202, or equivalent

416 (1-4) Conversation

Practice in advanced conversation skills.

Pre: FREN 201, 202, or equivalent

417 (1-3) Modern France

In-depth study of different aspects of contemporary French civilization.

Pre: FREN 201, 202, or equivalent

420 (1-4) French Seminar

In-depth study of an author, genre, movement, theme or period.

Pre: FREN 201, 202, or equivalent

432 (1-4) French Literature I

A study of the major authors, works and movements of two successive centuries of French literature.

Pre: FREN 201, 202, or equivalent

442 (1-4) French Literature II

A study of the major authors, works and movements of two successive centuries of French literature.

Pre: FREN 201, 202, or equivalent

452 (1-4) French Literature III

A study of the major authors, works and movements of two successive centuries of French literature.

Pre: FREN 201, 202, or equivalent

492 (1-3) Individual Study

Topics will vary.

Pre: FREN 201, 202, or equivalent

494 (1-6) Supervised French Study

Topics will vary. Study for credit must be approved by the department prior to departure.

Pre: FREN 201, 202, or equivalent

497 (1-6) Internship

Pre: FREN 201, 202, or equivalent

499 (1-4) Individual Study

Pre: FREN 201, 202, or equivalent

MODERN LANGUAGE (MODL) COURSES FOR BS,T:

460 (3) Methods of Teaching Modern Languages

Introduction to theory and practice of modern language teaching, including lessons in listening, speaking, reading, writing, vocabulary, and culture. Includes testing, program design, lesson planning, and use of technology.

F

461 (1) Applied Modern Language Teaching Methods

A field experience including placement in the secondary level school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

462 (3) Foreign Languages in the Elementary School Methods

Introduction to theory and practice of modern language teaching for children grades K-6, including oral language development, second language literacy development, content-based language instruction, and techniques for language immersion programs.

463 (1) Applied Foreign Languages in the Elementary School Methods

A field experience including placement in the elementary level school setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462.

465 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.

V

Geography

College of Social & Behavioral Sciences

Department of Geography

7 Armstrong Hall • 507-389-2617

Chair: Martin D. Mitchell

Branko M. Colakovic, Donald A. Friend, Cecil S. Keen, Jose Javier Lopez, Cynthia A. Miller

Geography is the study of natural and cultural features and processes distributed over the earth. It is both a natural science and a social science in that it examines people and their environment and serves as bridge between the physical and cultural worlds. Furthermore, geography seeks to understand and solve the problems of modern society as they pertain to people's use of the earth's resources. The department's courses are especially suitable for students interested in liberal education, teaching, travel management, environmental management, field-work, cartographic and geographic information system analysis and other applied field sciences.

Admission to Major. Students enrolling in 300-400 level courses must be admitted to the program. Admission to major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
 - a minimum cumulative GPA of 2.00 (C).
- Contact the department for application procedures.

GEOGRAPHY BA, BS

STANDARD MAJOR OPTION - 32 credits

Required for Major (Core, 14 cr):

GEOG 101	Introductory Physical Geography (3)
GEOG 103	Introductory Cultural Geography (3)
GEOG 340	United States (3)
GEOG 370	Cartographic Techniques (4)
GEOG 401	Colloquium (1)

Required for Major (Electives, 18 cr):

Choose one cultural-systematic course from the following:

GEOG 425	Economic Geography (3)
GEOG 435	Urban Geography (3)
GEOG 437	Political Geography (3)

Choose one physical course from the following:

GEOG 313	Natural Disasters (4)
GEOG 315	Geomorphology (3)
GEOG 317	Weather (3)
GEOG 318	Weather lab (1)
GEOG 410	Climatic Environments (3)
GEOG 420	Conservation of Natural Resources (3)

Choose one foreign regional course from the following:

GEOG 445	Latin America (3)
GEOG 450	Europe (3)
GEOG 454	Russian Realm (3)
GEOG 456	Africa (3)
GEOG 458	West Pacific Rim (3)

Geography

Choose one capstone experience from the following:

GEOG 440 Field Studies (1-4)

GEOG 480 Seminar (3)

GEOG 491 Senior Paper (1-4)

GEOG 497 Internship (1-10)

Choose additional electives (above 100 level):

GEOG Electives

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor. Yes. Any.

PROFESSIONAL MAJOR OPTION - 48 credits

Required for Major (Core, 14 cr):

Same as for Standard Major.

Required for Major (Electives, 16 cr):

Same as for Standard Major.

Required for Major (Additional Electives, 18 cr):

Choose additional electives (above 100 level):

GEOG Electives

Other Electives (6 cr may be taken outside department with department permission)

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor. None.

GEOGRAPHY MINOR - 18 credits

Required for Minor (Core, 9 cr):

GEOG 101 Introductory Physical Geography (3)

GEOG 103 Introductory Cultural Geography (3)

GEOG 340 United States (3)

Required for Minor (Electives, 9 cr, above 100 level):

GEOG Electives

POLICIES/INFORMATION

GPA Policy. A GPA of 2.0 or higher in a major or minor in geography is required for graduation.

Refer to the College regarding required advising for students on academic probation.

Pass/No Credit Policy. P/N grading will be accepted in the major only for GEOG 401 and 497. All other courses must be taken for letter grades. All courses for a minor must be taken for letter grades.

COURSE DESCRIPTIONS

100 (3) Elements of Geography

An introduction to Geography and its themes of study. The course will familiarize students with where places are located in the world together with the cultural and physical features that pertain. Students will be tasked to think critically and diversely about various cultures and features of the modern world.

F, S

101 (3) Introductory Physical Geography

Survey of the processes and features of the earth's physical environment, earth-sun relationships, weather, climate, natural vegetation, soil, and landforms. Examines their interrelations and spatial distribution using North America and world-wide examples. Some coverage of human-environmental relations.

F, S

103 (3) Introductory Cultural Geography

Cultural aspects of interactions between people and their environment focusing on spatial patterns of population, agriculture, politics, language, religion, industrialization, and urbanization. Emphasis is placed on the processes that create the cultural landscape and on management of land and natural resources.

F, S

299 (1-3) Individual Study

An assignment that is tailored to individual needs of a student. The instructor and the student arrange the type of project for the student, such as a term paper, readings, mapping, field investigation, or computer cartography.

Pre: Consent

F, S

301 (1) Readings for Honors

An assignment of geographic literature readings that meet the needs of the student. Usually the student provides reviews of articles or books of a geographic nature.

F, S

313 (3) Natural Disasters

An examination of the underlying causes of natural disasters occurring over the globe. Focus will be primarily upon weather and climate related disasters. Students will also be exposed to concepts of plate tectonics and how these affect the distribution of earthquakes and volcanism over the planet.

Pre: GEOG 317

ALT-F

315 (3) Geomorphology

This course will cover elements of the structure of the earth and the variety of landforms found on the earth's surface, with emphasis upon the processes, both past and present, that act upon the surface to create the landforms now visible. Local field trips.

F

317 (3) Weather

An examination of the processes involved in weather formation. Students will be introduced to weather map analysis, simple forecasting and observational techniques, and weather instruments.

F, S

318 (1) Weather Lab

This course will cover applied aspects of weather, including understanding weather codes, analysis and interpretation of weather maps, basic techniques of forecasting, and familiarity with weather instruments.

F, S

340 (3) United States

Students will develop a knowledge of the similarities and contrasts in regional landscapes and cultures of the United States.

F, S

341 (3) World Regional Geography

Differences and similarities in the cultural and natural environments by the world's major regions.

F, S

370 (4) Cartographic Techniques

The lecture material addresses map projections, technology changes in production, basic analysis and depiction of quantitative point, line and areal data. Also, the evaluation of maps and the history of cartography from a European, Oriental, and American Indian perspective is discussed. All maps are drawn using computer assistance.

F, S

373 (4) Introductory Geographic Information Systems

The course will be an introduction to the analysis of spatial data using the concept of a geographical information system (GIS). Content of the course will be, to a great extent, based on the NCGIA core curriculum with assignments tailored to the data and software available within the department such as ArcInfo.

Pre: GEOG 370

F, S

401 (1) Colloquium

Overview of geographic work, interests, and research by guest speakers.

F

409 (1-3) Selected Topics

The instructor will develop a specific course on a geographic topic, such as soils, landforms, water resources, energy, housing, population geography, or some other topic for the class.

F, S

410 (3) Climatic Environments

A qualitative regional climatology of the world, including the Pleistocene Ice Ages and urban impacts upon climate. Emphasis is on the characteristics of particular climates and understanding the factors that control their spatial distribution.

Pre: GEOG 101, or consent

F

412 (4) Advanced Weather

Meteorological principles and theory are applied to the analysis and interpretation of weather data in order to better understand the structure and evolution of synoptic-scale weather systems. Basic knowledge of mathematics will be assumed.

Pre: GEOG 317

ALT-F

420 (3) Conservation of Natural Resources

Survey of natural resources emphasizing energy, minerals, soils, fisheries, and water resources. Also addresses timber, wetlands, and wildlife on public and private lands.

S

425 (3) Economic Geography

Examines national and international economic geographical order and trade activities. Topics include economic development, competition, international trade, and impacts on the environment and people.

F

430 (3) Historical Geography of the United States

The evolving patterns of settlement, cultures, landscapes, and economies of the United States from the colonial period to 1990. An introduction to historical geography as a sub field of geography, including career opportunities in related professions.

On Demand

435 (3) Urban Geography

Hypotheses and generalization related to urban functions, structure, land use, distribution, growth, and sometimes decline. Emphasis will be mostly on the United States' urban places.

F

437 (3) Political Geography

Spatial problems and structure of governments, focusing on countries of the world and their geographic internal order. Covers such topics as boundary problems, strategic locations, and geopolitical explanations of international and internal relations and conflicts.

S

440 (1-4) Field Studies

Various excursions to study physical and cultural landscapes inside and outside of Minnesota.

ALT-F

445 (3) Latin America

Regional geography covering the ecological and human environment of Middle and South America, including the Caribbean. Students can pick specific topics to study in detail. The geographic relations between the USA and Latin America are also covered.

F

446 (3) Canada

Students will develop a knowledge of the environmental, cultural, historical, and economic geographies of Canada. Readings of bestselling fiction and scholarly works written by Canadians will provide a Canadian perspective on the nation's past, present, and future.

ALT-F

450 (3) Europe

Cultural, environmental, and economic background of Europe west of Russia and Ukraine. Following a general geographic survey, the course will cover major regions and countries.

S

454 (3) Russian Realm

Survey of the area of Russia and her neighbors. Examines regional patterns of the physical environment, natural resources, population distribution, cities, and economic activity. Relates people to the land.

F

Geography

456 (3) Africa

A survey of the physical and cultural resources and economic development of the continent with emphasis on current issues. Topics discussed will focus on Africa South of the Sahara.

Pre: Jr. or Sr. status On Demand

458 (3) West Pacific Rim

Examines the ecological and human environments of eastern and southeastern Asia, mainly China, Japan, and off-shore nations. The course will be supported with field information.

On Demand

460 (3) Geographic Teaching Methods

The course will cover resource materials and current techniques in classroom teaching.

On Demand

464 (4) Teaching Earth Science

An applied course tailored to meet practical needs of a teacher, related to curriculum development and earth science lab equipment and supplies.

ALT-S

471 (4) Field Mapping

This course will cover basic strategies for conducting field surveys and gathering from the real world data appropriate to mapping the earth's surface. Emphasis will be upon simple but reliable techniques, ranging from compass-and-pacing to global positioning systems (GPS).

Pre: GEOG 101, or 370 F

473 (4) Geographic Information Systems

Comprehensive examination of computer-assisted systems for manipulation and analysis of spatially-referenced data, including data structure and organization, input and output problems, data management, and strategies for analytical work.

Pre: GEOG 373 S

476 (3) Spatial Statistics

Descriptive statistics, probability, hypothesis testing, introduction to non-parametric statistics, correlation, introduction to regression analysis, spatial statistics, and principles of data representation in graphs, tables, and statistical results.

S

477 (1-3) Topics in Techniques

This offering will include a variety of selected technical topics in geography, including but not necessarily limited to manual cartographic drafting and negative scribing, photomechanical techniques in production cartography, aerial photo interpretation, and advanced coverage of digital analysis of satellite-derived remote sensor data and global positioning systems.

Pre: Consent F, S

479 (1-3) GIS Practicum

This offering will include supervised project work in raster-based and/or vector-based GIS, using problems

and data drawn from local or regional agencies or other professional-level organizations with whom the Geography Department maintains a relationship. Students must have completed one of the prerequisite courses, or a course or professional-level experience.

Pre: GEOG 373, or 473, or consent F, S

480 (1-3) Seminar

Topics vary in physical, cultural, economic, political, and historical geography, as well as environmental conservation and geographic techniques.

F

491 (1-4) Senior Paper

F, S

497 (1-10) Internship

An applied work and learning experience. The student will provide a written internship report on professional practicum and the work supervisor will be consulted on how much the student has accomplished.

Pre: Consent F, S

499 (1-3) Individual Study

An assignment that is tailored to individual needs of a student. An arrangement is made that the student works on a project (term paper, readings, mapping, field investigation, GIS, or related topics).

Pre: Consent F, S

eastern and southeastern Asia, mainly China, Japan, and off-shore nations. The course will be supported with field information.

S

480 (3) Seminar

Topics vary in physical, cultural, economic, political, and historical geography, as well as environmental conservation and geographic techniques.

F

491 (1-4) Senior Paper

F, S

497 (1-10) Internship

An applied work and learning experience. The student will provide a written internship report on professional practicum and the work supervisor will be consulted on how much the student has accomplished.

Pre: Consent F, S

499 (1-3) Individual Study

An assignment that is tailored to individual needs of a student. An arrangement is made that the student works on a project (term paper, readings, mapping, field investigation, GIS, or related topics).

Pre: Consent F, S earth

science lab equipment and supplies.

ALT-S

Geology

College of Science, Engineering and Technology
Department Chemistry & Geology
242 Trafton Science Center N • 507-389-1963

Chair: Jeffrey R. Pribyl

Bryce Hoppie

Geology is the study of the earth. It concerns itself with the materials that constitute the earth, their disposition and structure, the processes at work on and within the earth, and both the physical and biological history of the earth.

GEOLOGY MINOR

Required for Minor (Core, 12 cr):

GEOL 121	Physical Geology (4)
GEOL 122	Earth History (4)
GEOL 201	Elements of Mineralogy (4)

Required Electives for Minor (6-7 cr):

Choose a minimum of 6 credits from the following:

GEOL 202	GEOL 270	GEOL 350
GEOL 370	GEOL 450	GEOL 491
GEOL 499		

COURSE DESCRIPTIONS

100 (3) Our Geologic Environment

Earthquakes, volcanic eruptions, and flooding are three examples of naturally recurring events on the Earth that ultimately influence all of our lives. This course introduces the physical features and processes of the Earth that control these events. The course has a laboratory component and is designed for students not majoring in the natural sciences.

F, S

121 (4) Physical Geology

Physical geology is the study of how the earth works. From mountain building to soil erosion, this course provides an introduction to all the main areas of geologic study. Lecture discussions and laboratory exercises are designed for students seeking a major or minor in one of the natural sciences.

F

122 (4) Earth History

An examination of the development and evolution of life on earth. In addition to reviewing the range of life forms and global climates existing on earth during various times in its geologic past, we will also look at how global industrialization could lead to the earth's next period of mass extinction. Weekly laboratory assignments help illustrate principles discussed in lectures.

S

201 (4) Elements of Mineralogy

Examination of the elemental composition and crystal structure of various common minerals. Laboratory time

is spent practicing techniques of identifying crystals and minerals. The importance and occurrence of many economic minerals is also covered thoroughly in this course.

Pre: GEOL 100 or 121

F

202 (3) Lithology

Similar in scope to GEOL 201; however, this course reviews the identification, classification, occurrence, and uses of the earth's rocks. Laboratory assignments will focus on the recognition of globally significant rock groups and those of particular significance to the upper Midwest.

Pre: GEOL 201

V

270 (4) Structural Geology

Study of faults, folds, and fractures in the earth's crust, and the forces and movements which cause their formation.

Pre: GEOL 121

ALT-S

305 (2) Earth Science for Elementary Educators

An integrated, multi-disciplinary study of the Earth and the solar system. The course establishes basic concepts of astronomy, physical geography, and geology to give students a thorough understanding of the Earth and its place in the solar system. Learning outcomes partially fulfill licensure requirements for elementary educators. This course is focused on content.

Pre: BIOL 100, PHYS 101

F, S

310 (3) Earth and Space Systems

An integrated, multi-disciplinary study of the Earth and the solar system. The course builds on basic concepts of astronomy, chemistry, and geology to give students an enhanced understanding of the nature and relationships among the forces that control the Earth's evolution. Learning outcomes partially fulfill licensure requirements for secondary science educators.

Pre: AST 101, CHEM 201, GEOL 121, PHYS 211

F

350 (4) Environmental Geology

The application of geologic data and principles to problems created by human occupancy and use of the physical environment. Lecture and laboratory topics include soil classification and conservation, hazardous waste site evaluation and remediation, and living with geologic hazards.

Pre: GEOL 121

ALT-S

370 (2) Geotectonics

Expanded discussions of several topics introduced in Physical Geology and Structural Geology. Topics include plate tectonics, deep earth structure, seismicity, mountain building, and continental growth.

Pre: GEOL 121 and 270

V

401 (1) Field Studies

Trips to local areas of geologic interest where students may collect samples and discuss the geologic setting, and geologic history of southern Minnesota.

Pre: GEOL 100 or 121 and 122

ALT-S

German

450 (3) Hydrogeology

This course introduces physical and chemical studies of hydrogeology. The main areas of discussion will include the physical and chemical attributes of aquifers, movement of ground-water and solute through soils and rocks, and reactions between earth materials and pollutants in ground-water systems. The class includes extensive use of MODFLOW and MT3D, the two most commonly used groundwater modeling programs currently available.

PRE: CHEM 201, MATH 121

ALT-S

479 (3) Teaching Earth Sciences

Material and methods of earth science study directed toward students in junior high and high schools.

Pre: GEOL 121, GEOG 317

V

490 (1-4) Workshop

499 (1-5) Individual Study

German

College of Arts & Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Website: <http://www.mnsu.edu/dept/modernlang/Welcome.html>

Chair: Kimberly Contag

Birgitta Hendrickson, Patricia Wilcox Peterson, Edith White

Education in the German language provides insight into the literature and culture of German-speaking countries. It also gives students a knowledge of language that enables them to work and travel in areas where the target language is used.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

A minimum GPA of 2.5 is required in all German courses.

Contact the department for application procedures.

GERMAN BA, BS

Required for Major:

Elementary German or other proof of skill is needed.

The intermediate sequence counts toward the major.

Required for Major (Core, 33 cr):

GER 401 Advanced Composition (2)

GER 402 German Literature I (2)

GER 404 German Literature II (2)

GER 405 German Linguistics (2)

Choose one course from the following:

GER 302 German Civilization (2)

GER 303 Modern Germany (2)

Choose one course from the following:

GER 304 German Conversation/Composition I (2)

GER 305 German Conversation/Composition II (2)

Electives (21)

Required Minor: Yes. Any.

GERMAN BS, TEACHING

The German BS, Teaching is temporarily suspended due to lack of staffing.

GERMAN MINOR

Required for Minor: Elementary German or other proof of skill is needed. The intermediate sequence counts toward the minor.

Required for Minor (Core, 24 cr):

Choose 24 credits of German courses, including at least 14 credits at the upper-division level. Eight of the upper division credits must be in skills courses selected from the list below:

GER 300 Intermediate Composition (2)

GER 304 German Conversation/Composition I (2)

GER 305 German Conversation/Composition II (2)

GER 306 Listening Comprehension (2)

GER 401 Advanced Composition (2)

GER 405 German Linguistics (2)

Electives (12)

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade above the second-year level. A grade of P must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students with high school language experience may take the CLEP test for a maximum of 12 credits. Students who wish to receive credit by examination may take tests to evaluate their proficiency. Students may not take a proficiency test for a course in which they are enrolled. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

Fulfilling B.A. Language Requirement. Students who wish to validate the B.A. language requirement may take a language competency test from the Department of Modern Languages at no cost. If they are evaluated as being proficient, they need not take any more language courses, but they receive no credit. Students will not be considered exempt from the language requirement merely because they have taken two years of high school language.

Students may receive elective credit for fewer than 8 credits of an elementary language sequence, if these are satisfactorily completed. Such credits do not apply toward the 8 credit requirement for the B.A. degree.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of Modern Languages for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State University, Mankato as follows.

Major: a minimum of three upper division courses other than Independent or Individual Study, for a total of at least 8 credits. At least two of these courses must be at the 400 level.

Minor: a minimum of two upper division courses other than Independent or Individual Study, for a total of at least six credits.

Courses not required for a student's specific baccalaureate degree should be chosen according to these general guidelines:

- BA: Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS: Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other disciplines for which a language is either required or recommended.
- BS (teaching): Emphasis on communication (four skills plus culture and language analysis).

COURSE DESCRIPTIONS

101 (4) Elementary German I

Introduction to German for students with little or no language experience.

102 (4) Elementary German II

Pre: GER 101 or equivalent

201 (4) Intermediate German I

A review of German structure and its application to reading, conversation, and composition.

Pre: GER 102 or equivalent

202 (4) Intermediate German II

Pre: GER 201 or equivalent

211 (1) Independent Readings I

Readings from modern prose texts for students who have mastered the rudiments of German.

Pre: Elementary sequence or equivalent

212 (1) Independent Readings II

Pre: GER 102 or equivalent

213 (1) Independent Readings III

Pre: GER 102 or equivalent

215 (2) German Vocabulary

Pre: GER 102 or equivalent

293 (1-4) Supervised Foreign Study: Intermediate

299 (1-4) Independent Study

Pre: as appropriate for level of project

300 (2) Intermediate Composition

Practice in German composition at the intermediate level.

Pre: GER 202 or equivalent

302 (2) German Civilization

Study of German civilization and culture to 1870.

Pre: GER 202 or equivalent

303 (2) Modern Germany

Study of German civilization and culture since 1870.

Pre: GER 202 or equivalent

304 (2) German Conversation/Composition I

Intensive practice in speaking and writing German.

Pre: GER 202 or equivalent

305 (2) German Conversation/Composition II

Intensive practice in speaking and writing German.

Pre: GER 202 or equivalent

306 (2) Listening Comprehension

Independent study with taped radio plays.

Pre: GER 202 or equivalent

308 (2) German Translation

Intensive practice in translating various types of written German.

Pre: GER 202 or equivalent

310 (1-4) Selected Topics

Pre: GER 202 or equivalent

393 (1-6) Supervised Foreign Study

Study for credit must be approved by the department prior to departure.

Pre: Intermediate Sequence

401 (2) Advanced Composition

Intensive practice in writing German for advanced students.

Pre: GER 300, 304 or 305

402 (2) German Literature I

A survey of German literature from roughly 1750-1850, including the Enlightenment, Sturm und Drang, Classicism, and Romanticism.

Pre: GER 202 or equivalent

404 (2) German Literature II

A survey of German literature from roughly 1850-1950, including Realism, Naturalism, Impressionism and Expressionism.

Pre: GER 202 or equivalent

405 (2) German Linguistics

A study of German phonetics, morphology and syntax for advanced students.

Pre: One 300-level course

410 (1-4) Selected Topics

Concentrated study of special topics.

Pre: One 300 level class

493 (1-6) Supervised Study in Foreign Countries

Study for credit must be arranged by contract prior to departure.

Pre: Experience appropriate for level of credit

497 (1-6) Internship

Pre: Experience appropriate to project

499 (1-4) Individual Study

Pre: As appropriate for level of project

Gerontology

College of Social & Behavioral Sciences

Department of Gerontology

335 Trafton Center N • 507-389-1563

Website: <http://www.mnsu.edu/dept/gero>

Director: Kathryn "Jay" Elliott

Other Faculty: Michael Bentley (Biological Sciences), Mary Bliesmer (Nursing), Michael Fatis (Psychology), Marilyn Frank (Social Work), Rosemary Krawczyk (Psychology), Vanda Manahan (Social Work), Shirley Murray (Social Work), Bikash Nandy (Health Science), Carol Perkins (Women's Studies), Charles Piehl (History), Carolyn Shrewsbury (Political Science), Harold Slobof (Health Science), Regina Smith (Nursing), Mary Frances Visser (Human Performance), Richard Wintersteen (Social Work)

The field of Gerontology focuses upon the scientific study of the biological, psychological and social aspects of human aging and the application of this knowledge in the service of older adults. The Department of Gerontology coordinates the delivery of the gerontology curriculum and conducts programs including the B.A. or B.S. Minor in Gerontology, the Master of Science in Gerontology, the Certificate of Study in Gerontology, and an approved course of study for nursing home administration licensure. The Gerontology Program also cooperates with the MSU Center on Aging and the Minnesota Area Geriatric Education Center on continuing education, research and resource development. Minnesota State University, Mankato is a member of the Association for Gerontology in Higher Education. **All programs require registration with the Department of Gerontology director.**

GERONTOLOGY MINOR

Required Total: 23 credits

***Appropriate substitutions for required core or elective courses can be negotiated with the Director of the Department of Gerontology.**

Required Core (12 cr):

- HLTH 455 Health and Aging (3)
- POL 464 Aging: Policy Issues (3)
- PSYC 466 Psychology of Aging (3)
- SOC 404 Sociology of Aging (3)

Required Electives for Minor (8 cr):

To be selected from Gerontology Courses—specific courses offered by particular department and/or courses offered by the Gerontology program.

Elective courses include:

- GERO 200 Aging: Interdisciplinary Perspectives (3)
- GERO 480 Nursing Home Administration (3)
- GERO 485 Topics in Gerontology (1-3)
- GERO 499 Individual Study in Gerontology (1-4)
- ANTH 436 Anthropology of Aging (3)

- BIOL 417 Biology of Aging and Chronic Diseases (3)
- FCS 443 Older Adult Nutrition (3)
- FCS 474 Residential Management for Families and Special Needs People (4)
- HLTH 441 Death Education (3)
- RPLS 482 Leisure Needs of the Aging (3)
- SOWK 419 Social Work and Aging (3)
- SOC 405 Sociology of Death (3)
- WOST 445 Women and Aging (3)

Required for Minor (Internship, 3 cr):

In addition to the course work, a 3 semester hour internship which combines gerontology with the student's major is required. This may be met by Gerontology 497 or, if approved in advance by the Department of Gerontology director, an internship or practicum which is completed for the major.

POLICIES/INFORMATION

Certificate of Study in Gerontology. Requires 18 credits of approved coursework in gerontology including the four courses required for the minor. It provides a core of knowledge in human aging which may be relevant to practice in the aging network. Enrollment in a degree program is not required.

Nursing Home Administration Licensure. This is an approved program of specific coursework and practicum which fulfills educational requirements for a Minnesota nursing home administrator license. It may be pursued at either the undergraduate or graduate level either as part of degrees or in addition to them. Students seeking licensure **must** register with the gerontology program director at the beginning of their program, and **must** contact the Minnesota State Board of Examiners for Nursing Home Administrators, 2829 University Avenue S.E., Suite 440, Minneapolis, MN 55414-3245; telephone 612-617-2117. website: www.benha.state.mn.us

COURSE DESCRIPTIONS

200 (3) Aging: Interdisciplinary Perspectives

Introduction to human aging. Overview of social, psychological, and physical changes and social policy considerations.

F, S

480 (3) Nursing Home Administration

Issues and trends, programs and services, funding mechanisms and regulations. Meets state educational requirements for specific content areas.

S

485 (1-3) Topics in Gerontology

Topics vary as announced in class schedule. May be retaken for credit if topic is different.

V

491 (1-6) In-Service

Pre: Consent

V

497 (1-6) Internship

Pre: Consent F, S

498 (1-6) Practicum in Nursing Home

Administration

For students following plan of study for nursing home administration licensure only.

Pre: by application and Consent only F, S

499 (1-4) Individual Study in Gerontology F, S

Health Science

College of Allied Health & Nursing

Department of Health Science

213 Highland Center N • 507-389-1527

Website: <http://www.mnsu.edu/dept/health/>

Chair: Judith K. Luebke

Steve Bohnenblust, Dawn Larsen, Linda Marshall, Marge Murray-Davis, Bikash Nandy, John A. Romas, Harold Slobof

The school and community health programs prepare health professionals with expertise in health promotion and disease prevention for employment in public health and community health agencies, health care facilities, business and industry, and schools.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).
- completion of HLTH 260.

Contact the department for application procedures.

COMMUNITY HEALTH BS

Required for Major (Core, 35 cr):

HLTH	260	Introduction to Health Education (4)
HLTH	361	Health Communications (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	460	Introduction to Epidemiology (3)
HLTH	475	Biostatistics (3)
HLTH	480	Community and Program Development for Health (4)
HLTH	496	Internship in Community Health (8)
BIOL	230	Human Physiology (4)
FCS	240	Nutrition I (3)

Required Electives for Major (15 cr):

15 credits of Health Science Electives. Determined in consultation with academic advisor.

Minor Required: None

SCHOOL HEALTH BS, TEACHING

Required General Education (Prerequisites, 9-10 credits):

HLTH	101	Health and the Environment (3)
SPEE	102	Public Speaking (3)
CHEM	xxx	Elective (3-4)

Required for Major (8 credits):

BIOL	100	Our Natural World (4)
BIOL	220	Human Anatomy (4)

Required for Major (Core, 27 credits):

HLTH	260	Introduction to Health Education (4)
HLTH	310	Drug Education (3)
HLTH	311	Family Life and Sex Education (3)
HLTH	340	Health Teaching Methods (5)
HLTH	410	Current Health Issues (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	475	Biostatistics (3)
FCS	240	Nutrition I (3)

Required Electives (18 credits):

Choose 9 credits from the following:

HLTH	212	HLTH	361	HLTH	400
HLTH	450	HLTH	451	HLTH	460

Choose 9 credits from the following:

BIOL	230	HLTH	210	HLTH	315
HLTH	440	HLTH	441	HLTH	455
HLTH	459	HLTH	465	PSYC	429

or any from the list above.

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Minor Required: None

COMMUNITY HEALTH MINOR

Required for Minor (Core, 21 credits):

HLTH	260	Introduction to Health Education (4)
HLTH	361	Health Communications (3)
HLTH	454	Chronic and Infectious Disease (3)
HLTH	460	Introduction to Epidemiology (3)
HLTH	480	Community and Program Development for Health (4)
HLTH	496	Internship in Community Health (4)

Required Electives Minor (3 credits):

Choose a minimum of 3 Health Science credits

POLICIES/INFORMATION

GPA Policy. A 2.0 GPA is required for admission to the college and the department majors.

P/N Grading Policy. All major courses must be taken for grade.

COURSE DESCRIPTIONS

101 (3) Health and the Environment

This course is designed to introduce the wellness concept, encouraging development of physical, mental, social and environmental health of the individual. The course ultimately fosters decision-making through a variety of instructional strategies.

F, S

Health Science

210 (3) First Aid and CPR

Provides the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness. Includes First Aid certification for the non-professional and all aspects of CPR for the non-professional and professional.

F, S

212 (3) Consumer Health Issues

This a course designed to examine health products, services, and information from the consumer's perspective. Emphasis will be placed on those factors that influence and ultimately determine which products, services, and information sources that you will either accept or reject.

F, S

215 (1) CPR Basic Rescuer

Certification and recertification in all aspects of CPR for the non-professional and professional. Emphasizes recognition and care for cardiac and respiratory emergencies; special rescue situations, minimizing risk of disease transmission, use of pocket and bag-valve resuscitation devices, and two rescuer CPR.

V

225 (3) Introduction to Chemical Dependency

This course provides information on a variety of topics related to chemical use, abuse and dependency. Students will be exposed to chemical dependency counseling, assessment and intervention techniques. Different drug classifications will be discussed in detail. Counselor core functions and ethics will be discussed also.

F

260 (4) Introduction to Health Education

Health 260 is required of all Health Science majors and minors. This is the foundation class for the professional preparation of health educators. The course explores the knowledge, skills, and competencies of health educators in various settings. Health 260 is a prerequisite for all 300 and 400 level School and Community Health required courses.

F, S

310 (3) Drug Education

Addresses drugs and drug use from psychological, behavioral, pharmacological, historical, legal and clinical perspectives - while examining the effects of drug use on personal health and social functioning.

F, S

311 (3) Family Life and Sex Education

Explores biological, physiological, and sociological perspectives of human sexuality. The course examines personal and family relationships and addresses family life and sex education teaching methods for school and community settings.

S

315 (3) Holistic Health and Wellness

This course presents a study of the essential nature and characteristics of total health. The course explores di-

mensions of mental, physical, social, and spiritual well-being. Various approaches to holistic health and wellness are considered.

ALT-F

321 (3) Medical Terminology

For health care personnel, emphasis on spelling, pronunciation and meaning.

F, S

340 (5) Health Teaching Methods

Overview of methodology and materials used in the school health setting. Review curriculum development, teaching strategies and program administration. Includes the preparation and presentation of lessons.

Pre: HLTH 260

S

361 (3) Health Communications

Health Communications focuses upon the development of skills necessary to communicate technical and practical information for the health professional. Theory and practice of written, verbal and electronic communication methods will be addressed.

Pre: HLTH 260

S

400 (3) Women's Health

This course explores current issues, controversies and concerns affecting women's health. Relationships between social, cultural, psychological, environmental and physical factors of women's health status are examined.

S

410 (3) Current Health Issues

An in-depth review of significant current health concerns and controversies in health science using the elements of reasoning as the framework for critiquing the issues.

Pre: HLTH 475

S

440 (2) Teaching First Aid and CPR

American Red Cross instructor certification for Community First Aid and Safety courses. Includes review of course contents, preparation in teaching principles, methods, strategies, course materials and their use, clerical duties, and teaching experience.

Pre: HLTH 210

ALT-S

441 (3) Death Education

Explores the relationship of death concerns to the process of meaningful living. Uses a variety of learning strategies to examine death attitudes, values and related behaviors.

F

449 (3) Clinical Health Education

Course is designed for health educators preparing for employment in a medical/health care setting and includes an overview of hospital-clinic based educational program. Patient interviewing and counseling skills are presented for professional and paraprofessional health care personnel. Course emphasis is on developing and preparing a teaching module in patient education.

Pre: HLTH 454

ALT-F

450 (3) Environmental Health

To promote identification and analysis of environmental influences upon health status. Health concerns related to residential, occupational, and other environments are explored. Problems pertaining to air, water, solid waste, housing, land use, toxic waste, and sanitation are addressed.

ALT-F

451 (3) Stress and Health

Emphasis is on recognition of, and enhancing awareness about, how stress affects human health and performance. Stress management techniques such as relaxation, effective communication, cognitive-behavioral approaches, eating behaviors, regular exercise, and time management are explored.

S

454 (3) Chronic and Infectious Diseases

The purpose of this course is to develop the knowledge and understanding of the causes, symptoms and methods of controlling and preventing chronic and infectious diseases. Primary and secondary prevention strategies will be identified. Emphasis will be placed on those behaviors that foster and those that hinder well-being.

Pre: HLTH 260

F, S

455 (3) Health and Aging

This course investigates the physical and mental health concerns of the aging process. Explores specific health problems confronting older persons, and examines preventive health behaviors and health maintenance practices.

ALT-S

456 (3) Assessment of Chemical Dependency

This course is designed to provide students with practical knowledge and application techniques in assessing an individual with a chemical use/dependency problem. Various assessment techniques will be presented and discussed as to appropriate utilization. This course meets the criteria for Rule 25 training in Chemical Dependency Assessment.

Pre: HLTH 225

S

459 (1-3) Critical Topics in Health

An in-depth study of specific topics of current interest in the Health Science discipline.

V

460 (3) Introduction to Epidemiology

Examines the philosophy and rationale of current epidemiological practice. Requires the application of epidemiological techniques to selected health concerns. Explores the interaction of agent, host and environment with the emphasis on application of principles of prevention.

F, S

465 (3) Health Care Delivery in the United States

An examination of the system of delivery of health care in the United States from a historical, social, political, and economic perspective.

V

467 (3) Public Health Law

An examination of the judicial system and the development, enactment and enforcement of laws as they relate to the public's health.

V

469 (3) Chemical Dependency: Dual Diagnosis

The focus of this course is on assessment and treatment of persons with coexisting mental disorders as well as chemical dependency.

Pre: HLTH 225

F

475 (3) Biostatistics

Introduction to statistical analysis as applied to the health sciences. Examines concepts and methods of statistical procedures applied to health problems and issues.

F, S

480 (4) Community and Program Development for Health

Focuses upon knowledge and skills necessary for community organization and program development. The course identifies and explores methods and techniques needed for organizing a community for implementing health promotion programs. Principles of program planning, implementation and evaluation are presented.

Pre: HLTH 260, 361, 460

F

488 (3) Worksite Health Promotion

The course examines approaches to promote health and prevent disease and injury, and explores other health related issues at the workplace. Assessment, planning, implementation and evaluation strategies are addressed. Model programs are reviewed and analyzed.

ALT-F

490 (1-4) Workshop

Intensive educational experience on selected topics related to skill development, content update, or material development. Typically offered in a concentrated format.

V

496 (1-8) Internship in Community Health

A concentrated pre-professional work experience for those students preparing for a career in community health. Student must schedule placement one semester in advance.

Pre: Completion of all Community Health core courses

F, S

497 (1-12) Internship: Chemical Dependency

A concentrated pre-professional experience for those preparing for a career in chemical dependency counseling. All course work must be completed prior to placement. Student must schedule placement one semester in advance.

Pre: Course work completed

F, S

499 (1-6) Individual Study

An in-depth study on a topic of particular interest to the student and project supervisor.

F, S

History

College of Social & Behavioral Sciences

Department of History

110 Armstrong Hall • 507-389-1618

Website: <http://www.mnsu.edu/dept/history/>

Chair: Erwin P. Grieshaber

Melodie J. Andrews, Loretta T. Burns, Richard C. Hall, Margaretta S. Handke, Bruce L. Larson, William E. Lass, Charles K. Piehl, Johannes Postma, Donald H. Strasser

The study of history is the attempt to understand and interpret past human societies. It provides both the joy and anguish of contemplating collective experiences, and presents insights that could produce a better future for the human race. History also opens a panorama of enormous variety in human experiences, values, and customs, which provide enjoyment and from which society can also learn wisdom, mutual respect, and tolerance.

Admission to Major. Admission to major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

HISTORY BA, BS

Required for Major (Core, 17 cr):

Choose one survey sequence:

HIST 170 Ancient World Civilization to 1500 (4)

HIST 171 World Civilization 1500 to Present (4)

or

HIST 190 United States to 1877 (4)

HIST 191 United States since 1877 (4)

Plus two methodology courses and one Capstone senior paper:

HIST 260 Nature of History (4)

HIST 399 Historical Research and Writing (3)

HIST 495 Senior Paper (2)

Required Electives for Major (Restricted, 9-12 cr)

Choose 9-12 credits of history electives at the 3/400 level as follows:

One U.S. course

One European course

One course from either Africa, Asia, Middle East or Latin America

Required Electives for Major (7-10 cr)

Choose 7-10 credits at the 3/400 level.

HIST xxx HIST xxx

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

HISTORY MINOR

Required for Minor (Core, 18 cr):

HIST 260 Nature of History (4)

Choose a minimum of 14 cr, at least 9 cr at the 3/400 level:

HIST xxx

HIST xxx

HIST 3/400

HIST 3/400

HIST 3/400

POLICIES/INFORMATION

GPA Policy. A minimum cumulative grade-point average of 2.0 is required in the major.

Pass/No Credit Policy. Undergraduate history courses may be taken either for P/N or letter grading except HIST 490 (workshops), HIST 497(1-6 credits), HIST 498(1-6 credits) and HIST 499(1-3 credits), which are available only on P/N grading. However, majors and minors in history and majors in social studies (history core) must take all history courses, other than those enumerated, for a letter grade. No more than one-fourth of the credits in a history major or minor may be taken as P/N.

Transfer Policy. Transfer students should come to the History Department to have their transfer credits reviewed prior to registration for classes. All transfer students are required to take at least 9 semester credits at the Minnesota State University, Mankato History Department.

In order to provide broad preparation for graduate study, history majors of superior ability may read for honors in three different areas [see HIST 390(1)-392(1)]. To be eligible, a student must have completed at least 14 credits of history courses and have earned a grade-point average of 3.5 in history. The student may enroll for one honors course a semester. Honors credit may be counted for the history major and social students (history core). Students who successfully complete these three courses with a grade-point average of 3.5 for all history courses (and who have met the other degree requirements) will be eligible for graduation "with distinction in history."

For Scandinavian Studies, students may receive history credit for courses in Scandinavian studies by enrolling in HIST 424(4).

Students interested in teaching history should see the Social Studies section for information on the major in Social Studies with a History Concentration BS, Teaching.

COURSE DESCRIPTIONS

150 (1-3) Historical Perspectives

Selected topics in United States or World History depending on interests of the instructor.

V

151 (3) African-American History

A survey of African-American history from African origins to the present.

V

153 (3) War and Peace in the 20th Century

An examination of the cause and consequences of war in the twentieth century with focus on World War I, World War II, and the Cold War.

F, S

154 (3) Minnesota: People and the Land

Survey of Minnesota history with emphasis on the interrelationships of the physical environment and various peoples.

V

155 (3) History of the Family in America

This course is designed to provide an overview and analysis of the historical experiences of the family in the United States from earliest settlement to the present in order to aid students in understanding the contemporary situation of the family in American society.

V

156 (3) American Automotive History

Introduction to United States automotive development from the late 19th century to the present.

F

157 (3) American Aviation History

Introduction to United States aviation development from the Wright brothers to the present.

S

158 (3) Freedom and Authority

This course explores notions of freedom and authority across cultures and through time. By using political writings, literary works and film, the course examines issues including the nature and limits of legitimate authority, the nature and sources of freedom, limits to freedom, and the role of personal choice and conscience.

170 (4) Ancient World Civilization to 1500

A history of the physical, political, cultural, social, and economic foundations of world civilizations to 1500.

F, S

171 (4) World Civilization, 1500-Present

Review of major changes in World Civilizations since 1500.

F, S

180 (4) European History to 1648

A survey of European civilization from Egypt to the end of the Thirty Years War.

F, S

181 (4) European History: 1648 to the Present

A survey of European history from the end of the Thirty Years War to the present.

F, S

190 (4) United States to 1877

This course is designed to provide an overview of America's political, social, economic, and cultural development from earliest colonization to 1877.

F, S

191 (4) United States since 1877

A survey of American History from the end of Reconstruction to the present with a special emphasis on political and social developments.

F, S

199 (1-3) Clep History**260 (4) Nature of History**

A course in historical interpretations and historical methodology which identifies the challenges facing the historian and analyzes how major historians dealt with them.

F, S

301 (4) Readings in United States History

Review of United States history through analysis and discussion of selected primary and secondary readings.

F, S

302 (4) Readings in World History

Review of World History as a field of study.

F, S

390 (1) Readings for Honors: United States History

Pre: 14 semester credits of History with minimum GPA of 3.5

F, S

391 (1) Readings for Honors: European History

Pre: 14 semester credits of History with minimum GPA of 3.5

F, S

392 (1) Readings for Honors: World History

Pre: 14 semester credits of History with minimum GPA of 3.5

F, S

399 (3) Historical Research and Writing

Research methodologies and nature of historical writing.

F, S

401 (4) Classical World of Greece and Rome

The history of Greece and Rome stressing political, social and economic institutions and cultural and intellectual achievements.

ALT-F

402 (4) Foundations of Judaism, Christianity, and Islam

A history of western monotheistic religions and their interactions with the secular world and each other from the beginnings of Judaism to the Crusades.

ALT-S

403 (4) The Middle Ages

A history of the Middle Ages stressing political, social and economic interactions and cultural achievements.

ALT-F

406 (3) Renaissance and Reformation

Intellectual, social and cultural developments in Western Europe, 1300-1600.

ALT-F

407 (3) Scientific Revolution and Enlightenment

Europe during the 17th and 18th centuries when science and reason replaced religion as the intellectual authority.

ALT-S

History

412 (4) Modern Germany Since 1500

Review of German history from the Reformation and Thirty Years War to the present, including such topics as Rise of Prussia, Revolution of 1848, Bismarck and the formation of a German Empire, World War I, Weimar Republic and the rise of Hitler, World War II and Germany since 1945.

ALT-F

414 (4) Early England to 1603

England from ancient times to the death of Elizabeth I.

ALT-F

415 (4) England Since 1603

Political, social and economic development of England and Great Britain since the death of Elizabeth I.

ALT-S

419 (4) France Since the Revolution in 1789

Review of French history from the Revolution of 1789 to the present, including such topics as origins and course of the Revolution, Napoleon, Louis XVIII to Third Republic, World War I, World War II and France since 1945.

ALT-F

421 (4) Modern Russia

A history of Russia and surrounding areas from the fall of Tsarism in 1917 to the modern era.

ALT

424 (4) Scandinavian History

Political, economic, social, cultural, and emigration-immigration history of the Scandinavian countries, including major themes in the mass migration and history of Scandinavians in America. Emphasis on the period, 1500-present.

ALT

427 (4) Eastern Europe

A history of Eastern Europe from the middle ages to the present.

ALT

430 (1-4) United States: Selected Topics

This seminar course will deal with a specific aspect of United States history as announced by the departmental course description.

V

431 (1-4) European History: Selected Topics

This seminar course will deal with a specific aspect of European history as announced by the departmental course description.

V

432 (1-4) World History: Selected Topics

This seminar course will deal with a specific aspect of World History as announced by the departmental course description.

V

434 (4) Modern East Asian History

A comparative history of the rise of the Chinese and Japanese nations from the 1840's to the present.

ALT-S

437 (4) African History

Review of African history from the earliest civilization of Africa to the present, including such topics as Empires of West Africa and East Africa, spread of Islam in Africa, Bantu migrations, European contact and slave trade, European Colonization and independent Africa.

ALT-F

442 (4) History of Latin America

Review of Latin American history from Ancient American Civilizations to the present.

F

450 (3) Minnesota to 1880

Survey of Minnesota's frontier history with emphasis on Indian-white contacts, exploration and settlement.

F

451 (3) Minnesota Since 1880

Modern political, economic and social history of the state, emphasizing both its uniqueness and its relationship to national and regional developments.

S

454 (4) Early America to 1763

This course will examine America's political, social, economic, and cultural development from the earliest settlement of the continent by indigenous peoples to 1763, when provincial Americans began to demand more than token equality in the British Empire.

V

455 (4) Revolutionary and Early National America 1763-1820

This course will examine the social, economic, ideological, political, diplomatic, and military experiences of the United States between 1763 and 1820, in order to understand the creation of the American political nation and the culture which developed within it.

V

459 (4) Civil War and Rise of Industrialization

Examines issues of slavery and conflict between the North and the South leading up to, during, and after the Civil War, and the rise of a socially and culturally diverse manufacturing society by the 1880's.

S

462 (3) Twentieth Century United States to 1945

Reform/domestic themes and U.S. foreign policies during the Progressive Era, the "Roaring 20's," the Great Depression and the New Deal, and the two world wars.

ALT

463 (3) Contemporary U.S., 1945-Present

Social, political and foreign affairs since World War II.

F

470 (4) American Frontier

Occupation of the area between the Mississippi and the Pacific from Spanish exploration to the late 19th century.

ALT

475 (3) The American South

A course which attempts to identify the major themes in southern history and tackles the question whether the South has been un-American or ultra-American.

V

477 (3) Advanced African-American History

A course which deals with the main themes in African-American history and their interpretations.

V

483 (3) Intellectual and Cultural History

Topics in intellectual history or popular and traditional culture.

V

484 (4) Social and Labor History

An examination of the history of labor and the emergence of social welfare within the context of the modernization of western society and the diversity of the United States.

V

487 (4) United States Women's History

This course is designed to provide a survey and analysis of the historical experiences of women in the United States from earliest settlement by indigenous peoples to the present in order to aid students in understanding the contemporary situation of women in American society.

V

490 (1-4) Workshops

Specific titles to be announced in departmental course descriptions. P/N only.

F, S

495 (2) Senior Paper

Capstone writing project on an individually selected topic. Advisor's permission required.

Pre: HIST 399

F, S

497 (1-6) Internship

Practical work experience in an historical agency.

P/N only.

F, S

498 (1-6) Internship

Practical work experience in an historical agency.

P/N only.

F, S

499 (1-3) Individual Study

Advanced independent study and research. P/N only.

F, S

Honors

Honors Program

203 Morris Hall • 507-389-5056

Director: Suzanne Bunkers

Email: suzanne.bunkers@mnsu.edu

Website: www.intech.mnsu.edu/honors/

Faculty are chosen from all disciplines to teach honors seminars, topics courses, and general education courses.

The mission of the Honors Program at Minnesota State University, Mankato, is to provide a challenging interdisciplinary program of study for a highly motivated group of undergraduates and to function as an alternative to the traditional general education curriculum. By providing opportunities for students to meet weekly with professors in small, personalized classroom settings, the Honors Program allows participants to become part of a community of scholars that includes experienced faculty who share a commitment to the program's goals. Honors Program participants have opportunities to attend special lectures, go on field trips, and work at the own pace in a setting that encourages goal-setting, perspective-taking, and independence. The MSU Honors Program is designed to help ensure a successful undergraduate experience, foster creativity and self-direction, and prepare the student for future professional and post-graduate work.

A student invited to join the Honors Program typically has 1) graduated in the top 10 percent of his or her high school class, 2) attained a composite score of 25 or above on the ACT or its equivalent, or 3) attained a GPA of 3.2 in college-level course work. Transfer and international students are admitted on an individual basis after eligibility has been determined.

Required Courses (35 cr):

The Minnesota State University, Mankato, Honors Program offers participants an alternative to the University's general education requirements, which are waived for Honors students; instead, the Honors program requires 35 credits under the following four categories:

I Honors Seminars (6-8 cr)

II Honors Sections of General Education Courses (17-23 cr)

III Honors Special Topics Courses (4-8 cr)

IV Honors Senior Project (2 cr)

Cultural diversity requirements must be satisfied as required by the university.

Students pursuing a B.A. degree will also be required to complete at least one year of a foreign language; selected AP or CLEP credits may be used as a part of the student's general education program.

English and math competency must be satisfied by meeting the requirements of one's major field of study.

Humanities

POLICIES/INFORMATION

GPA Policy. A student in the Honors Program is expected to maintain a 3.0 (cumulative GPA) during the first year, a 3.1 during the sophomore year, a 3.2 during the junior year, and a 3.3 during the senior year. An Honors Program student who has attained a 3.3 GPA upon graduation will be eligible for University Scholar designation. An undergraduate who does not fulfill Honors Program requirements must complete the standard general education requirements set by the university.

P/N Grading Policy. A student in the Honors Program may take a maximum of 6 credits as P/N.

Humanities

*College of Arts & Humanities
Humanities Program*

230 Armstrong Hall • 507-389-2350 or 389-2117

Director: Donald F. Larsson

Interdisciplinary humanities explores human experience through examination of texts, performances, art symbols, cultural and historical systems, and other modes of human expression. The Humanities Program is concerned with connections between particular texts and their social and historical contexts, with relationships among the various arts—literary, performing and visual—and with links to other disciplines that explore the human condition.

The Humanities Program helps to prepare its students to use language effectively, to locate information from a variety of sources and examine it critically, to discover patterns of relationships within this wealth of information and sources, to view these patterns within cultural and historical perspectives, and to assess the beliefs, values, and ideologies that lie beneath or within these patterns and perspectives.

Admission to Major is granted by the department. Minimum university admission requirements are:
- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).
Contact the department for application procedures.

HUMANITIES BA

Required for Major (Core, 27-28 cr):

- HUM 150* The Western Humanities (4)
- HUM 155* Global Humanities (4)
- HUM 450 Humanities Seminar (4)
- HUM 490 Senior Capstone Project (4)

Choose one course from the following:

- HUM 250 Topics in Humanities (4)
- HUM 251** Coming of Age (3)

Choose two courses from the following:

- HUM 280 Humanities Traditions (4)
- HUM 281** Human Diversity and Humanities Traditions (4)

- HUM 282* Global Perspectives and Humanities Traditions (4)

Required for Major (8-9 cr):

- PHIL 460 Philosophy of the Arts (3)

Choose a minimum of 5-6 credits of courses in approved departments not in second major or minors. At least 4 credits of electives must be in 300 or 400 level classes, in addition to PHIL 460:

- Elective xxx Elective xxx Elective xxx
- Elective xxx Elective xxx Elective xxx

Required for Major: one additional Major or two Minors

* May be repeated when topics change.

HUMANITIES MINOR

Required for Minor (16 cr):

- HUM 450* Humanities Seminar (4)

Choose two of the following:

- HUM 150 The Western Humanities (4)
- HUM 155 Global Humanities (4)

Choose one course from the following:

- HUM 250* Topics in Humanities (4)
- HUM 251* Coming of Age (3)
- HUM 280* Humanities Traditions (4)
- HUM 281* Human Diversity and Humanities Traditions (4)
- HUM 282 Global Perspectives and Humanities Traditions (4)

Required for Minor (Electives, 2-3 cr):

Electives chosen in consultation with the director of humanities. Must be in 300 or 400-level classes.

Choose a minimum of 2-3 credits for an elective:

- ELECTIVE xxx

POLICIES/INFORMATION

GPA Policy. Candidates for a major in Humanities must maintain a 2.5 grade-point average.

P/N Grading Policy. Humanities core courses taken for a major or minor in Humanities may not be taken on a P/N basis.

COURSE DESCRIPTIONS

150 (4) The Western Humanities

An introduction to the interdisciplinary study of the Western Humanities, from ancient times to the present. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

F

155 (4) Global Humanities

An introduction to the interdisciplinary study of the humanities, as expressed through the cultures and traditions of Asia, Africa, and others. Artistic, philosophical and religious forms of cultural expression are considered

within their social and historical contexts.
This is a Cultural Diversity Related course.

S

250 (4) Topic in Humanities

Explores the critical analysis of written, visual and/or musical texts; considers these texts from a variety of cultural and historical contexts; and analyzes issues that engage basic questions of human existence, for individuals and societies. May be repeated when topic changes.

V

251 (3) Coming of Age: Gender and Culture

This is a Learning Fund course. The content is the same as Women's Studies 251: Coming of Age: Gender and Culture.

This is a Cultural Diversity Related course.

ALT-S

280 (4) Humanities Traditions

Traditions explore historical or cultural periods, beliefs, or movements within the larger Western traditions of Europe and America and the expressions of these traditions through the visual, literary and performing arts and other forms. May be repeated when topic changes.

V

281 (4) Human Diversity and Humanities Traditions

Explores the cultural and artistic traditions of groups that have experienced discrimination or exclusion in U.S. society and how these groups express themselves through the visual, literary and performing arts and other forms. May be repeated when topic changes.

V

282 (4) Global Perspectives and Humanities Traditions

Traditions explore historical or cultural periods, beliefs, or movements of one of more groups outside Europe and America and the expressions of these traditions through the visual, literary and performing arts and other forms. May be repeated when topic changes.

V

350 (1-3) Reading for Honors

Independent reading in the Humanities. Requires permission of faculty member.

450 (4) Humanities Seminar

Intensive study of a topic related to the Humanities. Topics have included the Baroque Era, Modernism and the Arts, and Culture and Critical Theory.

ALT-Y

490 (4) Senior Capstone Project

An individual project by Humanities Majors that will demonstrate an ability to use interdisciplinary methods to draw together different areas of study in focusing on a specific topic, problem or concern. Requires approval of the Humanities Director or designated advisor.

Pre: Admission to college as Humanities Major

499 (1-4) Individual Study

Interdisciplinary study in an area for which the student has basic preparation.

Pre: Approval of faculty

Interior Design & Construction Management

*College of Science, Engineering & Technology
Department of Interior Design & Construction Management*

354 Wiecking • 507-389-6385

Website: <http://www.mnsu.edu/dept/idcm/>

Carl M. Egan, C. Michael Lindstrom, Chris Priest

The mission of the Department of Interior Design and Construction Management is to provide preparation for diverse employment opportunities following completion of the degree program. This program leads to a Bachelor of Science in Interior Design and Construction Management. It provides graduates with the essential tools and competency levels for design or managerial careers. Students may choose from among four options: Construction Management; Facilities Planning and Management; Historic Restoration and Preservation; or Interior Design. The options focus on culturally diverse issues and foster mutual respect, self-development, and fulfillment.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

INTERIOR DESIGN AND CONSTRUCTION MANAGEMENT BS

Required for all Majors (Core, 18 cr):

- IDCM 111 Introduction to Design & Construction Management (2)
- IDCM 216 Construction Methods (3)
- IDCM 248 Contract Documents (2)
- IDCM 250 Mechanical and Electrical Systems (3)
- IDCM 280 Fundamentals of Interior Design (4)
- IDCM 281 Architectural Graphics (4)

Required for all Majors (Option):

Choose an option as outlined below:

CONSTRUCTION MANAGEMENT OPTION

The objective of the construction management option is the promotion and improvement of collegiate education for construction administration. It also seeks to provide a background in general education so that students are better enabled to cope with the environment in which they must work and live.

Required General Education (4 credits):

- MATH 112 College Algebra (4)

Interior Design & Construction Management

Recommended General Education (22 credits):

BIOL	201	Ecology and Human Society (3)
ENG	101	Composition (4)
GEOG	100	Elements of Geography (3)
PHIL	120	Introduction to Ethics (3)
SOC	101	Introduction to Sociology (3)
SPEE	100	Fundamentals of Speech Communication (3)
URBS	100	Introduction to the City (3)

Required Support Courses (6 credits):

COMS	101	Introduction to Microcomputers (3) (or equivalent)
MATH	113	Trigonometry (3)

Required for Option (Construction Management, 27 credits):

IDCM	212	Surveying and Site Planning (2)
IDCM	215	Fundamentals of Estimating (3)
IDCM	311	Equipment Management (2)
IDCM	312	Foundations and Concrete Structures (3)
IDCM	413	Cost Estimating and Bidding (3)
IDCM	414	Computerized Estimating and Scheduling (3)
IDCM	445	Construction Systems Management (3)
BED	345	Business Communications (3)
BLAW	476	Construction and Design Law (3)
MET	424	Industrial Safety (2)

Required for Option (Business Related, 24 cr):

ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
BLAW	200	Legal, Political and Regulatory Environment of Business (3)
*ECON	201	Principles of Macroeconomics (3)
*ECON	202	Principles of Microeconomics (3)
MGMT	200	Introduction to MIS (3)
MGMT	330	Principles of Management (3)
Select one of the following:		
FINA	362	Business Finance (3)
MGMT	440	Human Resource Management (3)
MGMT	482	Business, Society and Ethics (3)
* Either course may be used to meet Category 5 of General Education requirements.		

Required (External Studies, 9 cr):

IDCM	106	Construction Experience (1)
IDCM	497	Internship: Construction Management (8)

Required Minor: None.

FACILITIES PLANNING AND MANAGEMENT OPTION

The facilities planning and management option is designed to provide the students with an appropriate background in both interior design and construction management. This background will enable the graduate to successfully design, manage, and maintain both small and large scale commercial and institutional environments. Facilities management integrates principles of behavioral and engineering sciences, business administration, and construction management.

Recommended General Education (26 credits):

BIOL	201	Ecology and Human Society (3)
ENG	101	Composition (4)
GEOG	100	Elements of Geography (3)
MATH	112	College Algebra (4)
PHIL	120	Introduction to Ethics (3)
SOC	101	Introduction to Sociology (3)
SPEE	100	Fundamentals of Speech Communication (3)
URBS	100	Introduction to the City (3)

Required Support Courses (18-19 credits)

BED	453	Office Management (3)
COMS	101	Introduction to Microcomputers (3) (or equivalent)
FINA	476	Real Estate Appraisal (3)
MATH	113	Trigonometry (3)
MET	407	Facility Planning (2) or
RPLS	379	Facilities Planning and Management (3)
MET	423	Ergonomics (2)
MET	424	Industrial and Construction Safety (2)

Required for Option (Facilities Planning and Management, 51 cr):

IDCM	212	Surveying and Site Planning (2)
IDCM	215	Fundamentals of Estimating (3)
IDCM	283	Interior Design Lighting and Color (4)
IDCM	362	History of the Decorative Arts II (4)
IDCM	372	Interior Design Resources (4)
IDCM	413	Cost Estimating and Bidding (3)
IDCM	414	Computerized Estimating and Scheduling (3)
IDCM	445	Construction Systems Management (3)
IDCM	480	Topics: Interior Design Product Development (4)
IDCM	481	Interior Design Studio III (4)
IDCM	482	Interior Design Studio IV (4)
IDCM	483	Procedures and Practices in Interior Design (4)
ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
BLAW	476	Construction and Design Law (3)

Required Internship (4 credits):

IDCM	497	Internship: Facilities Planning and Management (4)
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Required Minor: None.

HISTORIC RESTORATION AND PRESERVATION OPTION

The historic restoration and preservation option is designed to provide students with appropriate backgrounds in architectural history, decorative arts history, urban development, restoration techniques, and preservation administration. The focus of this option is applied rather than theoretical. The successful graduate will be able to pursue careers in both small and large scale restoration projects primarily involving construction companies and interior design firms. A secondary theme is the adaptive reuse of existing historical buildings.

Recommended General Education (30 credits):

BIOL	201	Ecology and Human Society (3)
ENG	101	Composition (4)
GEOG	100	Elements of Geography (3)
HIST	191	United States Since 1877 (4)
MATH	112	College Algebra (4)
PHIL	120	Introduction to Ethics (3)
SOC	101	Introduction to Sociology (3)
SPEE	100	Fundamentals of Speech Communication (3)
URBS	100	Introduction to the City (3)

Required Support Courses (25 credits):

COMS	101	Introduction to Microcomputers (3) (or equivalent)
HIST	399	Historical Research and Writing (3)
MATH	113	Trigonometry (3)
URBS	431	Urban Design Principles (3)
URBS	437	Urban Heritage Preservation (3)
URBS	453	Grants Administration (3)
Choose one of the following:		
HIST	190	United States to 1877 (4)
HIST	191	United States since 1877 (4)
HIST	450	Minnesota to 1880 (3)
HIST	451	Minnesota since 1880 (3)
HIST	470	American Frontier (4)
THEA	464	Costume History (3)

One of the following:

URBS	435	Downtown Revitalization (3)
URBS	457	Economic Development (3)

Required for Option (Historic Restoration and Preservation, 47 cr):

IDCM	215	Fundamentals of Estimating (3)
IDCM	282	Interior Design Portraiture (4)
IDCM	283	Interior Design Lighting and Color (4)
IDCM	361	History of the Decorative Arts I (4)
IDCM	362	History of the Decorative Arts II (4)
IDCM	372	Interior Design Resources (4)
IDCM	413	Cost Estimating and Bidding (3)
IDCM	414	Computerized Estimating and Scheduling (3)
IDCM	445	Construction Systems Management (3)
IDCM	481	Interior Design Studio III (4)
IDCM	482	Interior Design Studio IV (4)
IDCM	483	Procedures and Practices in Interior Design (4)
BLAW	476	Construction and Design Law (3)

Required (Internship, 2 cr)

IDCM	497	Internship: Historic Restoration and Preservation (2)
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Required Minor. None.

INTERIOR DESIGN OPTION

The interior design option qualifies the graduate to enter a variety of fields in interior design, business, industry, and government. It provides a comprehensive background in residential and commercial design. It is based upon the principles of functional and aesthetic utilization of space and design.

Recommended General Education (37 credits):

ANTH	101	Introduction to Anthropology (3)
BIOL	100	Our Natural World (4)
ENG	101	Composition (4)
FREN	101	Elementary French I (5)
HIST	191	United States Since 1877 (4)
MUS	120	Introduction to Music (3)
MATH	112	College Algebra (4)
PSYC	101	Psychology (4)
SPEE	102	Public Speaking (3)
URBS	100	Introduction to the City (3)

Required for Option (Interior Design, 44 credits):

IDCM	282	Interior Design Portraiture (4)
IDCM	283	Interior Design Lighting and Color (4)
IDCM	361	History of the Decorative Arts I (4)
IDCM	362	History of the Decorative Arts II (4)
IDCM	372	Interior Design Resources (4)
IDCM	381	Interior Design Studio I (4)
IDCM	382	Interior Design Studio II (4)
IDCM	480	Topics: Interior Design Product Development (4)
IDCM	481	Interior Design Studio III (4)
IDCM	482	Interior Design Studio IV (4)
IDCM	483	Procedures and Practices in Interior Design (4)

Required External Studies (4 cr):

IDCM	492	Seminar: Interior Design Resource Seminar (1)
IDCM	498	Internship: Interior Design (3)

Required Art Studio or Art History Minor (18 cr):

Art Studio Track:

ART	110	Drawing Foundations (3)
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Choose one of the following:

ART	100	Elements and Principles of Art (3)
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ART	101	Design Foundations (3)
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Electives: Select 12 credits of Art Studio Electives in consultation with an Art advisor

Art History Track:

ART	260	Art History Survey I (3)
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ART	261	Art History Survey II (3)
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Electives: Select 12 credits of Art History Electives in consultation with an Art advisor

POLICIES/INFORMATION

GPA Policy. A minimum grade of "C" is required in all courses.

P/N Grading Policy. All courses in the major must be taken for letter grade except where P/N is the only option.

For interior design students, the department reserves the right of acquisition and exhibition of work completed in the studios under the guidance of the interior design faculty.

COURSE DESCRIPTIONS

106 (1) Construction Experience

Construction Experience consists of at least 15 weeks

Interior Design & Construction Management

of work in the construction industry and must precede the internship program. This credit may be waived for experience acquired prior to enrolling at Minnesota State University, Mankato.

111 (2) Introduction to Design and Construction Management

Overview of academic preparation and career opportunities in the fields of: Construction Management; Facilities Planning and Management; Historic Restoration and Preservation; and Interior Design.

212 (2) Surveying and Site Planning

Basic surveying as related to the layout of construction work sites, focusing on measurement of distances, angles, and elevations, and making selected computations.

Pre: MATH 112

215 (3) Fundamentals of Estimating

Covers principles of quantity takeoff including identification of symbols and trigonometric computations of materials from construction blueprints. Includes building, street, utility, and industrial types of construction plans.

Pre: MATH 112 and 113, IDCM 111 and 281

216 (3) Construction Methods

Processes utilized in material handling and installation are examined for their effect on the scheduling of construction. Concepts of scheduling are then studied for patterns to yield higher productivity in the construction process.

Pre: IDCM 111

248 (2) Contract Documents

Basic understanding of the plans and specifications for construction projects. Emphasis on interpretation of bidding and contractual documents, conditions of the contract, technical specifications, quantity takeoffs, and the plans/working drawings.

Pre: IDCM 111 and 281

250 (3) Mechanical and Electrical Systems

Design concepts of heating, plumbing, electrical and control systems are analyzed for attributes that effect the construction process and quality of completed structures.

Pre: IDCM 111

280 (4) Fundamentals of Interior Design

Introduction to the elements and principles of design and their application within residential and commercial interior environments.

281 (4) Architectural Graphics

An introduction to architectural drafting and illustration including planning, architectural symbols, vocabulary, lettering, and three-dimensional illustration techniques.

282 (4) Interior Design Portraiture

An introduction to the principles of interior portraiture including techniques for the creation of three-dimensional illustrations, color illustration techniques, and presentation formats.

Pre: IDCM 281 or concurrent

283 (4) Interior Design Lighting and Color

Study of lighting and color principles and theories as major tools in the design of human environments through research, study, and actual problem solving.

291 (1) Lectures in Construction Management

Seminars will be conducted by leaders in industry, government and business to learn how they function in their role of management and their relationship to the construction industry.

311 (2) Equipment Management

Study of equipment used in the construction industry with emphasis on equipment selection and cost factors involved in owning and operating equipment.

Pre: IDCM 111 and 216

312 (3) Foundations and Concrete Structures

Soil identification and testing methods are examined to identify design concepts and construction circumstances that can effect projects. Concrete design and workmanship principles are then studied for their effect on quality and durability of construction. Foundation design principles are examined for their effect on scheduling, equipment selection and project success.

Pre: IDCM 216

361 (4) History of the Decorative Arts I

A history of the Decorative Arts from Prehistoric human development to the European Periods, with appropriate historical architectural study.

362 (4) History of the Decorative Arts II

A history of the Decorative Arts including American Primitive through Victorian and Mid-19th century through current contemporary developments, with appropriate historical architectural study.

372 (4) Interior Design Resources

Methods and materials for interior environments. Investigation of residential and commercial materials and product lines.

381 (4) Interior Design Studio I

Emphasis on large scale residential environments to include investigation of luxury resources and specialty design projects.

Pre: IDCM 280, 281, 282, 283, 361, and 362

382 (4) Interior Design Studio II

Design of commercial environments emphasizing restaurants, retail spaces and executive offices, including specialized kitchen and barrier-free design. Scale-model presentation techniques will be explored.

Pre: IDCM 381

413 (3) Cost Estimating and Bidding

Advanced application of procedures and theory in formulating estimates. Study includes job selection, estimating production, compilation of costs, the final preparation of bids, and ethics in estimating.

Pre: IDCM 215, 216, 248 and 311

414 (3) Computerized Estimating and Scheduling

The process of construction estimating is extended by the use of computers together with specialized construction software packages to increase job productivity. Software utilized includes commonly used packages in the construction industry on IBM/PCDOS style systems. Pre: IDCM 311; COMS 101 or equivalent; ACCT 210

445 (3) Construction Systems Management

This course encompasses an overview of the operations of a construction company relevant to strategic management. Identifies and analyzes the various roles, positions and functions of construction managers and the interrelationship with key personnel external to the company. International issues also discussed.

Pre: IDCM 413, ACCT 210

480 (4) Topics: Interior Design Product Development

Exploration of selected topics in interior design and related industries emphasizing product design and development.

Pre: IDCM 281, 282, 361, and 362. Senior standing.

481 (4) Interior Design Studio III

Emphasis on large scale commercial environments with an emphasis on systems planning and the investigation of contract resources. Projects require the schematic development of private and public space.

Pre: IDCM 382

482 (4) Interior Design Studio IV

Comprehensive Senior Design Thesis. Large scale environment to include all aspects of previous courses of study with a segment on Institutional Design.

Pre: IDCM 481

483 (4) Procedures and Practices in Interior Design

Business practices for the Interior Designer including design contracts, business forms, coordination of documents, and professional ethics. Professional portfolio development through analysis and objective critique. Senior standing.

490 (1-4) Workshop: Interior Design and Construction Management

Exploration of techniques, technology and theories relating to design and construction industries. Course may be repeated for credit as content changes.

491 (1-6) In-Service: Interior Design and Construction Management

Advanced study into current developments in design and construction related industries, professional orientation, and affiliations. Course may be repeated for credit as topics change.

492-00 (1-4) Seminar: Interior Design and Construction Management

Advanced study into current topics of interest in design and construction related industries. Course may be repeated for credit as topics change.

492-01 (1-4) Seminar: Interior Design Resource Seminar

Examination of resources available within the design industry through tours of specific markets, i.e., Chicago, IL, or Highpoint, NC.

497-01 (1-5) Internship: Construction Management (P/N)

One full academic term of industry employment as a construction management trainee to be taken during or at the end of the senior year.

497-02 (3) Internship: Construction Management (Grade)

One full academic term of industry employment as a construction management trainee to be taken during or at the end of the senior year.

Pre: IDCM 497-01

497-03 (1-10) Internship: International Construction Management (P/N)

One full academic term of international experience as a construction management trainee to be taken during or at the end of the senior year.

497-04 (1-5) Internship: Facilities Planning and Management

A scheduled work assignment with supervision in private business, industry or government agency appropriate to Facilities Planning and Management.

497-05 (1-5) Internship: Historic Restoration and Preservation

A scheduled work assignment with supervision in private business, industry or government agency appropriate to Historic Restoration and Preservation.

498 (1-6) Internship: Interior Design

Supervised work experience in design or design related field within private business, industry or a government agency.

499 (1-4) Individual Study

An in-depth study on a topic of particular interest to the student. Project must be approved by project supervisor and department chairperson.

International Business

College of Business

Department of Marketing & International Business

150 Morris Hall • 507-389-2967

Chair: M. Anaam Hashmi

Kenneth A. Anglin, Linda K. Anglin, Kevin Elliott, H. Turgut Guvenli, Mark Hall, Basil Janavaras, Ann T. Kuzma, John R. Kuzma, Gerald W. Stiles, Li Zhang.

The international business program offers an integrated undergraduate degree. The objective of the program is to train and prepare students to compete and excel in today's increasingly interdependent global economy.

International Business

The minor is designed to complement the student's major field of study and enhance his/her career opportunities. It is strongly recommended to students in business administration, marketing, management, finance, accounting, computer science, language, political science, history, geography, and other related areas.

Admission to Major typically occurs at the beginning of the student's junior year. A student must be admitted to the program for permission to register for 300-400 level courses.

1. GPA of 2.5 for unconditional admission.
2. Completion of 33 credits of general education requirements.
3. Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers, or equivalent.
4. Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; MATH 112; BLAW 200; Second Year Experience 201.
5. Completion of math and English competencies.
6. Completion of 60 credits (or in progress).

INTERNATIONAL BUSINESS BS

Required General Education (15 credits):

ECON 201 Principles of Macroeconomics (3)
MATH 112 College Algebra (4)

Modern Language (6 credits):

Majors must complete one year of foreign language at the 200 level or test out by examination. There are also study abroad programs that offer opportunities for the learning of foreign languages. Majors whose native language is not English are required to meet with the chairperson for possible waiver of the language requirement.

Required for Major (25 credits):

ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BED 345 Business Communications (3)
BLAW 200 Legal, Political & Regulatory Environment of Business (3)
COMS 101 Introduction to Microcomputers (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
MGMT 200 Introduction to MIS (3)

Required for Major (Core, 34 credits):

MRKT 310 Principles of Marketing (3)
MGMT 330 Principles of Management (3)
FINA 362 Business Finance (3)
IBUS 380 Principles of International Business (3)
MGMT 346 Production and Operations Management (3)
MGMT 395 Personal Adjustment to Business (1)
MGMT 481 Business Policy and Strategy (3)
IBUS 428 International Marketing (3)
IBUS 448 International Business Management (3)
IBUS 469 International Business Finance (3)
IBUS 485 Export Administration (3)
IBUS 490 International Business Policy (3)

Required Elective (3 credits):

Choose one of the following:

IBUS 419 International Business Seminar (3)
IBUS 486 Consulting for Export Business (3)
IBUS 499 Individual Study (3)
BLAW 453 International Legal Environment of Business (3)
ECON 420 International Economics (3)

Required Electives (Business Function, 9 cr):

Select three courses from one of the following business function areas:

OPTION A

MRKT 316 Consumer Behavior (3)
MRKT 318 Promotional Strategy (3)
MRKT 324 Marketing Research and Analysis (3)
MRKT 339 Distribution Strategy (3)
MRKT 412 Professional Selling (3)

OPTION B

FINA 460 Investments (3)
FINA 462 Strategic Financial Management (3)
FINA 463 Security Analysis (3)
FINA 464 Financial Institutions and Markets (3)
ACCT 310 Management Accounting I (3)

OPTION C

MGMT 440 Human Resource Management (3)
MGMT 444 Organization Design (3)
MGMT 448 Operations, Planning and Control (3)
MGMT 452 Operations Strategy (3)
MGMT 459 Management Information Systems (3)
MGMT 480 Human Behavior in Organizations (3)
MGMT 485 Introduction to Management Science (3)

Related International Elective (3 credits):

Choose one of the following:

GEOG 341 World Regional Geography (3)
POL 231 World Politics (3)
POL 433 International Organization (3)

Required Minor: None

INTERNATIONAL BUSINESS MINOR

Required for Minor (18 cr):

MRKT 310 Principles of Marketing (3)
IBUS 380 Principles of International Business (3)
Choose four courses from the following:
IBUS 419 IBUS 428 IBUS 448
IBUS 469 IBUS 485 IBUS 486
IBUS 490 BLAW 453 ECON 420

POLICIES/INFORMATION

Students have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

College of Business students must complete a minimum of 64 credits outside the College of Business.

Students who are non-business majors, business minors, or those who are not seeking a four year degree may not complete more than 30 credits in the College of Business.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business. Transfer students pursuing a minor in the College of Business must complete 50% (one-half) of their minor coursework through Minnesota State University, Mankato.

Information Technology Initiative. Students with a Marketing/International Business major or minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges, but are required to take MKT 310 will be able to enroll in a non-notebook class offered once per year for non-majors/minors. For further information see the College of Business section at the front of this bulletin.

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the assessment of its programs make a vital contribution to those programs and student learning. Student participation is an important and expected part of the assessment process.

Student Organizations. The International Business Organization operates on both a professional and personal level. IBO creates cultural awareness and provides interaction among students and international business professionals. IBO members participate in conferences, business tours, annual trips, meetings and social activities. The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the seven organizations and the college representative to the Student Senate, works directly with the Dean's office in the coordination of activities of the various organizations and sponsors activities of their own.

Internships. Students are encouraged to participate in business and industrial organizations through intern programs. Internships are available during the junior or senior years. Students interested in internships should interview early with the internship coordinator for enrollment in this program.

COURSE DESCRIPTIONS

380 (3) Principles of International Business

International dimensions of business: global business environment (economic, cultural, legal, political) and international business functions (management, marketing, finance, exporting, importing).

Pre: Junior Standing

F, S

419 (3) International Business Seminar

Topics on current developments in international business, technology, and legislation.

Pre: IBUS 380

ALT

428 (3) International Marketing

Managerial approach to marketing decision making in multicultural market situations.

Pre: MRKT 310, IBUS 380

F

448 (3) International Business Management

Comparison of the major management systems within their differing cultural environments. Analysis of differing value systems, group behaviors, conflicts and supervisory problems.

Pre: IBUS 380

F

469 (3) International Business Finance

International finance functions in a corporation include currency issues, investment, financial markets interacting, raising debt and equity, and export financing.

Pre: IBUS 380

S

485 (3) Export Administration

Provides knowledge and documentary skills in managing and implementing the export operations of firms engaged in international trade.

Pre: IBUS 380

S

486 (3) Consulting for Export Business

Student teams under faculty supervision assist area firms interested in developing or expanding international business.

Pre: Senior Standing/consent

V

490 (3) International Business Policy

A capstone course for students majoring in international business designed to analyze and integrate the various international business management decisions.

Pre: IBUS 428, 448, 469

S

491 (1-3) In-Service

Topics will vary across various hands-on practical experiences.

Pre: Consent

V

497 (1-9) Internship

Supervised experience in business, industry, state or federal institutions. P/N only.

Pre: Consent

F, S

498 (1-3) Internship

Supervised experience in business, industry, state or federal institutions. Taken for grade only.

Pre: Consent

F, S

499 (1-4) Individual Study

Individual study of special topics.

Pre: Consent

F, S

International Relations

International Relations

College of Social & Behavioral Sciences
Department of Political Science
109 Morris Hall • 507-389-2721

Advisors: Abdalla Battah
Tom Inglot
Jackie Viecei

The degree is designed to prepare students for employment in international organizations, governmental and charitable agencies in the international arena, business and financial institutions with overseas interests, or to provide a broad liberal arts education.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours
- a minimum cumulative GPA of 2.00 (C).

To prepare a program of study suitable to the needs and interests of the individual student, the international relations major is required to consult with an advisor. The student's individualized program will be on file with the Political Science Department and the awarding of a degree will depend upon fulfillment of the program.

INTERNATIONAL RELATIONS BA

Required Credits for Major (42 cr)

Required for Major (Core, 15 cr):

ANTH	230	People: An Anthropological Perspective (3)
POL	231	World Politics (3)
POL	241	Introduction to Comparative Politics (3)
POL	431	International Relations (3)
POL	300-400	Any comparative politics course (3)

Required for Major (Option, 15 cr):

With the advice and consent of an International Relations advisor, each International Relations major will build an emphasis in one of the following areas from the approved course list. Please see an International Relations advisor for copies of the list of approved courses.

1. Global Policy Issues
2. International Norms and Behavior
3. International Political Economy
4. War, Peace and Conflict Resolution
5. A regional emphasis in one area of the following:
 - a. Africa
 - b. Asia
 - c. Latin America
 - d. Middle East
 - e. Russia and neighboring states
 - f. Europe
6. General Emphasis

Required for Major (Electives, 12 cr):

With the advice and consent of an International Relations

advisor, each IR major will select the remainder of their credits from an approved list of IR program courses.

Required for Major (Foreign Language, 8 cr):

All students must take a year's sequence in a foreign language, unless waived as a result of examination or because the student has already learned English as a second language. These credits in a foreign language do not count as part of the international relations degree program course work.

Required Minor: Yes. Any.

POLICIES/INFORMATION

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C).

P/N Grading Policy. With the exception of internship credits, which must be taken on a P/N basis, no more than one-fourth of the credits in the major may be taken as P/N. Internship credits will not be counted as part of the one-fourth limitation, but will be subtracted from the total hours required for the major or minor prior to the computation of the one-fourth limitation.

With the consent of an International Relations advisor, the student may utilize credits in foreign language above and beyond the 100 level, provided the student is not majoring or minoring in that foreign language.

Employment opportunities with respect to this degree are highly dependent upon the area the student selects as a companion minor or second major. For possible second majors or minors and employment opportunities associated with each, the student is urged to consult with an advisor.

Latin American Studies

College of Social & Behavioral Sciences
Department of Anthropology
358 Trafton Science Center N • 507-389-6504

Director: Winifred Mitchell

George Genz, Erwin Grieshaber, Karl Heise, Tomasz Inglot

This interdisciplinary minor enables students from a variety of majors to focus on Latin America. This training is useful in many careers including international business, international relations, Spanish and social studies teaching, and the disciplines of the departments which contribute to the minor. When filing for graduation, Latin American studies minors should enter the code LATA in the column where minors are listed.

LATIN AMERICAN STUDIES MINOR

Required for Minor (16 cr):

Choose 3-7 credits from the following:

SPAN 356 Latin American Civilization (1-4)

SPAN	403	Topics in Spanish American Literature (1-4)
SPAN	494	Supervised Study in Mexico: Themes in Spanish American Literature (1-6)
SPAN	496	Supervised Study: Themes in Hispanic Culture (1-6)

Choose 9-13 credits from at least three departments:

ANTH	412	Prehistory of Latin America (3)
ANTH	430	Ethnography of Latin America (3)
GEOG	445	Latin America (3)
HIST	442	History of Latin America (4)
POL	444	Latin America Politics (3)

Other offerings may be substituted with permission of the director. For course descriptions see the department listings.

Law Enforcement

College of Social & Behavioral Sciences

Department of Political Science/Law Enforcement

109 Morris Hall • 507-389-2721

Website: <http://www.mnsu.edu/dept/psle/welcome.html>

Director: John H. Parham

Susan Burum, Doran Hunter, William Lewinski, John Parham, Mark Robbins, Rick Seklecki, Tamara Wilkins

The law enforcement program is designed for men and women seeking a professional career in criminal justice and law enforcement. It is open to in-service students who wish to improve their basic education, and to pre-service students who may be interested in pursuing a career in law enforcement.

In order to enter the police profession, applicants should be aware that height, visual and other physical and mental standards are set by law enforcement agencies. Students should be aware that some criminal convictions prevent licensure as a peace officer. Law enforcement students should consider these standards.

Admission to Major, Option I is granted by the department. Admission to Option I requires satisfaction of departmental GPA and course prerequisites as well as POST Board documentation. Since these requirements are subject to change, students should contact the Political Science/Law Enforcement Department Office for current admission requirements.

Admission to Major, Option II is granted by the department. Contact the department for application procedures.

LAW ENFORCEMENT BA, BS

Required General Education (7 credits):

ENG	101	Composition (4)
POL	111	US Government (3)

Required Support Courses (7 credits):

SPEE	100	Fundamentals of Speech Communication (3) or
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SPEE	101	Interpersonal Communication (3)
ENG	113	Intro. Prose Literature (4) or
ENG	211	Perspectives: Human Diversity and Literature/Film (4) or
ENG	212	Perspectives: World Literature/Film (4) or
ENG	270	Advanced Composition (4) or
ENG	271	Tech Communication (4)

Required for Major (Option I or Option II):

There are two different options for the law enforcement degree. The Option I program is certified as meeting the academic learning objectives of the Minnesota Peace Officer Standards and Training (P.O.S.T.) Board. Option II is designed for students who do not wish to take the P.O.S.T. Board Certification Test in Minnesota.

OPTION I (PRE-PROFESSIONAL)

Leads to Minnesota Licensure when combined with Skills Component.

Required for Option I (Core, 44 cr):

LAWE	131	Introduction to Law Enforcement (3)
LAWE	231	Criminal Law and Procedures (3)
LAWE	232	Victims, Survivors: Police Response (3)
LAWE	233	Criminal Investigation (3)
LAWE	234	Policing in a Diverse Society (3)

Successfully apply for admission to Option I program before taking 300-400 level classes. See Law Enforcement Office for details.

LAWE	331	Police Stress (3)
LAWE	332	Police Juvenile Justice Procedure (3)
LAWE	335	Police and the Community (3)
LAWE	343	Police Emergency Response Procedures (4)
LAWE	344	Tactical Communications (4)
LAWE	431	Police Patrol: Theory, Practice (3)
LAWE	432	Minnesota Criminal Code (3)
LAWE	433	Senior Seminar (3)
Choose one of the following:		
POL	221	Introduction to Political Analysis (3)
POL	260	Introduction to Public Administration (3)
POL	371	State and Local Government (3)

Required for Option I (Electives, 12 cr):

6 credits of LAWЕ electives, 3 at the 300/400 level; 6 credits of electives from the following departments:

CHEM	131	CHEM	134	COMS	xxx
CORR	xxx	ETHN	xxx	HLTH	210
POL	xxx	PSYC	xxx	RPLS	xxx
SOC	xxx	SOWK	xxx	SPAN	xxx
SPEE	xxx	WOST	xxx		

Required for Bachelor of Arts (BA) degree ONLY:
Language (8)

Total Credits Required for Major (56 cr)

Required Minor: None

OPTION II (GENERALIST)

Required for Option II (Core, 27 cr):

LAWE	131	Introduction to Law Enforcement (3)
LAWE	231	Criminal Law and Procedures (3)

Law Enforcement

LAWE	232	Victims, Survivors: Police Response (3)
LAWE	233	Criminal Investigation (3)
LAWE	234	Policing in a Diverse Society (3) or
ETHN	100	American Racial Minorities (3)
LAWE	331	Police Stress (3)
LAWE	335	Police and The Community (3)
POL	221	Introduction to Political Analysis (3)

Choose one of the following:

POL	371	State and Local Government (3)
POL	451	Administrative Law (3)
POL	452	Jurisprudence (3)
POL	454	Civil Liberties (3)
POL	475	Judicial Process (3)

Required for Option II (Electives, 9 cr):

3 credits of LAWE electives and 6 credits from the following departments:

CHEM	131	CHEM	134	COMS	xxx
CORR	xxx	ETHN	xxx	HLTH	210
POL	xxx	PSYC	xxx	RPLS	xxx
SOC	xxx	SOWK	xxx	SPAN	xxx
SPEE	xxx	WOST	xxx		

Required for Bachelor of Arts (BA) degree ONLY: Language (8)

Total Credits Required for Major (36 cr)

Required Minor: Option II. Yes. Any.

LAW ENFORCEMENT MINOR (21 total credits)

Required for Minor (Core, 9 cr):

LAWE	131	Introduction to Law Enforcement (3)
LAWE	231	Criminal Law and Procedures (3)
POL	111	United States Government (3)

Required for Minor (12 cr):

Choose 12 credits from the following:

LAWE	233	LAWE	234	LAWE	235
LAWE	332	LAWE	335	LAWE	393
LAWE	434	LAWE	435	LAWE	436
LAWE	437	LAWE	438	LAWE	491
LAWE	493				

All required classes in the minor must be taken for a grade.

POLICIES/INFORMATION

GPA Policy. Students seeking to graduate with a bachelor's degree in law enforcement (either option) must have accrued a 2.5 grade-point average in their major.

P/N Grading Policy. All law enforcement classes (both options and minor) except LAWE 492 must be taken for a grade.

Minnesota Licensure. The student must successfully complete the Option I program and an integrated "skills" program and meet other P.O.S.T. Board and Minnesota State University requirements before being approved to take the P.O.S.T. Board licensure examination. This

includes being certified in first aid and CPR (Red Cross Emergency Response, First Responder or EMT currently qualify). Only graduates of certified two and four year academic programs that also meet the requirements of the "skills" program providers may enter an integrated skills program. The licensure examination is administered by P.O.S.T. and covers those items included in the P.O.S.T. Board academic and skills learning objectives. Note: Since P.O.S.T. Board rules change from year to year we advise students to contact the program director for current rules regarding licensure.

COURSE DESCRIPTIONS

131 (3) Introduction to Law Enforcement

The course provides a survey of the institutions and processes of the criminal justice system with and emphasis and the role of law enforcement agencies in a free society. Political theories of justice are explored with theories of crime causation.

F, S

132 (3) Crime and Punishment

An overview of conflicting theories in criminal justice and the tools to critically evaluate the theories and present the strengths and weaknesses of each in written, oral or other forms.

V

231 (3) Criminal Law and Procedures

The history and development of criminal law procedures and their application by law enforcement.

Pre: LAWE 131

F, S

232 (3) Victims/Survivors: Police Response

The purpose of this course is to develop in the student an insight into the dynamics of interpersonal violence, particularly sexual violence. The focus will be on developing effective law enforcement responses to the victims/survivors and the perpetrators.

F, S

233 (3) Criminal Investigation

Procedures of crime investigations, procurement and preservation of evidence, interrogation and courtroom testimony.

F, S

234 (3) Policing In a Diverse Society

Historically, minority members have often faced disparate treatment in the criminal justice system. Because of physical, cultural and economic distinctions, this course is designed to provide students of law enforcement with the basic tools and skills needed to improve interpersonal communications with citizens, victims, suspects, and co-workers.

235 (3) Women In Law Enforcement

This course utilizes a broad multi-disciplinary approach in examining the forces, theories, and popular beliefs that influenced the restriction and eventual acceptance of women in the policing profession. Included in this course are perspectives from the social, historical, biological, political, and social-psychological sciences.

331 (3) Police Stress

This course will cover the sources of interpersonal and intrapersonal stress in the law enforcement profession. Students will be required to assess their vulnerability to these stressors and develop their own strategies and tactics for coping.

F, S

332 (3) Police, Juvenile Justice Procedure

This course focuses on the law enforcement approach to the juvenile justice system and how it has evolved in the United States. Theories of delinquency are reviewed. Minnesota Juvenile Code in emphasized.

V

335 (3) Police and The Community

This course explores the theories of community policing, what community policing is and is not, and what recent research reveals regarding police in the community. The student will be introduced to positive principles of interaction between the police officer and the citizens of the community in which the officer serves.

F, S

336 (3) Advanced Criminal Investigation

A survey of methods and techniques for the investigation of major crimes.

Pre: LAWE 233 or instructor's permission V

343 (4) Police Emergency Response Procedure

This course will cover the crisis intervention aspects of law enforcement from the perspectives of officer safety, communications, persuasion, problem solving and interpersonal relations. It will start with the fundamentals and build skill in the areas of working with emotionally distraught individuals, death notifications, suicide, dispute intervention, and interpersonal problem solving.

F, S

344 (4) Tactical Communication

This course integrates officer safety and procedures with the role of street communications. The class starts with the basic elements of fitness, the dynamics and legalities of force, and the theory and fundamentals of structured communication. These themes and skills are then integrated into routine law enforcement scenarios.

Pre: LAWE 343, admission to Option I or consent of instructor F, S

393 (1-4) Issues in Law Enforcement

An examination of issues facing law enforcement today in constantly changing legal, social and cultural environments. Topics will vary and may be repeated for credit.

Pre: LAWE 131 V

431 (3) Police Patrol: Theory/Practice

Provides students with specific procedures for handling various types of routine calls and situations and provides a base for handling those incidents which are not routine. Emphasizes critical thinking skills through discussion, assignments and evaluations.

Pre: Junior or senior standing F, S

432 (3) Minnesota Criminal Code (criminal code and traffic law)

An extensive study of Chapter 609, Minnesota Criminal Code, and traffic law.

Pre: LAWE 231, admission to Option I or consent F, S

433 (3) Senior Seminar

This is the capstone course for LAWE option 1 and will include such topics as P.O.S.T. License review, ethics and interviewing skills.

F, S

434 (3) Comparative Criminal Justice Systems

A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as POL 449.

V

435 (3) Jurisprudence

Philosophy and sources of law. Schools of legal philosophy and types of legal thinking. Emphasis is placed on Classical Natural Law, Analytical Legal Positivism, Legal Realism and Critical Legal Studies. Same as POL 452.

F

436 (3) Civil Liberties

Review of selected United States Supreme Court decisions interpreting important freedoms contained in the Bill of Rights and the 14th Amendment. Focus is on the rationale which underlies decisions and their impact on American political social processes. Provides an opportunity to exercise and develop individual analytical abilities through analysis of Court's reasoning. Same as POL 454.

V

437 (3) Judicial Process

An examination of the structure, jurisdiction and processes of federal and state courts. Emphasis is placed on selection of judges and justices and on the dynamics of judicial decision-making. Same as POL 475.

V

438 (3) Terrorism and Political Violence

History, philosophy, techniques and countermeasures to terroristic and law intensity threats to public order. Both domestic and international terror. The blurring of the lines between low intensity conflict/terrorism and multinational high intensity crime. Same as POL 485.

V

439 (3) Police Administration and Planning

An examination of emerging administrative and management concepts and the processes related to their implementation.

V

491 (1-5) Topics in Law Enforcement

This course explores topics in law enforcement beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

Liberal Studies

492 (1-8) Internship

Field placement with a law enforcement agency or related organization. Provides a learning experience in which the student can integrate and apply knowledge and theory derived from curriculum. P/N only.

V

493 (1-3) Individual Study

Advanced study and research on topics not currently available in existing courses. May be repeated with a change of topic. Requires advisor and instructor approval of topic.

V

Liberal Studies

College of Arts & Humanities

Liberal Studies Program

226 Armstrong Hall • 507-389-1712

Coordinator: Jane F. Earley

This Associate of Arts (A.A.) degree is intended for those students who wish to pursue a two-year balanced program of liberal education.

Students should complete the general education requirements for the B.S. degree, plus 20 credits of lower division electives for a total of 64 semester credits.

POLICIES/INFORMATION

GPA Policy. A minimum GPA of 2.0 is required.

P/N Grading Policy. All coursework must be taken for letter grade.

Management

College of Business

Department of Management

150 Morris Hall • 507-389-2966

Website: <http://www.mgmt.mnsu.edu>

Chair: Miles Smayling

William Brown, Yong Suk Choi, Brenda Flannery, Marilyn Fox, Jon Kalinowski, Rakesh Kawatra, Sung Kim, Ronald Klocke, Howard Miller, Claudia Pragman, Buddhadev Roychoudhury, Paul Schumann, Timothy Scott, Dooyoung Shin

The primary objective of the Department of Management is to offer a program of study with the aim of developing the technical, analytical and conceptual skills for the future leaders of the private and public sectors. Study provides the student with fundamental principles and practices of effective management. Emphasis is placed on organizational functioning within changing socio-cultural, economic, legal and political environments. Students may select and complete one or more of the following areas: general management, human resource management, and management information systems.

Admission to Major typically occurs at the beginning of the student's junior year. A student must be admitted to a College in the University for permission to register for 300-400 level courses. A student can only expect one temporary admission to the College of Business before permanent admission.

1. GPA of 2.5 for admission.
2. Completion of 33 credits of general education requirements. Consult bulletin for cultural diversity requirements.
3. Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers (MIS majors should take COMS 102), or equivalent.
4. Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; BLAW 200; MATH 112; Second Year Experience 201.
5. Completion of the math and English competencies.
6. Completion or in progress of 60 semester credits.

MANAGEMENT BS

Required General Education (7 credits):

ECON 201 Principles of Macroeconomics (3)

MATH 112 College Algebra (4)

Required Support Courses (10-11 credits):

ECON 202 Principles of Microeconomics (3)

ECON 207 Business Statistics (4)

COMS 101 Introduction to Microcomputers (3)*

* MIS majors choose COMS 102 (4)

Required for Major (Core, 34 credits):

ACCT 200 Financial Accounting (3)

ACCT 210 Managerial Accounting (3)

BED 345 Business Communications (3)

BLAW 200 Legal, Political and Regulatory

Environment of Business (3)

MGMT 200 Introduction to MIS (3)

MRKT 310 Principles of Marketing (3)

MGMT 330 Principles of Management (3)

MGMT 346 Production and Operations

Management (3)

MGMT 395 Personal Adjustment to Business (1)

MGMT 481 Business Policy and Strategy (3)

FINA 362 Business Finance (3)

IBUS 380 Principles of International Business (3)

Required for Major (Options, 21-38 credits):

Select at least one of the following options:

GENERAL MANAGEMENT OPTION

MGMT 440 Human Resource Management (3)

MGMT 444 Organization Design (3)

MGMT 459 Management Information Systems (3)

MGMT 480 Human Behavior in Organizations (3)

Pick any three of the following:

MGMT 443 Entrepreneurship (3)

MGMT 447 Management: Special Topics (3)

MGMT 452 Operations Strategy (3)

MGMT 455 Dynamics of Negotiations (3)

MGMT 482 Business, Society and Ethics (3)

MGMT	485	Introduction to Management Science (3)
MGMT	497	Internship (3)
ACCT	310	Management Accounting I (3)
MRKT	441	Consulting for Small Business (3)
MGMT	449	Quality Management (3)

HUMAN RESOURCE MANAGEMENT OPTION

MGMT	440	Human Resource Management (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training and Development (3)
MGMT	480	Human Behavior in Organizations (3)
Choose at least six credits of the following:		
MGMT	455	Dynamics of Negotiations (3)
ECON	403	Labor Problems (3)
FINA	466	Employee Benefits Planning (3)
ACCT	310	Management Accounting I (3)
HLTH	488	Worksite Health Promotion (3)
MET	423	Ergonomics (2)
BLAW	452	Employment and Labor Law (3)

Required Minor: None.

MANAGEMENT INFORMATION SYSTEMS OPTION

Required (Core, 18 credits):

MGMT	440	Human Resource Management (3)
or		
MGMT	444	Organization Design (3)
MGMT	458	Corporate Information Systems (3)
MGMT	476	Decision Support Systems (3)
MGMT	477	Computer Performance Modeling (3)
or		
MGMT	473	Introduction to E-Commerce (3)
MGMT	485	Introduction to Management Science (3)
MGMT	471	Wireless Networks (3)
or		
MGMT	472	Information Technology Project Management (3)

Required (Computer Information Science, 20 cr):

COMS	103	Fundamentals of Computer Science II (4)
COMS	280	Systems Analysis and Design (4)
COMS	340	Database Management Systems I (4)
Choose one of the following tracks:		
Track 1:		
COMS	462	Data Communications and Networks I (4)
COMS	463	Data Communications and Networks II (4)
Track 2:		
COMS	371	Applications Programming (4)
COMS	481	Rapid Application Development (4)
Track 3:		
COMS	260	Assembly Language Programming (4)
COMS	320	Computer Organization I (4)
Track 4:		
COMS	350	Operations Research I (4)
COMS	450	Operations Research II (4)

Required Minor: None.

Recommended: Internship

An internship can be a valuable addition to your educational experience. Please see your advisor or the Management Internship Coordinator for internship opportunities for advanced professional growth.

HUMAN RESOURCE MANAGEMENT MINOR

Required for Minor (18 cr):

MGMT	330	Principles of Management (3)
MGMT	440	Human Resource Management (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training and Development (3)
MGMT	480	Human Behavior in Organizations (3)

MANAGEMENT MINOR

Required for Minor (21 cr):

COMS	101	Introduction to Microcomputers (or equivalent) (3)
MGMT	200	Introduction to MIS (3)
MGMT	330	Principles of Management (3)
MGMT	440	Human Resource Management (3)
MGMT	444	Organization Design (3)
MGMT	480	Human Behavior in Organizations (3)
Choose one of the following:		
MGMT	346	Production and Operations Management (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	443	Entrepreneurship (3)
MGMT	447	Management: Special Topics (3)
MGMT	449	Quality Management (3)
MGMT	455	Dynamics of Negotiations (3)
MGMT	459	Management Information Systems (3)
MGMT	482	Business, Society and Ethics (3)

POLICIES/INFORMATION

Management Information Systems (MIS) is a cross disciplinary field of study which combines the technical aspects from computer science with the resource management techniques from business. To reflect this cross disciplinary nature of the field, there are two MIS programs at MSU: one is offered in the Department of Computer and Information Sciences; the other is offered in the Department of Management. Students who have an interest and an aptitude for the technical aspects of MIS should consider the Management Information Systems major in the Department of Computer and Information Sciences; students who have an interest and an aptitude for the resource management component of MIS should consider the Management major, MIS option in the Department of Management. Students pursuing either MIS program will be required to thoroughly study both the technical and non-technical aspects of MIS.

Students have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

Management

College of Business students must complete a minimum of 64 credits outside the College of Business. ECON 201, 202, and 207 are counted as credits outside the College of Business.

Students who are non-business majors, business minors, or those who are not seeking a four year degree may not complete more than 30 credits in the College of Business.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business. Transfer students pursuing a minor in the College of Business must complete 50% (one-half) of their minor coursework through Minnesota State University, Mankato.

Information Technology Initiative. Students with a Management major or minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges but are required to take MGMT 200, 330, 346, and 458 will be able to enroll in non-notebook classes offered once per year for non-majors/minors. For further information see the College of Business section at the front of this bulletin.

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the ongoing assessment of its program makes a vital contribution to those programs and student learning. Student participation is an important and expected part of the assessment process.

Student Organizations Delta Sigma Pi is a coeducational business fraternity organized to further the camaraderie of business students and professionals. Delta Sigma Pi provides members the opportunity to network with current business students and alumni throughout the United States.

The Human Resource Management Club is an accredited member of the Society for Human Resource Management. HRMC is in direct contact with human resource executives through conferences, meetings and social events. All majors are welcome.

The Management Information Systems Club brings together students with common interests in the application of information systems to management problems. All students are welcome.

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the seven organizations and the college representative to the Student Senate, works directly with the Dean's office in the coordination of activities of the various organizations and sponsors activities of their own.

Internships Students are encouraged to participate in business and industrial organizations through intern programs. Internships are available during the junior or senior years. Students interested in internships should interview early with the internship coordinator for enrollment in this program.

COURSE DESCRIPTIONS

200 (3) Introduction to MIS

This course explores information systems which assist management in planning, directing and controlling the activities of an organization. Primary emphasis is placed on analysis, design and implementation of systems which generate information for managerial purposes. This course includes the application of database management and spreadsheet processing systems.

Pre: COMS 101 or equivalent or COMS 102 and COMS 103 F, S

330 (3) Principles of Management

This course examines basic management concepts and principles, their historical development, and their application to modern organizations. Topics covered include planning, organizing, decision making, leadership, control, and organizational change. In addition, the course includes an introduction to business ethics and social responsibility, human resource management, organizational design and organizational behavior.

Pre: COB Junior Standing F, S

346 (3) Production and Operations Management

This course engages students in the study of the operations management function in manufacturing and service organizations. Students learn how to apply the basic analytical models to operation decisions involving topics such as scheduling, production technology, inventory management, quality assurance, just-in-time production, and others.

Pre: ECON 207 F, S

395 (1) Personal Adjustment to Business

This course reviews the steps to prepare for future job placement. Topics include the preparation of a credentials file, interview skills, the creation of an effective resume and cover letter, the process of networking, the internship program, requirements for graduation, opportunity for travel studies and application for graduate studies.

F, S

440 (3) Human Resource Management

This course examines the effective management of the human resources of organizations. Topics include analyzing jobs and writing job descriptions; recruiting and hiring of applicants; complying with employment law; managing promotions, quits, and layoffs; employee training and development; evaluating job performance; determining compensation; and managing human resources in a unionized environment.

F, S

441 (3) Staffing

Students learn how to hire the best talent available using sound professional methods. Students design and present legally defensible recruiting and screening techniques for jobs they have analyzed.

Pre: MGMT 440

F, S

442 (3) Compensation Management

The focus of this course is operating an effective, efficient, legal and responsible system for compensating one's employees. Includes the workings of labor markets, analyzing jobs, finding the market value for jobs, designing a pay structure, appraising performance, setting individual pay, determining benefits, occupations requiring special pay programs.

Pre: MGMT 440

F, S

443 (3) Entrepreneurship

The course is an active learning course where students are immersed in the process of starting a new enterprise. In managing their entrepreneurial projects, students conceptualize and develop business plans that includes self assessment, industry and market analyses, a marketing plan, human resource management, and financial analyses and projections. Students have contact with other business professionals and entrepreneurs via field trips, guest speakers, and the end-of-term entrepreneurial fair held on campus.

F

444 (3) Organization Design

This course provides an understanding of the processes that cause organizations to be structured in various forms. The impact on size, technology, strategy, culture, and environmental conditions on structure are examined. The internal processes of power, conflict, culture, and organizational transformation are also emphasized.

Pre: MGMT 330

F, S

445 (3) Training and Development

Students design and deliver training by assessing client needs, defining learning outcomes, choosing effective methods, training, and evaluating results.

Pre: MGMT 440

F, S

447 (3) Management: Special Topics

Special topics as requested by students.

Pre: MGMT 330

V

448 (3) Operations Planning and Control

This course covers the needs of managers in profit or non-profit organizations who are engaged in planning and control functions. The course also focuses on the use and application of emerging technologies in a global, competitive environment.

Pre: MGMT 346

V

449 (3) Quality Management

This course covers essential topics in modern quality management within manufacturing and service organizations from a managerial perspective, including quality planning, culture, customer focus, leadership, vendor

relations, the use of statistical quality control tools and software as well as behavioral issues in the improvement of process and product/service quality.

F

451 (3) Advanced Topics in POM

This course covers recent developments and trends in operations management. The emphasis is on such issues as JIT, GT, FMS, CIM, Concurrent Engineering, DFM, and Optimized Technology. Case studies and industrial projects will be used to illustrate the implementation aspects of the subjects covered. POM software applications are also emphasized.

Pre: MGMT 346, MGMT 485

V

452 (3) Operations Strategy

Capstone course covering strategic issues in Operations Management, and their practical consequences for policy making. The emphasis is on (a) understanding how manufacturing interacts with other business functions, e.g. marketing, accounting, and finance, and (b) determining how the manufacturing function can contribute to the success of the firm.

Pre: MGMT 346

V

455 (3) Dynamics of Negotiations

This course has three major objectives. Firstly, it introduces students to the analytical concepts necessary for effective business negotiations. Secondly, it provides a variety of applications that illustrate the importance of negotiations to management. Finally, the course provides students with the opportunity to practice business negotiation skills through a variety of experiential exercises.

V

458 (3) Corporate Information Systems

This course will provide conceptual frameworks and a practical guideline for understanding how information technologies can provide a competitive advantage, how to identify strategic information systems (SIS) opportunities and risks, how to manage organizational strategic information systems applications, and how to sustain such a competitive advantage in a global market.

S

459 (3) Management Information Systems

This course is designed to prepare students to design and develop personal computer based information systems for management control and decision making using end-user software including spreadsheets and data base management systems. Students will design and develop several information systems as group projects.

Pre: MGMT 200, MGMT 330

F, S

471 (3) Wireless Networks

This course will cover topics such as: cellular systems, personal communication services, wireless LANs, SMR (specialized mobile radio), infrared and microwave-based communication services including geostationary satellites, LEOS, MEOS and specialized satellite services,

Management

VSAT systems, direct broadcasting, meteor burst communication systems, mobile (sea and land) based networks. Issues such as transmission methodologies (FDMA, TDMA, CDMA), routing LMDS, channel allocation, addressing and naming, locating mobile users, user authentication, privacy, security, bandwidth auctioning methods, and system expansion and transition over time.

Pre: Senior in MIS

V

472 (3) Information Technology Project Management

Software project management encompasses the knowledge, techniques, and tools necessary to manage the development of software products. This curriculum module discusses material that managers need to create a plan for software development, using effective estimation of size and effort, and to execute that plan with attention to productivity and quality. Within this concept topics such as risk management, alternative life-cycle models, development team organization, and management of technical people will also be discussed.

Pre: Senior in MIS

V

473 (3) Intro to E-Commerce

This course evaluates several critical facets of e-commerce including business models, developing a competitive advantage, rapid deployment and change management, evaluation of system architecture, security including firewall technology, role of channel partners, and existing and emerging internet technologies. A project is included with the course, which includes the development of Internet accessible database using Access 2000 and FrontPage 2000 with shopping cart software to enable secure payment capabilities and a product offering with interactive shopping capabilities.

Pre: MGMT 200

V

476 (3) Decision Support Systems

In the course of their decision activities, managers work with many pieces of knowledge and have to make informed decisions based on this knowledge. This course is designed to introduce students to the various decision making techniques and explore the techniques required for automating such activities among knowledge workers in an organization.

Pre: MGMT 485

F

477 (3) Computer Performance Modeling

An important function performed by IS professionals is the characterization and estimation of a computing system's performance and capacity for a known benchmark. This course provides an overview of primary modeling techniques to estimate server utilizations, system throughputs, and system response times. Students will develop a series of analytic and simulation based models.

Pre: MGMT 485

S

480 (3) Human Behavior in Organizations

Concepts, theories, and empirical research on organizational behavior are studied. Models and tools for diagnosing situations, individual behavior, group behavior,

intergroup conflicts, supervisory problems and organizational change are analyzed.

Pre: MGMT 330

F, S

481 (3) Business Policy and Strategy

This course examines policy problems of profit and not-for-profit organizations, including top management problem solving and decision making; planning; appraising the business environment; evaluating financial, human and physical resources; forecasting; developing and implementing objectives and strategies; evaluating alternatives; and monitoring results and social responsibility through case analysis and or management simulation.

Pre: MGMT 330, FINA 362 and MRKT 310

F, S

482 (3) Business, Society, and Ethics

Students learn how to apply moral principles to analyze ethical dilemmas in business. Students also learn how to argue for or against government regulation of business. Topics covered include bribery, anti-competitive business practices, pollution, product safety, marketing ethics, employee rights, sexual harassment, discrimination and affirmative action, conflicts of interest, and insider trading.

F, S

483 (3) Ethics in Business

This course examines the meaning and relevance of business ethics to organizations in a diverse and globally competitive marketplace. It covers ethical theory, corporate social responsibility, ethical sales tactics, honesty in advertising, ethical duties to consumers, moral rights of employees, and business and professional codes of ethics.

V

485 (3) Introduction to Management Science

This course introduces a scientific approach to modeling and solving managerial decision problems. It includes such topics as linear and integer programming, network models, waiting-line models, simulation analysis, and decision theory.

F, S

491 (1-3) In-Service

V

497 (1-9) Internship

Supervised experience in business, industry, state or federal institutions. P/N only.

F, S

498 (1-3) Internship

Supervised experience in business, industry, state or federal institutions. Grade only.

F, S

499 (1-4) Individual Study

F, S

Manufacturing Engineering Technology

*College of Science, Engineering & Technology
Department of Automotive & Manufacturing
Engineering Technology*

205 Trafton Science Center E

Phone: 507-389-6383

Fax: 507-389-5002

Website: <http://www.amet.mnsu.edu>

Chair: Kirk Ready

Lee Anderson, Ann Goebel, Andrzej Markowski, Bruce Jones, Harry Petersen, Paul Sullivan

The Bachelor of Science degree in Manufacturing Engineering Technology prepares the student for a career in manufacturing. Students study the design, development, analysis, planning, materials, supervision, and fabrication of industrial and consumer goods. Graduates obtain positions in manufacturing industries where they organize workers, materials and machines so a reliable product can be produced efficiently.

Accreditation. The program is accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

MANUFACTURING ENGINEERING TECHNOLOGY BS

Required General Education (22 cr):

ENG 101	Composition (4)
SPEE 100	Fund. of Speech Comm. (3) or
SPEE 102	Public Speaking (3)
MATH 115	Precalculus Mathematics (4)
MATH 121	Calculus I (4)
PHYS 211	Principles of Physics I (4)
CHEM 105	Introduction to Chemistry (3)

Required Support Courses (15 cr):

ENG 271	Technical Communication (4)
MATH 127	Calculus II for Engineering Technology: Integration (2)
STAT 154	Elementary Statistics (3)
PHYS 212	Principles of Physics II (4)
COMS 171	Introduction to C++ Programming (2)

Required for Major (Core, 57 cr):

MET 104	Introduction to Manufacturing Engineering Technology (1)
EET 113	DC Circuits (3)
MET 141	Computer Aided Drafting (4)
MET 144	Industrial Design (2)

MET 177	Materials Processing I and Metallurgy (4)
MET 245	Computer Aided Design (3)
MET 277	Materials Processing II (4)
MET 322	Statics, Dynamics, and Mechanics of Materials (5)
AET 334	Fluid Power (3)
MET 347	Manufacturing Automation (5)
AET 378	Composite Materials (3)
MET 407	Facility Planning (2)
MET 423	Ergonomics (2)
MET 424	Industrial and Construction Safety (2)
MET 425	Manufacturing Value Analysis (2)
MET 427	Quality Assurance (2)
MET 428	Work Measurement (2)
MET 429	Production and Inventory Control (2)
MET 432	Project Management (3)
MET 488	Senior Design Project I (1)
MET 489	Senior Design Project II (2)

Minor Required: None.

MANUFACTURING ENGINEERING TECHNOLOGY MINOR

Total Credits (16 cr)

Required for Minor (9 cr):

MET 104	Introduction to Manufacturing Engineering Technology (1)
MET 141	Computer Aided Drafting (4)
MET 177	Material Processing I and Metallurgy (4)

Required for Minor (Electives, 7 cr):

Choose 7 credits of MET/AET courses:

POLICIES/INFORMATION

GPA Policy. A minimum GPA of 2.0 is required.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/NC, except those courses offered P/NC only.

Residency. A minimum of 50 percent of the credits for a major or minor in Manufacturing Engineering Technology must be taken at Minnesota State University, Mankato. In addition to general university transfer-of-credit policies for students transferring to MSU, the following policy will be used in giving credit in Manufacturing Engineering Technology courses. For students transferring from two-year or four-year colleges, up to 28 MET credits will be accepted if the transcript is from an ABET-accredited school. If the school is not accredited by ABET, MSU will accept up to 16 credits.

Prerequisites and co-requisites must be observed. A flow chart of prerequisites is available in the Department Office.

The scheduling of all department courses is done yearly, based on enrollment and staffing. To obtain a current yearly class schedule, contact the Department.

Manufacturing Engineering Technology

COURSE DESCRIPTIONS

104 (1) Introduction to Manufacturing Engineering Technology

An overview of careers, technology and requirements for individuals interested in Manufacturing Engineering Technology. Hands-on experience is gained in a variety of new technologies. Careers in engineering and technology are examined along with professional organizations and ethics. The course is intended as a first step toward a career in manufacturing.

141 (4) Computer Aided Drafting

Fundamentals of technical drawings and use of AutoCAD as a drawing instrument. Conventions, standards and practices for 2D and 3D technical drawings. Lab projects cover introduction to AutoCAD, basic construction, geometric and editing techniques, orthographic and auxiliary drawings, dimensioning, and surface modeling.

144 (2) Industrial Design

Fundamental concepts in product design through reports and projects. Course includes systematic approaches to key design phases, identification of design and process problems, the relationship of design to marketing and manufacturing activities, prototype testing, and cost implications.

Coreq: MET 141

145 (2) Computer Graphics

A course intended for civil engineering students. Principles of AutoCAD along with civil engineering applications are covered.

177 (4) Material Processing I and Metallurgy

Fundamentals of machine technology and metallurgy. Theory and step-by-step procedures are used to provide instruction on how to turn materials into products. Students learn to perform machining on a lathe, mill, and drill press, and also inspect the products. Basics of metal processing, plastic molding, and other processes are discussed.

Coreq: MET 141

245 (3) Computer Aided Designing

Solid CAD modeling in detail to provide a complete engineering graphics package. Developing and analyzing solid models. Solving technical design problems based on real-world applications. Designing documentation and assembly drawings. AutoCAD solid modeling tools are used. Other software (Pro E, Ideas, etc.) are introduced. CAE, FEA and CFD are covered.

Pre: MET 141

277 (4) Materials Processing II

A study of the principles of manufacturing technologies, measurements and equipment used in processing of an end product. Advanced manufacturing processes including casting, forging, sheet metal forming, material removal, joining, and powder metals are discussed.

Topics also include materials treatment, preparation, and design for manufacture.

Pre: MET 177, Coreq: MET 245

322 (5) Statics, Dynamics, and Mechanics of Materials

A theoretical and laboratory course covering principles of force equilibrium, stress and strain in tension, shear and torsion, pressure vessels, bending moments, force diagrams, deformations of beams, and stress/strain analysis.

Pre: PHYS 211 and MATH 121

345 (1-2) CAD Projects

Advanced applications of computer aided design. Solid and parametric systems.

Pre: MET 245

347 (5) Manufacturing Automation

Essentials of CNC technology, control hardware and software. Planning for NC operations, tooling and workholding for NC, manual and CAD/CAM programming. Milling and turning programming fundamentals, robotics, programmable logic controllers, flexible manufacturing systems.

Pre: MET 277, EET 113, COMS 171

407 (2) Facility Planning

A study of industrial plant layout for maximum facility utilization. Topics include: factory layout, materials storage and handling, industrial equipment selection and mechanization.

Pre: MET 245 and 277

423 (2) Ergonomics

Investigation of work place design and environmental stress from heat, noise, vibration, repetitive motion and illumination in worker-machine systems.

Pre: STAT 154

424 (2) Industrial and Construction Safety

Techniques of developing safety practices in an industrial environment. Topics include OSHA, current legislation, cost analysis, personal protection, employee selection, psychological aspects, product safety, hazard materials and catastrophe control.

425 (2) Manufacturing Value Analysis

A study of the optimal relationship between the value and function of products, the cost and availability of resources. Topics include the principles of engineering economy, costing systems, capital budgeting, breakeven analysis, the time value of money, comparison of alternatives, capital justification development, taxes and depreciation. Topics are enhanced through spreadsheet modeling for industry applications.

Coreq: MET 407

427 (2) Quality Assurance

This course is focused on quality assurance systems, management philosophies, methodology, function, and impact of quality systems in manufacturing applications.

Development and application of statistical process control tools are also addressed.

Pre: MATH 121, STAT 154

428 (2) Work Measurement

Principles and practical applications of time and motion studies in manual and automated industrial settings, considering the impact on quality, optimization of throughput, safety, ergonomics, and scheduling.

Pre: MATH 121, STAT 154

429 (2) Production and Inventory Control

A study and application of the techniques and problems involved in maintaining competitive product production strategies, such as, material and enterprise resource planning, forecasting methods, supply chain management, process design and process simulation.

Coreq: MET 428

432 (3) Project Management

Development, implementation, and management for effective manufacturing project methodology throughout the entire product life cycle. Principles and case study applications include factors such as organizational structure, strategic planning, cost, time, and quality constraints, scheduling, resource allocation, conflict resolution, skills requirements, elements for project success, estimating, and trade-off analysis.

488 (1) Senior Design Project I

An examination of manufacturing design and research along with topics such as ethics, professionalism, measurement, statistics, and career development/ placement. This course also prepares the student for MET 489, Senior Design Project II, where the design proposal, design project, and final report are completed. This course must be taken in the spring semester of the junior year.

Coreq: STAT 154

489 (2) Senior Design Project II

A continuation of MET 488.

Pre: MET 488, ENG 271

492 (1-4) Manufacturing Seminar

Selected manufacturing topics.

497 (1-10) Internship: Manufacturing

Manufacturing work experience in an area pertinent to the student's objective. Consent of internship coordinator required prior to the beginning of employment and registration. Typically done between the junior and senior year.

Pre: 50% of major

499 (1-4) Individual Study

Marketing

College of Business

Department of Marketing and International Business

150 Morris Hall • 507-389-2967

Chair: M. Anaam Hashmi

Kenneth A. Anglin, Linda K. Anglin, Kevin Elliott, H. Turgut Guvenli, Mark Hall, Basil Janavaras, Ann T. Kuzma, John R. Kuzma, Gerald W. Stiles, Li Zhang.

It is the objective of the department to advance the understanding and practice of marketing and international business.

Faculty advance the discipline of marketing through research, writing, and involvement in professional associations. They improve the practice of marketing with a progressive curriculum for full- and part-time students. The region's business community and public institutions also are directly served with student and faculty consulting and research projects.

The marketing major prepares students for marketing positions in retail management, industrial sales, promotion, marketing research, or marketing management, and equips them with the comprehensive knowledge necessary to assume upper management positions in the marketing function.

Admission to Major typically occurs at the beginning of the student's junior year. A student must be admitted to the program for permission to register for 300-400 level courses.

1. GPA of 2.5 for unconditional admission.
2. Completion of 33 credits of general education requirements.
3. Demonstrated microcomputer competency by successfully completing COMS 101, Introduction to Microcomputers, or equivalent.
4. Completion of ACCT 200, 210; ECON 201, 202, 207; MGMT 200; MATH 112; BLAW 200; Second Year Experience 201.
5. Completion of math and English competencies.
6. Completion of 60 semester credits (or in progress).

MARKETING BS

Required General Education (7 credits):

ECON 201 Principles of Macroeconomics (3)
MATH 112 College Algebra (4)

Recommended General Education (3 credits):

SPEE 102 Public Speaking (3)

Required for Major (25 credits):

ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BED 345 Business Communications (3)
BLAW 200 Legal, Political and Regulatory Environment of Business (3)
COMS 101 Introduction to Microcomputers (3)

Marketing

ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
MGMT	200	Introduction to MIS (3)

Required for Major (Core, 37 credits):

MRKT	310	Principles of Marketing (3)
MGMT	330	Principles of Management (3)
FINA	362	Business Finance (3)
IBUS	380	Principles of International Business (3)
MGMT	346	Production and Operations Management (3)
MGMT	395	Personal Adjustment to Business (1)
MGMT	481	Business Policy and Strategy (3)
MRKT	316	Consumer Behavior (3)
MRKT	317	Product and Pricing Strategy (3)
MRKT	318	Promotional Strategy (3)
MRKT	324	Marketing Research and Analysis (3)
MRKT	339	Distribution Strategy (3)
MRKT	490	Marketing Management (3)

Required Electives (9 credits):

Choose a minimum of three courses from the following:

MRKT	412	Professional Selling (3)
MRKT	413	Industrial Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	441	Consulting for Small Business (3)
MRKT	480	Seminar (3)
MRKT	498	Internship (3)

Required Minor: None.

MARKETING MINOR

Required for Minor (18 credits):

MRKT	100	Global Business Concepts (3) or admittance to the College of Business
MRKT	310	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

Choose a minimum of three courses from the following:

MRKT	317	MRKT	318	MRKT	324
MRKT	339	MRKT	412	MRKT	413
MRKT	415	MRKT	420	MRKT	428

POLICIES/INFORMATION

Students have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Larry Herke, student relations coordinator, 151 Morris Hall, telephone 507-389-2963.

College of Business students must complete a minimum of 64 credits outside the College of Business.

Students who are non-business majors, business minors, or those who are not seeking a four year degree may not complete more than 30 credits in the College of Business.

Residency. Transfer students must complete a minimum of 30 resident credits at the upper division (300-400) in the College of Business. Transfer students pursuing a

minor in the College of Business must complete 50% (one-half) of their minor coursework through Minnesota State University, Mankato.

Information Technology Initiative. Students with a Marketing major or minor are required to lease a notebook computer from Minnesota State University, Mankato. Students who are majoring in other colleges but are required to take MKT 310 will be able to enroll in a non-notebook class offered once per year for non-majors/minors. For further information see the College of Business section at the front of this bulletin.

GPA Policy. Students must earn a minimum grade-point average of 2.0 (C) on the total courses taken in the College of Business to meet graduation requirements.

P/N Grading Policy. No more than one-fourth of a student's major shall consist of P/N grades.

Assessment Policy. The College of Business believes that the assessment of its programs makes a vital contribution to those programs and student learning. Student participation is an important and expected part of the assessment process.

Student Organizations The Advertising Club enables students to participate in the American Advertising Federation's National Student Advertising competition. This is an opportunity to work on a real world situation in a competitive atmosphere. Students will gain exposure to advertising executives while learning about the advertising industry and their own capabilities.

The American Marketing Association is a nationally affiliated marketing organization. AMA offers students opportunities to network with professionals in marketing-related fields, contribute to the community through service projects and meet other students. All majors are welcome.

Delta Sigma Pi is a coeducational business fraternity organized to further the camaraderie of business students and professionals. Delta Sigma Pi provides members the opportunity to network with current business students and alumni throughout the United States.

The International Business Organization operates on both a professional and personal level. IBO creates cultural awareness and provides interaction among students and international business professionals. IBO members participate in conferences, business tours, annual trips, meetings and social activities.

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the seven organizations and the college representative to the Student Senate, works directly with the Dean's office in the coordination of activities of the various organizations and sponsors activities of their own.

Internships Students are encouraged to participate in business and industrial organizations through intern programs. Internships are available during the junior or

senior years. Students interested in internships should interview early with the internship coordinator for enrollment in this program.

COURSE DESCRIPTIONS

100 (3) Global Business Concepts

Focuses on the basic business functions of Accounting, Finance, Management, and Marketing in global context.

F, S

310 (3) Principles of Marketing

This course provides a basic understanding of marketing concepts with emphasis on the pricing, promotion, and distribution of need satisfying products and services in domestic and international markets. The format of the course consists of lectures, case discussions, application exercises, projects, exams, and in-class group assignments.

F, S

316 (3) Consumer Behavior

Students will learn about consumer decision styles, perceptions, group influences, family decision-making, lifestyles, shopping behaviors and domestic and international trends related to marketing strategies. The framework consists of individual or group projects, usually requiring some personal interviewing, exams, and reports.

Pre: MRKT 310 F, S

317 (3) Product and Pricing Strategy

The intention of the course is to explore in depth the concepts involved in new product development, the management of products through the product life cycle, and the development of pricing policies and strategies. The course involves a lecture/discussion format with occasional group activities, projects and exams.

Pre: MRKT 310 F, S

318 (3) Promotional Strategy

Promotional strategy focuses on the utilization of all the elements of the promotion mix-advertising, personal selling, publicity, sales promotion, and corporate sponsorship-in the development of an effective promotion plan.

Pre: MRKT 310, 316 F, S

324 (3) Marketing Research and Analysis

In this course, students will examine the role of research in decision making and the basics of scientific research, including the preparation of research proposals, design of data collection instruments, data analysis, interpretation, and reporting.

Pre: MRKT 310, ECON 207 F, S

339 (3) Distribution Strategy

Defines the role of marketing channels within the marketing system. Topics in this course examine important issues in marketing distribution systems.

Pre: MRKT 310 F, S

412 (3) Professional Selling

The course is designed to provide basic human motiva-

tion theories, and develop persuasive communications strategies and applications necessary in the field of professional selling. The course takes a hands-on approach to professional selling techniques with the use of sales presentations, sales manuals, and exams.

Pre: MRKT 310 F, S

413 (3) Industrial Marketing

A broad examination of the techniques employed in business-to-business marketing. Topics include organizational buying, buyer-seller relationships and industrial marketing mix development.

Pre: MRKT 310 S

415 (3) Retailing Management

The study of marketing at the retail level, including the organization, operations, methods, policies, and problems of retail establishments in satisfying consumers.

Pre: MRKT 310, 316 F

420 (3) Sales Management

This course involves studying the role of the general sales manager, the functions of sales management within overall marketing strategy, and the development of analytical decision skills necessary to plan, manage, and control the sales force.

Pre: MRKT 310 S

428 (3) International Marketing

This course takes a managerial approach to analyzing marketing decision making in multinational market situations.

Pre: MRKT 310 and IBUS 380 F, S

441 (3) Consulting for Small Business

Student teams assist businesses with problems by conferring with clients, conducting analyses and recommending solutions. Problems may encompass accounting, finance, personnel procedures, production or marketing.

Pre: Consent ALT

480 (3) Seminar

Topics covered are specialized topics not covered in other courses and will be announced.

Pre: Consent V

490 (3) Marketing Management

This course should be the last marketing class taken, since it involves comprehensive marketing strategy development, integrating all dimensions of the marketing offering, and utilizing marketing information systems for top-level control and decision making. Students will complete a formal marketing plan, case analyses, and examinations.

Pre: MRKT 310, 316, 317, 318, 324, and 339 F, S

491 (1-3) In-Service

Topics will vary across various hands-on practical experience.

Pre: Consent V

Mass Communications

497 (1-9) Internship

Individual, supervised experience in a business firm or government agency. Taken for P/N only.

Pre: Consent F, S

498 (1-3) Internship

Individual, supervised experience in a business firm or government agency. Taken for grade only.

Pre: Consent F, S

499 (1-4) Individual Study

Individual study of special topics.

Pre: Consent F, S

Mass Communications

College of Arts & Humanities

Department of Mass Communications

136 Nelson Hall • 507-389-6417

Website: <http://www.mnsu.edu/dept/masscom/>

Chair: Chuck Lewis

John Gaterud, Ellen M. Mrja, Marshel D. Rossow

The goal of the Department of Mass Communications is to prepare people for professional practice in mass communication. To this end, the department has the following objectives:

1. To train students in journalistic skills and competencies of a high professional standard requisite for their performing as reporters, writers, editors and photographers in print media; and as public relations specialists.
2. To enable students to intelligently assess mass media and to understand the power and weaknesses of their various components.
3. To aid the professional who is seeking additional skills and information.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

Proficiency in English grammar, spelling and composition, and keyboarding is essential for admission to the major. A diagnostic test in English usage is required to determine such proficiency. The department requires that students complete with a cumulative GPA of 3.0 or better these courses (or their equivalents): ENG 101, Composition and MASS 110, Introduction to Mass Communications; and that students pass LME 101, Library Orientation. Overall GPA will also be considered in determining admission status. Students not meeting minimum requirements may petition the faculty in writing to seek admission.

No student entering the mass communications program as a major or minor may take courses beyond MASS 110, Introduction to Mass Communications, unless he/she has met the stated requirements. Students seeking

entry into the department's major or minor program must present evidence of their satisfactory fulfillment of these requirements.

In preparation for undertaking a major or minor program in mass communications, students should consider taking these courses (or their equivalents): ECON 100, An Introduction to U.S. Economy; GEOG 103, Introductory Cultural Geography; ETHN 100, American Racial Minorities; POL 371, State and Local Government; PSYC 101, Psychology; SOC 100, Social Problems; SOC 101, Introduction to Sociology; WOST 110, Intro to Women's Studies.

MASS COMMUNICATIONS BA, BS

Required General Education (19 credits):

ENG	101	Composition (4)
HIST	190	United States to 1877 (4)
HIST	191	United States Since 1877 (4)
MASS	110	Intro to Mass Communications (3)
POL	111	United States Government (3)
LME	101	Library Orientation (1)

Required for Major (Core, 28 cr):

MASS	221	Media Writing I (4)
MASS	312	Mass Communication Law (4)
MASS	322	Media Writing II (4)
MASS	341	The Editorial Process (4)
MASS	351	Photojournalism (3)
MASS	411	Ethics and Press Criticism (4)
MASS	412	History of Mass Communications (3)
MASS	498	Internship (1-6)

Required for Major (Options, 9 cr):

Select an option from the following:

GENERAL

Choose at least 9 credits from the following courses:

MASS	242	MASS	290	MASS	334
MASS	353	MASS	360	MASS	381
MASS	425	MASS	431	MASS	433
MASS	434	MASS	436	MASS	480
MASS	490	MASS	499	ART	200
ART	203	ART	204	ART	301
ART	302	ART	401	ART	402
ENG	270	ENG	271	ENG	342
ENG	475	POL	473	MRKT	310
BED	345	RPLS	377	MRKT	318

NEWS-EDITORIAL

Choose at least 9 credits from the following courses:

MASS	242	MASS	290	MASS	334
MASS	353	MASS	360	MASS	381
MASS	425	MASS	431	MASS	433
MASS	436	MASS	480	MASS	490
MASS	499	ART	200	ART	203
ART	204	ART	301	ART	302
ART	401	ART	402	ENG	270
ENG	271	ENG	342	ENG	475
POL	473				

PUBLIC RELATIONS

MASS 433	Public Relations Principles (4)
MASS 434	Advanced Public Relations (3)
Choose at least 2 credits from the following courses:	
MASS 290	MASS 334 MASS 353
MASS 360	MASS 381 MASS 431
MASS 436	MASS 480 MASS 490
MASS 499	ART 200 ART 203
ART 204	ART 301 ART 302
ART 401	ART 402 BED 345
ENG 270	ENG 271 ENG 475
MRKT 310	MRKT 318 RPLS 377

Required for Bachelor of Arts (BA) degree ONLY:
Language (8)

Required Minor: Yes. Any.

MASS COMMUNICATIONS MINOR

Required General Education for Minor (19 cr):

ENG 101	Composition (4)
HIST 190	United States to 1877 (4)
HIST 191	United States since 1877 (4)
MASS 110	Introduction to Mass Communica- tions (3)
POL 111	United States Government (3)
LME 101	Library Orientation (1)

Required for Minor (Core, 23 cr):

MASS 221	Media Writing I (4)
MASS 312	Mass Communications Law (4)
MASS 322	Media Writing II (4)
MASS 341	The Editorial Process (4)
MASS 411	Ethics and Press Criticism (4)
MASS 412	History of Mass Communications (3)

POLICIES/INFORMATION

GPA Policy. Majors and minors must earn a cumulative GPA of 2.5 or better in all mass communications coursework, in addition to the 2.0 overall GPA required by the university for graduation.

Refer to the College regarding required advising for students on academic probation.

P/N Grading Policy. Mass communications majors and minors are required to take department courses for a letter grade, except for MASS 498, which must be taken P/N.

Transfer Credit. The department accepts no more than 13 credits from other colleges and universities as transfer credits to be applied toward the major or minor. They must be taken in courses that match or are the equivalent of courses that are either offered by the department or allowed by it for elective credit as shown in the areas of concentration.

Internships. Opportunities for mass communications internships exist on and off campus for junior and senior majors to work in professional settings. The internship must be done under professional supervision and is taken only after the student has (1) completed 19

credits in the core curriculum (MASS 411, Ethics and Press Criticism, and MASS 412, History of Mass Communications, are not included); (2) submitted a department internship contract signed by the student, the student's internship supervisor, and the department chair.

Filing a Program. By the end of the sophomore year the student, through individual consultation with a department advisor, should complete and file with the department a proposed program.

The department recommends that students develop a program of study that is complementary to their major in mass communications. Students concentrating in the news-editorial concentration are encouraged to elect courses in liberal arts, such as art, English, literature, modern language, history, humanities, philosophy and political science. Students concentrating in public relations are encouraged to elect courses in business administration, English, psychology, sociology and speech.

Communication Facilities. In addition to a fully equipped modern computerized classroom, the Department of Mass Communications has access to a broad range of on-campus facilities that provide students practical experience. Students majoring in mass communications and in other fields contribute to publishing a student-oriented campus newspaper, *The Reporter*, and a campus literary magazine, and to producing programming for KMSU-FM radio.

Counseling and Guidance. The key to the department's selective approach to mass communications education is its counseling and guidance program. Students are encouraged to choose a department advisor. Working closely with this faculty person, students develop academic programs that relate to their needs, interests and career aspirations.

COURSE DESCRIPTIONS

110 (3) Introduction to Mass Communications

Nature, functions and responsibilities of the media in contemporary society. F, S

221 (4) Media Writing I

Basic techniques of gathering information and writing readable and accurate media stories.

Pre: ENG 101, MASS 110, LME 101 F, S

242 (2) Radio Station Operation

Principles of radio station operation, radio production techniques and study of FCC requirements.

Pre: MASS 221 V

290 (1-3) Selected Topics in Mass Communications

Selected topics in mass communications.

Pre: MASS 221 or consent V

312 (4) Mass Communications Law

Principles of the First Amendment, libel, fair trial, privacy, access to news, pornography and regulation of radio and television.

Pre: MASS 221, POL 111 F, S

Mathematics

322 (4) Media Writing II

Problems and techniques in reporting about public affairs and social issues.

Pre: MASS 221 F, S

334 (3) Writing and Speaking for Broadcast

Planning, writing and delivering of broadcast news.

Pre: MASS 221 V

341 (4) The Editorial Process

Instruction and practicum in editorial production: design and layout, editing, headlining, computerized typesetting.

Pre: MASS 221 F, S

351 (3) Photojournalism

Instruction and practicum in the operation of the still camera, development and reproduction of black and white photographs, and principles of photography as related to the journalistic process. Student must provide own 35mm camera.

Pre: MASS 221 F, S

353 (2) Advanced Photojournalism

Guided experiences in techniques and practicum of journalistic photography.

Pre: MASS 221 and MASS 351 V

360 (3) Publications Layout

Practicum in typography, design and layout for newspapers, magazines, newsletters, brochures and posters. Computer use in layout and design is stressed.

Pre: MASS 221 and MASS 341 V

381 (1) Reading for Honors

Directed reading program in literature of mass communications. For mass communications students who maintain 3.0 GPA or better.

Pre: MASS 221 and 3.0 GPA F, S

411 (4) Ethics and Press Criticism

Study, analysis and criticism of the mass media, their ethics and performance.

Pre: MASS 221 and MASS 312 F, S

412 (3) History of Mass Communications

Study of people and events that have shaped the American press.

Pre: MASS 221, HIST 190, HIST 191 F, S

425 (3) Advanced Reporting

Advanced news reporting in depth; investigative and research techniques; background and feature series.

Pre: MASS 221 and MASS 322 V

431 (3) Magazine Article Writing

Marketing and writing of magazine articles.

Pre: MASS 221 V

433 (4) Public Relations Principles

Survey of current practices and problems in the field of public relations. Emphasizes successful case histories and planning techniques.

Pre: MASS 221 F, S

434 (3) Advanced Public Relations

Guided experience in planning public relations programs and campaigns.

Pre: MASS 433 F, S

436 (3) Specialized Writing

Techniques and practicum in writing of features, reviews, editorials, opinion columns and other specialized fields.

Pre: MASS 221 and MASS 322 V

480 (1-3) Mass Media Seminar

Advanced studies in reading, writing and discussion on the practice, issues and literature of journalism.

Pre: MASS 221 V

490 (1-3) Mass Communications Workshop

Discussion and hands-on experience involving mass media activities. Topic varies.

Pre: MASS 221 V

498 (1-6) Internship

Practical mass media experience in a professional setting.

Pre: MASS 221, 312, 322, 341, 351 F, S

499 (1-2) Individual Study

Directed research on a mass media topic chosen by the student.

Pre: MASS 221 F, S

Mathematics

College of Science, Engineering & Technology

Department of Mathematics and Statistics

273 Wissink • 507-389-1453

Website: <http://mnsu.edu/dept/mathstat>

Chair: Larry M. Pearson

Ernest Boyd, Maureen H. Fenrick, Francis T. Hannick, Kil S. Lee, Namyong Lee, Mary Ann Lee, R. Bruce Mericle, Mezbahur Rahman, Malcolm Lee Riddle, Gary Rockswold, Chia-Chi Tung, Charles Waters, Mary Wiest

Mathematics in its purest form is an art concerned with ideas. The Department of Mathematics believes that an undergraduate major should be both an introduction to more advanced study and a survey of the many facets of mathematics. From the profound insights of Thales to the undecidability of Godel, from the intuitive to the rigorous, from the abstract to the applied, with a solid emphasis on both the discrete and the continuous cases, the department expects all majors to be engaged in a wide range of mathematical ideas.

Unlike many other disciplines, mathematics is a very structured subject. Consequently, the curriculum consists of sequences of interrelated courses which must be taken in the appropriate order. The department expects that the well prepared student will complete the mathematics major in four years.

The courses in mathematics are organized with the needs of three groups of students in mind: (1) those interested in mathematics as a major field of study who may be planning more advanced study in the field, preparing to teach or intending to use their skill in business, industry or government; (2) those needing mathematics primarily as a tool in other disciplines (some special courses and sequences are provided to better meet this need); and (3) those interested in the logical and cultural aspects of mathematics as an element in their general education.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C), including 8 credits in mathematics, MATH 121 or higher, with a 2.5 GPA in mathematics.

Contact the department for application procedures.

MATH BA, BS

Required for Major (Core, 27-28 cr):

- | | |
|----------|--------------------------------|
| MATH 121 | Calculus I (4) |
| MATH 122 | Calculus II (4) |
| MATH 223 | Calculus III (4) |
| MATH 247 | Linear Algebra I (4) |
| MATH 290 | Foundations of Mathematics (4) |

Choose two from the following:

- | | |
|----------|-----------------------------------|
| MATH 316 | Intermediate Analysis (3) |
| MATH 345 | Abstract Algebra I (4) |
| MATH 375 | Intro to Discrete Mathematics (4) |

Required for Major (Electives, 15 cr):

Choose a minimum of 15 credits from the following:

- | | | |
|----------|----------|----------|
| MATH 316 | MATH 321 | MATH 332 |
| MATH 345 | MATH 375 | MATH 392 |
| MATH 411 | MATH 417 | MATH 418 |
| MATH 422 | MATH 425 | MATH 435 |
| MATH 442 | MATH 446 | MATH 447 |
| MATH 455 | MATH 456 | MATH 470 |
| MATH 471 | MATH 480 | MATH 496 |

Required for Bachelor of Arts (BA) degree ONLY: Language (8)

Required Minor. Yes. Any.

MATH BS TEACHING

Required for Major (Core, 50 cr):

- | | |
|----------|--|
| MATH 121 | Calculus I (4) |
| MATH 122 | Calculus II (4) |
| MATH 223 | Calculus III (4) |
| MATH 247 | Linear Algebra I (4) |
| MATH 290 | Foundations of Mathematics (4) |
| MATH 316 | Intermediate Analysis (3) |
| MATH 332 | College Geometry (4) |
| MATH 345 | Abstract Algebra I (4) |
| MATH 354 | Concepts of Probability and Statistics (3) |
| MATH 375 | Intro. to Discrete Mathematics (4) |
| MATH 480 | History of Mathematics (3) |

- | | |
|----------|--|
| MATH 483 | Advanced Viewpoint of 5-8 School Mathematics (3) |
| MATH 484 | Technology in Secondary School Mathematics (3) |
| MATH 485 | Teaching Secondary School Mathematics (3) |

Required for Major (Professional Education, 30 cr):
See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: No.

MATH BA, BS MINOR

Required for Minor (Core, 12 cr):

- | | |
|----------|----------------------|
| MATH 121 | Calculus I (4) |
| MATH 122 | Calculus II (4) |
| MATH 247 | Linear Algebra I (4) |

Required for Minor (Electives, 7 cr):

Choose 7 credits from:

- | | |
|----------|--|
| MATH 354 | Concepts of Probability and Statistics (3) |
|----------|--|
- or**
any courses listed for the BA and BS major.

POLICIES/INFORMATION

GPA Policy. Mathematics majors or minors must earn a grade of C or better in all courses applied to the major or minor.

P/N Grading Policy. Not more than one-fourth of the credits in mathematics courses numbered 121 or above can be taken under P/N and applied to a major or minor. All 300- and 400-level courses are offered for grade only with the exception of MATH 487, 498, and 499 which are available for both P/N and letter grade.

Credit by Examination. Credit by examination will not be approved for courses in which a student has already received a grade.

Credit Limitations. A student may accumulate a maximum of six credits from MATH 110 and the College Level Examination Program (CLEP). After completing MATH 122 with a grade of C or better, a student may not receive credit for MATH 110, 112, 113, 115, or 180 without the consent of the department. Since the following courses have some common content, credit is not allowed for both MATH 115 and either MATH 112 or MATH 113. A student may not receive credit for MATH 354 after completing MATH 455 or STAT 455.

Advising Procedure for Freshman Mathematics Courses. Students may register for freshman mathematics courses at several different levels (094, 098, 110, 112, 113, 115, 121 or higher) depending on their background and interest in mathematics. Students registering for one of the above courses may be given a mathematics placement test. The result of this test is used as an aid in the selection of the appropriate course

Mathematics

for each student. For placement advising prior to registration, students may contact the Mathematics and Statistics Department, the college student relations coordinator or their advisor.

Advising Suggestions. A person with a major in mathematics is encouraged to have a significant concentration in an area of recognized application. By proper selection of electives and willingness to exceed the required minimum number of credits for graduation, a student may earn a second major in fields such as accounting, business administration, biology, chemistry, computer science, economics, environmental sciences, geography, or physics.

COURSE DESCRIPTIONS

094 (4) Essential Mathematics with Elementary Algebra

Basic mathematics skills integrating the fundamental operations of whole numbers, integers, fractions, decimals, percents, ratio and proportion with the elementary algebra topics of linear equations and inequalities, graphs, exponents, polynomials and factoring. Credit does not apply toward graduation. P/N only.

F, S

098 (4) Intermediate Algebra

Topics covered include intermediate study of graphs, systems of linear equations, introduction to functions, linear and nonlinear inequalities, factoring, rational expressions and equations, radicals, and basic quadratic equations. Credit does not apply toward graduation. P/N only.

F, S

110 (3) Perspectives in Mathematics

A survey of mathematics and its relationship to society, showing its development and evolution to meet the needs of mankind.

Pre: Three years high school algebra/geometry or MATH 098

F, S

112 (4) College Algebra

Concepts of algebra (real numbers, exponents, polynomials, rational expressions), equations and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, matrices and determinants, conic sections, sequences and series, probability, and binomial theorem.

Pre: Must meet the required standard on MnSCU math readiness test or having achieved an ACT Math subscore of 24 or higher.

F, S

113 (3) Trigonometry

Basic concepts of trigonometry as preparation for college level mathematics and science course work. Topics include concepts of algebra (real numbers, functions, graphs of functions, exponential and logarithmic functions), trigonometric functions, analytic trigonometry, applications of trigonometry, and analytic geometry.

Pre: Three years of high school algebra/geometry or MATH 098

F, S

115 (4) Precalculus Mathematics

This course will cover topics of precalculus mathematics. Topics covered will include functions, graphs of functions, exponential and logarithmic functions, conic sections, systems of equations and inequalities, matrices, trigonometric functions, circular functions, vectors and complex numbers, induction, series, and probability.

Pre: four years high school mathematics or equivalent

F, S

121 (4) Calculus I

Limits, continuity, the derivative and applications, and the integral and applications.

Pre: MATH 115 or both 112 and 113 with C or better or consent

F, S

122 (4) Calculus II

Transcendental functions, L'Hopital's rule, techniques of integration, sequences and series, parametric equations and polar coordinates, and vectors in two and three dimensions.

Pre: MATH 121 with C or better or consent

F, S

127 (2) Calculus II for Engineering Technology: Integration

A continuation of the study of calculus from MATH 121 including transcendental functions, L'Hopital's rule, techniques of integration, and vectors in two and three dimensions. Content is intended for students enrolled in any engineering technology program. Credit for both MATH 127 and MATH 122 is not allowed.

Pre: MATH 121 with C or better or consent

S

128 (2) Calculus II for Engineering Technology: Infinite Series

A continuation of the study of calculus from MATH 127 including infinite series, parametric equations, and polar coordinates. Content is intended for students enrolled in any engineering technology program. Credit for both MATH 128 and MATH 122 is not allowed.

Pre: MATH 127 with C or better or consent

S

130 (3) Finite Mathematics and Its Application

This course is an introduction to the mathematical concepts needed in business, the social sciences, and the life sciences including problem solving and linear models, linear algebra, linear programming, consumer mathematics, probability and statistics, and decision making.

Pre: Three years of high school mathematics

180 (4) Mathematics for Computer Science

This course is an introduction to the mathematical concepts needed in computer science, including sets, logic, representations of numbers, counting techniques, discrete functions, matrices, trees and graphs, and algorithm analysis.

Pre: MATH 112 or equivalent

F, S

181 (3) Intuitive Calculus

This course presents the concepts of the differential and integral calculus from an intuitive (non-theoretical) point of view. The course emphasis is on the applications of the calculus to the fields of business and economics.

Pre: MATH 112

ALT-S

184 (3) Mathematical Reasoning

Designed to increase a student's ability to reason quantitatively and to communicate mathematics effectively through verbal, graphical, and symbolic forms. The acquisition of both mathematical skills and higher-order thinking are learning outcomes. Students will learn how technology can be used to solve mathematical problems. An integral part of this course is student interpretation and evaluation of real-data models and contemporary applications. Students will learn modeling strategies and relevant historical perspectives of mathematics.

Pre: Three years of high school mathematics

199 (4-9) CLEP Mathematics

201 (3) Elements of Mathematics I

Nature of mathematics from a problem solving approach using sets, relations, number systems through integers, rational numbers and discrete mathematics.

Pre: Three years of high school algebra/geometry or MATH 098

F, S

202 (3) Elements of Mathematics II

A continuation of MATH 201, including rational and real number systems, informal geometry and measurement, statistics, and probability.

Pre: MATH 201

F, S

223 (4) Calculus III

Surfaces, vector-valued functions, partial differentiation, multiple integration, and vector calculus.

Pre: MATH 122 with C or better, or consent

F, S

247 (4) Linear Algebra I

Matrices, determinants, systems of linear equations, vector spaces, linear transformations, and characteristic value problems.

Pre: MATH 122

F, S

290 (4) Foundations of Mathematics

Logic, proof techniques, set theory, relations, functions, cardinality, operations, and an introduction to mathematical structures and number theory.

Pre: MATH 247

F, S

303 (3) Elements of Mathematics III

Transformational and Euclidean geometry, coordinate geometry and applications of discrete mathematics.

Pre: MATH 202

ALT-S

316 (3) Intermediate Analysis

Limits, sequences, continuity, and differentiation of a real valued function of a real variable.

Pre: MATH 223 and 290

S

321 (4) Ordinary Differential Equations

This course presents the theory, computations, and applications of first and second order differential equations and two-dimensional systems.

Pre: MATH 122

F, S

332 (4) College Geometry

This course covers several geometric systems including Euclidean, non-Euclidean, transformational and projective. Other topics studied are topological properties and the relationship between coordinate and synthetic geometry.

Pre: MATH 290

F

345 (4) Abstract Algebra I

An introduction to the theory of groups and rings; including polynomial rings, homomorphisms, isomorphisms, and concepts of normal subgroups, ideals, quotient groups, and quotient rings.

Pre: MATH 290

F

354 (3) Concepts of Probability and Statistics

This is a calculus-based course covering introductory level topics of probability and statistics. It is designed to meet the needs of both the practitioner and the person who plans further in-depth study. Topics include probability, random variables and probability distributions, joint probability distributions, statistical inference (both estimation and hypothesis testing), analysis of variance, regression, and correlation. Same as STAT 354.

Pre: MATH 122

F, S

375 (4) Introduction to Discrete Mathematics

An introduction to the concepts fundamental to the analysis of algorithms and their realization. Topics will include combinatorics, generating functions, recurrence relations, graph theory, and networks.

Pre: MATH 180 or 290 or consent

S

392 (4) Topology of Euclidean Spaces

Metric spaces, topology of metric spaces, continuity, compactness in metric spaces, and Euclidean n-space.

Pre: MATH 290

ALT-F

411 (4) Introduction to Complex Variables

Algebra and geometry of complex numbers, analytic functions, power series, Cauchy's theorem and residue theorem.

Pre: MATH 223 and 290

ALT-S

417 (3) Real Analysis I

Limits and continuity, sequences and series, differentiation and integration.

Pre: MATH 223 and 290

F

418 (3) Real Analysis II

Topology of Euclidean spaces, continuous functions, sequences of functions and differentiable mappings.

Pre: MATH 417

S

Mathematics

422 (4) Partial Differential Equations

This course presents the theory, computations, and applications of partial differential equations and Fourier series.

Pre: MATH 223 and 321 ALT-S

425 (4) Mathematical Modeling

This course presents topics from mathematical analysis of both discrete and continuous models taken from problems in the natural sciences, economics and resource management.

Pre: MATH 223 and 247 ALT-S

435 (4) Modern Geometry

Geometry of spaces including Euclidean and non-Euclidean and applications of contemporary geometry.

Pre: MATH 332 or consent ALT-S

442 (4) Theory of Numbers

Euclidean algorithm, primes, composites, number theoretic functions, congruencies, Diophantine equations, Euler and Fermat theorems, algebraic number fields.

Pre: MATH 345 ALT-F

446 (4) Abstract Algebra II

A continuation of MATH 345. The course will include topics from groups, rings, and fields.

Pre: MATH 345 S

447 (3) Linear Algebra II

An in-depth study of linear operators and their related spaces, dimension, rank, matrix representation of linear operators, special matrices, determinants, eigenvectors and eigenvalues.

Pre: MATH 345 or consent F

455 (4) Theory of Statistics I

A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications. Includes probability, continuous probability distributions, multivariate distributions, functions of random variables, central limit theorem and statistical inference. Same as STAT 455.

Pre: MATH 223 F

456 (4) Theory of Statistics II

A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications, including sufficient statistics, additional statistical inference, theory of statistical tests, inferences about normal models and nonparametric methods. Same as STAT 456

Pre: MATH/STAT 455 S

470 (4) Numerical Analysis I

This course provides an introduction to techniques and analysis involved with solving mathematical problems using technology. Topics included are errors in computation, solutions of linear and nonlinear equations, numerical differentiation and integration, and interpolation.

Pre: MATH 122, 247, and familiarity with a programming language F

471 (4) Numerical Analysis II

This course is a continuation of MATH 470. Topics included are the algebraic eigenvalue problem, least-squares approximation, solutions of systems of nonlinear equations, numerical solutions of ordinary differential equations.

Pre: MATH 470 and 223 S

480 (3) History of Mathematics

The development of selected topics from before the Hellenistic time period to the late twentieth century. Familiarity with the content of HIST 180 is beneficial.

Pre: MATH 345 S

483 (3) Advanced Viewpoint of 5-8 School Mathematics

Advanced viewpoint of mathematics content and learning theories, teaching strategies, reading strategies, assessments, and planning, teaching and reflecting on grades 5-8 mathematics. Field experiences in grades 5-8 mathematics classroom required.

Pre: MATH 290 S

484 (3) Technology in Secondary School Mathematics

Numerical, verbal, symbolic and graphical representations of quantitative relationships, concatenations in written mathematics, problem solving, dynamic geometry, perspective drawing, parametric equations, geometric probability, transition matrices, statistics and calculus using technology.

Pre: MATH 290 F

485 (3) Teaching Secondary School Mathematics

Learning theories, teaching strategies, assessments and planning, teaching and reflecting on secondary (grades 9-12) school mathematics. Field experiences in grades 9-12 mathematics classroom required.

Pre: MATH 290 F

487 (1) Teaching Experiences in Mathematics

Student will work with an experienced member of the faculty in teaching a college mathematics course.

488 (1-3) Seminar

A course of study in which a group of students study a topic by examining results through reports and discussions. May be repeated for credit on each new topic.

490 (1-4) Workshop

A short course devoted to a specific mathematical topic. May be repeated for credit on each new topic.

491 (1-4) Inservice

A course designed to upgrade the qualifications of persons on-the-job. May be repeated for credit on each new topic.

495 (1-4) Selected Topics

A course in an area of mathematics not regularly offered. May be repeated for credit on each new topic.

496 (3) Mathematical Logic

Propositional logic, first and second order logic, completeness, consistency, models of theories, Godel's Incompleteness theorem.

Pre: MATH 345 and PHIL 411

ALT-F

498 (1-12) Internship

Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

499 (1-4) Individual Study

Independent individual study under the guidance and direction of a faculty member in mathematics. Special arrangements must be made with an appropriate faculty member. May be repeated for credit on each new topic.

Mechanical Engineering

College of Science, Engineering & Technology

Department of Mechanical Engineering

205 Trafton Science Center E

Phone: 507-389-6383

Fax: 507-389-5002

Website: www.me.mnsu.edu

Chair: Saeed Moaveni, Ph.D., P.E.

Vance Browne, Ph.D., P.E., Jerzy Fiszdon, Ph.D., P.E.,
Charles W. Johnson, Ph.D., P.E., Vojin Nikolic, Ph.D.

Mechanical engineering (ME) is essential to a wide range of activities that include the research, design, development, manufacture, management, and control of engineering systems, subsystems, and their components.

Mechanical engineers use the fundamentals of engineering mechanics, energy, thermal-fluid sciences and material sciences to design and analyze mechanical systems that perform useful tasks required by society. For example, mechanical engineers work with the design and function of machines, devices, and structures in the areas of manufacturing, processing, power generation, and transportation (air, land, sea and space). As a result of a rapidly expanding technology in recent years, mechanical engineers have become more versed in computer-aided design; robotics; bioengineering; environmental engineering; solar, wind, and ocean energy sources; and space exploration. The breadth of the field provides the graduate with many possibilities for a satisfying career.

Typically, mechanical engineers are employed by the manufacturing, power, aerospace, automotive, computer hardware and software, and processing industries. Careers are also available in design and development organizations as well as in many federal and state agencies. The department will make any reasonable effort to accommodate people with disabilities.

The Mechanical Engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

The primary objective of the program is to train students to be competent mechanical engineers and also to provide a basis for students who wish to further their education at the graduate level. To this end, the program at Minnesota State University, Mankato includes the following:

- The curriculum, instruction and faculty conform to the standards of ABET, the accreditation organization for engineering programs.
- Students are strongly encouraged to take the Fundamentals of Engineering exam in their senior year - a precursor to professional registration.
- Students are encouraged to work in engineering related areas for exposure to industrial practice. Internships are strongly recommended.
- Senior students must participate in a full academic year design experience working in a team similar to development teams in industry and government. Industrial sponsored projects are offered when available.
- Students are informed about possibilities of graduate study. Faculty provide assistance to students who wish to pursue graduate study.
- Students are encouraged to become active in the ASME student section and other professional societies and to attend and participate in student conferences and design competitions.
- Ethical, safe and professional conduct is emphasized.
- Elements of engineering design are introduced early in the program in courses such as Introduction to Engineering and Introduction to Engineering Design. The integration of engineering design continues in the upper division courses in both solids/structures and thermal/fluid stems of the curriculum.

The program has an Industrial Advisory Board which is periodically consulted on industry trends and needs.

Recommended high school preparation is two years of algebra, one year of geometry, one-half year of trigonometry, one-half year of college algebra, and a year each of physics and chemistry. Engineering drafting and a computer language such as BASIC are also recommended. Without this background it may take longer than four years to earn the degree.

Admission to Major is necessary before enrolling in 300- and 400-level courses. Admission to program is granted by the department. Near the end of the sophomore year, students should submit applications for admission to the mechanical engineering program. Application to the program may be obtained from the Mechanical Engineering Department Office or downloaded from the department homepage.

Admission to the program is based on GPA and performance in selected courses and is subject to approval by the Department of Mechanical Engineering. Only stu-

Mechanical Engineering

dents admitted to the program are permitted to enroll in upper-division ME courses. No transfer credits are allowed for upper-division ME courses. For any exceptions to this policy, special written permission must be obtained and will be reviewed by the department. The department makes a special effort to accommodate transfer students. Transfer students are encouraged to contact the department as soon as possible to facilitate a smooth transition. If local information is insufficient, write, call or visit the department.

Before being admitted to upper division mechanical engineering courses, a student must complete a minimum of 49 credits, including the following courses: General Physics (calculus based) 10 cr; Calculus and Differential Equations 16 cr; Introduction to Engineering 2 cr; Computer Science (C++ or FORTRAN) 2 cr; Introduction to Engineering Design 1 cr; Engineering Mechanics (Statics and Dynamics) 6 cr; Electrical Engineering (Circuits, including lab) 4 cr; Chemistry 5 cr; and English Composition 13 cr.

For transfer students the distribution of credits specified in the previous paragraph may vary, but the total credits must satisfy departmental transfer requirements. Transfer students should contact department for individual evaluation.

All courses and credits shown above must be completed before enrollment in 300-level engineering courses. All of the above courses except Introduction to Engineering and any internship credits must be taken for "grade". It is not acceptable for the student to take any of these courses on a pass/no credit basis. A grade of "C" or better must be achieved in each course. To be considered for admission, the student must have a cumulative GPA of 2.5 for all science, math, ME and EE courses. Admission to the Mechanical Engineering Program is selective and subject to approval of the Mechanical Engineering Academic Standards Committee. Failure to submit an application could result in the student being denied admission to the program and registration in junior or higher level classes in the ME program. If a student is denied admission to the Mechanical Engineering Program, he/she can reapply to the program for admission in subsequent years. If the applicant has attended Minnesota State University, Mankato only the application form is submitted to the Mechanical Engineering Department along with a copy of that student's MSU transcript obtained from "The Hub". Pre-engineering students at MSU are not guaranteed admission to the junior-level ME Program. If the applicant has any transfer credits from another college or university, or expects to be admitted as a transfer student, all transfer courses/credits must be evaluated by the Office of Admissions at Minnesota State University, Mankato. The transfer student will need to refer to the Supplemental Information and/or the Minnesota State University, Mankato Undergraduate Bulletin for information about procedures that need to be followed when making application for admission as a transfer student. Applicants for admission to the program must also submit a complete plan of study.

MECHANICAL ENGINEERING BS

Required (Special General Education, 23 cr):

The Bachelor of Science in Mechanical Engineering degree does NOT adhere to the 44 credits of general education required by other colleges. Rather, it requires a special distribution of communication, humanities and social science courses. Courses should be chosen to simultaneously satisfy the university cultural diversity requirement.

Required Communication Courses (7 cr):

ENG 101	Composition (4)	and
SPEE 102	Public Speaking (3)	or
SPEE 240	Special Topics (3)	or
ENG 271	Technical Communication (4)	

Required Humanities and Social Science Courses (minimum 16 cr):

In the interest of making engineers fully aware of their social responsibilities and better able to consider related factors in the decision-making process, course work in the humanities and social sciences is required as an integral part of our mechanical engineering program. To satisfy this requirement, the course selected must provide both breadth and depth and not be limited to a selection of unrelated introductory courses. Not all courses in humanities and social sciences are acceptable, i.e. skill developing courses are not acceptable. Courses should be chosen to simultaneously satisfy the university cultural diversity requirement. Each student should discuss with his/her mechanical engineering advisor selection of courses to meet this requirement. All students are urged to discuss this plan with their mechanical engineering advisors early in their academic career. An updated list of acceptable courses is posted in the department office.

Specifically, the minimum requirements consist of (a) three credits of microeconomics or macroeconomics, (b) at least 6 credits in the humanities area, and (c) at least 6 credits in the social science area; again, (a), (b), and (c) must total at least 16 credits.

To provide the measure of depth to the course of study, at least three credits at the 300 level or above must be included in the 16 credit requirement. At least one upper-division course must follow in the same subject area.

Required for Major (Prerequisites, 46 cr):

Mathematics (16 cr):

MATH 121	Calculus I (4)
MATH 122	Calculus II (4)
MATH 223	Calculus III (4)
MATH 321	Ordinary Differential Equations (4)

Physics (10 cr):

PHYS 221	General Physics I (5)
PHYS 222	General Physics II (5)

Computer Science (2 cr):

COMS 171	Introduction to C++ Programming (2)
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Chemistry (5 cr):

CHEM 201	General Chemistry I (5)
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Electrical Engineering (5 cr):

EE	101	Introduction to Engineering I (1)
EE	230	Circuits Analysis I (3)
EE	240	Evaluation of Circuits (1)

Mechanical Engineering (8 cr):

ME	103	Introduction to Engineering III (1)
ME	201	Introduction to Engineering Design (1)
ME	212	Statics (3)
ME	214	Dynamics (3)

Required for Major (53 cr):

EE	244	Introduction to Digital Systems (2)
EE	253	Digital and Circuits Lab (1)
ME	291	Engineering Analysis (3)
ME	303	Materials Science (3)
ME	319	Thermodynamics (3)
ME	321	Fluid Mechanics (3)
ME	323	Mechanics of Materials (3)
ME	324	Heat Transfer (3)
ME	329	Applied Thermodynamics (3)
ME	333	Manufacturing Processes (3)
ME	336	Mechanical Engineering Experimentation I (2)
ME	341	Linear Systems (3)
ME	417	Design of Machine Elements (3)
ME	420	Computer-Aided Engineering (4)
ME	428	Design Project I (3)
ME	436	Mechanical Engineering Experimentation II (2)
ME	438	Design Project II (3)
ME	463	Automatic Controls (3)
ME	466	Mechanical Engineering Experimentation III (2)
ME	492	Mechanical Engineering Seminar (1)

Required for Major (Electives, 6 cr):

Consult with your advisor for selection of electives:

ME Elective

ME Elective

Required Minor: None.

POLICIES/INFORMATION

GPA Policy. To maintain satisfactory progress in the upper-division mechanical engineering program, a student must: (1) maintain a cumulative GPA of at least 2.3; and (2) achieve a GPA of at least 2.0 each semester.

P/N Grading Policy. P/N credit may not be applied to any 200-level or higher required course in the mechanical engineering curriculum except for internship credits and courses designated as P/N only.

Probation Policy. A student who does not maintain satisfactory progress as defined above will be placed on academic probationary status for a maximum of one semester. During the probationary period, the student must maintain satisfactory progress and in addition: (a) must complete at least 8 credits for grade from the prescribed ME curriculum; and (b) shall not receive a degree without first conforming to the satisfactory progress criteria.

A student who does not maintain satisfactory progress during the probationary period will not be allowed to continue in the program. The student may later reapply for admission to the program.

Refer to the College regarding required advising for students on academic probation.

Appeals. A student has the right to appeal a department decision in writing. The department will consider such appeals individually.

COURSE DESCRIPTIONS

101 (1) Introduction to Engineering

Historical and global perspectives, engineering discipline and functions, professional aspects of engineering, ethical aspects of engineering, creativity and innovation, basics of personal computers—word processing and spreadsheets, introduction to problem solving. V

102 (1) Introduction to Engineering II

A continuation of ME 101 covering historical and global perspectives, engineering discipline and functions, professional aspects of engineering, ethical aspects of engineering, creativity and innovation, basics of personal computers—word processing and spreadsheets, introduction to problem solving. V

103 (1) Introduction to Engineering III

Basic engineering drafting principles and conventions. Orthogonal projection, isometric drawing, dimensioning, section views. Introduction to and use of computer aided modeling system. F, S

201 (1) Introduction to Engineering Design

Introduction to engineering design philosophy and methodology concentrating on increasing student's ability to prepare well-written technical communication and to define problem and generate and evaluate ideas. Teaming skills enhanced. A term design project is included.

Pre: ME 103

F

212 (3) Statics

Resultants of force systems, equilibrium, analysis of forces acting on structural and machine elements, friction, second moments, virtual work.

Pre: PHYS 221

F

214 (3) Dynamics

Kinematics and kinetics of particles, systems of particles and rigid bodies, work-energy, linear and angular impulse-momentum, vibrations.

Pre: ME 212

S

291 (3) Engineering Analysis

Probability and statistics. Uncertainty, distributions. Numerical solution of algebraic, transcendental and differential equations. Numerical integration and differentiation.

Pre: COMS 171 or 271, Coreq: MATH 321

S

Mechanical Engineering

299 (2) Thermal Analysis

Basic principles of thermodynamics, fluid mechanics, and heat transfer. First and second laws of thermodynamics and application to engineering systems and their design. Not for mechanical engineering major.

Pre: PHYS 222, MATH 321 S

303 (3) Materials Science

Physical principles of elastic and plastic deformation of materials. Dislocation theory. Fatigue, creep, fracture, hardness, phase diagrams and other mechanical phenomena in materials. Ceramics and composite materials. Residual stresses. Lecture and lab demonstrations.

F

308 (2) Design Morphology

Components of the product realization process are covered including process steps, financial analysis and project planning. Design case studies are presented.

V

319 (3) Thermodynamics

Fundamental concepts of thermodynamics. Thermal properties of substances and state equations. Conservation of mass, first and second laws. Examples of applications to different engineering systems.

Pre: PHYS 222 F

321 (3) Fluid Mechanics

Introduction to fluid flow, fluid properties, fluid statics, the integral and differential approach to basic flow equations. Bernoulli's equation, similitude and dimensional analysis, viscous internal and external flows, one dimensional compressible flow.

Pre: ME 214 Coreq: ME 319 F

323 (3) Mechanics of Materials

Load deformation, stress, strain, stress-strain relationship, buckling, energy concepts, stress analysis of structural and machine elements.

Pre: ME 212, Coreq: ME 303 F

324 (3) Heat Transfer

Steady and unsteady conduction. Free and forced convection. Heat transfer by radiation. Combined modes of heat transfer. Elements of heat exchangers design.

Pre: ME 321 S

327 (3) Mechanical Engineering Design I

Applications of principles of mechanics to the design of various machine elements such as bearings, shafts, gears, clutches, brakes and springs. Design factors and fatigue. Design problems considering engineering calculations, manufacturability and safety.

Pre: ME 214, ME 323 V

329 (3) Applied Thermodynamics

Energy analysis and design of thermodynamic systems including power and refrigeration cycles. Thermodynamic relations. Application of thermodynamics to mixtures and solutions. Psychometrics. Introduction to chemical thermodynamics. Third law of thermodynamics.

Pre: ME 319 S

331 (1) Materials Properties Lab

Elastic and plastic deformation of materials. Fatigue and impact. Microstructure. Structural deflections. General mechanical properties of materials related to the performance of products.

Pre: ME 303, ME 323 V

333 (3) Manufacturing Processes

Introduction to manufacturing, tribology, casting, bulk deformation, sheet metal forming, material removal, joining, polymers, powder metals, ceramics, automation, integrated systems. Design for manufacture.

Pre: ME 323 S

336 (2) Mechanical Engineering Experimentation I

Experiments in Mechanical Engineering, load-deformation, load-failure, fatigue, impact, hardness. Introduction to traditional machining and material processing.

Coreq: ME 333 S

341(3) Linear Systems

Analysis of linear systems in the time and frequency domains. Physical systems modeled and analyzed using time domain techniques. Fourier and Laplace Transforms.

Pre: ME 214, MATH 321, EE 230 F

357 (3) Mechanical Engineering Design II

Motion, velocity, acceleration, and dynamic forces in various mechanisms and machines. Design of selected mechanical motion devices. Optimum design

Pre: ME 327 V

414 (3) Intermediate Dynamics

Two and three dimensional kinematics, multi-degree of freedom systems, Newton's equations, impulse-momentum, energy methods, Lagrange's equations.

Pre: ME 341 V

415 (3) Structural Analysis

Structural analysis of determinate and indeterminate beams, trusses, frames, plates shells; influence lines, moving loads, deflection analysis. Computer assisted design of structural members.

Pre: ME 417 V

416 (3) Thermal/Fluid Systems Design

The application of the principles of thermodynamics, fluid mechanics, and heat transfer to the design and analysis of selected energy systems of current interest, such as nuclear, solar, geothermal, and also conventional systems. Lecture and design projects.

Pre: ME 324, ME 329 V

417 (3) Design of Machine Elements

Application of principles of mechanics to the design of various machine elements such as gears, bearings, springs, rivets, welding. Stresses in mechanical elements. Design factors, fatigue, manufacturability. Lectures and design projects.

Pre: ME 214, ME 323 S

418 (3) Mechanical Systems Design

The application of mechanics to the design and analysis of motion and force transmitting systems. Optimum design.

Pre: ME 417 V

420 (4) Computer Aided Engineering

Computer-aided design and introduction to the use of advanced computer codes for engineering design and analysis. Related theoretical foundations.

Pre: Senior standing in Engineering F

421 (3) Intermediate Fluid Mechanics

Potential flow, boundary layer flow, turbomachinery. Design aspects in fluid-flow systems. Formulation of continuity, momentum and energy equations, applications to control volumes, two-dimensional and axially symmetric potential flows.

Pre: ME 321 V

423 (3) Intermediate Mechanics of Materials

Stresses and deformation of curved beams, beams on elastic foundations, indeterminate problems, torsion of noncircular bars, introduction to plates and shells, thick walled cylinders, failure theories.

Pre: ME 417 V

424 (3) Analysis and Design of Heat Transfer Equipment

Analysis of heat and mass flow, design of heat exchangers and accompanying piping system. Methods of heat transfer enhancement, heat pipes.

Pre: ME 324 V

425 (3) Thermal Analysis and Control of Electronic Equipment

Thermal consideration in the design of heat-exchange equipment. Review of heat transfer modes; contact resistance; air handling. Numerical methods. Cooling techniques; fins, extended surfaces, cold plates, heat pipes, immersion cooling, thermoelectric coolers. Enhanced heat transfer.

Pre: ME 324 V

427 (3) Kinematics and Dynamics of Mechanisms

Computer-oriented methods of synthesis. Dynamics of mechanisms. Force and moment balancing of mechanisms; shaking forces. Term design projects.

Pre: ME 417 V

428 (3) Design Project I

The first course in a two semester sequence that provides a complete design experience under professional guidance. The courses covers: the product realization process, financial analysis, quality, patents, ethics and case studies. The students initiate a design project early in the semester to be completed in ME 438.

Pre: Senior standing in mechanical engineering F

429 (3) Energy Conversion

Methods of energy conversion. Topics may include hydroelectric, geothermal, wind and solar power generation, as well as unconventional methods of energy conversion. Term design problems.

Pre: ME 324, ME 329 V

430 (3) Dynamics of Machinery

Force transmissibility, bearing reactions, applications to cams, flywheels, gear linkages, shaking forces, balancing, isolators, critical speeds. Term design problems.

Pre: ME 417 V

433 (3) Design for Manufacture and Assembly

Current design for assembly (DFA) techniques are discussed. Both "manual" and software approaches are utilized, and enforced with numerous examples. Design for manufacturability (DFM) is addressed for many common manufacturing processes including: sheet metal, casting, forging, plastics, machining, snap fits, elastomers, surface finishes/protective finishes, powdered metal, and extrusions. Recent DFM software is utilized. Class project required.

434 (3) Computer Control of Manufacturing Systems

A study of the principles, techniques, and applications of computer numerically controlled machine tools. The planning, use, expansion, and updating of computerized systems to meet the needs of industry. An introduction to Computer Aided Manufacturing (CAM) systems.

Pre: Senior standing in Engineering V

436 (2) Mechanical Engineering Experimentation II

Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration and mechanical power systems.

Pre: ME 324, ME 329 F

438 (3) Design Project II

The second course of a two semester sequence, taken the semester in which the student expects to graduate. These two courses provide a complete design experience. This course includes: completion of the design project, design presentations, design report, design evaluations and manuals.

Pre: ME 428 S

439 (3) Air Conditioning and Refrigeration

Refrigeration cycles and equipment, refrigerant properties, heating and cooling loads, psychometric analysis of air conditioning. Distribution of air conditioning medium and air quality as applied to design.

Pre: ME 324 ME 329 V

441 (3) Vehicle Dynamics

The dynamics of ground vehicles is studied, including pneumatic tires, vehicle handling, vehicle performance (including transmissions), modeling & simulation, and current research topics such as ITS/AVCS (Intelligent Transportation Systems Program/Advanced Vehicle Control Systems). Emphasis is on fundamentals, simulation, and limited experimentation. Class project required.

Pre: Senior standing in Mechanical Engineering

Military Science

443 (3) Theory of Elasticity

Fundamental equations of elasticity in three dimensions, plane stress and plane strain, flexure and torsion of bars of various shapes.

Pre: ME 323 V

446 (1) Senior Mechanical Engineering Laboratory

Application of the engineering sciences and the principles of measurement to the evaluation of operating characteristics of mechanical equipment and systems. Design of measurement systems. Collection, analysis, and interpretation of the data and the presentation of the results.

Pre: Senior standing in Mechanical Engineering V

450 (3) Finite Element Method

Energy and residual methods, 2D and 3D problems in stress analysis. Application of steady and transient heat flow, hydrodynamics, creeping flow.

Pre: ME 323 and ME 324 V

462 (3) Vibrations

Free and forced vibration in linear single degree of freedom systems, design and analysis of multiple degree of freedom systems with and without damping, vibration of coupled systems.

Pre: ME 341 V

463 (3) Automatic Controls

Analysis of control systems using the methods of Evans, Nyquist and Bode. Improvement of system performance by feedback compensation. Introduction to digital control.

Pre: ME 341 F

464 (3) Mechatronics

Synergistic combination of mechanical engineering, electronics, controls and programming in the design of mechatronic systems. Sensors, actuators and microcontrollers. Survey of the contemporary use of embedded microcontrollers in mechanical systems, case studies.

Pre: ME 417, 463

466 (2) Mechanical Engineering Experimentation III

Experiments in vibrations: Motion measurement, force measurement, free vibration, frequency response, impact response, noise, signal processing. Experiments in control: system modelling and characterization in the time and frequency domains, feedback and compensation, PID control, control of velocity and position.

Pre: ME 463 S

471 (3) Production Tool Design

Classroom discussions and actual design projects are combined to gain knowledge and experience necessary to design tools commonly used in modern manufacturing processes. Course consists of designing tools, gages, simple jigs, fixtures, punches and dies as employed in mass production processes.

Pre: Senior standing in Engineering V

491 (1-4) In-Service

V

492 (1) Mechanical Engineering Seminar

To acquaint students with various engineering careers, various industries, and various societal and ethical problems.

Pre: Senior standing in Mechanical Engineering V

497 (1-6) Internship

V

499 (1-6) Individual Study

V

Military Science

College of Education

Department of Military Science/Reserve Officers' Training Corps (Army ROTC)

316 Wiecking Center • 507-389-6226/6220

Chair: LTC Thomas Evelyn

MAJ Mike Larsen, MSG Charles Jasken, SFC Clint Watkins, Jean Andresen, Scott Forsyth, Lori Olinger

The Military Science Department offer either a two- or four-year program enabling students/cadets to compete for a commission as an officer in the United States Army, Army Reserves, or Army National Guard. University credit is awarded for the courses in the program. However, the Military Science program is not an academic major. Students must complete an academic major in another area in addition to the military science requirements.

For a complete description of the 2- and 4-year Reserve Officers' Training Corps (ROTC) program, see the Military Science/Army ROTC section of this bulletin.

An academic minor in military science is available.

MILITARY SCIENCE MINOR

Required for Minor (General Education, 9 credits):

HIST 153 War and Peace in the 20th Century (3)

POL 111 United States Government (3)

SPEE 102 Public Speaking (3)

Required for Minor (Core, 13 credits):

MSCI 210 Army Physical Fitness Training (1)

MSCI 301 Light Leader Development I (3)

MSCI 302 Light Leader Development II (3)

MSCI 401 Implementation of Leadership (3)

MSCI 402 Mentorship and Application (3)

POLICIES/INFORMATION

GPA Policy. Students must earn a minimum GPA of 2.0 on the courses taken in military science to meet graduation requirements.

P/N Grading Policy. No classes for a military science minor will consist of P/N grades.

COURSE DESCRIPTIONS

101 (1) Confidence Building

Build and increase self-confidence through team building activities such as physical fitness, reaction exercises, rappelling, first aid, basic land navigation/orienteering and leadership in classroom and laboratory environments. Students will be introduced to basic techniques of surviving the stress of everyday college life. **F**

102 (1) Introduction to Leadership

Continuation of MS 101 activities. Additionally, the course will focus and teach effective leadership principles. The student reinforces self-confidence through participation in physically and mentally challenging exercises geared toward developing individual and group dynamic characteristics. Communication skills to improve individual performance and group interaction are emphasized through practical application and hands on experiences. Relate organizational ethical values to the effectiveness of a leader. **S**

201 (2) Leadership Development Process

Continuation of MS 101/2 activities. The course will focus on the fundamentals of leadership and how they are contrasted between military and civil use. Group exercises develop individual planning and decision making skills. **F**

202 (2) Survival and Confidence Building

Build and increase self-confidence through team building activities such as physical fitness, reaction exercises, rappelling, first aid, basic land navigation/orienteering and team dynamics. Introduction to basic fundamentals of leadership, hot and cold weather survival techniques and assessment of one's performance. Focus on practical application of leadership and survival team dynamics. **S**

210 (1) Army Physical Fitness Training

Students will enhance individual leadership qualities, develop and organize physical training programs, and learn the advantages of being a responsive follower as well as a productive leader (ingredients of integrity and teamwork). In addition, students will achieve the highest standards of physical fitness in preparation for the Army Physical Fitness Test. **F, S**

299 (1-8) Individual Study **F, S**

301 (3) Light Leader Development I

Course consists of a series of practical opportunities to lead small groups, receive personal assessment, and develop skills necessary for military leadership. Students will study defensive tactics and apply those during lab periods and field training exercises. **F**

302 (3) Light Leader Development II

A series of practical opportunities to lead small groups,

receive personal assessment and develop skills necessary for military leadership. Students will study offensive tactics and apply those skills during lab periods and field training exercises.

Pre: MSCI 301 **S**

401 (3) Implementation of Leadership

Focuses on preparing students to assume command responsibility of small organizations. Students refine their personal and behavioral motivation techniques through identifying and resolving ethical dilemmas, practicing mentoring and counseling skills, and applying real world resolution techniques to problems of subordinates. The course is designed to challenge the leadership and managerial abilities of the student.

Pre: MSCI 301, 302 **F**

402 (3) Mentorship and Application

Students mentor and teach other Military Science students the application of leadership and managerial techniques. MS 402 students are responsible for the conduct of confidence courses, training exercises and the development of underclassment. The class concludes with the necessary preparations that are needed to ensure a successful entry into the Army, or its Reserve Components.

Pre: MSCI 301, 302, 401 **S**

403 (1) Application of Physical Conditioning

Students plan, organize and lead individual and team oriented physical conditioning activities. These activities are geared toward the physical development and instruction of underclassmen. MS 403 students also administer fitness tests to underclassmen which measure the cardiovascular endurance and upper and lower body strengths. MS 403 students are required to successfully pass the Army Physical Fitness Test prior to the end of each semester. **F, S**

499 (1-8) Individual Study **F, S**

Military Science/Army ROTC

College of Education

Department of Military Science/Reserve Officers' Training Corps (Army ROTC)

316 Wiecking Center • 507-389-6226/6220

Chair: LTC Thomas Evelyn

MAJ Louis Bello, MSG Charles Jasken, Jean Andresen, Scott Forsyth, Lori Olinger

The four-year Army ROTC curriculum develops the student's leadership, managerial and organizational abilities. Integration with other related academic programs such as political science, history, business and geography develop well-rounded professional officers for the Army. Leadership skills acquired through ROTC and the practical application of skills provided in the program transfer easily to civilian career goals. ROTC graduates traditionally enter industrial and business career fields with a significant competitive edge.

Music

The program consists of two parts: the basic course and the advanced course. The basic course usually occurs the freshman and sophomore years and students incur no military obligation. After completing the basic course, students may enroll in the advanced course. Additionally, students with military basic training experience receive advanced placement credit into the ROTC advanced course. The advanced course must be taken after students receive academic junior status. All cadets receive uniforms and the necessary textbooks for military science classes. Also, all contracted cadets will receive a living allowance of \$200 each academic month of the school year.

MILITARY SCIENCE/ARMY ROTC

4-YEAR PROGRAM

Required General Education (6 credits):

SPEE 102 Public Speaking (3)
HIST 153 War and Peace in the 20th Century (3)

Required Support Courses (5-7 credits)

COMS 101 Introduction to Microcomputers (3)
Choose one of the following:
ENG 242 Introduction to Creative Writing (2)
ENG 270 Advanced Composition (4)

Required for Program (Core, 18 credits):

MSCI 101 Confidence Building (1)
MSCI 102 Introduction to Leadership (1)
MSCI 201 Leadership Development Process (2)
MSCI 202 Survival and Confidence Building (2)
MSCI 301 Light Leader Development I (3)
MSCI 302 Light Leader Development II (3)
MSCI 401 Implementation of Leadership (3)
MSCI 402 Mentorship and Application (3)

2-YEAR PROGRAM

Required General Education (6 credits):

SPEE 102 Public Speaking (3)
HIST 153 War and Peace in the 20th Century (3)

Required Support Courses (5-7 credits)

COMS 101 Introduction to Microcomputers (3)
Choose one of the following:
ENG 242 Introduction to Creative Writing (2)
ENG 270 Advanced Composition (4)

Required for Program (Core, 12 credits):

MSCI 301 Light Leader Development I (3)
MSCI 302 Light Leader Development II (3)
MSCI 401 Implementation of Leadership (3)
MSCI 402 Mentorship and Application (3)

POLICIES/INFORMATION

GPA Policy. Students must earn a minimum GPA of 2.0 (C) on the courses taken from the military science department in order to meet commissioning requirements.

P/N Grading Policy. No classes offered by the military science department will consist of P/N grades.

Leadership Laboratories. All students are required to attend (1) eight-hour leadership laboratory

each month. Specifics are outlined in each course syllabus. A weekend field training exercise is also conducted each semester.

Advanced ROTC Summer Camp. During the summer between the junior and senior years, cadets attend a five-week advanced camp at Fort Lewis, WA. Cadets receive a stipend for this training; travel, room, board, uniforms, and medical facilities are also included. Students experience leadership positions at advanced camp, leading other ROTC cadets through a number of challenging situations, building both stamina and self-confidence.

Basic ROTC Internship. During the summer between the sophomore and junior years, students who have **NOT** completed the first two years of ROTC or do not have a military basic training may attend this five-week internship. This internship qualifies the student to enter the ROTC Advanced Course. A stipend is paid for attendance.

COURSE DESCRIPTIONS

See course listings under the Military Science section.

Music

College of Arts & Humanities

Department of Music

202 Performing Arts Center • 507-389-2118

Website: <http://www.mnsu.edu/dept/music/music/music.html>

Chair: Linda B. Duckett

Interim Chair: John Lindberg

Gerard Aloisio, Stephen Bomgardner, David Dickau, Harry Dunscombe, Dale Haefner, Diana Moxness, Paul Moxness, Doug Snapp, Stewart Ross, David Viscoli

The Music Department provides the finest possible training for the prospective music teacher and professional musician and strives to enrich the lives of all university students. Professional programs are designed for music majors; general courses and many opportunities for participation in various musical groups are offered to non-majors.

Admission to Major is granted by the department. Minimum university admission requirements are:

1. Complete a minimum of 32 earned semester credit hours.
2. Achieve a minimum cumulative GPA of 2.00 (C).
3. To be admitted to the Bachelor of Music degree, a letter of recommendation from the student's private teacher at MSU is required.

Contact the department for application procedures.

All entering music majors should register for the following courses: MUS 100, MUS 131, MUS 2xx (Private Lesson), and MUS 1xx (Ensemble)

Required for All Majors:

1. MUS 100 Recital Class (0 credits) each

- semester in residence
- 2. Large or Small Ensemble (1 credit) each semester in residence
- 3. Private Lessons (1-3 credits) according to degree requirements

For details on these requirements, see the Undergraduate Music Handbook.

MUSIC BA

Required for Major (Core, 23 cr):

- MUS 125, 126 Pop Music USA (6)
- MUS 131, 132 Theory I (8)
- MUS 162 Piano Proficiency Exam (0)
- MUS 221, 222 Music Literature and History I and II (6)
- MUS 231, 232 Theory II (6)
- Sophomore Review

Required for Major (Foreign Language, 8-10 cr):

Must complete one year of foreign language.

Required for Major (21 cr)

- MUS 100 Recital Class (0) (each semester)
- MUS 1xx Primary Ensemble (8)
- MUS 1xx Secondary Ensemble (4)
- MUS 2xx Private Lessons (4)
- MUS 3xx Private Lessons (2)
- MUS 434 Form and Analysis (3)

Required for Major (Electives, 6 cr):

Choose courses from music or other departments.
Elective Elective

Required Minor: Yes. Any.

MUSIC BM

Required for Major (Core, 23 cr):

- MUS 125, 126 Pop Music USA (6)
- MUS 131, 132 Theory I (8)
- MUS 162 Piano Proficiency Exam (0)
- MUS 221, 222 Music Literature and History I and II (6)
- MUS 231, 232 Theory II (6)
- Sophomore Review

Required for Major (Options, Varies):

Choose one of the following options: Voice, Piano, Organ, or Percussion, Strings and Winds:

VOICE (58 cr)

- XXX xxx Foreign Language (8)
- MUS 100 Recital Class (0) (each semester)
- MUS 101 Concert Choir (8)
- MUS 1xx Secondary Ensemble (4)
- MUS 251 Private Voice I (2 - 2 semesters at 1 cr)
- MUS 251 Private Voice I (6 - 2 semesters at 3 cr)
- MUS 261 Private Piano I (4)
- MUS 351 Private Voice II (12 - 4 semesters at 3 cr)
- MUS 401 Choral Musicianship I (3)
- MUS 434 Form and Analysis (3)
- MUS 451 Vocal Pedagogy and Literature (3)
- MUS 455 Diction for Singers I (2)

- MUS 459 The Art Song (2)
- MUS 496 Senior Recital (1)

PIANO (40 cr)

- MUS 100 Recital Class (0) (each semester)
- MUS 1XX Primary Ensemble (4)
- MUS 261 Private Piano I (2 - 2 semesters at 1 cr)
- MUS 261 Private Piano I (6 - 2 semesters at 3 cr)
- MUS 361 Private Piano II (12 - 4 semesters at 3 cr)
- MUS 461 Piano Pedagogy (1)
- MUS 462 Piano Literature (3)
- MUS 496 Senior Recital (1)
- Choose eight credits from the following:
- MUS 1xx Primary or Secondary Ensemble (8)
- MUS 219 Piano Accompanying (8)
- Choose one course from the following:
- MUS 401 Choral Musicianship I (3)
- MUS 411 Instrumental Musicianship I (3)

Required for Piano (Electives, 12 cr):

Choose an additional 12 credits of Music in theory, history, music education, or MIDI:
MUS xxx MUS xxx MUS xxx
MUS xxx

ORGAN (45 cr)

- MUS 100 Recital Class (0) (each semester)
- MUS 1xx Primary Ensemble (4)
- MUS 265 Private Organ I (2 - 2 semesters at 1 cr)
- MUS 265 Private Organ I (6 - 2 semesters at 3 cr)
- MUS 365 Private Organ II (12 - 4 semesters at 3 cr)
- MUS 401 Choral Musicianship I (3)
- MUS 434 Form and Analysis (3)
- MUS 465 Service Playing (2)
- MUS 466 Organ Pedagogy (1)
- MUS 467 Organ Literature (3)
- MUS 496 Senior Recital (1)
- Choose eight credits from the following:
- MUS 1xx Primary or Secondary Ensemble (8)
- MUS 219 Piano Accompanying (8)

Required for Organ (Electives, 10 cr):

Choose an additional 10 credits of Music in theory, history, music education, or MIDI:
MUS xxx

PERCUSSION, STRINGS, WINDS (41 cr)

- MUS 100 Recital Class (0) (each semester)
- MUS 1xx Primary Ensemble (8)
- MUS 1xx Secondary Ensemble (4)
- MUS 27x Private Lessons (2 - 2 semesters at 1 cr)
- MUS 27X Private Lessons (6 - 2 semesters at 3 cr)
- MUS 37X Private Lessons (12 - 4 semesters at 3 cr)
- MUS 379 Instrumental Pedagogy and Literature (2)
- MUS 411 Instrumental Musicianship I (3)
- MUS 434 Form and Analysis (3)
- MUS 496 Senior Recital (1)

Required for Percussion, Strings, Winds Option (Electives, 8 cr):

Choose an additional 8 credits of Music in theory, history, music education, or MIDI:

Music

MUS xxx MUS xxx MUS xxx

Required Minor: None.

General Education 44 cr.

MUSIC EDUCATION BS, TEACHING

Required for Major (Core, 23 cr):

MUS 125, 126 Pop Music USA (3)
MUS 131, 132 Theory I (8)
MUS 162 Piano Proficiency Exam (0)
MUS 221, 222 Music Literature and History I and II (6)
MUS 231, 232 Theory II (6)
Sophomore Review

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required for Major (Options):

Students should choose either Vocal/General Music (K-12) or Instrumental/General Music (K-12) as an area of specialization.

VOCAL/GENERAL (36 cr)

MUS 100 Recital Class (0)
MUS 1xx Large Ensemble (7 semesters at 1 cr)
MUS 1xx Small Ensemble (4 semesters at 1 cr)
MUS 175 Class Instruction in Guitar (1)
MUS 341 General Music K-12 (4)
MUS 401 Choral Musicianship I (3)
MUS 402 Choral Musicianship II (3)
MUS 445 Advanced Music Methods (2)
MUS 451 Vocal Pedagogy and Literature (3)

Choose a minimum of 4 cr from primary area:

MUS 251, 261 Private Voice I or Private Piano I (4)

Choose a minimum of 3 cr from primary area:

MUS 351, 361 Private Voice II or Private Piano II (4)

Choose a minimum of 2 cr from applied area (If primary area is Voice, 2 cr of 261; if primary area is Piano, 2 cr of 251):

MUS 251 Private Voice I
MUS 261 Private Piano I

INSTRUMENTAL/GENERAL SPECIALIZATION (37 cr)

MUS 100 Recital Class (0) (each semester)
MUS 151 Class Instruction in Singing I (1)
MUS 1xx Large Ensemble (7 semesters at 1 cr)
MUS 1xx Small Ensemble (4 semesters at 1 cr)
MUS 171 Class Instruction in Brass (2)
MUS 172 Class Instruction in Woodwinds (2)
MUS 173 Class Instruction in Strings (2)
MUS 174 Class Instruction in Percussion (1)
MUS 175 Class Instruction in Guitar (1)
MUS 27x Private Lessons (4)
MUS 341 General Music K-12 (4)
MUS 37x Private Lessons (3)

MUS 411 Instrumental Musicianship I (3)
MUS 412 Instrumental Musicianship II (3)

Required Minor: None.

MUSIC MANAGEMENT BS

Required for Major (Core, 23 cr):

MUS 125, 126 Pop Music USA (6)
MUS 131, 132 Theory I (8)
MUS 162 Piano Proficiency Exam (0)
MUS 221, 222 Music Literature and History I and II (6)
MUS 231, 232 Theory II (6)
Sophomore Review

Required for Major (28 cr):

MUS 100 Recital Class (0) (each semester)
MUS 1xx Primary Ensemble (7)
MUS 1xx Secondary Ensemble (4)
MUS 2xx Private Lessons (4)
MUS 281 Introduction to MIDI (2)
MUS 450 Music Merchandising (3)
MUS 497 Internship (8-15)*

*See Music advisor.

Required for Major (Non-Departmental, 36 cr):

ACCT 200 Financial Accounting (3)
ACCT 210 Managerial Accounting (3)
BLAW 200 Legal, Political and Regulatory Environment of Business (3)
COMS 101 Introduction to Microcomputers (3)
ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
ECON 207 Business Statistics (4)
FINA 362 Business Finance (3)
MGMT 200 Introduction to MIS (3)
MGMT 330 Principles of Management (3)
Choose one course from the following:
MRKT 310 Principles of Marketing (3)
Business Electives (3)
Choose one course from the following:
BED 345 Business Communications (3)
MRKT 415 Retailing Management (3)

Required for Major (Electives, 3 cr):

Choose three credits from Music courses in theory, history, music education, or MIDI.

MUS xxx Elective (3)

Required Minor: None.

MUSIC MINOR

Required for Minor (21 cr):

MUS 120 Introduction to Music (3)
MUS 131, 132 Theory I (8)
MUS 1xx Ensemble (2)
MUS 2xx Private Lessons (2)
MUS 221, 222 Music Literature and History I and II (6)

POLICIES/INFORMATION

GPA Policy. Students must pass required courses under either a music major or the music minor with a grade of C or higher.

Students on academic probation must consult with the department chair.

P/N Grading Policy. No P/N grades are accepted for required music courses except where course is only offered P/N.

Transfer students who wish to major or minor in music will be evaluated by appropriate music faculty for proper placement in the music curriculum. These students must fulfill all graduation requirements of the Department of Music in both academic and performance areas.

Residency. In general, courses taken at another institution at the 300 or 400 level will not be accepted as transfer credit for music majors. **Music majors must earn at least half of their music credits (including two semesters of private study)** at Minnesota State University, Mankato.

Prospective music majors and minors must audition in their major performing area prior to registration.

The Department of Music strongly recommends that students interested in pursuing a major in music contact the department for an advising appointment and audition.

COURSE DESCRIPTIONS

100 (0) Recital Class

Required for all music majors each semester in residence. May be repeated. P/N only.

101 (1) Concert Choir

Select ensemble which performs on and off campus. Pre: Audition Required

102 (1) Women's Chorale

Large chorus. Open to all qualified students. Previous singing experience desirable but not required. No audition.

103 (1) Chamber Singers

A select group of approximately 20 singers who perform works for small ensemble. The group tours regularly in the state and in the region. Pre: Audition Required

104 (1) Opera Chorus

Performs choral repertoire drawn from operatic literature. Pre: Audition Required

105 (1) Maverick Men's Chorus

The Maverick Men's Chorus is an ensemble dedicated to performing fine music from a wide repertoire available for men's chorus. Open to students as well as members of the university community at large. No audition required.

111 (1) Wind Ensemble

A select group of wind and percussion players. Open to all students who play a band instrument. Concerts on and off campus. Pre: Audition Required

112 (1) Symphonic Band

Open to all students who play a band instrument. No audition required.

113 (1) Pep Band

Open to any qualified student who plays a band instrument. Plays for hockey and basketball games. Pre: Audition Required

114 (1) Drum Corps

Open to students who play a band instrument. No audition required. F

115-01 (1) Jazz Band I

A select group which studies and performs the literature for contemporary jazz band. Pre: Audition Required

115-02 (1) Jazz Combo

This ensemble provides an opportunity for students with limited experience with jazz to explore that repertoire. Pre: Audition Required

116 (1) University Orchestra

Open to all qualified students who play an orchestral instrument. Pre: Audition Required

117 (1) Theatre Orchestra

Plays for theatre productions. Pre: Audition Required

119-01 (1) Brass Ensemble

Performing with small groups. Pre: Consent

119-02 (1) Woodwind Ensemble

Performing with small groups. Pre: Consent

119-03 (1) String Ensemble

Performing in small groups. Pre: Consent

119-04 (1) Percussion Ensemble

Performing in small groups. Pre: Consent

119-05 (1) Ensemble: Piano

Performing in small groups. Pre: Consent

120 (3) Introduction to Music

A general course in music appreciation. This course includes a study of styles at different periods, musical forms, and information about composers with emphasis on the elements of music and how these elements have evolved through history. (Category 6, General Education; Related Cultural Diversity)

Music

125 (3) Pop Music USA: Jazz to Country to Blues to Broadway

Popular music is a multi-billion dollar industry today. What is it, and where did it come from? Learn about the origins of jazz in the music of African-Americans, its growth from Dixieland through the Big Band era (with the contributions of performers like Louis Armstrong and Duke Ellington) to its influences on musical styles in the present day. (Category 6 or 7, General Education; Core Cultural Diversity)--

126 (3) Pop Music USA: R & B to MTV

Rock music has fans in every country and in every culture. It really is a "universal" language, but it didn't start that way. It began as black Rhythm and Blue in the 40s, and through to the present, minority groups have had a major influence on the music. (Category 6 or 7, General Education, Core Cultural Diversity)

131 (4) Theory I

Diatonic and chromatic vocabulary and relationships by means of work in sight-singing, dictation, harmony, keyboard, and aural analysis. F

132 (4) Theory I

Diatonic and chromatic vocabulary, a continuation of 131. Pre: MUS 131 S

151 (1) Class Instruction in Singing I

Two semester sequence. Fundamentals of posture, tone production, breathing, diction, and expressiveness. F

152 (1) Class Instruction in Singing II

A continuation of 151. S

160 (1) Beginning Class Piano

Class instruction in preparation for piano proficiency exam.

161 (1) Intermediate Class Piano

Class instruction in preparation for piano proficiency exam.

162 (0) Piano Proficiency Exam

Required of all music majors. P/N only. Pre: Class piano or Piano lessons.

171 (1) Class Instruction in Brass

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

172 (1) Class Instruction in Woodwinds

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

173 (1) Class Instruction in Strings

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

174 (1) Class Instruction in Percussion

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.

175 (1) Class Instruction in Guitar

Beginning instruction for students with no previous experience in guitar, focus on developing a basic chord vocabulary and accompaniment techniques.

219 (1) Piano Accompanying

Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated. Pre: Consent

220 (3) History of Jazz

A historical overview of jazz styles and performers.

221 (3) Music Literature and History I

An overview of music of the western world from ancient Greece to 1800. F

222 (3) Music Literature and History II

An overview of music of the western world from 1800 to the present. Pre: MUS 132 S

230 (3) Fundamentals of Music

Required of all students in elementary education curriculum. Notation, basic keyboard skills.

231 (3) Theory II

Musical resources of the 18th, 19th, and 20th centuries through lecture, discussion, and performance. Continued work in ear-training, sight-singing, keyboard skills, and analysis. Pre: MUS 132 F

232 (3) Theory II

Musical resources of the 18th, 19th and 20th centuries. A continuation of 231. Pre: MUS 231 S

240 (2) Introduction to Music Education

251 (1,3) Private Voice I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week. Pre: Consent

261 (1,3) Private Piano I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week. Pre: Consent

262 (1,3) Private Harpsichord I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week. Pre: Consent

265 (1,3) Private Organ I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week. Pre: Consent

271-01 (1,3) Private Trumpet I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

271-02 (1,3) Private French Horn I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

271-03 (1,3) Private Trombone I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

271-04 (1,3) Private Baritone I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

271-05 (1,3) Private Tuba I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

272-01 (1,3) Private Flute I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

272-02 (1,3) Private Oboe I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

272-03 (1,3) Private Clarinet I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

272-04 (1,3) Private Saxophone I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

272-05 (1,3) Private Bassoon I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

273-01 (1,3) Private Violin I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

273-02 (1,3) Private Viola I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

273-03 (1,3) Private Cello I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

273-04 (1,3) Private String Bass I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

274 (1,3) Private Percussion I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

275 (1,3) Private Classical Guitar I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

278 (1,3) Private Instrument I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Consent

281 (2) Introduction to MIDI

An introduction to the basics of MIDI (Musical Instrument Digital Interface), the means by which music interacts with computers.

Pre: MUS 131 and 132

305 (2) Opera Workshop

Performance of solo and ensemble vocal operatic repertory.

Pre: Consent

340 (3) Materials and Methods of Teaching Music

Kindergarten and elementary grades. For elementary education majors only.

Pre: MUS 230

341 (4) General Music K-12

Required of all music education majors. Techniques and methods leading to licensure to teach general music in K-12. For music majors only.

351 (1,3) Private Voice II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

361 (1,3) Private Piano II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

362 (1,3) Private Harpsichord II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

365 (1,3) Private Organ II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

371-01 (1,3) Private Trumpet II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

Music

371-02 (1,3) Private French Horn II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

371-03 (1,3) Private Trombone II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

371-04 (1,3) Private Baritone II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

371-05 (1,3) Private Tuba II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

372-01 (1,3) Private Flute II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

372-02 (1,3) Private Oboe II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

372-03 (1,3) Private Clarinet II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

372-04 (1,3) Private Saxophone II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

372-05 (1,3) Private Bassoon II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

373-01 (1,3) Private Violin II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

373-02 (1,3) Private Viola II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

373-03 (1,3) Private Cello II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

373-04 (1,3) Private String Bass II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

374 (1,3) Private Percussion II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

375 (1,3) Private Classical Guitar II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

378 (1,3) Private Instrument II

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.

Pre: Upper Level Jury, and consent

379 (2) Instrument Pedagogy and Literature

Topics to be discussed are methods, literature, and teaching techniques for specific wind, percussion, and stringed instruments.

390 (1-6) Study for Honors

Instruction for students in honors program.

Pre: Honors Program Status

401 (3) Choral Musicianship I

Choral conducting and the administration of school choral programs.

402 (3) Choral Musicianship II

A continuation of Choral Musicianship I.

Pre: MUS 401

411 (3) Instrumental Musicianship I

Instrumental conducting and the administration of school band and orchestra programs.

412 (3) Instrumental Musicianship II

A continuation of Instrumental Musicianship I.

Pre: MUS 411

419 (3) Advanced Score Reading and Conducting

Conducting and score reading skills for the advanced instrumental conductor.

422 (3) Music of the Renaissance

An intensive examination of the music of Western Civilization from 1450-1600.

Pre: MUS 221

423 (3) Music of the Baroque Era

An intensive investigation of the music written from 1600-1750.

Pre: MUS 221

424 (3) Music of the Classic Period

Music of the age of Haydn, Mozart, and Beethoven.

Pre: MUS 222

425 (3) Music of the 19th Century

An intensive study of Romanticism in music.

Pre: MUS 222

426 (3) Music of the Modern Era

Music since 1900.

Pre: MUS 222

427 (3) Music Theatre

Methods of presenting musical drama.

429 (3) Topics in Ethnomusicology

The music of non-Western cultures.

431 (1-3) Composition

An independent study in compositional techniques.

Pre: Consent

432 (3) Contemporary Theory

Twentieth-century harmonic, melody, and contrapuntal practices.

Pre: MUS 232

433 (3) Contrapuntal Techniques

Writing and analyzing 2-part, 3-part, and 4-part counterpoint.

Pre: MUS 232

434 (3) Form and Analysis

Significant musical forms, past and present.

Pre: MUS 232

435 (3) Arranging and Orchestration

Writing techniques for instrumental groups of various types.

Pre: MUS 411

441 (2) Music in Early Childhood

Learning characteristics, teaching strategies, and materials for ages 2-6.

442 (2) Music for Special Education

Music in the education of the special learner.

445 (2) Advanced Music Methods

Classroom techniques for vocal/general K-12 licensure.

450 (3) Music Merchandising

A survey of career opportunities in the music business.

451 (3) Vocal Pedagogy and Literature

Principles of applied voice instruction and an overview of vocal literature.

455 (2) Diction for Singers

Application of the International Phonetic Alphabet to song texts in English, French, Italian, and German.

459 (2) The Art Song

Accompanied solo vocal repertory, with special emphasis on the 19th and 20th centuries.

461 (1) Piano Pedagogy

Technical problems in relationship to different styles.

462 (3) Piano Literature

A survey of literature for the keyboard from the early baroque to the present.

465 (2) Service Playing

For organists: playing hymns, improvising, conducting from the console, and arranging piano accompaniments for organ.

466 (1) Organ Pedagogy

Pedagogy and methods for organ.

467 (3) Organ Literature

Literature from the 15th century to the present day.

479 (2) Instrument Repair and Maintenance

Basic techniques.

481 (2) Advanced MIDI Production

In-depth aspects of MIDI production.

485 (1-4) Selected Topics

491-01 (1) IS: Lake Washington Band Camp

Participation in Junior or Senior High Band Camp at Camp Patterson.

494 (1-4) Workshop

496 (1) Senior Recital

Required of Bachelor of Music majors.

497 (1-16) Internship

499 (1-4) Independent Study

Nursing

College of Allied Health & Nursing

School of Nursing

360 Wissink Hall • 507-389-6022

Website: <http://www.mnsu.edu/dept/nursing/welcome.html>

Interim Associate Dean: Mary Huntley

Sharon Aadalen, Mary Bliesmer, Kathleen Brandenburg, Carol Brown, Patricia Earle, Sandra Eggenberger, Julie Hebenstreit, Carol Heupel, Mary Huntley, Marilyn Kosmala, Norma Krumwiede, Carol Larson, Diane Manahan, June McLachlan, Nancy McLoone, Sonja Meiers, Candice Mentele, Linda Rosenbaum, Kathleen Rowe, Dottie Salsbury, Kathleen Sheran, Regina Smith, Marcia Stevens, Linda Wenkel, Karen Willette-Murphy, Diane Witt, Patricia Young

The nursing curriculum is designed to provide opportunities for the student to develop a sound theoretical and clinical foundation for the practice of professional nursing. The graduate is prepared for a variety of roles in the community, including the responsibility for health promotion; prevention of disease; and caring for the sick in the community, the hospital and the home. An understanding of people and how they adapt to the environment is essential to the provision of these health-care services.

The program is approved by the Minnesota Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC).

Inquiries regarding accreditation may be made by contacting:

NLNAC
61 Broadway
New York, NY 10006
212-363-5555

Nursing

Graduates of the program are eligible to take the National Council Licensure Examination—Registered Nurse. Successfully passing this exam permits the graduate to practice as a registered nurse (R.N.). Graduates will have met the requirements for certification as public health nurses and licensure as school nurses in Minnesota.

Admission to Major. Application for admission to the School of Nursing is a separate process in addition to being admitted to the University. Requirements for admission to the nursing major are 1) completion of at least 30 credits, 2) a minimum career grade-point average of 2.5, 3) successful completion of ENG 101, PSYCH 101, SOC 101, BIOL 220, and two of these three courses: BIOL 230, BIOL 270, or CHEM 111. Prior to enrollment in nursing courses, students must have completed all general education and support courses required for the nursing major EXCEPT PSYC 455 which must be completed prior to enrollment in NURS 440, 4) LPN/RN option students must have practiced full-time as LPN's or RN's (appropriate to their license) for at least one year in the last five years. There are two application deadline dates each academic year: the third Friday of fall semester classes and the fifth Tuesday of spring semester classes. RN option students are admitted once per year-spring semester. Deadline date for application is October 15. Students should contact the School of Nursing for specific dates. The application form may be obtained from the website or Student Relations Coordinator or the RN Option Coordinator or the School of Nursing office. The number of students that may be admitted to the nursing major is limited. Applicants are accepted primarily on the basis of their academic achievement in prerequisite courses as listed in "Facts in Brief" which is available in the School of Nursing or the website.

For the Nursing major, students must meet computer science competency. This can be met by completing NURS 110 or by passing a competency exam.

NURSING BS

Required General Education (44 credits)

Basic Options (23 credits):

ENG	101	Composition (4)#
CHEM	111	Chemistry of Life Processes (5)^
BIOL	270	Microbiology (4)^
EDFN	235	Human Development (3)~
PSYC	101	Psychology (4)#
SOC	101	Introduction to Sociology (3)#

Recommended for Category 4 (3 or 4 credits)

MATH	112	College Algebra (4)~
STAT	154	Elementary Statistics (3)~

Required Support Courses (14 credits):

BIOL	220	Human Anatomy (4)#
BIOL	230	Human Physiology (4)^
FCS	240	Nutrition I (3)~
PSYCH	455	Abnormal Psychology (4)+

Prerequisites

^ Two of these three courses must be successfully com-

pleted prior to submitting an application to the School of Nursing. The third course must be successfully completed prior to enrolling in nursing courses

~ Must be successfully completed prior to enrolling in nursing courses

+ Must be successfully completed prior to NURS 440

Required for Major (63 cr):

Students may access 1 of the following 2 options depending on previous education and credentials.

BASIC OPTION (63 cr):

NURS	110	Nursing Perspectives (1)
NURS	220	Foundations in Nursing Science (4)
NURS	252	Altered Human Functioning (3)
NURS	253	Psychomotor Strategies in Nursing I (4)
NURS	260	Pharmacology for Nursing Practice (2)
NURS	340	Gerontological Nursing (2)
NURS	341	Gerontological Clinical (3)
NURS	350	Altered Physiologic Mode Nursing I (3)
NURS	351	Altered Physiologic Mode Clinical I (3)
NURS	353	Psychomotor Strategies in Nursing II (1)
NURS	360	Childbearing Family Nursing (2)
NURS	361	Childbearing Family Clinical (3)
NURS	380	Child Health Nursing (2)
NURS	381	Child Health Clinical (3)
NURS	410	Nursing Perspectives of Leadership and Management (2)
NURS	430	Nursing Research (2)
NURS	440	Mental Health Nursing (2)
NURS	441	Mental Health Clinical (3)
NURS	450	Altered Physiologic Mode Nursing II (3)
NURS	451	Altered Physiologic Mode Clinical II (4)
NURS	460	Community Health Nursing (2)
NURS	461	Community Health Clinical (4)
NURS	470	Nursing Synthesis Seminar (1)
NURS	471	Nursing Synthesis Clinical (4)

RN OPTION (63 cr)

Transfer Credits

In accordance with the statewide MN Articulation Agreement, 30 semester nursing credits are transferred for RN's. An additional 31 general credits must be earned through a four-year college.

Required (MSU Courses, 33 cr):

NURS	298	Professional Nursing for RN Students (4)*
NURS	302	Nursing Domains-RN's (3)*
NURS	303	Nursing Domains Clinical-RN's (2)
NURS	402	Psychosocial Nursing-RN's (3)*
NURS	410	Nursing Perspectives of Leadership and Management (2)*
NURS	430	Nursing Research (2)^
NURS	460	Community Health Nursing (2)*
NURS	461	Community Health Clinical (4)
NURS	470	Nursing Synthesis Seminar (1)^
NURS	471	Nursing Synthesis Clinical (4)

Choose 6 credits of electives from the following:

NURS	252	NURS	260	NURS	340
NURS	360	NURS	380	NURS	428>

NURS 440 NURS 450 NURS 451
NURS 452

* On-campus and/or by ITV

^ On-campus and/or on the internet

> On-line or workshop format

RN transfer students must complete a college chemistry course prior to admission. Prior to enrollment in 400-level courses, PSYCH 455 must be successfully completed.

LPN OPTION

The LPN option is being revised. Please call the School of Nursing for specific information.

Required Minor: None.

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be achieved in all prerequisite and support courses. Nursing courses are sequentially arranged and progression is based on successful completion of the prerequisite nursing course(s). All classroom courses are offered for grade only and all clinical courses are offered for P/N only. To continue in the nursing major, all students must achieve and maintain at least a C or P grade in each required nursing course. A grade of D, F, or NC in a nursing course is unacceptable, and the student must repeat the course to continue in the nursing major. In addition, it is required that each student maintain at least a C (2.0) average in all courses completed.

P/N Grading Policy. All of the pre-nursing and foundational courses EXCEPT NURS 110 must be taken for a letter grade; P/N is not acceptable. A grade of C must be achieved. (A grade of P must be earned in NURS 110)

The School of Nursing utilizes a variety of health-care agencies for students' clinical experiences. All clinical experiences are planned and conducted by the School of Nursing faculty. The student is responsible for travel to clinical agencies and for housing arrangements when necessary. Criminal background studies must be completed each year prior to beginning clinical courses.

Transfer Students. It is often possible for students to complete the required pre-nursing curriculum at another college or university and then have these courses and credits transferred to MSU. Nursing courses begin both fall and spring semesters.

Standardized Exams. All students enrolled in the School of Nursing will be required to take standardized achievement examinations at periodic intervals during their program. Exam results are used for student self-evaluation as well as program evaluation of learning outcomes.

Health. All nursing students are required to maintain a program of yearly health examinations and immunizations. Students will be advised of these requirements and must assume responsibility for meeting the health requirement before starting clinical experiences each year, beginning with the sophomore year.

Expenses. Each student is responsible for costs related to travel for nursing course experiences, student uniforms, health examinations, immunizations, and Mantoux's; health insurance, malpractice insurance coverage, and CPR certification. In the case of accidental exposure, students are responsible for testing and follow-up care costs.

Continuing Education Program. Continuing education workshops, designed in response to the needs defined by area nurses, are available to registered nurses and licensed practical nurses seeking to maintain their competence in nursing practice. Continuing Education Units (CEUs) are awarded upon successful completion of workshops. The CEU is not applicable toward meeting the requirements for a degree at Minnesota State University, Mankato. Requests for further information should be directed to Director, Continuing Education Program, College of Allied Health and Nursing.

COURSE DESCRIPTIONS

101 (3) Courage, Caring and Team Building

This experiential course will prepare students for effective participation in a variety of groups. Students can expect to experience various group member roles through structured activities within the MSU culture and with diverse cultures. Students will learn about risk taking, trust building, cooperation/collaboration in groups and caring for self and others in the larger community.

V

110 (1) Nursing Perspectives

Introduction to nursing as a profession and career, exploration of nursing practice concepts and overview of the nursing curriculum and conceptual framework.

F, S

220 (2,4) Foundations in Nursing Science

Introduction to the Roy Adaptation Model as a framework for critical thinking, nursing process and practice. Development of effective individual and group communication skills; application of communication theory in small groups. Use of the interview process to collect data from individuals and families. Beginning socialization to nursing as a profession.

Pre: Admission to the School of Nursing F, S

252 (3) Altered Human Functioning

A holistic perspective of the pathophysiologic functioning of the human adaptive system. Includes alterations in oxygenation, nutrition, elimination, activity and rest, and protection. Also includes alterations in processes related to the senses, fluid and electrolytes and neurological and endocrine functions.

Pre: Admission to the School of Nursing F, S

253 (4) Psychomotor Strategies in Nursing I

The first of two psychomotor skills courses in which the Nursing Learning Resource Center is utilized for self-directed learning activities and evaluation of performance with clinical application experience. The psy-

Nursing

chomotor skills are beginning to intermediate concepts, principles and techniques utilized with patients in a variety of clinical settings.

Pre: Admission to the School of Nursing F, S

260 (2) Pharmacology for Nursing Practice

Introduction to pharmacologic concepts with emphasis on nursing responsibilities in drug therapy.

Pre: Admission to the School of Nursing F, S

298 (4) Professional Nursing for RN Students

Introduction to professional nursing with emphasis on: adaptation and the nursing process; socialization to the profession; self-awareness; and interactive skills for nursing practice

Pre: Current RN License F

302 (3) Nursing Domains-RN's

Concepts related to the practice of professional nursing in the four domains comprising the health system: trauma/acute illness;) chronic disease management; health promotion/maintenance/education; and supportive care management.

Pre: Admission to RN Track and NURS 298 S

303 (2) Nursing Domains Clinical-RN's

Clinical application of nursing care for individual and family clients in the domains of health promotion/maintenance/education, trauma/acute illness, and chronic disease management with emphasis on the physiologic mode.

Pre: Admission to RN Track and NURS 298 and Pre or Coreq: NURS 302 S

340 (2) Gerontological Nursing

Theory course on the promotion of physiological and psychosocial adaptation of the older adult client.

Pre: NURS 220, 252, 253, and 260 F, S

341 (3) Gerontological Clinical

Gerontological clinical nursing practice in various health care settings.

Pre: NURS 220, 252, 253 and 260, Pre or Coreq: NURS 340 and 353 F, S

350 (3) Altered Physiologic Mode Nursing I

The first of two theory courses. Emphasizes the promotion of adaptation in individuals experiencing alterations in activity and rest patterns, ingestion, digestion, absorption and elimination, protection, endocrine function, inflammatory-immune-infectious response, and neoplastic responses. Concepts of stress and coping, powerlessness, sick role and long term illness are introduced.

Pre: NURS 220, 252, 253, and 260; Pre or Coreq: NURS 340 F, S

351 (3) Altered Physiologic Mode Clinical I

The first of two clinical courses emphasizing the nursing care of adult clients experiencing physiologic and psychosocial alterations. The Roy Adaptation Model will be utilized to provide nursing care for clients re-

quiring supportive, acute and chronic care in simple to intermediate situations.

Pre: NURS 220, 252, 253, 260 and 341, Pre or Coreq: NURS 350 F, S

353 (1) Psychomotor Strategies in Nursing II

The second of two psychomotor skills courses in which the Nursing Learning Resource Center is utilized for self-directed learning activities and evaluation of performance. The psychomotor skills included in this course relate to the more advanced concepts, principles and techniques utilized with patients in a variety of clinical settings.

Pre: NURS 220, 252, 253, and 260 F, S

360 (2) Childbearing Family Nursing

A course designed to describe the physiological and psychosocial changes that occur in families during the childbearing period. Key concepts include personal and family adaptation and health promotion.

Pre: NURS 340, 341, 350, 351, and 353 F, S

361 (3) Childbearing Family Clinical

This clinical course focuses on the care of the childbearing family. The nursing process is utilized to plan and implement care of normal and high risk perinatal clients in the hospital and community based settings.

Pre: NURS 340, 341, 350, 351, and 353, Pre or Coreq: NURS 360 F, S

380 (2) Child Health Nursing

Concepts related to adaptation, growth and development, and specific physiologic and psychosocial alterations of the child from infancy through adolescence.

Pre: NURS 340, 341, 350, 351, and 353 F, S

381 (3) Child Health Clinical

A clinical course utilizing the nursing process to plan and implement nursing care for children from infancy through adolescence with a variety of specific physiologic and psychosocial responses. Clinical experiences with children and their families occur in acute care and community based settings.

Pre: NURS 340, 341, 350, 351 and 353, Pre or Coreq: NURS 380 F, S

402 (3) Psychosocial Nursing-RN's

A combination theory and clinical course. Emphasis on family, culture, ethical values, and community as they relate to psychosocial problems throughout the lifespan. Application of nursing care for individual and family clients in the domains of health promotion/maintenance/education and supportive care management with emphasis on the psychosocial modes.

Pre: NURS 302 and 303; PSYC 455 F

410 (2) Nursing Perspectives of Leadership and Management

Current theories derived from research in organizational psychology, business, and educational leadership are explored as they apply to the role of nurse leader and/or manager of nursing personnel giving direct care. Pa-

tient care, human resource and operational management skills in interaction with a changing health care environment are emphasized.

Pre: NURS 430, 440, 441, 460 and 461 or Consent
F, S

428 (2) Nursing Elective

Several sections on various topics not included in the required curriculum. Each section is a different course and expands on the nursing major courses. Examples of topics are ethical dimensions, laughter and wellness in nursing practice, dementia, rural nursing, cancer care, etc.

Pre: As appropriate for each section V

430 (2) Nursing Research

Introduces the components of the research process: problem and hypothesis development, literature review, design, sampling, data analysis and dissemination of results.

The student is guided to critique and be an informed consumer of nursing research. A researchable nursing related problem is identified and a scholarly paper written.
Pre: All 300 level nursing courses or admission to RN Track or Consent F, S

440 (2) Mental Health Nursing

Issues of self-esteem, dependency, abuse, and violence are addressed related to inpatient and community based nursing care of individuals, groups, families, and organizational systems.

Pre: All 300 level nursing courses and PSYC 455 or Consent F, S

441 (3) Mental Health Clinical

The focus of this clinical course is on patterns of ineffective behavioral responses related to conditions of mental illness. Mental health concepts and process skills are applied to working with individuals, groups, families, and members of the health team.

Pre: All 300 level nursing courses or Consent, Pre or Coreq: NURS 440 F, S

450 (3) Altered Physiologic Mode Nursing II

The second of two theory courses. Emphasizes the promotion of adaptation in individuals experiencing alterations in fluid and electrolytes/burns, oxygenation, renal elimination, perception, and multiple trauma. Concepts of crisis theory are introduced. Psychosocial needs of both clients and families are integrated throughout the course.

Pre: NURS 430, 440, 441, 460 and 461 F, S

451 (4) Altered Physiologic Mode Clinical II

The second of two clinical courses emphasizing the nursing care of adult clients experiencing physiologic and psychosocial alterations. The Roy Adaptation Model will be utilized to provide and coordinate nursing care of clients requiring acute and chronic care in complex situations.

Pre: NURS 430, 440, 441, 460 and 461, Pre or Coreq: NURS 450 F, S

452 (3) Advanced Health Assessment

This course offers theoretical and simulated clinical practice to develop advanced skills in health and physical assessment throughout the life span. Students complete a client data base and identify nursing problems necessary in making clinical judgments and planning and caring for the health care needs of individual clients.

Pre: Permission of instructor. Priority to graduate students and RNs. V

460 (2) Community Health Nursing

This course focuses on the community and integrates the principles of nursing and public health. Nursing care of individuals, families and groups is addressed within the context of promoting, maintaining, and restoring health.

Pre: All 300 level nursing courses or Consent, Pre or Coreq: NURS 440 or Admission to RN Track F, S

461 (4) Community Health Clinical

The focus of this clinical course is on community based nursing and home health care. Public health concepts are applied to promote adaptation in individuals, families, and populations.

Pre: All 300 level nursing courses or Con, Pre or Coreq: NURS 440 and 460 or NURS 402 and 460 F, S

470 (1) Nursing Synthesis Seminar

A capstone course in which students will apply previously learned theory and principles of nursing, research, leadership/management, communication, teaching, and caring to analyze and evaluate situations encountered in a variety of practice settings. Transition into the role of the professional nurse and implications for accountability will be addressed.

Pre: NURS 410, 450, and 451 F, S

471 (4) Nursing Synthesis Clinical

The purpose of this capstone clinical course is to expand the student's knowledge and skill in caring for individuals, families and/or communities and to gain reality-based insights into the role of the professional nurse.

Pre: NURS 410, 450, and 451, Coreq: NURS 470 F, S

490 (1-3) Workshop

Workshop(s) with various topics and titles.

V

491 (1-5) In-Service

Workshop(s) with various topics and titles.

V

499 (1-5) Individual Study

Individual study according to outcomes developed by faculty and student(s).

V

Open Studies, BS

College of Arts & Humanities

Open Studies Program

131 Nelson Hall • 507-389-5522

Director: Marshel D. Rossow

The Open Studies baccalaureate major is designed to give highly motivated, self-directed students an opportunity to create their own programs and earn an undergraduate degree. It is a liberal education program designed for students who wish to major in an interdisciplinary area with a coherency of design.

Admission to Major. Admission will be granted to students who meet eligibility requirements and who complete a formal application to the Open Studies program. Eligibility requirements are as follows:

- Student must have a current, cumulative GPA of 2.8 or higher, according to MSU records.
- Student should apply after earning a minimum of 32 semester credits and before completing 80 semester credits, according to MSU records. Student having more than 80 credits may still be considered for the Open Studies program if they are willing to meet all other requirements of the program.
- Student must submit a formal application on a form provided by the Open Studies director.

POLICIES/INFORMATION

Areas of Concentration. Students seeking the Open Studies degree will select three academic areas in which to concentrate their work and will arrange for a faculty advisor in each of those areas to oversee their work in each area. The areas of study must represent three distinct academic disciplines at Minnesota State University. The student must file a plan of study that provides a reason for choosing these areas of study and that demonstrates why the proposed work cannot be accomplished under the usual major-and-minor(s) format at MSU.

Continuation in Program. The following rules explain the requirements for a student to continue in the Open Studies program and to receive a university degree. The Open Studies major must:

- Maintain a minimum cumulative GPA of 2.80.
- Apply grades of A, B and C to the three areas unless specific courses are offered only on a P/NC basis.
- Complete the university's general-education program.
- Complete at least 64 upper-division semester credits.
- Complete a minimum of 15 semester credits of study in each of the three selected academic areas of concentration. A faculty advisor in each area must be willing to serve on a committee with the Open Studies director to oversee the student's work.

- Complete a capstone project synthesizing the areas of concentration. The completed project must be acceptable to members of the student's committee.

COURSE DESCRIPTION

499 (3) Capstone Experience

In the final year of the Open Studies degree, each major will undertake a project synthesizing the three areas of concentration. The project may range from primary research to practicum-type experience, but it will involve a written report and must receive approval from the Open Studies director and from the advisor in each area of concentration at the project's inception and completion.

Pre: Consent of director.

Philosophy

College of Arts & Humanities

Department of Philosophy

227 Armstrong Hall • 507-389-2012

Chair: Richard Liebendorfer

Cathryn Bailey, John Humphrey, Hal Walberg, Ronald Yezzi

Like no other discipline, through its methodical scrutiny of the entire network of our beliefs, philosophy reveals and clarifies our fundamental ideas and principles. Recognizing that anyone who systematically searches for knowledge may be considered a philosopher, the highest degree in the sciences and humanities which the modern university grants is the Ph.D. - the doctor of philosophy.

Because it engages in a comprehensive analysis of the theoretical foundations of other disciplines, philosophy serves as an excellent pre-professional major. The study of philosophy provides the student with a wealth of analytic skills, making it one of the preferred pre-law and pre-med majors. The insights and perspectives of philosophy prepare leaders of industry, politicians, theologians, and comedians alike. Through philosophy, the continued conversation that constitutes our culture is kept alive.

Minnesota State University's philosophy program provides general education courses, electives, and minors supporting concentrations in other fields. A philosophy major is both for those who want to become professional philosophers and those who want a general liberal education. It traverses other disciplines, providing the ability to deal with such problems as the nature of values and knowledge, and studies the development of ideas and their impact on the arts, religion, and social institutions.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
 - a minimum cumulative GPA of 2.00 (C).
 Contact the department for application procedures.

PHILOSOPHY BA, BS

Required for Major (Core, 12 credits):

PHIL	110	Logic and Critical Thinking (3)
PHIL	334	History of Philosophy: Ancient (3)
PHIL	336	History of Philosophy: Modern (3)

Choose one of the following courses:

PHIL	335	History of Philosophy: Medieval (3)
PHIL	337	19th Century Philosophy (3)
PHIL	338	American Philosophy (3)
PHIL	358	Eastern Philosophy (3)
PHIL	437	Contemporary Philosophy (3)

Required Electives (21 credits):

Choose a minimum of 21 additional Philosophy credits from the following:

PHIL	100	PHIL	110	PHIL	112
PHIL	115	PHIL	120	PHIL	205
PHIL	222	PHIL	224	PHIL	226
PHIL	311	PHIL	321	PHIL	334
PHIL	335	PHIL	336	PHIL	337
PHIL	338	PHIL	358	PHIL	361
PHIL	410	PHIL	437	PHIL	450
PHIL	455	PHIL	460	PHIL	473
PHIL	474	PHIL	480	PHIL	490
PHIL	491	PHIL	499		

Required for Bachelor of Arts (BA) degree ONLY:
 Language (8)

Required Minor: Yes. Any.

PHILOSOPHY MINOR

Required for Minor (Core, 9 credits):

PHIL	334	History of Philosophy: Ancient (3)
PHIL	336	History of Philosophy: Modern (3)

Choose one course from the following:

PHIL	335	History of Philosophy: Medieval (3)
PHIL	337	19th Century Philosophy (3)
PHIL	338	American Philosophy (3)
PHIL	358	Eastern Philosophy (3)
PHIL	437	Contemporary Philosophy (3)

Required Electives (9 credits):

Choose a minimum of 9 additional Philosophy credits from the following:

PHIL	100	PHIL	110	PHIL	112
PHIL	115	PHIL	120	PHIL	205
PHIL	222	PHIL	224	PHIL	226
PHIL	311	PHIL	321	PHIL	334
PHIL	335	PHIL	336	PHIL	337
PHIL	338	PHIL	358	PHIL	361
PHIL	410	PHIL	437	PHIL	450
PHIL	455	PHIL	460	PHIL	473
PHIL	474	PHIL	480	PHIL	490
PHIL	491	PHIL	499		

POLICIES/INFORMATION

GPA Policy. None.

P/N Grading Policy. The P/N grading system applies to all courses, but majors and minors may take 300- or 400-level courses in philosophy for P/N credit only with the consent of the department.

COURSE DESCRIPTIONS

100 (3) Introduction to Philosophy

Introduction to the nature of philosophy and specific, basic problems. F, S

110 (3) Logic and Critical Thinking

Traditional syllogistic logic and an introduction to the elements of modern symbolic logic. F, S

112 (3) Logic of Scientific Method

Inductive logic, formation of hypotheses, scientific explanation, definition, classification, probability, analogy. V

115 (3) Race, Class and Gender

To what extent do the differences among races and between genders represent biological differences, and to what extent are they constructed by society? Is racism best conceptualized as an additional burden to sexism or as one different in kind? V

120 (3) Introduction to Ethics

Discussion of theories of value and obligation. V

205 (3) Culture, Identity and Diversity

Understanding the ways that a culture both creates human community and shapes self-identity. Exploration of similarities and differences between and interdependence among cultural traditions, and of vocabularies for assessing such differences. V

222 (3) Medical Ethics

Ethical perspectives relevant to issues such as euthanasia, genetic engineering, organ transplant, patients' rights, abortion, etc. V

224 (3) Business Ethics

Introduction to ethical theories and concepts and their application to specific cases in the world of business. V

226 (3) Environmental Ethics

Questions about human responsibilities to other animals and the environment gain urgency as environmental crises become more prevalent, and animal species continue to be eliminated. Learn about, critique and apply the principles underlying evaluations of human environmental conduct. V

Physical Education

311 (3) Symbolic Logic

Study of the elements of first order symbolic logic, i.e., the propositional calculus and the predicate calculus, and its applications to ordinary language and mathematics.

S

321 (3) Social and Political Philosophy

Human rights and responsibilities in relation to the organization of society and government.

V

334 (3) History of Philosophy: Ancient

Philosophers of ancient Greece and Rome.

F

335 (3) History of Philosophy: Medieval

Philosophers of the Middle Ages.

V

336 (3) History of Philosophy: Modern

Renaissance through the 18th century.

S

337 (3) 19th Century Philosophy

Philosophers and philosophies of the 19th century.

V

338 (3) American Philosophy

Colonial times to the present.

V

358 (3) Eastern Philosophy

Survey of principle philosophical doctrines of ancient Chinese philosophers and a survey of Indian philosophical speculation.

V

361 (3) Philosophy of Religion

Structure and logic of religious belief. Problems such as the existence of God, evil, immortality, miracles, and religious language.

F

410 (3) Philosophy of Language

Theories of meaning, speech acts and semantics, relation of language to the world.

V

437 (3) Contemporary Philosophy

Major philosophers and philosophies of the late 20th Century.

V

450 (3) Special Topics

Intensive study of a single philosopher or topic.

V

455 (3) Existentialism and Phenomenology

In-depth analysis of major European existentialists such as Kierkegaard, Heidegger, and Sartre.

V

460 (3) Philosophy of the Arts

Aesthetic principles, theories, and the creative process. Theories of visual arts, music, literature, dance, etc.

S

473 (3) Knowledge and Reality

Analysis of the status and justification of claims about the nature and limits of human knowledge and the nature of what may be held to be real.

V

474 (3) Philosophy of the Mind

The nature of consciousness, mind and body relations, freedom of action.

V

480 (3) Philosophy of Science

Nature of explanations, causality, theoretical entities, and selected problems.

V

490 (1-6) Workshop

Special event of less than semester duration.

V

491 (1-6) In-Service

V

499 (1-6) Individual Study

Individual study of a philosopher or problem.

V

Physical Education

College of Allied Health & Nursing

Department of Human Performance

122 Highland Center • 507-389-6313

Website: <http://www.mnsu.edu/dept/colahn/HPhp.html>

Chair: Harry Krampf

Dean Bowyer, Marge Burkett, Greg Clough, Ken Ecker, Sherry Folsom-Meek, Patricia Hale, Kent Kalm, Julie Kerr-Berry, Jim Makovsky, Dan McCarrell, Lori Meyer, Christine Miskec, Phillip Rhoads, Dan Runkle, Gary Rushing, Pat Sexton, Peter Toews, Doug Tully, Mary Visser, Ann Walker, Joe Walsh, Debra Runkle, Robert Weber, Jerry Olszewski, Christina Ruff, Suzanne Venet.

Physical education develops and maintains individuals for vocational and personal pursuits through physical activities. Students are taught conditioning activities and recreational skills for this purpose and for desirable mental attitudes and social behavior for university and post-university life. The professional programs listed are designed to prepare students for leadership in human performance/physical education and related fields.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Students are encouraged to consult with appropriate advisors for additional departmental requirements.

Students planning to major in the College of Allied Health and Nursing have an advisor from their area of interest assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by Mark Schuck, student relations coordinator, 162 Highland Center, 507-389-5486.

PHYSICAL EDUCATION BS (Non-Teaching)

Required for Major (Performance Core, 4 cr):

Choose 4 credits from the following courses:

HP 166 Team Games Skills I (1)

HP 174 Individual Dual Activities (1)

- HP 175 Fitness Activities (1)
- HP 176 Lifetime Activities I (1)
- HP 177 Lifetime Activities II (1)
- HP 178 Social, Folk and Square Dance Technique (1)
- HP 182 Aquatic Skills (1)

Required for Major (Theory Core, 20 cr):

- HP 160 Introduction to Human Performance Studies (2)
- HP 290 Psycho-Social Aspects of Sport (3)
- HP 320 Foundations of Motor Learning (3)
- HP 348 Structural Kinesiology and Biomechanics (3)
- HP 403 Measure and Evaluation in Human Performance (3)
- HP 405 Adapted Physical Activity (3)
- HP 414 Physiology of Exercise (3)

Required for All Majors (Option):

Choose one of the following options.

GENERAL OPTION

Required (Option, 13 cr):

- BIOL 220 Human Anatomy (4)
- BIOL 230 Human Physiology (4)
- CHEM 111 Chemistry of Life Processes (5)

Minor Required: Yes. Any.

EXERCISE SCIENCE OPTION

Required General Education (13 cr):

- COMS 100 Introduction to Computer Science (4)
- MATH 112 College Algebra (4)
- CHEM 201 General Chemistry I (5)

Required Support Courses (16 cr):

- MATH 113 Trigonometry (3)
- CHEM 202 General Chemistry II (5)
- BIOL 220 Human Anatomy (4)
- BIOL 230 Human Physiology (4)

Required for Option (Core, 18 cr):

- HP 436 Nutrition in Exercise and Sport (2)
- HP 456 Athletic Testing and Conditioning (2)
- HP 465 Legal Aspects of Physical Education and Sport (3)
- HP 466 Graded Exercise Testing and Exercise Prescription (3)
- HP 467 Wellness Program Development and Administration (2)
- HP 496 Internship (6)

Required Electives for Option (15 cr):

15 credits of electives selected from list or recommended in consultation with advisor.

Required Minor: None

SPORTS MANAGEMENT OPTION

Required General Education for Option (9 cr):

- COMS 100 Introduction to Computer Science (4)
- CHEM 111 Chemistry of Life Processes (5)

Required Support Courses for Option (8 cr):

- BIOL 220 Human Anatomy (4)
- BIOL 230 Human Physiology (4)

Required for Option (Core, 17 cr):

- HP 441 Organization and Administration of Physical Education and Sport (2)
- HP 460 Leadership and Management in Sport Organizations (3)
- HP 465 Legal Aspects of Physical Education and Sport (3)
- HP 490 Workshop: Facilities (2)
- or
- HP 499 Individual Study: Facilities (2)
- HP 496 Internship (8)

Required Electives for Option (17 cr):

Choose a minimum 17 credits of electives from Human Performance, Business, or RPLS, with consent of advisor.

Minor Required: None.

PHYSICAL EDUCATION BS TEACHING

Required General Education (11 cr):

- BIOL 100 Our Natural World (4)
- PSYC 101 Psychology (4)
- Choose one of the following:
- CHEM 105 Introduction to Chemistry (3)
- PHYS 101 Introductory Physics (3)

Required for Major (11 cr):

- BIOL 220 Human Anatomy (4)
- BIOL 230 Human Physiology (4)
- HLTH 210 First Aid and CPR (3)

Required for Major (Performance Core, 12 cr):

- HP 117 Aerobic Conditioning (1)
- HP 166 Team Games (1)
- HP 174 Individual Dual Activities: Gymnastics (1)
- HP 174 Individual Dual Activities: Track and Field (1)
- HP 175 Fitness Activities (1)
- HP 176 Lifetime Activities I: Tennis (1)
- HP 176 Lifetime Activities I: Badminton (1)
- HP 177 Lifetime Activities II: Archery (1)
- HP 177 Lifetime Activities II: Golf (1)
- HP 178 Social, Folk and Square Dance Techniques (1)
- HP 179 Winter Sport Activity (1)
- HP 182 Aquatic Skills (1)

Required for Major (Theory Core, 31 cr):

- HP 160 Introduction to Human Performance Studies (2)
- HP 266 Teaching Dance in Physical Education (1)
- HP 290 Psycho-Social Aspects of Sport (3)
- HP 320 Foundations of Motor Learning (3)
- HP 323 Elementary Physical Education Methods (2)
- HP 340 Athletic Training (2)
- HP 348 Structural Kinesiology and Biomechanics (3)
- HP 380 Developing Teaching Skills (3)
- HP 386 Physical Education Teaching Techniques (2)

Physical Education

HP	403	Measurement and Evaluation in Human Performance (3)
HP	411	Developmental/Adapted Physical Education (3)
HP	414	Physiology of Exercise (3)
HP	432	Practicum in Teaching Physical Education (1)
HP	441	Organization and Administration of Physical Education and Sport (2)

Professional Education Core (30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor. None.

PHYSICAL EDUCATION MINOR

Required for Minor (Human Performance, 4 cr):

Choose 4 credits from the following:

HP	166	HP	170	HP	174
HP	175	HP	176	HP	177
HP	178	HP	182		

Required for Minor (Theory, 14 cr):

HP	160	Introduction to Human Performance Studies (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	320	Foundations of Motor Learning (3)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	411	Developmental/Adapted Physical Education (3)

Required for Minor (Biology, 8 cr):

BIOL	100	Our Natural World (4)
BIOL	220	Human Anatomy (4)

AQUATICS

This cluster of courses, associated with the Physical Education major, may be elected by majors or non-majors and is designed to prepare qualified aquatic leaders.

Pre: HP 182 or consent

Required (Core, 11 credits):

HP	182	Aquatic Skills (1)
HP	250	Lifeguard Training (2) or current ARC Lifeguard certification
HP	257	Water Safety Instructor (2) or current ARC WSI certification
HP	344	Aquatic Organization and Administration (2)
HP	491	In-Service (1)
HP	496-02	Internship (3)

Required Electives (4 cr):

Choose 4 credits from the following courses:

HP	143	Aqua Exercise (1)
HP	145	Aquatic Conditioning and Water Polo (1)
HP	190	Sport Activity: Springboard Diving, Sailboarding, Synchronized Swimming (1)

HP	190	Sport Activity: SCUBA (1)
HP	241	Sailing (1)
HP	242	Canoeing (1)
HP	248	Stroke Analysis (1)
HP	301	Swimming Theory (1)

POLICIES/INFORMATION

GPA Policy. A GPA of 2.00 is required.

P/N Grading Policy. Courses required in the major must be taken for a grade.

COURSE DESCRIPTIONS

101 (1) Developmental/Adapted Exercise

For students with disabilities who will benefit from a guided program of individualized exercise.

F, S

103 (1) Fitness for Living

Concepts and development of lifelong healthy exercise and nutritional habits.

F, S

104 (1) Adult Fitness

This course is designed to provide specific information and strategies to allow adults to develop or maintain life-long healthy exercise habits that impact physical fitness in one or more of the following areas: cardiovascular and muscular endurance, muscular strength, flexibility, and body composition.

F, S

105 (1) Beginner and Advanced Beginner Swimming

Introduction to basic swimming skills; basic rescue and water safety skills and techniques; stroke instruction in front crawl, back crawl, elementary backstroke, breast-stroke, and sidestroke.

F

107 (1) Orienteering

This course is designed to introduce the student to the basics of orienteering and land navigation. Through 15 weeks of classes and instruction, the student will be able to understand the basic principles of navigation. The class will be 50% classroom instruction and 50% outdoor activity.

On Demand

114 (1) Billiards and Bowling

Theory and practice of billiards or bowling.

F, S

117 (1) Aerobic Conditioning

Theory and practice of aerobic conditioning.

F, S

130 (1) Self-Defense for Women

Includes street fighting techniques and personal safety tips.

F, S

138 (1) Beginning Horsemanship

Basic skills of horseback riding—western and English.

F, S

139 (1) Winter Survival

The winter survival (WS) seminar is designed to provide student with an introduction to winter survival techniques applicable to severe and varying weather conditions. Classroom lecture and outdoor hands-on training is utilized to accomplish course objectives. Winter survival is pass/fail.

On Demand

140 (2) Introduction to Athletic Training

Orientation to the profession of athletic training. Designed for students majoring in athletic training.

F

143 (1) Aqua Exercise

Development of cardiovascular fitness, strength, flexibility, and endurance through a variety of exercise formats in the water. Swimming ability not a prerequisite.

F, S

145 (1) Aquatic Conditioning and Water Polo

Introduction to conditioning techniques for aquatic activities (swimming, triathlon, water polo, etc.). Development of cardiovascular fitness, strength, flexibility, and endurance. Individual/team skills and techniques of water polo.

Pre: Swim 500 yards without stopping S

146 (1) Intercollegiate Bowling

Consent

Pre: Bowling experience/averages F

147 (1) Intercollegiate Cross Country

Open for credit to those on the intercollegiate team.

Pre: Selection for team F

148 (1) Intercollegiate Softball

Open for credit only for those students who make the MSU team and who complete the requirements.

Pre: Selection for team S

149 (1) Intercollegiate Volleyball

Open for credit only for those students who make the MSU team and who complete the requirements.

Pre: Selection for team F

150 (1) Intercollegiate Wrestling

Open for credit to those who make the wrestling team and complete the requirements.

Pre: Selection for team S

152 (1) Intercollegiate Track and Field

Open for credit to those who make the team and complete the requirements.

Pre: Selection for team S

153 (1) Intercollegiate Swimming

Open for credit only for those students who make the MSU team and who complete the requirements.

Pre: Selection for team S

154 (1) Intercollegiate Football

Daily practice Monday through Friday.

Pre: Selection for team F

155 (1) Intercollegiate Basketball

Must be on intercollegiate roster.

Pre: Selection for team S

156 (1) Intercollegiate Baseball

Class for only students on the intercollegiate baseball team. Need permission to register.

Pre: Selection for team S

157 (1) Intercollegiate Golf

Open for credit to those who make the team and complete the requirements.

Pre: Selection for team S

158 (1) Intercollegiate Tennis

Open for credit to those who make the team and complete the requirements.

Pre: Selection for team S

159 (1) Intercollegiate Hockey

This course is admission by permission only. The course is limited to male students who are members of the MSU intercollegiate hockey team.

Pre: Selection for team S

160 (2) Introduction to Human Performance Studies

Introduction to physical education and exercise science. Majors, minors, and concentrations in the field. To acquaint physical education majors and minors with an overview of the physical education and exercise science profession.

F

161 (1) Intercollegiate Soccer

Participation in NCAA II soccer.

Pre: Selection for team F

166 (1) Team Games

Flag/Touch Football, Softball (fast and slow pitch), Soccer, Speedball, Ultimate, Volleyball, Basketball, Team handball.

F, S

174 (1) Individual-Dual Activities

Participation and increase skill knowledge through activity in track and field or gymnastics.

F, S

175 (1) Fitness Activities

Participation and increase skill knowledge through activity in body building, physical conditioning, and aerobics.

F, S

176 (1) Lifetime Activities I

Acquaint student with the basic skills, strategy and rules of badminton, tennis, or racquetball.

F, S

177 (1) Lifetime Activities II

Basic skills and knowledge of terminology, rules, and strategy in archery or golf.

F, S

178 (1) Social, Folk and Square Dance Techniques

Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.

F, S

Physical Education

179 (1) Winter Activities

Skiing, cross-country skiing, ice skating, or snowboarding.

S

182 (1) Aquatic Skills

Overview of aquatic skills and activities. Basic techniques and practical experience in teaching aquatic skills and activities.

Pre: Human Performance major or Aquatic emphasis. Ability to swim front crawl, back crawl, elementary backstroke, breaststroke, sidestroke. Developing teaching skills and curriculum.

F, S

190 (1) Sport Activities

Variable content based on demand.

Pre: Varies depending on activity

F, S

241 (1) Sailing

Students must furnish Coast Guard approved wearable life preserver. Beginning and intermediate sailing techniques. Sailboat racing.

Pre: Swimming ability

On Demand

242 (1) Canoeing

Paddling skills and safety/rescue techniques. Beginning white water skills. Students must provide their own personal floatation devices.

Pre: Swimming ability

On Demand

245 (1) Intermediate Swimming

Advanced strokes: butterfly, overarm sidestroke, trudgeon, inverted breaststroke. Competitive strokes and turns. Springboard diving. Aquatic Art. Mask and snorkel skills. Safety/rescue skills. Water exercise. Water polo.

Pre: Front crawl, back crawl, elementary backstroke, sidestroke, breaststroke

F, S

248 (1) Stroke Analysis

Stroke technique and theory in front crawl, back crawl, elementary backstroke, breaststroke, sidestroke, butterfly. Individual stroke analysis/video taping. Development of cardiovascular fitness, strength, flexibility, and endurance.

Pre: Ability to swim strokes

F

250 (2) Lifeguard Training

Explanations, demonstrations, practice, and review of skills required of lifeguards. Red Cross certification.

Pre: Swim 500 yards. Front crawl, breaststroke, elementary backstroke, sidestroke

On Demand

252 (1) Officiating Theory

The course is designed to give an overview of approximately five sports. Emphasis is placed on the philosophy behind sport officiating. Discussion involves how to get started, organization helpful to officials, learning materials, stipends to be earned, types of equipment and cost.

S

257 (2) Water Safety Instructor (WSI)

American Red Cross requirements for Water Safety Instructor (WSI) certification. Practical experiences included.

Pre: Swim 500 yards. Front crawl, back crawl, elementary backstroke, breaststroke, sidestroke

On Demand

265 (1) Orientation to Occupational and Physical Therapy

Academic direction for admission into a school of occupational or physical therapy. Information and experiences regarding roles and responsibilities of occupational and physical therapists.

F

266 (2) Teaching Dance in Physical Education

Methods and materials for teaching creative dance/movement and dance technique to children K-12. Includes practicum experiences with varied age groups.

F, S

290 (3) Psycho-Social Aspects of Sport

Examines sport from a social-psychological perspective. To identify and discuss ways in which societal values affect the character of sport and the people involved.

Pre: SOC 101

F, S

291 (2) Concepts of Fitness and Sport

Adult fitness, from theory to practice.

F, S

301 (1) Swimming Theory

Methods, procedures, and philosophy of coaching competitive swimming.

Pre: Competitive swimming experience

S

302 (1) Wrestling Theory

Methods and procedures used in coaching.

Pre: Wrestling experience or wrestling class

F

303 (1) Volleyball Theory

Methods and procedures used in coaching volleyball.

Pre: Volleyball experience or consent

F

304 (1) Track and Field Theory

Methods and procedures used in coaching.

S

305 (1) Baseball Theory

Methods and procedures used in coaching baseball.

F

306 (1) Football Theory

Course designed to teach the various techniques and philosophies of the game of football for prospective coaches. Open enrollment-male or female.

F

308 (1) Hockey Coaching Theory

The course is designed for those interested in coaching hockey at the youth and high school level.

On Demand

309 (1) Basketball Coaching Theory

Methods and procedures used in coaching.

S

310 (1) Softball Theory

Methods and procedures used in coaching.

Pre: Softball experience or consent S

311 (1) Track & Field/Cross Country Theory

Methods and procedures used in coaching.

On Demand

316 (1) Tennis Theory

Methods and procedures used in coaching.

On Demand

317 (1) Golf Coaching Theory

Methods and procedures used in coaching.

On Demand

318 (1) Soccer Theory

Methods and procedures used in coaching.

F

320 (3) Foundations of Motor Learning

Analysis variables which affect the learning, performance, and retention of motor skills.

Pre: PSYC 101 F, S

323 (2) Elementary Physical Education Methods

Methods and materials for teaching physical education in the elementary school. Precedes PE 324 and student teaching.

F, S

340 (2) Prevention and Care

Basic recognition, prevention, and care of athletic injuries. Designed for coaching certificate candidates, coaching minors, and physical education majors.

Pre: BIOL 220, HLTH 210 F, S

341 (3) Athletic Training Techniques

Recognition, prevention, and care of athletic injuries. Proper selection, care, and use of protective sports equipment. Designed for the athletic training major student.

Pre: Consent and BIOL 220, BIOL 230, HP 140

S

342 (3) Evaluation Techniques I

Athletic training lecture and laboratory application of athletic training techniques and principles of the lower body.

Pre: Consent and HP 341 F

343 (3) Evaluation Techniques II

Athletic training lecture and laboratory application of athletic training techniques and principles of the upper body. Designed for the athletic training student.

Pre: Consent, HP 341, HP 342 S

344 (2) Aquatic Organization and Administration

Development of skills necessary to organize and administer aquatic programs (seasonal and yearly).

Pre: Lifeguard Training/WSI or consent S

346 (1) Evaluation Techniques I Clinical

The focus of this clinical course is on the subjective and objective clinical assessment of injury/illness to the

lowback and lower extremities of physically active populations. The clinical education component will involve the acquisition and practice of clinical skills required for a comprehensive injury assessment of the lower body. The field experience component will provide them with the opportunity to apply these skills in the clinical (i.e., the athletic training room, practice/game coverage) environment.

Pre: HP 341 and HP 342 concurrent F

347 (1) Evaluation Techniques II Clinical

The focus of this clinical course is on the subjective and objective clinical assessment of injury/illness to the upper body and extremities of physically active populations. The clinical education component will involve the acquisition and practice of clinical skills required for a comprehensive injury assessment of the upper body. The field experience component will provide them with the opportunity to apply these skills in the clinical (i.e., the athletic training room, practice/game coverage) environment.

Pre: HP 341, HP 342, and HP 343 concurrent

S

348 (3) Structural Kinesiology and Biomechanics

A study of the structural and biomechanical functions of the muscular system during physical activity, sport, and exercise.

Pre: BIOL 220, BIOL 230, PHYS 101 F, S

354 (1) Physiology of Exercise for Coaches

The purpose of this course is to acquaint the student with the basic information regarding the physiological response of the human body to acute and chronic exercise. All material presented will be approached from a practical perspective with an emphasis on application for coaches.

On Demand

371 (2) Scientific Principles of Sport

This course is designed to acquaint the coaching licensure student with the basic principles of structural kinesiology and biomechanics.

Pre: BIOL 220, BIOL 230, PHYS 101

On Demand

380 (3) Developing Teaching Skills

Designed to prepare preservice physical education teacher with instructional skills necessary for effective teaching in physical education.

F, S

386 (2) Physical Education Teaching Techniques

Theory and practice, class organization and methods of teaching team sports and games, individual sports and games, fitness activities, gymnastics, wrestling and track and field.

F, S

403 (3) Measurement and Evaluation in Human Performance

Provides an introduction to measurement and evalua-

Physical Education

tion commonly used in physical education and exercise science. This encompasses the administration of skills and performance tests, interpretation of results, basic statistical analysis, and grading/evaluating performance.
F, S

405 (3) Adapted Physical Activity

Course is designed for preprofessionals who will be working in adapted physical activity outside the school setting. The course is for students with physical education majors in the Exercise Science and Athletic Training tracks, and students with majors from other departments who are interested in adapted physical activity for adult populations.
F

411 (3) Developmental/Adapted Physical Education

Legal and theoretical bases for teaching physical education to students with disabilities. First course in D/APE sequence.
F, S

412 (2) Assessment in Adapted Physical Education

Evaluation of motor skills and fitness among students with disabilities.
F, S

413 (2) Early Childhood Motor Development

Study of early childhood motor development from infancy through preschool age, including information on delayed development.
F, S

414 (3) Physiology of Exercise

Introductory study of the effects of both acute and chronic exercise on structure and function of the human body across the life span.
Pre: BIOL 220, 230, HP 175
F, S

419 (2) Teaching Dance to Individuals with Special Needs

Adaptation of dance materials to facilitate learning of individuals with special needs through simulated and hands-on teaching experiences.
Pre: HP 109
On Demand

421 (2) Teaching Sport to Individuals with Disabilities

Contemporary sport opportunities for individuals with disabilities, with application to teaching and transition planning.
Pre: HP 411 or consent
F

422 (2) Teaching Adapted Aquatics

Theory and practical experience in teaching swimming and other aquatic skills to individuals with disabilities.
S

432 (1) Practicum in Elementary Physical Education

Student practicum experience in a teaching situation prior to student teaching.
Pre: HP 320, 323 and 413
F, S

436 (2) Nutrition in Exercise and Sport

This course provides an overview of the dietary needs of physically active individuals and athletes with a special focus on the issues of hydration, eating designed to replenish energy stores, and gaining and losing weight to enhance athletic performance.
Pre: HP 414
S

440 (3) Medical Aspects of Athletic Training

Advanced medical lectures on various athletic injuries, surgical procedures, illnesses, and conditions. Designed for the athletic training student
Pre: Consent and HP 341, 348
F, S

441 (3) Organization and Administration of Physical Education and Sport

Planning, organizing, controlling, resource allocation, communication, marketing, public relations, and legal aspects of physical education and sport.
F, S

442 (2) Therapeutic Modalities and Rehabilitation Techniques

Theory and application of medical equipment and rehabilitation exercises prescribed for treatment and management of athletic injuries. Designed for the athletic training student.
Pre: Consent and HP 341, 342
F

444 (2) Rehabilitation Techniques

Techniques to integrate the knowledge base of strengthening and conditioning in rehabilitation with application to specific injuries received in sports participation. Rehabilitation strategies are designed to utilize strength and conditioning principles and functional range of motion techniques, to prepare athletes for safe return to full activity.
Pre: HP 342 and concurrent HP 343
S

445 (3) Physical Education for Students with Mental and Emotional Disabilities

Theory, strategies and best practices for teaching physical education to students with mental retardation, emotional/behavioral disorders, autism, attention deficit disorder, and multiple disabilities accompanying mental retardation.
S

456 (2) Athletic Testing and Conditioning

Physiological base for testing process, interpretation of results and the conditioning process as used with the athlete. Methodologies of nutritional assessment and the integration of sound nutritional principles in an athletic environment.
Pre: HP 414
F

460 (3) Leadership and Management in Sport Organizations

This course emphasizes ethics in management, philosophy, motivation, leadership theory, problem solving and decision-making, and financial concerns in sport organizations.
F

462 (2) Sports Administration

Planning, organizing and conducting extra curricular sports activities in the secondary school setting.

F, S

465 (3) Legal Aspects of Physical Education and Sport

To provide legal and safety aspects in physical activity. Legal liability, civil rights, and contract law are emphasized.

F, S

466 (3) Graded Exercise Testing and Exercise Prescription

An introduction to basic graded exercise tests and exercise prescription commonly used in clinical as well as health/wellness appraisal settings.

Pre: HP 175, HP 414

F

467 (2) Wellness Program Development and Administration

This course will review the various physiological, psychological, and administrative components involved in a comprehensive health/fitness program.

Pre: HP 414 and 466 or equivalent

S

470 (3) Psychology of Coaching

To introduce interested students, professionals, and coaching licensure candidates to the psychological literature and latest techniques associated with coaching in an athletic setting.

Pre: PSYC 101 or equivalent

F, S

480 (3) Senior Seminar

Emphasis on research in sports medicine and athletic training.

Pre: Consent, HP 343, 422

S

481 (1-4) Practicum in Athletic Training

Practicum in athletic training is designed to provide the athletic training student with supervised clinical experience outside of the traditional athletic training setting, in affiliated high school and clinical settings.

Pre: Consent

F, S

482 (1) Coaching Practicum

Supervised experience in a public school varsity/junior varsity sport setting.

Pre: First aid and coaching theory and HP 340

F, S

483 (3) Cardiac Rehabilitation

A course designed to provide experience for persons seeking leadership roles in institutions housing programs of rehabilitative cardiovascular exercise and risk factor intervention.

Pre: HP 414 and 467 or equivalent

F, S

484 (1) Clinical Techniques in Athletic Training I

This course is designed to provide the athletic training student with supervised clinical instruction and supervised clinical experience outside of the traditional athletic training setting, in affiliated high school and clinical settings. It is also intended to provide the student with clinical instruction and continuing evaluation in athletic training techniques in accordance with accreditation guidelines.

Pre: HP 343, HP 442, HP 444, concurrent HP 456

F

485 (1) Clinical Techniques in Athletic Training II

This course is designed to provide the athletic training student with supervised clinical instruction in the athletic training laboratory. It is also intended to provide the student with clinical instruction and continuing evaluation in athletic training techniques.

Pre: HP 343, 442, 444, and 484

F

490 (1-4) Workshop

Content is variable and based on special topic.

F, S

491 (1-4) In-Service

Broad spectrum of foci available. Designed in consultation with requesting group.

F, S

492 (1-10) Internship: Corporate and Community Fitness

This internship is designed to provide the student with practical experience in the area of corporate and community fitness.

Pre: Completion of required core CCF courses: HP 348, HP 414, HP 436, HP 465, and HP 466.

F, S

493 (2) Internship in Developmental/Adapted Physical Education

Supervised hands-on experience teaching physical education to students with disabilities.

Pre: HP 411 and 445

F, S

496-01 (1-10) Internship

Designed as an intense practical experience in a selected area.

F, S

496-02 (1-10) Internship: Aquatics

Internship in aquatics leadership and administration for Aquatics emphasis.

Pre: Aquatic in-service and aquatic certifications (WSI and lifeguard training)

F, S

499 (1-5) Individual Study

Topics for reading and/or research in human performance to be arranged between student and faculty. This must be done prior to registration.

F, S

Physics

College of Science, Engineering & Technology

Department of Physics & Astronomy

141 Trafton Science Center N • 507-389-5743

Website: <http://www.mnsu.edu/dept/physast>

Chair: Louis A. Schwartzkopf

Edward R. Borchardt, Robert J. Herickhoff, Mark A. Pickar, Hai-Sheng Wu, Youwen Xu

The physics programs available to the student are designed to prepare the student for graduate work, for a career in industry or government, or for high school teaching. Degree requirements provide graduates with laboratory skills useful both in graduate work and in industry and business.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

PHYSICS BA

This major is intended to prepare the student for work in industry or business after the bachelor's degree rather than for graduate work.

Required General Education (9 cr):

MATH 121 Calculus I (4)

PHYS 221 General Physics I (5)

Recommended Support Courses (18 cr):

CHEM 201 General Chemistry I (5)

CHEM 202 General Chemistry II (5)

COMS 272 FORTRAN Programming (4)

ENG 271 Technical Communication (4)

Required for Major (46 cr):

EE 230 Circuit Analysis (3)

EE 240 Evaluation of Circuits (1)

MATH 122 Calculus II (4)

MATH 223 Calculus III (4)

MATH 321 Ordinary Differential Equations (4)

PHYS 222 General Physics II (5)

PHYS 435 Modern Physics I (3)

PHYS 436 Modern Physics II (3)

PHYS 441 Mechanics (4)

PHYS 447 Electricity and Magnetism I (3)

PHYS 457 Optics (3)

PHYS 461 Quantum Mechanics (4)

PHYS 465 Computer Applications in Physics (3)

PHYS 475 Advanced Laboratory (2)

Required Electives (3 credits):

Choose one of the following:

PHYS 453 Solid State Physics (3)

PHYS 473 Statistical Physics (3)

Other Requirements:

Modern Language (8)

Required Minor: None.

PHYSICS BS

Students interested in physics preparation leading to professional opportunities or graduate study are encouraged to select this major.

Required General Education (9 cr):

MATH 121 Calculus I (4)

PHYS 221 General Physics I (5)

Recommended Support Courses (22 cr):

CHEM 201 General Chemistry I (5)

CHEM 202 General Chemistry II (5)

COMS 272 FORTRAN Programming (4)

ENG 271 Technical Communication (4)

MATH 422 Partial Differential Equations (4)

Required for Major (55 cr):

EE 230 Circuit Analysis I (3)

EE 240 Evaluation of Circuits (1)

MATH 122 Calculus II (4)

MATH 223 Calculus III (4)

MATH 321 Ordinary Differential Equations (4)

PHYS 222 General Physics II (5)

PHYS 435 Modern Physics I (3)

PHYS 436 Modern Physics II (3)

PHYS 441 Mechanics (4)

PHYS 447 Electricity and Magnetism I (3)

PHYS 448 Electricity and Magnetism II (3)

PHYS 453 Solid State Physics (3)

PHYS 457 Optics (3)

PHYS 461 Quantum Mechanics (4)

PHYS 465 Computer Applications in Physics (3)

PHYS 473 Statistical Physics (3)

PHYS 475 Advanced Laboratory (2)

Required Minor: None.

PHYSICS MINOR

Required Support Courses (8 cr):

MATH 121 MATH 122

Required for Minor (14-16 cr):

Choose one of the following sequences of introductory physics courses:

PHYS 221 General Physics I (5) **AND**

PHYS 222 General Physics II (5)

or

PHYS 211 Principles of Physics I (4) **AND**

PHYS 212 Principles of Physics II (4)

Also Required:

PHYS 435 Modern Physics I (3)

PHYS 436 Modern Physics II (3)

Required Elective

Choose a minimum of one course from the following courses:

PHYS 441 PHYS 447 PHYS 467

PHYS	453	PHYS	457	PHYS	461
PHYS	465	PHYS	473	PHYS	475

PHYSICAL SCIENCE TEACHING BS

Requirements for programs in teaching the physical sciences can be found in the SCIENCE TEACHING section of this bulletin. There is a new physics teaching program which will take effect for students applying for licensure after September 2001.

Students intending to teach physics in states other than Minnesota are advised to elect either the BA or the BS Physics major and use elective credits to satisfy the professional education course requirements. For additional information confer with the science teaching advisor.

POLICIES/INFORMATION

GPA Policy. A minimum GPA of 2.0 in physics courses is required for graduation.

Refer to College information on page 30 regarding required advising for students on academic probation.

P/N Grading Policy. All physics courses except PHYS 105 and 480 are open to P/N grading; however, a student majoring or minoring in physics must elect the grade option for all of the required courses.

A minimum of 25 percent of the required credits in physics must be taken at MSU for both the major and the minor. Testing for credit by examination is available on a case-by-case basis as determined by the Physics and Astronomy Department chairperson.

Electives in physics may include AST 420, 421 and/or 440. Students may receive credit for only one course in each of the following pairs of courses: PHYS 211 and 221, 212 and 222. Four credits of 100-level courses may be allowed toward the B.S. (teaching) major, provided they are completed before PHYS 211 (221). PHYS 482 counts only toward the B. S. teaching degree.

B.S. Degree, Double Major. Students majoring in physics often find a second major in mathematics or astronomy to be an attractive option. If the B.S. degree in physics is combined with a B.S. degree in mathematics, then the following math courses are recommended: MATH 345, 321, 422, 425, and 447.

COURSE DESCRIPTIONS

100 (3) Cultural Physics

Self-paced format, open laboratory component. Includes the history, philosophy and growth of science from myth to the present. Included are readings on Galileo, Newton, the Industrial Revolution, and the modern scientific revolution. The relationship of science to art, archaeology, politics, weapons, medicine, technology, research and development, and the universe are discussed.

F, S

100-10 (3) Cultural Physics

Self-paced format, open laboratory component. Includes history, philosophy, growth of science from myth to present. Readings on Galileo, Newton, Industrial Revolution, modern scientific revolution included. Relationship of science to art, archaeology, politics, weapons, medicine, technology, research and development, and the universe are discussed. Biography of prominent woman physicist, Joan Freeman, included. This is available for cultural diversity credit.

F, S

101 (3) Introductory Physics

A one semester course which covers the basic principles of physics on a conceptual level and with a minimal amount of math. The course provides an understanding of natural processes and their applications. Topics generally include mechanics, simple machines, atomic structure, heat, light and sound. Lecture and laboratory components.

F, S

102 (3) Physics in the World Around Us

A one semester course which covers the basic principles of physics on a conceptual level. The course provides an understanding of natural processes and their applications to technology (or how things work!), including the greenhouse effect and nuclear power. Lecture only.

F, S

105 (3) Time, Atomic Clocks, and Relativity

Self-paced format. Includes readings on time; telling time from sundials to atomic clocks; Albert Einstein (a biography of the primary developer of the Theory of Relativity); and the Theory of Relativity. All the readings are written to be understood by non-scientists.

F, S

107 (3) Physics of Flight

A one semester course which covers the basic principles of physics and flying on a conceptual level. Minimal math will be required. The course provides an understanding of physics and how it applies to the technology of flight. Topics include lift and drag; power plants and propulsion; stability; control; aircraft performance and history; subsonic and supersonic aerodynamics. Intended for students interested in aviation. Lecture, discussion, guided experiences at the University and at the Mankato airport.

S

110 (3) Physics Our Audio Environment

A one semester course which covers the basic principles of physics as they apply to audio systems, their specifications, and our audio environment. Presented at a conceptual level. Lecture and laboratory.

V

211 (4) Principles of Physics I

General background in physical concepts for those who do not plan advanced study in physics or engineering. Topics include mechanics, fluids, heat and thermodynamics. Lecture and laboratory.

Pre: Either MATH 112 and 113 or MATH 115; either high school physics or PHYS 101; or consent

F, S

Physics

212 (4) Principles of Physics II

Includes waves and sound, electricity and magnetism, light and optics, and topics in modern physics. Lecture and laboratory.

Pre: PHYS 211 F, S

221 (5) General Physics I

Designed for science and engineering students. Covers elementary mechanics including dynamics of particles, work and energy, rotational motion, and gravitation. Also discusses oscillations and thermodynamics. Lecture and laboratory.

Pre: MATH 121, high school physics or PHYS 101
F, S

222 (5) General Physics II

Designed for science and engineering students. Covers waves and sound, electricity and magnetism, DC and AC circuits, electromagnetic waves, geometrical and wave optics, and modern physics. Lecture and laboratory.

Pre: PHYS 221 F, S

381 (1-3) Tutoring Physics

Supervised experience as an instructional assistant. Must demonstrate ability in basic physics.

Pre: Consent V

404 (2) Physics and Society

Relations between physics and other intellectual communities: e.g., philosophy, humanities, social sciences, the arts.

Pre: Consent V

417 (2) Biophysics

Thermodynamic relationships; energy flow in living systems; metabolic heat generation and loss; homeostasis; atomic and molecular bonds in nucleic acids, proteins, and carbohydrates; hormonal regulation; cell metabolism; negative feedback control in living systems; cancer therapy; imaging; disease states; new theories and paradigms.

Pre: PHYS 212 or 222 and MATH 122 V

435 (3) Modern Physics I

Special Theory of Relativity. Quantum nature of waves and particles: photons, de Broglie wavelength of matter and wave packet description of particles, Bohr model of hydrogen. Schrodinger wave equation in one-dimension: energy quantization, potential barriers, simple harmonic oscillator. One-electron atoms. X-ray and optical excitation of multielectron atoms. Lecture and laboratory.

Pre: PHYS 212 or 222 and MATH 122 S

436 (3) Modern Physics II

Topics include nuclear force, interactions of nuclear particles with matter, radioactive decay, nuclear structure, nuclear reactions, fission, fusion, elementary particles, and the quark model. Lecture and laboratory.

Pre: PHYS 435 F

441 (4) Mechanics

Rectilinear motion of a particle, general motion of a particle in three dimensions, Newtonian mechanics including harmonic oscillations, forced oscillations, central forces and orbital motion, collisions, noninertial reference systems, dynamics of a system particles, rigid body motion, Lagrangian and Hamiltonian mechanics, normal coordinates.

Pre: PHYS 212 or 222 and MATH 223 F

447 (3) Electricity and Magnetism I

Electrostatic fields, magnetostatic fields, steady currents, electromagnetic induction. Review of vector algebra.

Pre: PHYS 212 or 222 and MATH 223, 321, or 422
F

448 (3) Electricity and Magnetism II

Electromagnetic waves, propagation and radiation of waves, electrodynamics and relativity.

Pre: PHYS 447 S

453 (3) Solid State Physics

Atoms in crystals, wave in crystals, thermal vibrations of the crystal lattice, free electron model, band theory of solids, semiconductors and PN junctions, magnetism, and superconductivity.

Pre: PHYS 435 ALT-S

457 (3) Optics

Geometric optics, wave optics, properties of light and matter, optics of transformations, and quantum optics. Lecture and laboratory.

Pre: PHYS 212 or 222 and MATH 122 ALT-S

461 (4) Quantum Mechanics

A systematic development of foundations of quantum mechanics. Observables, operators, state functions, expectation values. Matrix formulation of eigenvalue problems. The hydrogen atom, electron spin, angular momentum, and perturbation theory.

Pre: PHYS 435, 441, and MATH 321 F

465 (3) Computer Applications in Physics

Numerical solutions of physics problems and computer simulations of physical systems. Lecture and laboratory.

Pre: Familiarity with some programming language, PHYS 212 or 222, MATH 122; or consent F

467 (3) Semiconductor Device Physics

Introduction to theory and techniques of integrated circuit fabrication processes. Oxidation, photolithography, etching, diffusion of impurities, ion implantation, epitaxy, metallization, material characterization techniques, and VLSI process integration, their design and simulation by SUPREM. Same as EE 475.

Pre: PHYS 435 and 453 F

468 (1) Semiconductor Device Physics Laboratory

Introduction to integrated circuit fabrication processes, device layout, mask design, and experiments related to wafer cleaning, etching, thermal oxidation, thermal diffusion, photolithography, and metallization. Fabrication of basic integrated circuit elements: pn-junctions,

resistors, MOS capacitors, simulation or the fabrication process by SUPREM. Same as EE 480.

F

473 (3) Statistical Physics

Statistical mechanics, kinetic theory, thermodynamics.
Pre: PHYS 212 or 222 and MATH 223 and 321

ALT-S

475 (2) Advanced Laboratory

Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories.

Pre: PHYS 436 or consent

S

480 (2) Laboratory Experiences in Physical Science

For prospective teachers in elementary schools. Topics include weather, weather forecasting and record keeping, simple machines, electricity, chemistry, sound, light, and others. May not count as a physics elective. Not available for P/N grading.

Pre: PHYS 101

F, S

482 (4) Teaching Methods and Materials in Physical Science

Current methods of teaching all physical sciences with emphasis on physics and chemistry. For students planning to teach at a middle school, secondary school, college, or a university.

Pre: CI 447, one year of chemistry and one year of physics, or consent

S

484 (2) Middle/Junior High Science Teaching

Current methods of teaching all sciences with emphasis on physical science, physics, chemistry, and earth science.

Pre: Majority of required courses completed, or consent

S

490 (2-4) Workshop

A short course devoted to a specific topic in physics. May be repeated for credit on each new topic.

V

491 (1-8) In-service

A course designed to upgrade the qualifications of persons on-the-job.

V

492 (1-3) Seminar

May be repeated for credit on each new topic.

Pre: Sr. standing

V

493 (1-6) Undergraduate Research

Pre: Consent

V

495 (1-3) Selected Topics

A course in an area of physics not regularly offered. Topic and credit assigned by department each time offered.

Pre: PHYS 435 and 436

V

497 (1-16) Internship

Provides a student with the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

Pre: Usually Sr. standing

V

499 (1-8) Individual Study

Special arrangements must be made with an appropriate faculty member of the department office. May be repeated for credit on each new topic.

Pre: Consent

V

Political Science

College of Social & Behavioral Sciences

Department of Political Science/Law Enforcement

109 Morris Hall • 507-389-2721

Website: <http://www.mnsu.edu/dept/psle/welcome.edu>

Chair: Doran Hunter

Abdalla Battah, Susan Burum, Carl Ekstrom, Doran Hunter, Tomasz Ingnot, Joseph Kunkel, John Parham, Carolyn Shrewsbury, Fred Slocum, Jackie Viececi

Political science is the systematic study of politics, power relationships and government. Political science is in one sense an ancient discipline: Aristotle called it the "queen of the sciences." Yet the focus for much of today's political science was developed in the past sixty years. Scientific observations have now joined older philosophical traditions. Modern political science examines politics in the United States, countries and regions of the world and in international relations. It explains how and why public decisions are made. Political science majors can qualify for a wide variety of careers in public and private sector organizations, including business, law, government, journalism, international organizations and finance, political campaigns, interest groups and secondary and college teaching. The study of public affairs and government is essential for developing effective citizenship. This training prepares one for professional or volunteer involvement in community organizations, issue movements, electoral politics, and other activities in the public arena.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

POLITICAL SCIENCE BA, BS

Required for Major (Core, 3 cr):

POL 221 Introduction to Political Analysis (3)

Required for Major (Options, 30 cr):

Complete at least 15 credits in one of the four areas.

Subareas: Complete at least one course from five of the eight subareas. (15 credits)

AREA A: Theory and Methods

Subarea 1: Theory

POL 311 Ancient and Medieval Political Philosophy (3)

POL 312 Modern Political Philosophy (3)

POL 313 Contemporary Political Philosophy (3)

POL 410 Topics in Political Philosophy (1-4)

Political Science

- POL 414 Early United States Political Thought (3)
POL 415 Recent United States Political Thought (3)
POL 416 Nonwestern Political Philosophy (3)
Subarea 2: Methods
POL 321 Public Policy Analysis and Evaluation (3)
POL 420 Topics in Political Methods (1-4)
POL 421 Research Methods (3)
POL 423 Public Opinion and Polling Methods (3)

AREA B: International Relations and Comparative Politics

Subarea 3: International Relations

- POL 231 World Politics (3)
POL 430 Topics in International Relations (1-4)
POL 431 International Relations (3)
POL 432 International Law (3)
POL 433 International Organization (3)
POL 434 U.S. Foreign Policy (3)

Subarea 4: Comparative Politics

- POL 241 Introduction to Comparative Politics (3)
POL 342 Asia Pacific Rim: Politics and Policy (3)
POL 435 Capitalism, Nationalism, & Democracy (3)
POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 440 Topics in Comparative Politics (1-4)
POL 441 Russia and Neighboring States Politics (3)
POL 442 South Asia: Politics and Policy (3)
POL 443 Middle East Politics (3)
POL 444 Latin America Politics (3)
POL 446 African Politics (3)
POL 447 Europe: Politics and Policy (3)
POL 448 Political Development and Change (3)
POL 449 Comparative Criminal Justice System (3)

AREA C: Public Law, Policy and Administration

Subarea 5: Public Law

- POL 450 Topics in Public Law (1-4)
POL 451 Administrative Law (3)
POL 452 Jurisprudence (3)
POL 453 Constitutional Law (3)
POL 454 Civil Liberties (3)

Subarea 6: Policy and Administration

- POL 260 Introduction to Public Administration (3)
POL 361 Public Budgeting (3)
POL 460 Topics in Public Policy/ Administration (1-4)
POL 461 Environmental Politics (3)
POL 462 Collective Bargaining: Public Sector (3)
POL 463 Public Personnel Administration (3)
POL 464 Aging: Policy Issues (3)

AREA D: Institutions, Process, Behavior and Participation

Subarea 7: Institutions and Process

- POL 371 State and Local Government (3)
POL 470 Topics in Institutions, Process (1-4)
POL 472 Urban Government (3)
POL 473 The Legislative Process (3)

- POL 474 The Executive Process (3)
POL 475 The Judicial Process (3)
Subarea 8: Behavior and Participation
POL 381 Citizenship (1-4)
POL 480 Topics in Participation and Behavior (1-4)
POL 482 Campaigns and Elections (3)
POL 483 Political Parties (3)
POL 484 Women and Politics (3)
POL 485 Terrorism and Political Violence (3)
POL 486 Racial and Ethnic Politics (3)
POL 487 Political Psychology (3)

With the approval of the advisor these courses may be used to satisfy the area and subarea requirements.

- POL 391 Colloquium (1-4)
POL 490 Workshop (1-6)
POL 491 Internship (1-12)
POL 492 Individual Study (1-5)
POL 493 Individual Study: Social Studies Teaching (1-3)

Required for Major (Electives, 9 cr):

POL xxx POL xxx POL xxx

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Total Credits Required for Major (42 cr)

Required Minor: Yes. Any.

POLITICAL SCIENCE MINOR

Required for Minor (18 cr):

Choose at least 18 credits, 12 credits at the 300-400 level.

POL Any Level	POL Any Level
POL 300-400	POL 300-400
POL 300-400	POL 300-400

POLICIES/INFORMATION

Students must consult with the program advisor who will approve and file the program of courses selected and approve changes in the program.

GPA Policy. Students must maintain an overall GPA of 2.0 in the Political Science major.

Pass/No Credit Policy. With the exception of internship credits, which must be taken on a P/N basis, no more than one-fourth of the credits in a political science major or minor may be taken as P/N. Internship credits will not be counted as part of the one-fourth limitation, but will be subtracted from the total hours required for the major or minor prior to the computation of the one-fourth limitation.

COURSE DESCRIPTIONS

100 (3) Introduction to Politics

Study of the nature of politics and government and their influence on society and human behavior.

F, S

101 (3) Introduction to Public Life

Combine study with action to remake yourself into a democratic citizen. Consider your beliefs, debate issues and learn political skills. Integrate these in practical public work on a real issue or project in a student group or community organization.

102 (3) Politics of Diversity in Film

Use films and readings to understand the political implications of inequality and group identity in the US. Films helps students participate vicariously in experience of oppressed groups, reflect on their own attitudes and behavior regarding diversity, racism and bigotry.

103 (3) Thinking About Politics

This course is designed to help you to read, think and write critically about important concepts and issues in the study and practice of politics. It is intended to acquaint you with some of the great debates in political thought, increase your understanding of how political systems work and help you to develop your research and writing skills.

104 (3) Understanding the US Constitution

Rejoin the political debates of 1787 to understand the US Constitution. Compare the founding document with amendments, later usage and Supreme Court interpretations. Examine controversies over the meaning of the Constitution using the methods of political philosophers, historians, and legal scholars.

105 (2) Politics in Cyberspace

This course deals with the impact of information technology on politics, and develops the skills necessary to be an effective cyber citizen. It also examines political issues surrounding electronic information technology.

106 (3) Politics in the World Community

This introductory course examines key concepts and issues in contemporary world politics. It is a survey course covering topics including political culture, the political impact of economic globalization, the changing role of the state, nationality and ethnic identity, and issues of oppression and empowerment.

107 (3) Freedom and Authority

This course explores notions of freedom and authority across cultures and through time. By using political writings, literary works and film, the course examines issues including the nature and limits of legitimate authority, the nature and sources of freedom, limits to freedom, and the role of personal choice and conscience.

111 (3) United States Government

Become informed enough to play your part in governing the United States. Start by learning about the Constitution, our rights and freedoms, how the national government works and the opportunities and challenges of citizen influence. Political science methods, and the challenges of citizenship are emphasized.

201 (1-3) Issues in Politics

Various topics of current interest. Topics covered in the past include political corruption, contemporary ideologies, revolution, understanding the United States Constitution, political films. Course may be taken more than once for credit.

F, S

221 (3) Introduction to Political Analysis

Elementary analytical concepts and basic techniques for understanding and doing research in political science.

F, S

231 (3) World Politics

An introduction to the dynamics of interactions among sovereign states and other global actors.

F, S

241 (3) Introduction to Comparative Politics

This course is designed to acquaint undergraduates with the data and methods of comparative politics. Approaches to the study of comparative politics may include country studies, regional studies, global surveys focusing on specific policy areas or other issues, and general comparative theory.

F, S

260 (3) Introduction to Public Administration

A survey of the topics relative to administration in the public sector, including the history of public administration, organization theory, leadership and management, human resources management, budgeting and finance, policy analysis, program evaluation, and government regulation.

F, S

311 (3) Ancient and Medieval Political Philosophy

A survey of Western political philosophy from Plato through the Conciliar Movement. An examination of the origin and development of basic concepts defining the relationship between the person and the state: human nature, community, authority, power, legitimacy, obligation, accountability, government, liberty and personal responsibility.

F

312 (3) Modern Political Philosophy

A survey of Western political philosophy from Machiavelli through Edmund Burke. An examination of the development of ideas about government from the 15th Century through the 18th Century. Emphasis is placed on origins of political authority, purposes for which government exists, relationships between government authority and individual rights, civic virtue, republicanism and democracy.

S

313 (3) Contemporary Political Philosophy

A survey of Western political philosophy from Hegel through the post-modernist writers. An examination of 19th and 20th Century political philosophers emphasizing German transcendentalism, utilitarianism, economic determinism, state socialism, neoliberalism, communitarianism and post-modernism.

V

Political Science

321 (3) Public Policy Analysis and Evaluation

Traces the history of public policy analysis and program evaluation and provides rudimentary backgrounds on substantive policy areas, e.g., environmental policy; models to analyze policies; and means to evaluate policies and programs. V

342 (3) Asia Pacific Rim: Politics and Policy

Survey of the political processes, governmental institutions and policies of the countries of the Asian Pacific Rim, with special emphasis on China, Japan and the newly industrializing states of Southeast Asia. V

361 (3) Public Budgeting

An overview of the budgetary and fiscal processes of public budgeting, including the politics surrounding public budgeting and fiscal policy decisions. V

371 (3) State and Local Government

Institutions, processes, intergovernmental relations, and politics of U.S. state and local governments. F, S

381 (1-4) Citizenship

Students integrate learning from readings on democratic theory and practice with real organizing activity. Each week students are involved with one period of semester study and on period of service as citizenship “coaches” at a middle school in our Public Achievement program. Students registering fall semester should also register spring semester. Permission required. F, S

391 (1-4) Colloquium

Topics will vary. Typically each session of this colloquium is lead by a different speaker. The emphasis is upon the exchange of views. A single instructor typically will coordinate the colloquium and be responsible for the administrative aspects of the course. Pre: Consent of advisor V

410 (1-4) Topics in Political Philosophy

This course explores topics in political philosophy beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with change of topic. V

414 (3) Early United States Political Thought

Political thought in the United States from the colonial period to the Civil War. Puritans, American revolution, republicanism, debate over United States Constitution, Jacksonian Democracy, Thoreau, reformers and religious and secular utopias, womens’ rights, states’ rights, abolitionism, proslavery. V

415 (3) Recent United States Political Thought

Political thought in United States from reconstruction to present. Controversies over industrial capitalism: Social Darwinism, utopian socialism, Populism, Social-

ism, Progressivism. Women’s Rights, suffrage movement and contemporary feminism; African American political thought: liberalism; conservatism. V

416 (3) Nonwestern Political Philosophy

This course introduces students to the political philosophies of major thinkers from Asia, Africa and the Middle East. The course is designed to enhance students’ analytical and writing skills. V

420 (1-4) Topics in Political Methods

This course explores topics in political science research methods beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. V

421 (3) Research Methods

Research methods commonly used in political science and public administration. Emphasis on such topics as the scientific approach, research design, qualitative research and measurement issues. Pre: POL 221 or consent V

423 (3) Public Opinion and Polling Methods

This course examines public opinion in American politics. Topics include the definition, nature and consequences of public opinion; political socialization; public opinion on selected issues; intergroup differences in public opinion, and public opinion polling methods.

430 (1-4) Topics in International Relations

This course explores topics in international relations beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic. V

431 (3) International Relations

An advanced theoretical survey of the dynamics of politics and political change at the global level. S

432 (3) International Law

A study of the legal norms and institutions which influence international and transnational relations. V

433 (3) International Organization

Study of the function and process of the United Nations and other international organizations. S

434 (3) United States Foreign Policy

This course is a general overview of US foreign policy institutions, processes, and politics. US Foreign Policy is examined in historical, global and domestic contexts. V

435 (3) Capitalism, Nationalism and Democracy

This course explores the interaction of the three com-

plex contemporary political and socioeconomic phenomena: the continuing expansion of global capitalism, the rise of nationalism(s), and the new wave of democratization around the world. The following topics are covered and discussed in class, with references to specific country and regional examples, (1) the impact of international economic institutions and democratization, (2) new forms of political participation in emerging democracies, (3) cultural and ethnic determinants of democratization, (4) problems of economic inequality in new democracies, (5) social and gender issues of democratic transitions, and (6) the relationship between democratic expansion and world peace. Course format will be lecture, discussion, student presentations and occasional films.

439 (3) Comparative Social Policy: The Welfare State in Europe and the Americas

This course offers a cross-national perspective on the politics of social policy and the welfare state in industrialized parts of the world, including North and South America and different regions of Europe. It also explores distinct national patterns of public policy solutions to the common contemporary problems of social security, poverty, and health care by paying close attention to both domestic factors and the forces of globalization that work to constrain government decisions. This multidimensional approach is designed to enable students to better understand how politics works in different ways to produce collective or social choices.

440 (1-4) Topic in Comparative Politics

This course explores topics in comparative politics beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

441 (3) Russia and Neighboring States Politics

This course focuses on the Russian political system in relation to domestic social and economic environments and also on the role of Russia as a global actor. It examines the postcommunist transformation in Russia and other former Soviet republics.

V

442 (3) South Asia: Politics and Policy

This course introduces students to the governments and politics of the South Asian countries. The historical and cultural context of politics are explored, as well as contemporary issues.

V

443 (3) Middle East Politics

This class explores the dynamics that determine politics and effect change in the region. Using a comparative perspective for the major countries in the region, we examine such issues as Islam, nationalism, resources, regional conflicts, impact of the international system, and political development.

F

444 (3) Latin America Politics

This course includes a detailed analysis of select countries and theoretical concerns in Latin American studies. Its general goal is to provide students with the knowledge of Latin American politics and societies in both regional and comparative contexts.

V

446 (3) African Politics

This course is designed to acquaint undergraduate and graduate students with key concepts and issues in the study of African politics. The historical and cultural context of politics is explored, as well as topics of current importance in the field.

S

447 (3) Europe: Politics and Policy

This course discusses government institutions, political developments, and policymaking structures of contemporary Europe, including the former communist countries of East/Central Europe and the Balkans. It will also cover the ongoing process of European integration (European Union) and democratization of the former Soviet bloc countries. Some of the topics covered will include: elections, party systems, federalism and devolution, ethnic and minority policy, social policy, economic reforms, gender and politics, and cross-Atlantic relations with the US.

448 (3) Political Development and Change

This course introduces students to key issues and concepts in the study of political and economic development. Both theoretical approaches and empirical data are presented. The course is also designed to enhance students' analytical and research skills.

F

449 (3) Comparative Criminal Justice System

A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as LAWE 434

V

450 (1-4) Topics in Public Law

This course explores topics in public law beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

451 (3) Administrative Law

Legal procedures by which state and federal administrative agencies exercise legislative, judicial and executive powers. Emphasis is placed on the constitutional position of administrative agencies, the rule making process, the power of agencies to decide rights and obligations concerning individual cases, and judicial control of administrative action.

F

452 (3) Jurisprudence

Philosophy and sources of law. Schools of legal philosophy and types of legal thinking. Emphasis is placed on Classical Natural Law, Analytical Legal Positivism, Legal Realism and Critical Legal Studies.

Same as LAWE 435

F

453 (3) Constitutional Law

Review of selected U.S. Supreme Court decisions relating to the powers of the President, Congress and the Judiciary, as well as the division of power between the states and the federal government. Focus is on case briefing, underlying rationales, and the development of individual analytical abilities.

V

454 (3) Civil Liberties

Review of selected U.S. Supreme Court decisions interpreting areas such as substantive due process, abortion, speech, press, religion, and equal protection. Focus is on the rationale which underlies decisions and the development of individual analytical abilities. Same as LAWE 436

V

460 (1-4) Topics in Public Policy/Administration

This course explores topics in public policy and public administration beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

461 (3) Environmental Politics

A study of the natural environment as a public policy issue in the political process of the United States, with some attention given to comparative and international perspectives.

V

462 (3) Collective Bargaining: Public Sector

A broadly based introduction to the issues, processes, and techniques of public sector labor relations.

V

463 (3) Public Personnel Administration

The development of public personnel management in federal, state and local governments; strategic planning and policy making, position management, staffing, performance management, workplace relations.

F

464 (3) Aging: Policy Issues

The public policy process and issues as related to the generations, particularly to older Americans. Focuses on the policy context as well as the specific policies and programs.

S

470 (1-4) Topics in Institutions, Process

This course explores topics in political institutions and process beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

472 (3) Urban Government

Politics of cities and metropolitan areas. Impact of race, class, gender, immigrant status issues. Intergovernmental relations. How citizens can influence urban politics.

V

473 (3) The Legislative Process

United States Congress and state legislatures, with some cross-national comparisons. Legislative structure, powers; districting, elections, representation, constituency relations; committee system, parties, law-making process, rules and procedure, decision-making, relations with executives and courts. Reforms.

S

474 (3) The Executive Process

Examination of executive politics in United States at a federal and state level, with some cross-national comparisons. United States Presidency and executive branch, governors and state executive branches, mayors, and other local executives.

V

475 (3) The Judicial Process

An examination of the structure, jurisdiction and processes of federal and state courts. Also studied are judicial decision-making, the selection of judges and justices. Same as LAWE 437.

V

480 (1-4) Topics in Participation and Behavior

This course explores topics in political participation and behavior beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

V

482 (3) Campaigns and Elections

Elections in the United States at the federal, state and local levels. Election law, history, factors affecting elections, voting behavior, campaign finance, role of parties and groups, campaign strategy and tactics. Analysis of contemporary elections.

F

483 (3) Political Parties

Parties at United States, state, local level. Cross-national comparisons. Decline and revival of parties. What parties do. Is two party systems best? Are third parties the answer? Party organization. Voting behavior. Legislative, executive parties. Minnesota focus.

S

484 (3) Women and Politics

Politics impact on women: women's impact on politics and governance; primary focus on United States but some comparative considerations.

V

485 (3) Terrorism and Political Violence

History, philosophy, techniques and countermeasures to terroristic and low intensity threats to public order. Both domestic and international terror. The blurring of the lines between low intensity conflict/terrorism and multinational high intensity crime. Same as LAWE 438

V

Pre-Professional Programs

486 (3) Racial and Ethnic Politics

Racial and ethnic minorities in U.S. politics. Public opinion on racial issues, minority representation, race (partisanship and voting behavior), and racial issues (affirmative action, school busing, immigration).

487 (3) Political Psychology

Applications of psychological concepts to politics. Intergroup relations, stereotyping, political authoritarianism, presidential character and psychology, foreign policy decision-making, political tolerance, and mass violence and genocide.

490 (1-6) Workshop

Selected topics. May be repeated with change of topic.

V

491 (1-12) Internship

Field placement with a governmental agency or related organization. Provides a learning experience in which the student can integrate and apply knowledge and theory derived from curriculum. P/N only.

V

492 (1-5) Individual Study

Advanced study and research on topics not currently available in existing courses. May be repeated with a change of topic. Requires advisor and instructor approval of topic.

V

493 (3) Individual Study: Social Studies Teaching

This course provides individualized instruction for students preparing for social studies teaching with a concentration in political science. Students carry out research projects related to curriculum development and the teaching of social studies.

V

Pre-Professional Programs

The purpose of pre-professional programs is to provide students with the intellectual and academic backgrounds they will need before continuing their educations in degrees not offered at Minnesota State University, Mankato. Acceptance to professional educational institutions is contingent upon academic performance, so students enrolling in pre-professional programs should be highly motivated and realize they are expected to maintain standards of excellence. Advisors play an important role in guiding the students enrolled in such programs so students are urged to contact the advisor before enrolling.

PRE-AGRICULTURE

College of Science, Engineering & Technology

Advisors: Alison Mahoney, Ph.D.

Specific course requirements may vary based on the university and program area within agriculture. Students should identify their transfer institution early, and consult with advisors at that university.

Required for Program (56 cr):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)

BIOL	201	Ecology and Human Society (3)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	321	Organic Chemistry II (2)
ENG	101	Composition (4)
ENG	271	Technical Communication (4)
ENG	285	Practical Grammar (2)
MATH	112	College Algebra (4) <i>and</i>
MATH	113	Trigonometry (3) <i>or</i>
MATH	115	Precalculus Mathematics (4)
PHYS	211	Principles of Physics I (4)
PSYC	101	Psychology (4)
SPEE	102	Public Speaking (3)

PRE-CHIROPRACTIC

College of Science, Engineering & Technology

Advisor: Jim Rife

340 Trafton North • 507-389-5274

Required General Education (26 credits):

ENG	101	Composition (4)
PSYC	101	Psychology (4)
SPEE	102	Public Speaking (3)

An additional 15 elective credits from Humanities or Social Sciences

Recommended General Education (3 credits):

HLTH	321	Medical Terminology (3)
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Recommended Support Courses (7 credits):

MATH	112	College Algebra (4)*
MATH	113	Trigonometry (3)*

Required for Major (Core, 34 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	321	Organic Chemistry II (2)
CHEM	331	Organic Chemistry II Lab (1)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Required Electives (20 credits):

A minimum of 90 hours are required to complete this program. The student should consult with the pre-chiropractic advisor in selecting the remaining 20 elective credits.

*There are no requirements for mathematics in this program; however, the student needs adequate training in mathematics to take the courses in chemistry and physics.

This program meets the requirements for admission to the Northwestern College of Chiropractic in Bloomington Minn. Other colleges may have different requirements. Students in the pre-chiropractic program should regularly consult with the pre-chiropractic advisor.

PRE-DENTAL

College of Science, Engineering & Technology

Advisory Team: M. Bentley, Ph.D., J. Thoenke, Ph.D., E. Williams, Ph.D.

Pre-Professional Programs

Specific course requirements for admission to dental school vary somewhat among the different dental schools in the United States. To be eligible for admission at a particular dental school, the student must fulfill the requirements of that school.

* The following list of courses is consistent with the courses required for admission to the University of Minnesota Dental School.

English: ENG 101, SPEE 100 (students are encouraged to take ENG 271 and PHIL 222 as electives)

Biology: BIOL 105, 106 (students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, 220, 230, 270, 316, 320)

Physics: PHYS 211 (4), 212 (4) or PHYS 221 (5), 222 (5)

Chemistry: CHEM 201 (5), 202 (5), 320 (5), 321 (2), 331 (1), CHEM 360 (3), (students are encouraged to take CHEM 305 as an elective).

Mathematics: MATH 112

Psychology: PSYC 101

Although a minimum of 87 semester credits are required for admission to the D.D.S. program at the University of Minnesota, most students enrolled have completed four or more years of college. To receive a baccalaureate degree from Minnesota State University, Mankato, the student must complete the requirements for general education, a major and possibly a minor. Dental schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in dentistry. Students should pursue majors and minors in subjects of their own choosing, as dental schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of dental school is derived primarily from the disciplines of biology, chemistry, physics, mathematics and psychology. Sciences must include both lecture and laboratory instruction. Courses in biology, chemistry, and physics may be considered outdated by dental schools if taken more than five years before the time of application. Elective courses should be selected to achieve as broad and liberal an education as possible. Students who plan to enter dental school must take the Dental Admission Test (DAT). Typically, students begin the application process to dental school during the summer following their junior year. For their application to be complete, they must report their DAT scores.

PRE-ENGINEERING

College of Science, Engineering & Technology

Advisor: Louis Schwartzkopf, Ph.D.

Choose one of the following options:

MSU OPTION

This option is open to students who will be entering the Engineering program at Minnesota State University, Mankato.

Required General Education (17 credits):

MATH	121	Calculus I (4)
ENG	101	Composition (4)
PHYS	221	General Physics I (5)
CHEM	201	General Chemistry I (5)

Required Support Courses (11 credits):

MATH	122	Calculus II (4)
SPEE	240	Legal Communication (3)
COMS	171	Introduction to C++ Programming (2)
EE	101	Introduction to Engineering I (1)
ME	103	Introduction to Engineering III (1)

TRANSFER OPTION

This option is designed for students who plan to transfer from Minnesota State University, Mankato, after two years. Contact the pre-engineering advisor to obtain course listings for specific engineering fields at the University of Minnesota or other universities.

Required General Education (17 credits):

MATH	121	Calculus I (4)
ENG	101	Composition (3)
PHYS	221	General Physics I (5)
CHEM	201	General Chemistry I (5)

Required Support Courses (35 credits):

MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	247	Linear Algebra I (4)
MATH	321	Ordinary Differential Equations (4)
ENG	271	Technical Communication (4)
SPEE	240	Communicating Technically (3)
PHYS	222	General Physics II (5)
CHEM	202	General Chemistry II (5)
COMS	171	Introduction to C++ Programming (2)

Required Core (8 credits):

EE	101	Introduction to Engineering I (1)
ME	103	Introduction to Engineering III (1)
ME	212	Statics (3)
ME	214	Dynamics (3)

PRE-FORESTRY

College of Science, Engineering & Technology

Advisors: Alison Mahoney, Ph.D.

First Year

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
ENG	101	Composition (4)
MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)

Second Year

CHEM 320	Organic Chemistry I (5)
CHEM 321	Organic Chemistry II (2)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4)
PSYC 101	Psychology (4)
SPEE 102	Public Speaking (3)

PRE-LAW

Advisor: Doran Hunter, Ph.D.

A student's grade-point average and score on the Law School Admission Test are the primary factors on which law schools base their admission decisions. Law schools generally do not require a particular major field or any particular prescribed courses as prerequisites for admission. Most law schools merely require a bachelor's degree.

Students should select a major field which interests them and which will provide them with a basis for an alternative vocational choice should their plans to finish law school not be realized. Even though no particular pre-law major is best for all students, there must be substantial academic content in the pre-law education. In addition, students should supplement their major field by taking intellectually demanding courses that will develop broad educational foundations and mental skills required of the successful law student or lawyer the ability to analyze, reason, read carefully, think abstractly, and speak and write precisely. Elective courses might include accounting, statistics, corporate finance, constitutional law and history, jurisprudence, logic, political theory, and at least one course in English composition beyond the freshman level.

Students should contact the pre-law advisor for more detailed assistance on the manner in which their particular needs and interests may best be shaped into a suitable pre-law program.

The Pre-Law Association, a student-sponsored organization, is available for the purpose of encouraging communication and interaction among pre-law students on campus.

PRE-MEDICINE

College of Science, Engineering & Technology

Advisor Team: M. Bentley, Ph.D., J. Thoenke, Ph.D., E. Williams, Ph.D.

Specific course requirements for admission to medical school vary somewhat among the different medical schools in the United States. To be eligible for admission at a particular medical school, the student must fulfill the requirements of that school. The University of Minnesota requirements and the Mankato State course offering are as follows:

General Biology or Zoology with laboratory (7 cr minimum):

BIOL 105(4) and BIOL 106 (4)

Students are encouraged to take additional electives from

the following list to enhance their knowledge in basic biology:

BIOL 211, 220, 230, 270, 316, 320

Chemistry with laboratory (general, inorganic and organic chemistry, 14 cr minimum):

General chemistry: CHEM 201 (5), CHEM 202 (5)

Organic chemistry: CHEM 320 (5), CHEM 321 (2), CHEM 331 (1)

Analytical chemistry: CHEM 305 (4)

Students are encouraged to take CHEM 360 as an elective.

Physics with laboratory (8 cr minimum):

PHYS 211 (4) and PHYS 212 (4)

or

PHYS 221 (5) and PHYS 222 (5)

Mathematics (introductory course in calculus or upper level statistics):

MATH 121 (4) or MATH 354 (3)

English or literature (one year):

ENG 101 (4)

Students are encouraged to take ENG 271 as an elective.

Social and Behavior Sciences and Humanities (18 cr minimum):

Students are encouraged to include PSYC 101 and PHIL 222 among these electives.

The completion of a baccalaureate degree is required for admittance to a medical school in most cases. Medical schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in medicine. Students should pursue majors in subjects of their own choosing, as medical schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics, etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of medical science is derived primarily from the disciplines of biology, chemistry, physics, mathematics, and psychology. Students who plan to enter medical school must take the Medical College Admission Test (MCAT). Typically, students begin the application process to medical school during the summer following their junior year. For their application to be complete, they must report their MCAT scores. MCATs are offered during April and August. If you have questions, please contact your pre-medicine advisor.

PRE-MORTUARY SCIENCE

College of Science, Engineering & Technology

Advisor: Shannon Long, Ph.D.

Required for Program:

ACCT 110	Accounting for Non-Business Majors (3)
ART 160	Introduction to Visual Culture (3)
BIOL 105	General Biology I (4)

Pre-Professional Programs

BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)
CHEM	105	Introduction to Chemistry (3)
CHEM	111	Chemistry of Life Processes (5)
COMS	100	Introduction to Computer Science (4)
ECON	202	Principles of Microeconomics (3)
ENG	101	Composition (4)
HIST	150	Historical Perspectives (3)
MATH	112	College Algebra (4)
MUS	120	Introduction to Music (3)
PSYC	101	Psychology (4)
SOC	101	Introduction to Sociology (3)
SPEE	102	Public Speaking (3)
Elective		Arts, Humanities, or Social/Behavioral Elective (4)

For the University of Minnesota, the pre-mortuary program should be at least 60 credits. There are three other programs in the United States that offer a BS program: Central State University (Oklahoma), Cincinnati College of Mortuary Science (Ohio), and Wayne State University (Michigan). Students are advised to contact the college that they plan to attend early in the freshman year.

PRE-OCCUPATIONAL THERAPY

Advisor: Mark Schuck

This pre-professional program encompasses the prerequisite courses needed to apply to most professional occupational therapy programs. These programs may accept students after their sophomore or junior year, or after obtaining a bachelor's degree in any area as long as all the listed prerequisite courses are completed.

Recommended Courses:

ENG	101	Composition (4)
SPEE	100	Fundamentals of Speech Communication (3)
BIOL	100	Our Natural World (4)
BIOL	220	Human Anatomy (4)
BIOL	230	Human Physiology (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
MATH	112	College Algebra (4)
STAT	154	Elementary Statistics (3)
HLTH	101	Health and the Environment (3)
HLTH	210	First Aid and CPR (3)
HLTH	321	Medical Terminology (3)
SOC	101	Introduction to Sociology (3)
TECH	180	Technology and You (3)
PSYC	101	Psychology (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (3)
ART	230	Fibers (3)
ART	231	Multi-Media Art Exploration (3)
ART	330	Fibers (3)

Choose one of the following:

CHEM	100	Chemistry in Society (4)
CHEM	105	Introduction to Chemistry (3)

PRE-OPTOMETRY

The following prerequisite courses satisfy most colleges and schools of optometry. By the end of their first year at Minnesota State University, Mankato, however, students should check the specific requirements of the college or school of optometry they plan to attend to ascertain exactly what is required for admission. A third year or a bachelor's degree may be needed to be admitted to some colleges.

First Year

BIOL	220	Human Anatomy (4)
BIOL	230	Human Physiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
ENG	101	Composition (4)
MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)
MATH	121	Calculus I (4)

Second Year

BIOL	270	Microbiology (4)
CHEM	320	Organic Chemistry I (5)
CHEM	360	Principles of Biochemistry (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
PSYC	101	Psychology (4)
STAT	154	Elementary Statistics (3)
ENG	271	Technical Communication (4)

Third Year

ECON	100	An Introduction to the U.S. Economy (3)
HIST	150	Any topic (3)
POL	100	Introduction to Politics (3)

PRE-OSTEOPATHIC MEDICINE AND SURGERY

College of Science, Engineering & Technology

Advisor: Jim Rife

Required General Education (7 credits):

ENG	101	Composition (4)
SPEE	102	Public Speaking (3)

Recommended Support Courses (7 credits):*

MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)

Required for Major (34 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	321	Organic Chemistry II (2)
CHEM	331	Organic Chemistry II Lab (1)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Required Electives (42 credits):

Electives to yield a total of 90 semester credits are required.

* There are no requirements for MATH in this program; however, the student needs adequate training in math to take courses in chemistry and physics. Colleges of osteopathic medicine and surgery require a minimum of 90 semester hours for admissions. Most students admitted to a college of osteopathic medicine and surgery have completed undergraduate degrees. A few exceptional students are admitted after three years as an undergraduate. Students interested in osteopathic medicine will find that majoring in Human Biology (B.S.), Physiology (B.S.) or Biochemistry (B.A.) will provide them with adequate undergraduate training. The Medical College Admissions Test is required for all applicants to colleges of osteopathic medicine and surgery. Students in this program should regularly consult with the advisor.

PRE-PHARMACY

College of Science, Engineering & Technology
Advisor: Shannon Long, Ph.D.

Required for Program:

BIOL	105	General Biology I (4)
BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	321	Organic Chemistry II (2)
CHEM	331	Organic Chemistry II Lab (1)
ECON	202	Principles of Microeconomics (3)
ENG	101	Composition (4)
ENG	xxx	Literature Course Elective (3)
HIST	xxx	History elective (3)
HUM	xxx	Humanities elective (3)
MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
PSYC	101	Psychology (4)
SPEE	102	Public Speaking (3)

Sixty to 64 credits of coursework including the above are typically required by pharmacy programs. Substitutions for both science and non-science courses should be chosen after studying the requirements of particular pharmacy schools.

PRE-PHYSICAL THERAPY

Advisor: Mark Schuck

The pre-Physical Therapy curriculum is primarily a science-oriented curriculum which would meet the requirements for admission to most schools of physical therapy. Most physical therapy schools now require a bachelor's degree prior to application for admission, although a few still accept students following two or three years of college preparation.

Recommended Courses:

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	220	Human Anatomy (4)
BIOL	230	Human Physiology (4)

PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)
STAT	154	Elementary Statistics (3)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
SPEE	100	Fundamentals of Speech Communication (3)
HP	265	Orientation to Occupational and Physical Therapy (1)
ENG	101	Composition (4)
PSYC	101	Psychology (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (3)
HLTH	101	Health and the Environment (3)
HLTH	210	First Aid and CPR (3)
HLTH	321	Medical Terminology (3)
COMS	100	Introduction to Computer Science (4)

PRE-PODIATRIC MEDICINE AND SURGERY

College of Science, Engineering & Technology
Advisor: Jim Rife

The minimum requirements for admission to a college of podiatric medicine and surgery are the same as for osteopathic medicine and surgery. A minimum of 90 semester hours are required for admission; however, most students admitted to a college of podiatric medicine and surgery have completed undergraduate degrees. Students interested in podiatric medicine will find that majoring in Human Biology (B.S.), Physiology (B.S.) or Biochemistry (B.A.) will provide them with adequate undergraduate training. The Medical College Admissions Test is required for all applicants to colleges of podiatric medicine and surgery. Students in this program should regularly consult with the advisor.

Required General Education (7 credits):

ENG	101	Composition (4)
SPEE	102	Public Speaking (3)

Required Support Courses (7 credits):*

MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)

Required for Major (34 credits):

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	321	Organic Chemistry II (2)
CHEM	331	Organic Chemistry II Lab (1)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Required Electives (42 credits):

Electives to yield a total of 90 semester credits are required.

* There are no requirements for MATH in this program;

Psychology

however, the student needs adequate training in math to take courses in chemistry and physics.

PRE-THEOLOGY

Advising: College of Arts & Humanities Office

College courses prior to theological seminary should provide the cultural and intellectual foundations essential to an effective theological education. The emphasis should be on a four-year liberal arts degree program.

The following is regarded by the American Association of Theological Schools as a minimum list of fields with which it is desirable that a student have acquaintance before beginning study in a seminary. Many of these courses will be included in the general education requirements at Minnesota State University, Mankato.

English: literature, composition, speech and related studies. At least four courses.

History: ancient, modern, European and American. At least two courses.

Philosophy: At least two courses.

Natural Science: physics, chemistry, biology. At least one course.

Social Science: psychology, sociology, economics, political science and education. At least four courses including at least one course in psychology.

Foreign Language: one or more of the following: Latin, Greek, Hebrew, German, French (cooperative programs available in Greek and Hebrew). At least two years.

Religion: At least two courses.

Of the various areas, English, philosophy and history are regarded as the most desirable as areas of concentration.

Because of the general nature of this program, students are encouraged to have close contact with a faculty advisor and the seminary that they are considering attending.

PRE-VETERINARY MEDICINE

College of Science, Engineering & Technology

Advisors: P. Knoblich D.V.M., Ph.D.

Specific course requirements for admission to veterinary schools vary somewhat. The following requirements are designed to fit an application to the University of Minnesota Veterinary School. Students should use these requirements as a general guide and look up specific requirements for other Veterinary Schools.

Required for Major (Core, 62-69 credits):

ENG	101	Composition (4)
BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (3)
BIOL	270	Microbiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)

CHEM	320	Organic Chemistry I (5)
CHEM	360	Principles of Biochemistry (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
Choose one of the following options:		
MATH	112	College Algebra (4) <i>and</i>
MATH	113	Trigonometry (3) <i>or</i>
MATH	115	Pre-calculus (4) <i>or</i>
MATH	121	Calculus I (4)

Required Electives (12-16 credits):

- 2 History and Social Sciences (6-8 credits)
- 2 Arts and Humanities (6-8 credits)

Graduate Record Exam must be taken.

Psychology

College of Social & Behavioral Sciences

Department of Psychology

23 Armstrong Hall • 507-389-2724

Website: <http://www.mnsu.edu/dept/psych/psych.html>

Chair: Rosemary Krawczyk

Paul K. Brandon, Leslie Hames Eckert, Michael Fatis, Nancy Fenrick, Phillip Goernert, Kenneth J. Good, Daniel Houlihan, Barry J. Ries, D. C. Royal, Daniel Sachau, Douglas J. Wallen, Edison Perdomo, Seiji Takaku

Psychology is the scientific study of the effects of individual, social, physiological, developmental and environmental factors on thoughts, feelings and behavior. Psychology courses seek to teach students about the methods of psychological inquiry and the findings of psychological research.

Students study psychology because they wish to prepare for a professional career as a psychologist, because they are planning a career in which the understanding of human behavior is important, or simply because they wish to develop a greater understanding of themselves and others. The practice of psychology at the professional level requires a graduate degree beyond the bachelor's degree.

Admission to Major is granted by the department. Department admissions requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.50 (C).
- completion of PSYC 201 (Statistics) with a grade of "C" or better.

Contact the department for application procedures.

PSYCHOLOGY BA, BS

Required General Education:

PSYC	101	Psychology (4)
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Required for Major (Core, 11 cr):

PSYC	201	Statistics for Psychology (4)
and		
PSYC	211	Experimental Psychology (4)
or		

PSYC	207	Introduction to Behavior Analysis (4)
and		
PSYC	409	History of Psychology (3)

Required Restricted Electives (17-20 cr):

Choose two of the following:

PSYC	404	Memory and Cognition (4)
PSYC	407	Advanced Behavior Analysis (4)
PSYC	413	Sensation and Perception (4)
PSYC	421	Biopsychology (4)

Choose three of the following:

PSYC	340	Social Psychology (4)
PSYC	419	Psychometric Theory (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	452	Individual Differences (3)
PSYC	455	Abnormal Psychology (3)
PSYC	456	Personality (3)

Required Electives (5-7 credits):

PSYC	xxx	PSYC	xxx
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Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: Yes. Any.

PSYCHOLOGY MINOR

Required for Minor (General Education):

PSYC	101	Psychology (4)
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Choose 17 credits of electives, including at least 8 credits at the 400 level.

PSYC	Elective
PSYC	Elective
PSYC	Elective
PSYC	400 Level Elective
PSYC	400 Level Elective
PSYC	400 Level Elective

POLICIES/INFORMATION

GPA Policy. Any Psychology course in which a grade of less than C (or P) is earned will not be counted toward a major or a minor in psychology.

P/N Grading Policy. No more than 8 credits of the major or 4 credits of the minor may be taken for P/N credit. PSYC 291 is only available on a P/N basis. PSYC 497 and PSYC 499 are also normally taken for P/N credit.

Teaching Psychology. Students who intend to gain initial licensure to teach psychology in Minnesota schools need to meet the requirements of the social studies B.S. (teaching) program as described in the social studies section of this bulletin.

COURSE DESCRIPTIONS

101 (4) Psychology

This course is designed to provide a thorough introduction to the broad spectrum of theories and applications that make up the field of psychology.

F, S

201 (4) Statistics For Psychology

This course emphasizes understanding the conceptual basis of common statistical procedures and applying those procedures to the problems of organizing information and making inferences from data. Topics include: summarizing data, the logic of inference, estimation, analysis of variance, and correlation.

Pre: MATH 112

F, S

202 (1) Careers In Psychology

Exploration of career opportunities in the helping professions.

F, S

206 (4) The Human Mind

An overview of psychology from the cognitive perspective. What we know about the mental processes that underlie human activities and how we study them.

S

207 (4) Introduction to Behavior Analysis

This is a unit/mastery and laboratory course designed to introduce the student to the science of behavior analysis: the study of how behavior is influenced by its interactions with environmental events. The subject matter will be illustrated by human and animal experiments.

F, S

211 (4) Experimental Psychology

An introduction to the major components of internally valid investigations. How to use computers in psychological research is explored.

Pre: PSYC 201

F, S

230 (3) Child Care Psychology

This course is designed to develop an understanding of major variables that impact the psychological development of children. Emphasis will be placed on what parents and other care givers can do to maximize the healthy psychological development of their children.

F, S

240 (3) Personal Adjustment

Understanding oneself and increasing one's satisfaction in living.

F, S

291 (1-4) Tutoring Psychology

Application of the principles of learning to the instruction of students.

Pre: PSYC 101, or consent

F, S

303 (2) Introduction To Professional Psychology

This course is designed for psychology majors who plan careers in professional psychology (clinical, school, etc.). The purpose of the course is to assist students in developing the skills necessary to compete for graduate school placement. It is advised that students complete this course during their sophomore or junior year.

Pre: PSYC Major and 3.0 GPA

F, S

340 (4) Social Psychology

An exploration of theories and research related to the ways that the social environment affects people's behavior.

Pre: PSYC 101

F, S

Psychology

390 (2) Research Seminar I

Application of principles and methods of research design to development of individual student research projects.

Pre: PSYC 101, 201, 207 or 211 F

391 (2) Research Seminar II

This course is designed for students who are carrying out independent research designed in Research Seminar I. Focus on gathering data, data analysis, and compilation of research report.

Pre: PSYC 390 S

404 (4) Memory and Cognition

A survey of the research and theories describing how humans perceive, elaborate, store, recover and use information. Emphasis is placed on understanding and evaluating the experimental strategies used to gather data about human mental processes.

Pre: PSYC 201 and 207 or 211 S

405 (4) Motivation

Major concepts of human motivation and emotion, presentation of learned cognitive and biological influences on sustained behavior.

Pre: PSYC 201, 207 or 211, or consent V

407 (4) Advanced Behavior Analysis

The science and technology of Behavior Analysis. The application of the principles of operant and respondent conditioning to the understanding and modification of human behavior. The primary mode of instruction is unit/mastery based on the text. There will also be a lab component involving human and animal experiments.

Pre: PSYC 207 F, S

409 (3) History Of Psychology

Examination of the historical origins of the principal contemporary psychological theories.

Pre: Two of PSYC 404, 407, 413, or 421
Senior Status Recommended F, S

413 (4) Sensation and Perception

How the senses respond to environmental stimuli and how the information they provide is organized into meaningful patterns that make up our experience of the physical world. The effects of maturation and learning in altering those patterns are also considered.

Pre: PSYC 101, 201, 207 or 211 F

419 (4) Psychometric Theory

An overview of development, use, and validation of psychological tests. Topics include reliability and validity, test construction, item analysis, ethics, test administration and scoring, and computerized testing.

Pre: PSYC 201 F

420 (4) Drugs and Behavior

Drug and alcohol use and abuse including history, biology, psychology, sociology, and clinical treatment and prevention of abuse.

Pre: PSYC 421 V

421 (4) Biopsychology

Biological basis of psychological processes and behavior. Basic topics such as neuroanatomy and neuron function are presented as well as more general ones such as sensation and movement, sleep, memory and learning, schizophrenia and depression.

Pre: PSYC 201, and either 207 or 211 F, S

422 (4) Neuropsychology

Detailed analysis of the relationship between human behavior and brain function. Basic topics will include cerebral asymmetry, memory, language, and attention as well as behavioral deficits such as learning disabilities, psychiatric disorders, and disconnection syndromes associated with neurological abnormalities.

Pre: PSYC 421 V

429 (3) Drug Dependence

Examination of psychological theories relevant to the prevention and treatment of drug abuse.

Pre: PSYC 101 F

433 (4) Child Psychology

Physical, social, emotional, intellectual, and personality development from conception to preadolescence. Focus on interplay between maturation and experience.

Pre: 8 PSYC credits F, S

436 (4) Adolescent Psychology

This class covers the development of the individual from the age of 11 to 19 years of age. Discussion will include aspects of both normal and abnormal development.

F, S

437 (3) Youth And Sports

Psychological impact of sports on youthful participants.

V

438 (3) Community Psychology

The application of psychological principles to the assessment, analysis, intervention, and prevention of social problems. Research from an applied behavior analysis perspective will be emphasized.

Pre: 3 PSYC courses V

441 (3) Attitudes

Examining cultural, social, and individual influences on attitude development and change through lectures and discussions of theories and findings, and through experiential activities.

Pre: PSYC 101 V

442 (3) Group Psychology

Exploring factors affecting leadership and effective group processes through lectures and discussion of theories and findings and through experiential activities.

Pre: PSYC 101 S

443 (3) Advanced Social Psychology

An in-depth examination of social psychological research in laboratory and field settings.

Pre: PSYC 201, 211, and 340 ALT

448 (3) International Behavior

Images of foreign nations, cultures, people, and products in travel and cross-national contact. Effects of events, crises, news reporting, education persuasion, foreign policy decision-making, and strategies of international conflict resolution.
Pre: 8 PSYC credits F

450 (3) Aviation Psychology

Human factors issues such as workload, automation, fatigue, display format, and communication issues in the aviation environment. V

451 (3) Methods Of Enhancing Performance

The role of psychological factors in performance and psychological methods of performance enhancement. Factors examined will include attention, motivation, decision making, mental rehearsal, arousal, and self management.
Pre: 8 PSYC credits F

452 (3) Individual Differences

The nature, extent, and origins of mental, physical, and psychological differences among individuals.
Pre: PSYC 201 V

453 (3) Human Factors

The person-machine system; the strengths, operating limits, and tendencies of its human component.
Pre: PSYC 201 and 211 or 217 F

455 (4) Abnormal Psychology

This course is designed to increase the student's awareness and understanding of abnormal psychology. Students will become familiar with clinical descriptions, course of onset, and treatment regimens specific to various disorders.
Pre: 8 PSYC credits F, S

456 (3) Personality

Major theories of normal personality formation, organization, and structure.
Pre: 8 PSYC credits F, S

457 (3) Cross Cultural Psychology

Subjective culture effects on communication, culture contact, interactions in socialization, education, workplace, travel, gender, and family.
Pre: 8 PSYC credits F

460 (3) Psychology Of Women

Psychological study of women in historical and functional perspective. Role of hereditary, physiological, and socialization variables on women's thinking, feelings, and behavior.
Pre: PSYC 101 S

461 (3) Marketing Psychology

Analysis of product marketing and consumer purchasing strategies and their determinants.
Pre: 8 PSYC credits F

462 (3) Management Psychology

Managerial behavior, problems, and effects in planning,

problem-solving, decision-making, supervision, leadership, conflict, communication, appraisal, motivation, training, and information systems in organizational environments.
Pre: 8 PSYC credits V

463 (4) Survey Of Industrial/Organizational Psychology

An examination of the psychological aspects of human behavior in the work place. Topics include history of Industrial/Organizational psychology, job analysis, performance measurement, predictors of performance, making personnel decisions, training, satisfaction, social perception, motivation, communication, group process, leadership, and organizational culture.
Pre: PSYC 201, 207 or 211 F

464 (3) Environmental Psychology

Exploring environmental influences on group and individual perceptions, cognition, attitudes and behaviors through lectures and discussion of theories and findings and through experiential activities. ALT

465 (2) Psychology of Religion

Psychological processes underlying religious behavior. Religious development, concepts, common to religion and psychology such as belief, guilt, altruism, conscience, self-actualization. V

466 (3) Psychology of Aging

Aging process and development during the adult years; psychology and psychological concerns of the aging individual; dealing with death.
Pre: PSYC 101 V

473 (3) Teaching of Psychology

Methods of teaching psychology.
Pre: PSYC 101 V

476 (3) Behavior Therapy

Principles and procedures of behavior therapy in clinical areas. Emphasis is placed on procedures for developing more appropriate behaviors through positive and negative reinforcement, modeling, and cognitive procedures. Decreasing problematic behaviors through decelerating consequences and exposure techniques is also presented.
Pre: PSYC 207 or 211 V

478 (4) Behavioral Medicine

The interface of behavioral and medical science is explored. Research on environmental and learning factors in the etiology and treatment of physical disease and rehabilitation is examined. Specific topics include pain management, medical compliance, behavior disorders in nursing homes and on chronic illnesses.
Pre: Three courses in PSYC V

489 (1-5) Advanced Topics

Application of psychology to topics of current interest. May be retaken for credit. V

490 (1-3) Workshop

Topics to be announced. May be retaken for credit. F, S

Recreation, Parks & Leisure Services

491 (1) In-Service: Issues in Behavior Therapy

Current issues in Behavior Therapy are addressed. Students participate in off-campus didactic activities such as attendance at grand rounds at local hospitals, attendance at national, regional or local professional conferences, and augment learning with library research. Topics vary and students may repeat for credit.

Pre: Consent. Academic and experience in human services strongly recommended. F, S

497 (1-8) Field Experience

A learning experience integrated with the student's course of study, to be developed with an advisor and the field experience coordinator. May be retaken for credit up to an 8 credit total for all enrollments. Available for P/N grading only.

Pre: 9 credits of PSYC F, S

499 (1-4) Individual Study

Individualized learning under faculty supervision F, S

Recreation, Parks & Leisure Services

College of Allied Health & Nursing

Department of Recreation, Parks And Leisure Services
213 Highland North • 507-389-2127

Website: <http://www.mnsu.edu/dept/RPLS/>

Chair: James Petersen

Joy Joyner, Ronald Nickerson, James Wise

This program prepares a graduate to become a professional leader, supervisor and/or administrator within the private for profit, private non-profit, and the public sector of the recreation and leisure services field. The program includes preparation for youth programs, community education, municipal and leisure service programs; a broad variety of therapeutic recreation settings including hospitals, long-term care, advocacy organizations, consultant services; a wide variety of commercial recreation and tourism settings, nature and historical interpretation; private and public park systems including park ranger, research, educational outreach, planning marketing, park operations; and military recreation.

The Department offers a professional core that is accredited by the NRPA/AALR with three career tracks: Leisure Planning and Management, Therapeutic Recreation, and Resource Management.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures. In addition, a GPA of 2.4 in the first 12 hours of the program must be attained.

RECREATION, PARKS & LEISURE SERVICES BS

Required for Major (Core, 36 cr):

RPLS	272	Introduction to Recreation, Parks, and Leisure Services (3)
RPLS	277	Recreation Leadership (3)
RPLS	278	Leisure and Lifestyle (3)
RPLS	376	Program Planning in Recreation, Parks, and Leisure Services (3)
RPLS	377	Public Relations (3)
RPLS	379	Management of Parks & Recreation Facilities (3)
RPLS	471	Research Design in Recreation, Parks, and Leisure Services (3)
RPLS	473	Administration of Leisure Time Programs (3)
RPLS	483	Legal Processes in Recreation, Parks & Leisure Services (3)
RPLS	484	Field Experience (1)
RPLS	495	Practicum (8)

Required for Major (Career Tracks, 18-25 cr):

Choose one of the following areas:

LEISURE PLANNING AND MANAGEMENT OPTION

RPLS	325	Programming for Outdoor Settings (3)
RPLS	465	Event Management (3)
RPLS	475	Public Land Use Policy (3)
Choose 3 courses from the following:		
RPLS	476	Recreation Vehicular Safety (3)
RPLS	477	Commercial Recreation and Tourism (3)
RPLS	481	Park Systems and Planning (3)
RPLS	482	Leisure Needs of the Aging (3)

THERAPEUTIC RECREATION OPTION

RPLS	274	Therapeutic Recreation Service (3)
RPLS	447	Programming in Therapeutic Recreation (3)
RPLS	450	Therapeutic Recreation Techniques (3)
RPLS	482	Leisure Needs of the Aging (3)
RPLS	489	Seminar: Clinical Aspects of Therapeutic Recreation (3)

REQUIRED COURSES FOR NATIONAL CERTIFICATION:

PSYC	455	Abnormal Psychology (3)
EDFN	235	Human Development (3)
BIOL	220	Human Anatomy (4)

RESOURCE MANAGEMENT OPTION

RPLS	282	Wildlife as a Recreation Resource (3)
RPLS	370	Review of Outdoor Recreation Research (3)
RPLS	475	Public Land Use Policy (3)
RPLS	476	Recreation Vehicular Safety (3)
RPLS	477	Commercial Recreation & Tourism (3)
RPLS	481	Park Systems and Planning (3)
GEOG	373	Introductory Geographic Information Systems (4) Pre-Req.

Required for Major (Professional Experience Plan):

All RPLS majors must prepare a professional experience plan with an advisor. This plan requires completion of 240 hours of paid or volunteer experience in an RPLS related setting before being eligible to complete a practical field experience.

Required Minor: None. But a minor is recommended.

RECREATION MINOR

Required for Minor (12 cr):

- RPLS 272 Introduction to Recreation, Parks, and Leisure Services (3)
 RPLS 376 Program Planning in Recreation, Parks and Leisure Services (3)
 RPLS 377 Public Relations (3)
 RPLS 473 Administration of Leisure Time Programs (3)

Required for Minor (Electives, 9 cr):

Choose 9 credits of electives from one of the option areas.

RPLS xxx RPLS xxx RPLS xxx

POLICIES/INFORMATION

GPA Policy. A 2.5 GPA in the major and completion of the field experience are required before enrolling in the practicum along with personal characteristics that, in the joint professional judgment of program faculty, are conducive to successful professionals in recreation and leisure settings. These include reliability, completion of individual and group assignments on time, consistency of performance, coping with ordinary personal problems, creativity, assertiveness, ethical performance, and a questioning, constructive, critical approach to new ideas. Evaluation of academic work, attitudes and personality must be considered by faculty to assure success in the recreation, parks and leisure services field.

P/N Grading Policy. Recreation, parks and leisure services majors and minors must take required courses for a letter grade with the exception that practicum courses must be taken on a P/N basis. Non-majors may elect RPLS courses for pass/no credit where this option is available. A student who receives more than six credits of F grades in the program automatically assumes probationary status in the major.

Transfer students are required to complete a minimum of 40 semester credits of the major at Minnesota State University, Mankato.

Each student must complete the practicum requirement. Students who are graduating on a catalog prior to the 2001-2002 catalog must enroll in RPLS 487 and RPLS 488 after completing all course work and the Professional Experience Plan. Students who are graduating on the 2001-2002 or more recent catalog are required to enroll in RPLS 495 (8 credits) after completing all course work and RPLS 484. The student must file a practicum application with his/her advisor one semester prior to enrollment in the Practicum. The RPLS fac-

ulty advisor must approve the application prior to registration.

COURSE DESCRIPTIONS

272 (3) Introduction to Recreation, Parks and Leisure Services

A foundation course that introduces the student to the profession of leisure services. Emphasis is placed on recreation in the student's life, the development of the profession, the community leisure service system and careers in recreation, parks and leisure services.

F, S

274 (3) Therapeutic Recreation Service

This course is designed to be an overview of Therapeutic Recreation Services in a variety of human service settings with emphasis on the assessment, planning, implementation and evaluation of leisure and recreation programs performed by therapeutic recreation specialists serving persons with physical, mental, emotional or social limitations.

S

277 (3) Recreation Leadership

Through interactive classroom assignments, students develop expertise in planning, leading and evaluating a recreational experience. Foundations of leadership, group dynamics and motivation are also included.

F, S

278 (3) Leisure and Lifestyle

This course addresses leisure wellness and incorporates leisure into life as a balancing force for healthy living. Leisure is studied in relation to: work, time and money management, stress management, healthy relationships, life choices and decisions, personal and community resources, career opportunities and in relation to current issues in politics and in the work place.

F, S

282 (3) Wildlife as a Recreation Resource

A broad survey course that is concerned with game and non-game wildlife species. Habitat is stressed throughout the course as a necessity for maintaining a species. Funding of wildlife programs and changing attitudes of the public are concerns throughout this course.

F, S

325 (3) Programming for Outdoor Settings

This course exposes the parks and recreation major to basic outdoor skills. The camping movement in America is discussed as well as progressional planning strategies for outdoor recreation.

S

370 (3) Review of Outdoor Recreation Research

This course traces the historical development of outdoor recreation from the ancient Middle East to the present. Research efforts have resulted in many new outdoor activities, legislative mandates for land managing agencies, and the development of new equipment and attire for the participant.

S

Recreation, Parks & Leisure Services

376 (3) Program Planning in Recreation, Parks, and Leisure Services

The emphasis of this course is on the program planning process—from creating the idea through evaluation of the program—and how it fits into the agency profile. Various formats such as leisure learning, tournaments, trips and outings, and special events are highlighted for a variety of leisure service agencies.

F, S

377 (3) Public Relations

Focuses on the total planning, implementation and techniques of effective public relations.

F, S

379 (3) Management of Parks & Recreation Facilities

This course introduces students to basic management and planning techniques for a wide variety of in-door and out-door recreation facilities.

F, S

447 (3) Programming in Therapeutic Recreation

This course details the Therapeutic Recreation process: assessment, planning, implementation and evaluation in relation to individual treatment programs in Therapeutic Recreation Service. Emphasis is on interpreting assessment data, writing measurable goals and objectives, implementing an actual program and documenting program results in terms currently used in human service settings.

Pre: RPLS 274

F

450 (3) Therapeutic Recreation Techniques

This course is designed to teach a wide variety of interventions and facilitation techniques used in therapeutic recreation programs to give the student knowledge, practice and ability in the implementation of leisure and recreation programs for persons with special needs.

Pre: RPLS 274 and 447

S

465 (3) Event Management

This course introduces students to special event planning, development, budgeting, promotion and evaluation. The use, recruitment, evaluation and recognition of volunteers as well as fund raising strategies are discussed and employed.

Pre: RPLS 377

F, S

471 (3) Research Design in Recreation, Parks and Leisure Services

This course guides the student through the survey process including the creation and implementation of a questionnaire. The data collected are then analyzed and a formal report is prepared. Computer skills are emphasized.

F, S

473 (3) Administration of Leisure Time Programs

Development of approaches in staffing, planning, organization, coordination, evaluation and directing programs and personnel. Permission required from professor.

F, S

474 (2) Camp Administration

Overview of administration functions in resident camps and day camp settings.

ALT

475 (3) Public Land Use Policy

Traces the history of public lands in the United States, their acquisition and disposal. Congressional charges to executive agencies managing national lands and state and local government responsibilities for managing non-federal public lands. Attention is given to international oceanic resources and how the international community will manage these resources.

F, S

476 (3) Recreation Vehicular Safety

This course covers the ever-expanding mechanized leisure experience field with emphasis upon laws and regulations governing the utilization of the resource base, legal and ethical use of equipment in today's complex society. Utilization of maintenance equipment in leisure oriented facilities is stressed.

S

477 (3) Commercial Recreation and Tourism

This course traces the evolution of commercial recreation and tourism which has become the world's number one industry. Cultural, economic, geographic, and political forces will be examined as to their role in this rapidly expanding area.

F

481 (3) Park Systems and Planning

Traces the history of the parks movement in the United States, selected legislation establishing parks and the enactment of funding legislation. The importance of public participation, planning and political strategies are stressed.

Pre: GEOG 373

F

482 (3) Leisure Needs of the Aging

Leisure as an integral aspect of successful aging is the focus of this course which includes: leisure in relation to physical, intellectual, social and psychological aspects of aging and successful leisure programming in community based settings and in long term care.

F

483 (3) Legal Processes in Parks and Leisure Services

This course investigates legislative and budgetary processes utilized in the public, non-profit, and private sectors of the leisure services profession.

F, S

484 (1) Field Experience

Students are required to complete the Field Experience in order to be eligible to enroll in RPLS 495 Practicum. Students will contract with the advisor to complete 60 hours of volunteer or paid experience in a leisure services organization. Written permission required from the advisor.

F, S

485 (1-3) Selected Topics

F, S

486 (1-4) Minor Practicum

Course work set through student/advisor agreement.

F, S

487 (6) Practicum

Students who are graduating on a catalog prior to 2001-2002 catalog are required to complete one full semester of professional work experience. This is completed once all major classes are completed. Written permission is required from the student's advisor one semester in advance. The student enrolls in both RPLS 487 and RPLS 488 at the same time for a total of 12 credits.

Pre: Completion of the Professional Experience Plan and all RPLS major classes.

F, S

488 (6) Practicum

Students who are graduating on a catalog prior to 2001-2002 catalog are required to complete one full semester of professional work experience. This is completed once all major classes are completed. Written permission is required from the student's advisor one semester in advance. The student enrolls in both RPLS 487 and RPLS 488 at the same time for a total of 12 credits.

Pre: Completion of the Professional Experience Plan and all RPLS major classes.

F, S

489 (3) Seminar: Clinical Aspects of Therapeutic Recreation

This course is designed to develop student's ability to function as a member of the interdisciplinary treatment team and practice critical thinking, writing and oral skills related to treatment decisions, ethical issues, professional issues, and health care delivery systems.

Pre: RPLS 274 and 447

F

490 (2-4) Workshop

V

495 (8) Practicum

Students who are graduating on or after the 2001-2002 catalog must enroll in this Practicum.

The Practicum, which is one full semester of professional work experience, is completed at the end of the student's course work and requires 480 hours of service at a Department-approved agency where the student works fulltime for 12 weeks. Written permission is required from the student's advisor one semester in advance.

Pre: RPLS 484

497 (1-8) Internship

Course based on student/advisor agreement.

F, S

498 (1-8) Internship

Course based on student/advisor agreement.

F, S

499 (1-4) Individual Study

Course work set by student/advisor discussion.

F, S

Religious Studies

College of Arts & Humanities

Department of Religious Studies

227 Armstrong Hall • 507-389-2012

Director: College of Arts and Humanities

No new minors are being accepted to this program, which is in the process of program closure.

Scandinavian Studies

College of Arts & Humanities

136 Nelson Hall • 507-389-2728 or 389-6412

Website: <http://www.mnsu.edu/dept/modernlang/welcome.html>

Fax: 507-389-2816

Director: Nancy L. Wicker

Kathryn Elliott, Birgitta Hendrickson, Tomasz Inglot, Paul Lindfors, Harry Solo, Nancy Wicker

The Scandinavian Studies program is an interdisciplinary program designed to introduce the student to the Scandinavian countries through either of two languages, Swedish and Norwegian, and give insight into the literature and culture of these countries through courses from the departments of Art, English, History and Political Science. See these departments for course descriptions.

Education in the Scandinavian languages gives the students a basic language knowledge that enables them to travel and work in Norway and Sweden. It also provides insight into the literature and culture of these countries. Elementary Swedish and Norwegian are offered alternating years. More advanced courses are offered on demand.

Admission to Major is granted by the department.

Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

SCANDINAVIAN STUDIES MINOR

Required for Minor (Language Sequence, 8 cr):

SCAN 101 Elementary Norwegian I (4)

SCAN 102 Elementary Norwegian II (4)

or

SCAN 111 Elementary Swedish I (4)

SCAN 112 Elementary Swedish II (4)

Required for Minor (Electives, 12 cr):

SCAN 299 SCAN 499 ART 413

ART 499 ENG 499 HIST 424

POL 447 POL 439 ART 492

Course offerings in advanced Swedish language, literature, history, religion and sociology are available at Gustavus Adolphus College.

Science Teaching

SCANDINAVIAN STUDIES BA

Required for Major (32 cr):

This major is offered by Minnesota State University, Mankato in cooperation with nearby Gustavus Adolphus College. Students should work closely with the program director to complete requirements. Additional courses in Swedish history, literature, religion and sociology can be taken at Gustavus Adolphus College.

Required Minor: Yes. Any.

Scandinavian Studies Courses in Other Departments:

- ART 413 Scandinavian Art (3)
HIST 424 Scandinavian History (4)
POL 439 Comparative Social Policy: the Welfare State in Europe and the Americas (3)
POL 447 Europe: Politics and Policy (3)

Independent study projects may be arranged with these departments as well.

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for minor or major credits.

P/N Grading Policy. Work done for a minor or major must be done for letter grade.

COURSE DESCRIPTIONS

101 (4) Elementary Norwegian I

An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.

ALT-F

102 (4) Elementary Norwegian II

An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.

Pre: SCAN 101 ALT-S

111 (4) Elementary Swedish I

An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.

ALT-F

112 (4) Elementary Swedish II

An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.

Pre: SCAN 111 ALT-S

299-01 (1-4) Individual Study V

299-02 (1-4) Independent Study: Intermediate Norwegian I

Development of reading and listening skills, oral and writing practice within a cultural context.

Pre: SCAN 102, or equivalent ALT-F

299-03 (1-4) Independent Study: Intermediate Norwegian II

Development of reading and listening skills, oral and writing practice within a cultural context.

Pre: SCAN 102, or equivalent ALT-S

299-04 (1-4) Independent Study: Intermediate Swedish I

Development of reading and listening skills, oral and writing practice within a cultural context.

Pre: SCAN 112, or equivalent

299-05 (1-4) Independent Study: Intermediate Swedish II

Development of reading and listening skills, oral and writing practice within a cultural context.

Pre: SCAN 112, or equivalent

499 (1-4) Individual Study

Advanced study of works by selected Swedish or Norwegian authors.

Pre: SCAN 299-03 or 299-05 V

Science Teaching

Website: www.mnsu.edu/dept/biology
www.mnsu.edu/dept/chemgeol
www.mnsu.edu/dept/physast
www.mnsu.edu/dept/geog

Coordinators:

Daryl Adams, Ph.D., Biological Sciences
Ed Borchardt, Ph.D., Physics
James Pierce, Ph.D., Astronomy
Jeffrey Pribyl, Ph.D., Chemistry
Bryce Hoppie, Ph.D., Geology

Minnesota science teacher licensure is for grades 5-12. Students who wish to teach science in grades 5 through 12 must complete a State of Minnesota science teacher licensure program. Minnesota licensure for science is in the following four areas: 1) Earth and Space Science; 2) Life Science; 3) Chemistry; 4) Physics.

A teacher of 1) earth and space science, 2) chemistry, 3) life science, or 4) physics is authorized to provide instruction in all science disciplines to students in grades 5-8, and either 1) earth and space science, 2) chemistry, 3) life science, or 4) physics and integrated science offerings, to students in grades 9 through 12. The science discipline that the teacher is qualified to teach in grades 9 through 12 will be identified on the teacher's license.

Each major requires the 31 credit general core and a science emphasis that ranges from 27-35 credits of science and science teaching methods courses. In addition, the student must complete a 30 credit professional education component and the 3 credit Drug Education course.

The University Science Teaching Program must meet specific competencies to meet professional accreditation and licensure requirements. To stay within the required degree limits of 128 credit hours, students are strongly advised to select courses within the 44 credit general education program that meet both teaching program and general education needs. It is important for the student to meet with their advisor to assist with program planning.

A minor is not required for any of the science teaching programs; however, to broaden one's teaching opportunities, double majors are encouraged. For further details, the student should check with one of the science teaching advisors for an overview of available opportunities.

FOR ALL SCIENCE TEACHING PROGRAMS

Required General Education (3 cr):

HLTH 310 Drug Education (3)

Recommended General Education (22-23 cr):

AST 101 Introduction to Astronomy (3)

BIOL 105 General Biology I (4)

EDFN 222 Human Relations (4)

GEOL 121 Physical Geology (4)

PHYS 211 Principles of Physics I (4)

Choose one from the following:

MATH 112 College Algebra (4)

MATH 113 Trigonometry (3)

MATH 115 Precalculus (4)

MATH 121 Calculus I (4)

Required General Science Core (31 cr):

AST 101 Introduction to Astronomy (3)

BIOL 105 General Biology I (4)

BIOL 106 General Biology II (4)

CHEM 201 General Chemistry I (5)

GEOL 121 Physical Geology (4)

GEOL 310 Earth and Space Systems (3)

PHYS 211 Principles of Physics I (4)*

PHYS 212 Principles of Physics II (4)*

* Physics 221 (5) and 222 (5) may substitute. The additional credit hours will reduce the number of credits in the advanced physics courses.

Required for All Majors

(Professional Education, 30 cr):

See the SECONDARY EDUCATION section for additional information about admissions to Professional Education, and course requirements.

Required Minor: None.

CHEMISTRY 5-12 BS TEACHING 128

Required General Education (3 cr)

Recommended General Education (22-23 cr)

Required General Science Core (31 cr)

Required Professional Education (30 cr)

Required for Major (Core, 35 cr)

MATH 121 Calculus I (4)

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 320 Organic Chemistry I (with lab) (5)

CHEM 360 Principles of Biochemistry I (4)

CHEM 381 Introduction to Research (2)

CHEM 412 Intermediate Inorganic Chemistry (2)

CHEM 440 Physical Chemistry I (3)

CHEM 450 Physical Chemistry Lab I (1)

CHEM 479 Teaching in Physical Science (4)

CHEM 495 Senior Seminar (1)

EARTH SCIENCE 5-12 BS TEACHING 128

Required General Education (3 cr)

Recommended General Education (22-23 cr)

Required General Science Core (31 cr)

Required Professional Education (30 cr)

Required for Major (Core, 24 cr):

AST 125 Observational Astronomy (3)

GEOG 315 Geomorphology (3)

GEOG 317 Weather (3)

GEOG 410 Climatic Environments (3)

GEOL 122 Earth History (4)

GEOL 201 Elements of Mineralogy (4)

GEOG 464 Teaching Earth Science (4)

or

GEOL 479 Teaching Earth Science (4)

Required for Major (Research, 1-3 cr):

GEOG 480 Seminar: Snow and Ice (3)

GEOG 499 Individual Study (1-3)

GEOL 499 Individual Study (1-5)

Required for Major (Electives, 9 cr):

Must choose from at least two departments

AST 102 Introduction to the Planets (3)

AST 104 Introduction to Experimental Astronomy (2)

GEOG 373 Introduction to GIS (4)

GEOG 420 Conservation of Natural Resources (3)

GEOL 270 Structural Geology (4)

GEOL 350 Environmental Geology (4)

GEOL 450 Hydrogeology (3)

LIFE SCIENCE 5-12 BS TEACHING 128

Required General Education (3 cr)

Recommended General Education (22-23 cr)

Required General Science Core (31 cr)

Required Professional Education (30 cr)

Required for Major (Core, 26 cr):

BIOL 211 Genetics (3)

BIOL 215 General Ecology (4)

BIOL 220 Human Anatomy (4)

BIOL 270 Microbiology (4)

BIOL 301 Evolution (2)

BIOL 408 Vertebrate Ecology (4)

BIOL 485 Biology Teaching Methods and Materials (4)

BIOL 499 Individual Study: Research Project (1)

Required for Major (Electives, 9 cr):

Choose a minimum of 9 credits from Biology courses from the 300-400 level

PHYSICS (5-12) BS TEACHING

Required General Education (3 cr)

Secondary 5-12 & K-12 Professional Education

Recommended General Education (22-23 cr)

Required General Science Core (31 cr)

Required Professional Education (30 cr)

Required for Major (Core, 27-29 cr):

MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
PHYS	381	Tutoring Physics (1-2)
PHYS	435	Modern Physics I (3)
PHYS	453	Solid State Physics (3)
PHYS	493	Undergraduate Research (1-2)
PHYS	482	Teaching Methods and Materials in Physical Science (4)

Required for Major (Electives, Minimum of 7 cr):

Choose a minimum of three credits from:

EET	112	Elementary Electronics (3)
EET	113	DC Circuits (3)
EET	115	Understanding Computers (3)

Choose a minimum of 4 credits from:

PHYS	107	Physics of Flight (3)
PHYS	404	Physics and Society (2)
PHYS	417	Biophysics (2)
PHYS	436	Modern Physics II (3)
PHYS	441	Mechanics (4)
PHYS	447	Electricity and Magnetism I (3)
PHYS	448	Electricity and Magnetism II (3)
PHYS	457	Optics (3)
PHYS	461	Quantum Mechanics (4)
PHYS	465	Computer Applications in Physics (3)
PHYS	475	Advanced Laboratory (2)

POLICIES/INFORMATION

Students who are not science teaching majors should consult an advisor concerning possible additional course requirements.

Secondary 5-12 & K-12 Professional Education

College of Education

Maureen Prenn, Coordinator Professional Education
119 Armstrong Hall • 507-389-1215

This section describes **ONLY** the professional education requirements for completion of teaching degrees at the 5-12 and K-12 levels. Students interested in teaching at the 5-12 and K-12 levels must be admitted to **BOTH** their major program and professional education.

Formal evaluation of prior academic professional education preparation will be evaluated by Dr. Maureen Prenn. Formal approval of coursework is based on course descriptions, syllabi, samples of completed work and/or field experience evaluations.

Admission to Professional Education

Academic Advising Office

Cheryl Kalakian, Student Relations Coordinator

119 Armstrong Hall • 507-389-1215

All students working toward a 5-12 or K-12 teaching degree must be admitted to professional education prior to enrollment in upper division coursework in professional education. Application forms for admission may be obtained in 119 Armstrong Hall. Application to professional education should be made when the following requirements have been met:

- a minimum of 30 earned semester credit hours
- a minimum 2.5 cumulative GPA
- evidence of completion of the Pre-Professional Skills Test (PPST)
- completion of faculty recommendation folder

General Studies Competencies. Students majoring in 5-12 and K-12 education must demonstrate competencies in the arts, communications, history, literature, mathematics, philosophy, sciences, social sciences, and multicultural and global perspectives. They must also demonstrate competency in health-related issues, including drug use and misuse. Students should visit with the College of Education Student Relations Coordinator for assistance in selecting general education coursework to meet these competencies.

The programs below are designed to meet the new Minnesota state licensure standards, which will affect all graduates applying for licensure on or after September, 2001.

5-12 PROFESSIONAL EDUCATION

Communication Arts and Literature

Family Consumer Science

Health Science

Mathematics

Science (Life Science, Chemistry, Earth and Space Science, Physics)

Social Studies

Required for General Education (3 cr):

HLTH	310	Drug Education (3)
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Required (Professional Education, 30 cr):

CI	202	Introduction to Secondary Teaching (2)
EDFN	222	Human Relations and Cultural Diversity (3)
ED	333	Classroom Learning and Assessment (3)
ED	410	The Middle School Classroom (3)
EDUC	407*	Special Student in General Class (2)
LME	402	Media Utilization (2)
CI	447	Teaching in Secondary School (3)
EDFN	400	The Social Context of Learning: Secondary (1)
CI	477	Student Teaching (11)

K-12 PROFESSIONAL EDUCATION

Dance and Theatre Arts

English as a Second Language

Secondary 5-12 & K-12 Professional Education

Vocal Music and Instrumental Music

Physical Education

Visual Arts

World Languages and Cultures (Spanish and French)

Developmental Adapted Physical Education

Required for General Education (3 cr):

HLTH 310 Drug Education (3)

Required (Professional Education, 30 cr):

CI 202 Introduction to Secondary Teaching (2)

EDFN 222 Human Relations and Cultural Diversity (3)

ED 333 Classroom Learning and Assessment (3)

ED 410 The Middle School Classroom (3)

EDUC 407* Special Student in General Class (2)

LME 403 Media Utilization (2)

CI 448 Teaching in the K-12 Schools (3)

EDFN 400 The Social Context of Learning: Secondary (1)

CI 476 Supplementary Student Teaching, Secondary (6)

CI 478 Supplementary Student Teaching (5)

*Physical Education majors exempt.

POLICIES/INFORMATION

GPA Policy. Coursework in professional education requires a grade of "C" or better. A cumulative career GPA of 2.5 is required.

P/N Grading Policy. Grades are required in all professional education coursework except courses that are offered on a P/N basis only.

Student Teaching. Student teaching is a requirement for the completion of 5-12 and K-12 education degree programs. Students teach in their senior year after they have completed at least 95 semester credits, including all methods courses. To be eligible for a student teaching assignment the student must have an overall GPA of 2.5 and be admitted to professional education (see above). Written application must be submitted February 1 for fall teaching assignments and September 1 for spring. Attendance at an application information session is required prior to submission of application materials. Application folders are available in AH 307D.

COURSE DESCRIPTIONS

Course descriptions with the following prefixes are listed in this section: Curriculum & Instruction (CI), Education (ED), Educational Foundations (EDFN), and Library Media Education (LME).

Curriculum & Instruction

202 (2) Introduction to Secondary Teaching

A first course for secondary education majors. Experience in middle school, junior high and senior high classrooms. F, S

447 (3) Teaching in the Secondary School

Analysis of teaching/learning strategies used in today's secondary schools. Allows students to develop an awareness of working conditions.

Pre: Admission to Professional Education, CI 202, ED 333, ED 410 F, S

448 (3) Teaching in the K-12 Schools

Analysis of teaching/learning strategies used in today's K-12 curriculum. Allows students to develop an awareness of working conditions.

Pre: Admission to Professional Education, CI 202, ED 333, ED 410; K-12 licensure major F, S

476 (6) Supplementary Student Teaching, Secondary (Full Semester)

Student teaching in the secondary school including weekly seminar for K-12 majors.

Pre: Admission to student teaching Co: CI 478 and EDFN 400 F, S

477 (11) Student Teaching (Full Semester)

Student teaching in the secondary school including weekly seminar for 5-12 majors.

Pre: CI 447 and admission to student teaching Co: EDFN 400 F, S

478 (5) Supplementary Student Teaching (Full Semester)

Student teaching in the elementary school including weekly seminar for K-12 majors.

Pre: Admission to student teaching Co: CI 476 and EDFN 400 F, S

Education

333 (5) Classroom Learning and Assessment

Focus on principles of psychology and techniques of learning-behavioristic, cognitive and humanistic. Emphasis on a variety of formal and informal/strategies for assessment and student growth and learning. Requires twenty-four hours of out-of-class clinical experience.

Pre: Admission to Professional Education F, S

407 (2) Special Student in General Class

Provides general education majors with information and strategies including the special needs students in the regular classroom. This course is required of all education majors except those in Physical Education. F, S

410 (3) The Middle School Classroom

Strategies for teaching middle school students, concepts, curriculum and teaching methods. F, S

Educational Foundations

222 (4) Human Relations and Cultural Diversity

Study of interpersonal skills, motivation, and group skills. Applied to educational settings. Requires 18 hours clinical

Social Studies

cal experiences (out-of-class). Meets State of Minnesota human relations requirement for teacher licensure.

F, S

400 (1) The Social Context of Learning: Secondary

The Social Context of Learning explores the relationship of the school and community as well as the relationships and roles of the teacher, student, and the school. Knowledge of the social, historical, philosophical foundations of education, school law, finance and governance, ethics, democracy and multi-culturalism is explored. Requires twelve hours of out-of-class clinical experience.

Pre: Recommended for final semester of Professional Education

F, S

Library Education Media

402 (2) Media Utilities for Secondary Education

Instructional media used in the secondary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer aided instruction, telecommunications, and standard classroom media applications are stressed.

Social Studies

College of Social & Behavioral Sciences

Department of Social Studies

114 Armstrong Hall • 507-389-5718

Website: <http://www.mnsu.edu/dept/sost/>

Coordinator: Clark Johnson

The social studies program is designed to prepare students to teach secondary social studies. This challenging program draws upon faculty from nine areas (anthropology, economics, ethnic studies, geography, history, political science, psychology, sociology and women's studies) and works with the College of Education to promote effective teaching practice for future and in-service teachers.

A non-teaching major in social studies is also offered, and provides the student an opportunity to create a program to meet her or his personal academic needs.

Admission to Major is granted by the program. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the social studies coordinator for application procedures.

Admission to the Social Studies Program. Students enrolling in SOST 450 must be admitted to the social studies program, a process in addition to admission to the major. Admission to the Social Studies (teaching) program is limited. Preference for admission to the program is given to students who have a 3.0 GPA and who have had significant global, multicultural, civic, and community service experience. Students are encouraged to work closely with the social studies coordina-

tor to prepare for admission to the social studies program.

SOCIAL STUDIES BS TEACHING (64 cr)

Required for Major (Core, 49 cr):

ANTH 101 Introduction to Anthropology (3)
ECON 201 Principles of Macroeconomics (3)
ECON 429 Economic Education (3)
GEOG 100 Elements of Geography (3)
GEOG 340 United States (3)
HIST 260 Nature of History (4)
HIST 301 Readings in United States History (4)
HIST 302 Readings in World History (4)
POL 111 United States Government (3)
POL 381 Citizenship (2, 2)
PSYC 101 Introduction to Psychology (4)
SOC 101 Introduction to Sociology (3)
SOST 200 Introduction to Social Studies (1)
SOST 450 Teaching Social Studies in the
Secondary School (4)

Choose one of the following courses:

WOST 220 Perspectives on Women and Change (3)
ETHN 410 Foundations of Oppression (3)

Required for Major (Options, 15 cr):

Select one of the following options.

ANTHROPOLOGY OPTION

Select one course from the following:

ANTH 220 ANTH 230 ANTH 240

Select 12 credits of upper-division anthropology electives:

ANTH 300/400 Level

ANTH 300/400 Level

ANTH 300/400 Level

ANTH 300/400 Level

Contact Winifred Mitchell, Anthropology Department.

ECONOMICS OPTION

Required Courses:

ECON 202 ECON 314 ECON 406

ECON 412 ECON 420

Contact Ashok Chowdhury, Economics Department

GEOGRAPHY OPTION

Required Courses:

GEOG 101 GEOG 103

Choose one Cultural-Systematic from the following:

GEOG 425 GEOG 435 GEOG 437

Choose one Physical-Systematic from the following:

GEOG 313 GEOG 315 GEOG 317

GEOG 410 GEOG 420

Choose one Foreign Regional from the following:

GEOG 445 GEOG 450 GEOG 454

GEOG 456 GEOG 458

Contact Jose Lopez, Geography Department

HISTORY OPTION

Choose 15 credits of upper division history courses; including at least one course at the 400 level from each of the following areas: Europe, Third World (i.e., Latin America,

Middle East, Asia and Africa) and the United States.
Contact Ernie Grieshaber, History Department

POLITICAL SCIENCE OPTION

Required Courses:

POL 371 POL 414

POL 431 POL 473

Choose 3 credits of independent study

or

Choose one of the following:

POL 341 POL 342 POL 433

POL 441 POL 442 POL 443

Contact Joe Kunkel, Political Science Department

PSYCHOLOGY OPTION

Required Courses:

PSYC 207 PSYC 473

Choose 8 credits of upper division psychology courses:

PSYC xxx PSYC xxx PSYC xxx

Contact Rosemary Krawczyk, Psychology Department

SOCIOLOGY OPTION

Choose one course from each of the five areas:

Sociological Theory:

SOC 456 SOC 457 SOC 458

Methods:

SOC 201 SOC 469 SOC 479

SOC 480

Level of Focus: Micro/Macro:

SOC 351 SOC 352 SOC 401

SOC 407 SOC 423 SOC 461

Family:

SOC 408 SOC 409 SOC 411

SOC 483

Social Issues:

SOC 255 SOC 307 SOC 425

SOC 441 SOC 446 SOC 463

SOC 482

Contact Kim Greer, Sociology Department

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

SOCIAL STUDIES BS (50 cr)

Required for Major (Social Studies Concentration, 24 cr):

A minimum of 24 credits (of which 15 need to be upper division) must be taken in one of the following social studies areas: anthropology, economics, ethnic studies, geography, history, political science, psychology, sociology, or women's studies. Students taking the history option are required to take HIST 260 and at least six credits from each of the following areas: Europe, Third World (i.e., Latin America, Middle East, Asia and Africa) and United States.

Required for Major (General Social Studies, 26 cr):

A minimum of 26 credits (of which 16 need to be upper

division) must be taken on a widely distributed basis from the social sciences and history outside the area of concentration selected above and/or from the interdisciplinary programs of ethnic studies, urban studies or women's studies. Students are encouraged to take a mixture of courses that reflect a global and multicultural understanding.

Required Minor: None.

Students are required to enroll in SOST 299, independent study, in the subsequent semester to declaring the social studies non-teaching major. Students in SOST 299 will work with the social studies coordinator to define personal learning goals and objectives and begin the development of a personal learning portfolio. In the senior year, the student will take SOST 499. Students in SOST 499 will complete their learning portfolio under the guidance of the social studies coordinator.

POLICIES/INFORMATION

GPA Policy. A grade of "C" or better is required in all courses in the major.

P/N Grading Policy. No more than 12 credits may be taken P/N.

COURSE DESCRIPTIONS

199 (2-5) CLEP Social Studies

200 (1) Introduction to Social Studies

Acquaints students majoring in social studies (teaching) with the social studies major and fundamental ideas that will help students integrate what they are learning in social sciences and history within the context of secondary social studies classroom.

Pre: Concurrently with CI 202 V

299 (1-6) Independent Study

450 (4) Teaching Social Studies in the Secondary School

Organization and presentation of social studies in secondary schools. Preparation of units for teaching purposes, examination of materials useful to the social studies teacher. Application of national and state standards to teaching social studies.

Pre: Concurrently with CI 447 V

485 (1-6) Topics

Designed to provide students the opportunity to explore a variety of topics related to social studies.

491 (1-6) Inservice

Designed to provide students the opportunity to integrate academic learning with professional practice.

499 (1-8) Individual Study

Social Work

College of Social & Behavioral Sciences

Department of Social Work

358 Trafton Science Center N • 507-389-6504

Website: <http://www.mnsu.edu/dept/socialwk/swhp.html>

Chair: Richard Wintersteen

William A. Anderson, Marilyn Frank, Debra Gohagan,
Chris Black-Hughes, Vanda Manahan

This major is preparation for beginning-level professional social work practice. The program is accredited for baccalaureate level education by the Council on Social Work Education. This major is also excellent preparation for graduate work in social work and related fields. This accredited major meets one of the requirements for social work licensure, which is required to practice social work in most settings in Minnesota.

Students should request that they be assigned to a social work advisor as early as possible. Admission to the major is not necessary for enrollment in 100 and 200 level courses. Formal admission to the practice sequence (SOWK 314, 443, 445, 411 and 418) occurs during the first semester of the student's junior year. An application for admission is required. To be eligible for admission at that time, students must have a 2.8 GPA and a minimum grade of "C" in all required courses.

SOCIAL WORK BS

Required for Major (Supporting, 19 cr):

Required supporting courses may be taken as part of the general education program.

- SOC 101 Introduction to Sociology (3)
- POL 111 United States Government (3)
- ETHN 100 American Racial Minorities (3)
- EDFN 235 Human Development (3)
- BIOL 100 Our Natural World (4)
- ECON 100 An Introduction to the U.S. Economy (3)

Required for Major (Core, 52 cr):

- SOWK 190 Social Welfare Services (3)
 - SOWK 210 Introduction to Social Work I (3)
 - SOWK 214 Community Social Services Projects (3)
 - SOWK 305 Human Behavior in Social Work Practice (3)
 - SOWK 312 Introduction to Field Practice (5)
 - SOWK 314 Social Work Practice I (4)
 - SOWK 411 Social Work Practicum Seminar (2)
 - SOWK 412 Social Welfare Issues and Policies (3)
 - SOWK 418 Practicum (10)
 - SOWK 443 Social Work Practice II (4)
 - SOWK 445 Social Work Practice III (4)
 - SOWK 469 Applied Social Work Research (3)
 - SOWK 495 Senior Paper (2)
- Choose one of the following:
- SOWK 415 Child and Family Welfare Services (3)
 - SOWK 420 Women's Issues in Social Work (3)

- SOWK 425 Social Work in Health Care Settings (3)
- SOWK 430 School Social Work (3)

Required Minor: None.

SOCIAL WELFARE MINOR

Required for Minor (21 cr):

- SOWK 190 Social Welfare Services (3)
- SOWK 210 Introduction to Social Work I (3)
- SOWK 214 Community Social Service Projects (3)
- SOWK 305 Human Behavior in Social Work Practice (3)
- SOWK 412 Social Welfare Issues and Policies (3)
- SOWK xxx (approved by social work advisor) (3)
- SOWK xxx (approved by social work advisor) (3)

POLICIES/INFORMATION

GPA Policy. Formal admission to the Social Work major requires that applicants have achieved a 2.8 GPA in the required pre-major courses, including those taken in other departments, and a 2.8 cumulative GPA. A minimum grade of "C" is required in Social Work and supporting courses. Under some circumstances evidence of explanatory factors, strong academic performance in recent semesters and good results in courses within the major.

Once formally admitted, students are expected to demonstrate continued academic performance. No formal additional requirements are applied to acceptance for practicum in the final semester, other than successful completion of course requirements, including Introduction to Field Practice and Senior Paper.

P/N Grading Policy. SS 312 (Introduction to Field Practice, taken in the Junior Year) and SW 411 and 418 (Practicum and Practicum Seminar, taken in the Senior Year), are offered only on a P/N basis. All other required major and pre-major courses must be taken for credit and must be passed with a minimum grade of C.

Residency and Transfer Requirements. Transfer students are expected to complete a minimum of 30 credit hours at Minnesota State University, Mankato. Students who wish to transfer credits in Social Work from another university must have been honorably dismissed from the previous school(s). Students transferring Social Work credits must complete at least 24 credits from within the department.

Credit for classroom courses in Social Work taken at other institutions will be evaluated on an individual basis by the student's faculty advisor or by the department chairperson. The student will be expected to present course syllabi including assignments and texts used. All transfer students must see a department advisor for guidance and transcript evaluation before attempting to register for upper division courses.

Criminal Background Check. A criminal background check may be required prior to admission.

COURSE DESCRIPTIONS

190 (3) Social Welfare Services

Welfare as a social institution. Formal and informal efforts to meet common social needs.

F, S

210 (3) Introduction to Social Work I

An introduction to social work as a profession (values, ethics, areas of practice, and the curriculum).

F, S

214 (3) Community Social Service Projects

An experiential introduction to the problem solving process in social work, task groups and group development. Students work in small groups to design, research, implement, and evaluate a community social service project.

Pre: SOWK 190 and 210

F, S

255 (3) Global Responses to Human Need

This course exposes students to some of the major realities of life among the poor and socially deprived in all parts of the world, primarily developing countries. Students will confront conditions that impede development and keep people locked into poverty and despair, and will discuss how a person who sees her/himself as a global citizen can act in tangible ways to make that "citizenship" more meaningful.

F, S

291 (1-3) Exploratory Studies

Under faculty mentorship, students can pursue subjects of individual interest related to social work and social welfare.

F, S

305 (3) Human Behavior in Social Work Practice

A systematic overview and integration of the diverse factors which influence behavior and create the context for social work practice.

Pre: SOWK 190, 210, 214, and social work supporting courses: SOC 101, ETHN 100, EDFN 235, BIOL 100

F, S

312 (5) Introduction to Field Practice

Beginning level supervised field experience with a human service agency. Students complete 150 hours of observation and agency service and attend a seminar which integrates the field experience and social work values, knowledge, and practice skills. Application required during semester before registration.

Pre: SOWK 190, 210, 214, and permission

F, S

314 (4) Social Work Practice I

Overview of generalist social work practice including assessment and intervention methodology and strategies; social work with diverse populations; ethical issues/dilemmas; importance of social work research. Application required during semester before registration.

Pre: SOWK 190, 210, 214, 305, 312, and permission

F, S

411 (2) Social Work Practicum Seminar

Integration of field experience with academic content and concepts. Taken with 418 and 445.

Pre: SOWK foundation, 443, 495, and permission

F, S

412 (3) Social Welfare Issues and Policies

Theoretical and practical exploration of the interrelatedness of social services, social policy formation and analysis, and social work practice.

Pre: ECON 100 & POL 111

F, S

415 (3) Child & Family Welfare Services

Social services designed to facilitate child development and family functioning.

F, S

418 (10) Practicum

Pre: SOWK 443, 495, and permission

F, S

419 (3) Social Work & Aging

Issues, resources, and processes in working with the elderly and their families in the social service system.

V

420 (3) Women's Issues in Social Work

Women's concerns as clients and workers in the social service system.

V

425 (3) Social Work in Health Care Settings

Service delivery issues and skills for working in hospitals, nursing homes, and community programs.

F

430 (3) School Social Work

Service delivery issues, knowledge and skills for providing social services within school services.

S

443 (4) Social Work Practice II

Intervention skills for working with individuals, families, and groups.

Pre: SOWK 314 and permission

F, S

445 (4) Social Work Practice III

Intervention skills for working with organizations and communities. Taken with SOWK 411 and 418.

Pre: SOWK 443 and permission

F, S

465 (3) Analyzing the Small Community

Community study, application of research techniques; student-conducted research and analysis using a community setting.

V

469 (3) Applied Social Work Research

Research issues and techniques, needs assessment, program and practice evaluation.

F, S

485 (1-6) Selected Topics

Topics announced when offered

V

490 (1-3) Workshop

Sociology

492 (1-3) Honors Reading

495 (2) Senior Paper

Required senior capstone experience. Taken with SOWK 443.

Pre: SOWK 314 F, S

497 (1-10) Internship

Additional field experience in approved social agency.

499 (1-6) Individual Study

Under faculty mentorship, students may pursue in-depth library or field research on topics of their choice.

Sociology

College of Social & Behavioral Sciences

Department of Sociology & Corrections

113 Armstrong Hall • 507-389-1561

Website: <http://www.mnsu.edu/dept/soccor/web/sc.html>

Chair: William Wagner

Afroza Anwary, Dennis Braun, Steven Buechler, Barbara Carson, Joe W. Davis, W. Roy DeMaree, H. Diane Graham, Kim Greer, Barbara Keating, Leland McCormick, Luis Posas, Robert Redhead, James Robertson, Thomas Schmid, Pedro Thomas, Steve Vassar, William Wagner

Sociology is the scientific study of contemporary society, social structures, human social behavior, and the organization and functioning of groups.

The Department of Sociology operates under a mission statement that calls for shared faculty and student responsibility for the pursuit, transmission and application of sociological knowledge. Copies of the mission statement and specific academic goals are available through the Department office. As part of this shared responsibility, students majoring in Sociology are expected to integrate the various facets of their education through a series of reflexive essays and other contributions to a student portfolio.

The Sociology major is designed to provide a comprehensive undergraduate education in Sociology. It is appropriate for students who wish to use sociological knowledge and skills in a variety of settings, for liberal arts students with an interest in Sociology and for students who wish to prepare for graduate education in Sociology. Departmental requirements for BA and BS are identical.

Admission to Major is granted by the department. Minimum University admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.00 (C).

SOCIOLOGY BA, BS

Required General Education (3 credits):

SOC 101 Introduction to Sociology (3)

Required for Major (27 cr):

SOC 200	Foundations of Sociology (3)
SOC 201	Social Research I (3)
SOC 202	Introduction to Social Statistics (3)
SOC 351	Social Psychology (3)
SOC 457	Classical Sociological Theory (3)
SOC 458	Contemporary Sociological Theory (3)
SOC 463	Social Stratification (3)
SOC 495	Senior Seminar (3)

And one of the following:

SOC 469	Survey Research (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Social Observation (3)

Required for Major (Electives, 12 cr):

Choose 12 credits with the approval of an advisor.

SOC 300/400 Level	SOC 300/400 Level
SOC 300/400 Level	SOC 300/400 Level

Required for Bachelor of Arts (BA) degree ONLY:
Language (8)

Required Minor. Yes.

SOCIOLOGY BA, BS MINOR

Required for Minor (6 cr):

SOC 101	Introduction to Sociology (3)
SOC 102	Introduction to Social Thought (3)

Required Electives (15 credits):

At least 12 credits must be at the 300-400 level.

SOC	Any Level
SOC	300-400 Level
SOC	300-400 Level
SOC	300-400 Level
SOC	300-400 Level

POLICIES/INFORMATION

GPA Policy. A minimum grade-point average of 2.0 is required for all coursework in the major. A minimum cumulative grade-point average of 2.0 is required for graduation. In addition, students must earn a minimum grade-point average of 2.5 for courses taken in the major to be eligible for field practice or internship.

P/N Grading Policy. Courses leading to a major or minor in sociology may not be taken on a P/N basis, except where P/N grading is mandatory.

COURSE DESCRIPTIONS

100 (3) Social Problems

A critical description and analysis of selected social problems, with an emphasis on the sociological perspective, critical thinking, roots of group inequality, and exploration of solutions and alternatives to existing social problems.

F, S

101 (3) Introduction To Sociology

Overview of the nature and characteristics of human societies; the structure and processes of social life;

impact of social forces on individuals and groups; interdependence of society and the individual; emphasis on cultural diversity and globalism.

F, S

102 (3) Introduction To Social Thought

An exploration of the ideas and theories of major social thinkers of the twentieth century.

F, S

200 (3) Foundations Of Sociology

Elements of the sociological perspective; overview of theoretical and methodological orientations; sociological practice and application; initial development of student portfolio.

Pre: SOC 101

F, S

201 (3) Social Research I

Fundamentals of research methods focusing on the research process and research design and including hypothesis testing, basic analysis and interpretation; students will develop and practice research skills.

Pre: SOC 101

F, S

202 (3) Introduction To Social Statistics

Basic descriptive and inferential statistics used in the analysis of sociological data.

Pre: SOC 101

F, S

208 (3) Courtship, Marriage And The Family

Social processes and structures of courtship, marriage, and family; relationships between society, cultures, family systems, families and individuals.

F, S

209 (3) Human Sexuality

The psycho-social-sexual development of the individual with emphasis on developing and maintaining meaningful, enjoyable, and responsible sexual relationships throughout life. Explores cultural, religious, and societal influences on sexual values and behaviors.

V

240 (3) Rural Studies

Students will explore some of the major variables that impact the lives of rural populations. Emphasis will be placed on understanding the diversity in experiences and history in both national and international rural communities, as well as on understanding which public policies can maximize the success of rural environments.

F or S

255 (3) Juvenile Delinquency

A critical consideration of definitions of juvenile delinquency, emphasis on micro and macro level of struggle in which delinquent behavior takes place, critique of current theories on delinquency, and the juvenile justice response to delinquency.

Pre: SOC 101

F, S

291 (1-3) Exploratory Studies

May be used to explore areas of interest to students which are not covered in regular courses. A maximum

of three hours applicable toward a major or minor in the department with consent of an advisor.

Pre: Consent

F, S

307 (3) Sex And Gender In Contemporary Society

Description and analysis of sex/gender systems, interpersonal power, language and communication, the role of gender in social institutions such as the family, work, and politics, and the role of social movements in creating change in gender relations.

Pre: SOC 101

V

351 (3) Social Psychology

The study of symbolic interaction as the basis of the mind, the self, and society.

Pre: SOC 101

F, S

352 (3) Humanistic Sociology

An examination of the relationships between society and the myths and illusions expressed in art and the humanities as socially constructed realities and reified symbols.

Pre: SOC 101

S

401 (3) American Society: A Comparative Analysis

A comparative view of American Society, comparing and contrasting social, cultural, and demographic aspects of life in the United States across regions and states.

Pre: SOC 101

V

404 (3) Sociology Of Aging

Social and social-psychological focus in later life. Problems and prospects of growing old in the United States.

Pre: SOC 101

V

405 (3) Sociology Of Death

Study of the structure of human response to death, dying, and bereavement in their socio-cultural, interpersonal, and personal context. Formation of children's perception of death, functions of the funeral, euthanasia, and suicide are among the topics to be discussed.

Pre: SOC 101

F

407 (3) Population Dynamics

The course will acquaint students with dynamic forces operating in the field of population and development. Includes an introduction to basic theories and techniques of population analysis, with coverage of global economic forces: fertility, mortality, and migration. The causes and consequences of over-population are discussed with special attention to resource depletion and food shortages.

Pre: SOC 101

S

408 (3) Family Life Dynamics

An overview and analysis of major aspects and issues facing the American family, including cohabitation, mate selection, parenting, and changes in marriage, family and sex role dynamics. Ethnicity, race, social class, and cultural aspects of family are highlighted.

Pre: SOC 101

F, S

409 (3) Family Violence

Various forms of family violence including dating violence, spouse abuse, and child abuse; social theory and

empirical research on family violence, social policy, appropriate responses and possible solutions in the area.
Pre: SOC 101 S

411 (3) The Family Across Cultures

Utilizes the comparative perspective to examine marriage and family in numerous international cultures. Focuses upon similarities and differences across cultures and how different family systems deal with universal aspects of family.
Pre: SOC 101 V

417 (3) Program Administration

Implications of sociological knowledge for the administration of Human Services programs. Theoretical and practical aspects of administration within social service systems.
S

423 (3) Complex Organizations

Analysis of the development, structure, and functioning of social processes in large-scale, formal organizations.
Pre: SOC 101 or 102 V

425 (3) Social Movements

Survey of major sociological perspectives on social movements, including theoretical approaches and empirical research on the causes, processes, and outcomes of social movements.
Pre: SOC 101 S

430 (3) Sociology Of Capitalism

Overview of the political economy of the United States as an advanced capitalist society with a focus on economic and political inequality, the class structure, the labor process, race and gender relations, the welfare state, the global dimensions of capitalism, and modern crisis tendencies.
Pre: SOC 101 V

435 (3) Marital Conflict: Causes And Consequences

Socio-cultural and interpersonal factors contributing to marital conflict and separation; consequences for spouses and children; effective conflict resolution; single parenting; remarriage and step-parenting; legal and social resources.
Pre: SOC 101 S

441 (3) Social Deviance

Sociological perspectives on social deviance; overview of theoretical approaches; emphasis on symbolic interactionism; issues of social control; research examples and policy implications.
Pre: SOC 101 F, S

442 (3) Criminology

A critical consideration of myths concerning crime, perspectives on crime and their assumptions, current criminology theory, and construction of alternative explanations related to crime.
Pre: SOC 101 F, S

446 (3) Race, Culture, & Ethnicity

Study of minority racial and cultural groups in U.S. society. An examination of how the lives of the members of these groups are affected by racism, prejudice, and discrimination.
Pre: SOC 101 F

456 (3) The History Of Social Thought

A survey of ideas about the nature of society from the past to the present.
Pre: SOC 101 F

457 (3) Classical Sociological Theory

A study of the 18th century forerunners and the 19th century founders of sociology.
Pre: SOC 101 F

458 (3) Contemporary Sociological Theory

An overview of modern sociological theories, including functionalism, conflict theory, symbolic interactionism, rational choice theory, phenomenological sociology, and recent trends in theoretical developments.
Pre: SOC 101 S

461 (3) Urban Sociology

A survey of sociological theory and research on the ecology, demography, and social organization of the urban community. Presents a sociological interpretation of the development of urban society and how the process of urbanization affects the basic societal institutions and individual behavior.
Pre: SOC 101 S

463 (3) Social Stratification

Class, social status, and power inequalities are examined at the world, national, and community level. Different theories of structured social inequality, class conflict, and political decision-making are discussed. The emergence of a solidified "caste" (rigid and unchanging system of inequality) of elites is hypothesized in contrast to an amorphous, powerless mass.
Pre: SOC 101 S

465 (3) Law And Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse.
F

466 (3) Program Planning

Theoretical and practical aspects of the planning process within social service systems. Examines the social context of planning and the use of a sociological knowledge base for planning in Human Services.
Pre: SOC 101 S

469 (3) Survey Research

Techniques of survey research, interview, and questionnaire construction, field administration, and sampling methodology.
F

470 (3) Sociology of Parent-Child Interaction

Parent-child relationships in societal context; socialization theories; classic and contemporary research; parenting applications.
Pre: SOC 101 F

479 (3) Sociological Ethnography

Exploration of the methodological and theoretical issues in sociological ethnography; examination of ethnic, deviant, and other constructed social worlds and the means by which sociologists study these worlds.

Pre: SOC 101 S

480 (3) Social Observation

Participant observation, focused interviews, and qualitative analysis; students actively participate in a field research project.

Pre: SOC 101 F

482 (3) Social Change

Analysis of social forces and processes involved in changing norms, values, and structures in traditional and modern societies. Examines both planned and unplanned change.

Pre: SOC 101 or 102 F

483 (3) The Family: A Sociological Analysis

An examination of theory development and research findings about family systems with a special emphasis on societal influences (social, economic, political) on the changing family.

Pre: SOC 101 F

484 (3) Sociology Of Religion

Analysis of the structures, functions, and origins of religion, its relationship to other social institutions, and its role in modern secular society. Examines processes of individual religiosity and explores current religious movements and trends.

Pre: SOC 101 S

485 (2-6) Selected Topics

Topics vary as announced in class schedule. May be retaken for credit if topic varies.

Pre: SOC 101 V

486 (3) Modifying Behavior In Social Settings

Principles and techniques of changing people's behavior in social, group, and agency environments.

Pre: SOC 101 F, S

490 (1-3) Workshop

Workshop topics vary as announced in class schedule. May be retaken for credit.

V

491 (1-6) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

V

492 (1) Reading For Honors

For Honors students only.

V

495 (3) Senior Seminar

Review of central ideas, concepts, and controversies in sociology; detailed examination of the sociological perspective and its implications for vocational or other social action; preparation of integrative essay based on portfolio materials. Students must have completed or be currently enrolled in all other required courses for the sociology major.

Pre: SOC 200 F, S

497 (1-12) Internship In Sociology

The internship in sociology is designed to provide opportunity to apply classroom learning, to practice and enhance skills, to experience professional socialization, and to explore a career. It also serves as a vehicle for the student to become more aware of personal strengths and identify areas in which further growth is needed.

Pre: Consent F, S

499 (1-6) Individual Study

A maximum of six credits is applicable toward a single major in the department; three credits toward a minor.

Pre: Consent F, S

Spanish

College of Arts & Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Website: <http://www.mnsu.edu/dept/modernlang/Welcome.html>

Chair: Kimberly Contag

James A. Grabowska, Karl H. Heise, Patricia Longwell-Wera, Enrique Torner

Education in the Spanish language provides insight into the literature and culture of Spain, Mexico and the Spanish speaking countries of the Caribbean and Central and South America. It also gives students a knowledge of language that enables them to work and travel in areas where the target language is used. To facilitate these goals, the department has sponsored a study abroad program in Mexico since 1973. Students who choose to take advantage of this program, or of other accredited study abroad experiences in Spanish speaking countries, may receive credit if departmental approval is obtained in advance.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

SPANISH BA, BS**Required for Major:**

Elementary and intermediate Spanish or other proof of skill is needed.

Required for Major (24 cr):

SPAN 365 Selected Readings (1-4)

Choose at least two of the following:

SPAN 355 Spanish Civilization (1-4)

SPAN 356 Latin American Civilization (1-4)

SPAN 496 Supervised Study: Themes in Hispanic Culture (1-6)

Choose at least one of the following:

SPAN 301 Topics in Language (1-4)

SPAN 310 Advanced Conversation and Composition (1-4)

Spanish

- SPAN 393 Supervised Study in Spanish Speaking Foreign Countries: Advanced Spanish (1-6)
- SPAN 394 Supervised Study in Mexico: Advanced Spanish (1-6)
- SPAN 401 Topics in Linguistics (1-4)
- SPAN 493 Supervised Study in Spanish Speaking Foreign Countries (1-6)

Choose at least one of the following:

- SPAN 402 Topics in Spanish Peninsular Literature (1-4)
- SPAN 495 Supervised Study: Themes in Hispanic Literature (1-6)

Choose at least one of the following:

- SPAN 403 Topics in Spanish American Literature (1-4)
- SPAN 494 Supervised Study in Mexico: Themes in Spanish American Literature (1-6)

Required for Major (Electives, 12 cr)

Choose electives from approved list at the end of this section.

Required Minor: Yes. Any.

SPANISH BS, TEACHING

Required for Major:

Elementary and intermediate Spanish or other proof of skill is needed.

Required for Major (32 cr):

- SPAN 365 Selected Readings (1-4)
- MODL 460 Methods of Teaching Modern Languages (3)
- MODL 461 Applied Modern Language Teaching Methods (1)
- MODL 462 Foreign Language Elementary School Methods (3)
- MODL 463 Applied Foreign Language Elementary School Methods (1)

Choose at least two of the following:

- SPAN 355 Spanish Civilization (1-4)
- SPAN 356 Latin American Civilization (1-4)
- SPAN 496 Supervised Study: Themes in Hispanic Culture (1-6)

Choose at least one of the following:

- SPAN 301 Topics in Language (1-4)
- SPAN 310 Advanced Conversation and Composition (1-4)
- SPAN 394 Supervised Study in Spanish Speaking Foreign Countries: Advanced Spanish (1-6)
- SPAN 394 Supervised Study in Mexico: Advanced Spanish (1-6)
- SPAN 401 Topics in Linguistics (1-4)
- SPAN 493 Supervised Study in Spanish Speaking Foreign Countries (1-6)

Choose at least one of the following:

- SPAN 402 Topics in Spanish Peninsular Literature (1-4)
- SPAN 495 Supervised Study: Themes in Hispanic Literature (1-6)

Choose one at least of the following:

- SPAN 403 Topics in Spanish American Literature (1-4)
- SPAN 494 Supervised Study in Mexico: Themes in Spanish American Literature (1-6)

Required for Major (Electives, 12 cr)

Choose electives from approved list at the end of this section.

Required for the Major:

Students must "demonstrate Intermediate-high level speaking Proficiency as defined in the ACTFL Proficiency Guidelines Established by the American Council on the Teaching of Foreign Languages.

Required for the Major:

First-hand experiences with the Target cultures.

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

SPANISH MINOR

Required for Minor:

Elementary and intermediate Spanish or other proof of skill is needed.

Required for Minor (12 cr):

Choose at least two of the following:

- SPAN 355 Spanish Civilization (1-4)
- SPAN 356 Latin American Civilization (1-4)
- SPAN 496 Supervised Study: Themes in Hispanic Culture (1-6)

Choose at least one of the following:

- SPAN 301 SPAN 310 SPAN 365
- SPAN 393 SPAN 394 SPAN 493

Required for Minor (Electives, 12 cr)

Choose electives from approved list at the end of this section.

Approved Elective List:

SPAN 201	or	SPAN 293
SPAN 202	or	SPAN 294
SPAN 210	SPAN 255	SPAN 256
SPAN 257	SPAN 293	SPAN 294
SPAN 299**	SPAN 301	SPAN 310
SPAN 393	SPAN 394	SPAN 401*
SPAN 402*	SPAN 403*	SPAN 493*
SPAN 494*		
SPAN 492**		
SPAN 495*		
SPAN 496		
SPAN 497		
SPAN 499**		

*may be repeated if different topic

**up to 6 credits may be used toward the major or minor.

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for major or minor credit.

P/N Grading Policy. Work done for a major or minor must be done for a letter grade above the second-year level. A grade of P must be earned for major or minor credit in all work done on a P/N basis.

Proficiency Policies. Students with high school language experience may take the CLEP test for a maximum of 12 credits. Students who wish to receive credit by examination may take tests to have their proficiency evaluated. Students may not take a proficiency test for a course in which they are enrolled. Students who have any previous Spanish experience or instruction must take the computerized Spanish Placement Test in the Academic Computer Center and/or see a Spanish faculty member for placement advice before enrolling in a Spanish course at an appropriate Proficiency level. The department reserves the right to deny admission to courses for those students whom a faculty member determines to have mastered the material already.

Fulfilling B. A. Language Requirement. Students who wish to validate the B.A. language requirement may take a language competency test from the Department of Modern Languages at no cost. If they are evaluated as being proficient, they need not take any more language courses, but they receive no credit. Students will not be considered exempt from the language requirement merely because they have taken two years of high school language.

Students may receive elective credit for fewer than 8 credits of an elementary language sequence, if these are satisfactorily completed. Such credits do not apply toward the 8 credit requirement for the B.A. degree.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of Modern Languages for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State University, Mankato as follows. Major: A minimum of three upper division courses other than Independent or Individual Study, for a total of at least 8 credits. At least two of these courses must be at the 400 level. Minor: A minimum of two upper division courses other than Independent or Individual Study, for a total of at least six credits.

Courses not required for a student's specific baccalaureate degree should be chosen according to these general guidelines:

- BA: Emphasis on literature in upper-division courses; students will most likely pursue their education beyond the baccalaureate level.
- BS: Emphasis on the ability to communicate in the language; presupposes knowledge of culture and civilization; students frequently have career goals in other

disciplines for which a language is either required or recommended.

- BS (teaching): Emphasis on communication (four skills plus culture and language analysis).

COURSE DESCRIPTIONS

101 (4) Elementary Spanish I

An introduction to the basic language skills of listening, speaking, reading and writing; presentation of condensed cultural notes.

102 (4) Elementary Spanish II

An introduction to the basic language skills of listening, speaking, reading and writing; presentation of condensed cultural notes.

Pre: SPAN 101 or equivalent

193 (1-6) Supervised Study in Spanish Speaking Foreign Countries: Elementary Spanish

Introductory work toward proficiency in reading, writing speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

194 (1-6) Supervised Study in Mexico: Elementary Spanish

Introductory work toward proficiency in reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

201 (4) Intermediate Spanish I

A review of the fundamentals of grammar, practice in written and oral expression, development of listening and reading skills, brief cultural components.

Pre: one year university level Spanish or equivalent

202 (4) Intermediate Spanish II

A review of the fundamentals of grammar, practice in written and oral expression, development of listening and reading skills, brief cultural components.

Pre: one year university level Spanish or equivalent

210 (1-4) Composition and Conversation

Designed for students who have completed elementary Spanish or for those who are in the intermediate sequence at the university level or equivalent. Includes basic communication exchanges; common vocabulary and experiences. Emphasis is on improving written expression through compositions related to topics of conversation. Goal: intermediate level of written and oral proficiency.

Pre: One year university level Spanish or equivalent.

255 (1-6) Selected Topics in Cultural Preparation for Study in Spanish Speaking Foreign Countries

Topics will vary. May be repeated for credit.

256 (1-6) Supervised Study-Travel in Spanish-Speaking Foreign Countries

Topics will vary. May be repeated for credit.

Spanish

257 (1-6) Cultural Involvement Project in Mexico

Topics will vary. May be repeated for credit. Development of cultural awareness.

Pre: One year university level Spanish or equivalent

293 (1-6) Supervised Study in Spanish-Speaking Foreign Countries: Intermediate Spanish

Development of reading, writing, speaking and listening skills at the intermediate level. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: One year university level Spanish or equivalent

294 (1-6) Supervised Study in Mexico: Intermediate Spanish

Development of reading, writing, speaking and listening skills at the intermediate level. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: One year university level Spanish or equivalent

299 (1-4) Individual Study

Variable topics.

301 (1-4) Topics in Language

Topics will vary and course may be repeated for credit. Language topics include pronunciation and intonation, advanced grammar, Spanish for the Marketplace, etc. The focus is on advanced oral or written communication.

Pre: Two years of university level Spanish or equivalent

310 (1-4) Advanced Conversation and Composition

Designed for students who have completed intermediate Spanish at the university level or the equivalent. Course begins with intermediate proficiency level and progresses to advanced level functions, present, past, and future indicative and present subjunctive. Expansion of vocabulary. Goal: Advanced level of oral proficiency; improvement of writing.

Pre: Two years of university level Spanish or equivalent.

355 (1-4) Spanish Civilization

Major cultural and historical aspects of Spain from ancient times to the present.

Pre: Two years university level Spanish or equivalent

356 (1-4) Latin American Civilization

Major cultural and historical aspects of Latin America from pre-colonial times to the present.

Pre: Two years university level Spanish or equivalent

365 (1-4) Selected Readings

Discussion and analysis of major themes and movements based on selected readings from representative authors from the Spanish speaking world.

Pre: Two years university level Spanish or equivalent

393 (1-6) Supervised Study in Spanish-Speaking Foreign Countries: Advanced Spanish

Increase proficiency of reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: Two years university level Spanish or equivalent

394 (1-6) Supervised Study in Mexico: Advanced Spanish

Emphasis is on reading, writing, speaking and listening skills. Content varies. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: Two years university level Spanish or equivalent

401 (1-4) Topics in Linguistics

Topics may vary. Course may be repeated for credit. Discussion and analysis of Spanish linguistics (syntax, sociolinguistics, historical linguistics, translation theory and practice.)

Pre: Completion of 4 credits of 300 level or equivalent.

402 (1-4) Topics in Spanish Peninsular Literature

Topics vary: Spanish Literature from Medieval to Modern Times.- May be repeated for credit.

Pre: Completion of 4 credits of 300 level or equivalent.

403 (1-4) Topics in Spanish American Literature

Topics vary: major writers from Spanish America; Spanish American novel; Spanish American poetry; Spanish American drama; Spanish American short story; romanticism, the Mexican novel. May be repeated for credit.

Pre: Completion of 4 credits of 300 level or equivalent.

492 (1-3) Independent Study

Variable topics.

Pre: Completion of eight 300-level credits, or equivalent

493 (1-6) Supervised Study in Spanish Speaking Foreign Countries

Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: Two years university level Spanish

494 (1-6) Supervised Study in Mexico: Themes in Spanish American Literature

Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Pre: Two years university level Spanish

495 (1-6) Supervised Study: Themes in Hispanic Literature

Topics will vary. May be repeated for credit.

Pre: Two years university level Spanish

496 (1-6) Supervised Study: Themes in Hispanic Culture

Topics will vary. May be repeated for credit.

Pre: Two years university level Spanish

499 (1-4) Individual Study

Variable topics.

Pre: completion of eight 300-level credits, or equivalent

MODERN LANGUAGE COURSES FOR BS,T

Modern Language

460 (3) Methods of Teaching Modern Languages

Introduction to theory and practice of modern language

teaching, including lessons in listening, speaking, reading, writing, vocabulary, and culture. Includes testing, program design, lesson planning, and use of technology. F

461 (1) Applied Modern Language Teaching Methods

A field experience including placement in the secondary level school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

462 (3) Foreign Languages in the Elementary School Methods

Introduction to theory and practice of modern language teaching for children grades K-6, including oral language development, second language literacy development, content-based language instruction, and techniques for language immersion programs.

463 (1) Applied Foreign Languages in the Elementary School Methods

A field experience including placement in the elementary level school setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462

465 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit. V

Special Education

College of Education

Department of Special Education

313 Armstrong Hall • 507-389-1122

Coordinator: Contact department chair

Minnesota State University, Mankato, Department of Special Education seeks to prepare special education professionals who work effectively within complex world and cultural systems marked by diversity, interdependence, and accelerating change. It is the mission of the Department of Special Education to equip highly trained individuals in the practices of self-reflection and self-evaluation, leading to an openness of growth and change within self, others, the profession, and society.

The Department of Special Education offers 4 graduate programs.

- Masters of Science in the area of Emotional/Behavioral Disorders
- Masters of Science in the area of Learning Disabilities

- Certificate in Emotional/Behavioral Disorders
- Certificate in Learning Disabilities

Undergraduate course offerings are supportive of general education curriculum. Two courses, SPED 405 and SPED 448, are required prerequisites for special education graduate programs.

SPECIAL EDUCATION

Undergraduate Coursework

SPED	304	Young Children with Individual Needs (3)
SPED	*405	Individuals with Exceptional Needs
SPED	407	The Special Education Learner in the General Classroom (2)
SPED	415	Teaching Strategies: Gifted/Talented (3-4)
SPED	418	Education of Students with Learning Disabilities (2)
SPED	419	Education of Students with Mild Disabilities (4)
SPED	421	Assessment of Young Children with Exceptional Needs (3)
SPED	440	Teaming with Parents and Other Professionals (3)
SPED	444	Behavior Management in the Classroom (2)
SPED	*448	Behavior Management (3)
SPED	490	Workshop in Special Education (1-3)
* prerequisite for admission to graduate program		
SPED	491	In-Service: Special Education (1-3)
SPED	499	Individual Study (1-3)

COURSE DESCRIPTIONS

304 (3) Young Children with Individual Needs

Students will demonstrate understanding of young children with atypical development, their special educational needs, and documentation of their development. Also included are skills for accurate observation of typical and atypical development including skills for writing appropriate goals for young children in a variety of environments.

*405 (3) Individuals with Exceptional Needs

This course provides a rigorous overview to the education of children and youth who differ greatly from the average in physical, cognitive, emotional or social characteristics. It introduces the student to Minnesota's Graduation Standards Rule in relation to the needs of children and youth who receive special education services.

407 (2) The Special Education Learner in the Regular Classroom

This course prepares general education teachers to instruct learners with exceptional needs in a classroom

Speech Communication

environment shared with regular class students. It supports a team approach to teaching, using assistive technology, adapted curriculum, accommodation strategies, and differentiated staffing. Minnesota's Graduation Rule is introduced in relation to the needs of children and youth who receive special education services.

415 (3-4) Teaching Strategies: Gifted/Talented

This course provides a rigorous overview of teaching/learning strategies to meet the educational needs of children and youth who are gifted/talented. It introduces the student to Minnesota's Graduation Standards Rule in relation to the needs of children and youth who are gifted/talented.

418 (2) Education of Students with Learning Disabilities

This course provides an understanding of the history, identification, assessment, programming, and services needed for students with learning disabilities.

419 (4) Education of Students with Mild Disabilities

This course is designed to provide students with information on the history, characteristics and definitions of students with mild disabilities (high incidence special education populations) as well as to explore the interventions of teaching students with mild disabilities.

Pre: SPED 405 or SPED 407

420 (3) Education of Young Children with Exceptional Need

Legal, historical, and foundational issues in the education of young children with disabilities as well as characteristics, service needs, and models of service for young children with disabilities with emphasis on young children with moderate/severe disabilities.

421 (3) Assessment of Young Children with Exceptional Needs

Screening and assessment for placement and programming for infants and young children with disabilities. Includes evaluation and administration of instruments application, assessment information, child progress evaluation, and evaluation of functioning in an environment.

440 (3) Teaming with Parents and Other Professionals

This course provides a theoretical and practical base for conferencing and collaboration with parents of children and youth with exceptional needs and other professionals in a team construct. Its content includes practical and theoretical understanding of the history and purpose of teaming and application of the Minnesota Graduation Standards Rule.

444 (2) Behavior Management in the Classroom

This course is designed to assist teachers and prospective teachers in managing the behavior of individual students in a general education classroom. Teacher education students will learn to use proactive, positive interventions to deal with individual and group management of surface behaviors to create a motivating

learning environment that encourages positive social interaction.

*** 448 (3) Behavior Management**

Applied practical approaches to improve academic and personal-social behavior of individuals who have mild or moderate disabilities in general education and special education programs. Principles of applied behavior analysis including reduction and enhancement procedures will be explored.

490 (1-3) Workshop in Special Education

Authentic applications of special education knowledge.

491 (1-2) In-Service: Special Education

Teaching students with disabilities.

499 (1-3) Individual Study

Advanced independent study in a specified area.

Speech Communication

College of Arts & Humanities,

Department of Speech Communication

230 Armstrong Hall • 507-389-2213

Website: <http://www.mnsu.edu/dept/spcomm/Communications/SpCommHP.html>

Chair: Warren G. Sandmann

Daniel Cronn-Mills, Sheryl Dowlin, Patricia Palm, Lisa Perry

Speech Communication is the study of how people generate shared meaning through the use of verbal and non-verbal symbols. Speech Communication majors work to develop confidence and effectiveness in their public speaking, interpersonal, and small group communication skills. The focus is not on preparing students for a specific job, but rather helping students to develop interpersonal, organizational, intercultural, and public presentational skills which will enhance the quality of their lives across a variety of contexts (e.g., within the workplace, family, civic and social situations).

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures. In addition to the general requirements, a cumulative GPA of 2.2 must be maintained in the courses of the major.

SPEECH COMMUNICATION BA, BS

Required for Major (15 cr):

SPEE 101 Interpersonal Communication (3)

SPEE 102 Public Speaking (3)

SPEE 190 Introduction to Communication Studies (3)

SPEE 485 Senior Seminar (3)

Choose one course from the following:

SPEE 310 Performance of Literature (3)

SPEE 333 Advanced Public Speaking (3)

SPEE 220 Forensics (3)

Required for Major (Electives, 18 cr):

Choose 6 courses from the following:

SPEE 201 SPEE 202 SPEE 203

SPEE 220 SPEE 240 SPEE 300

SPEE 310 SPEE 315 SPEE 321

SPEE 325 SPEE 333 SPEE 400

SPEE 401 SPEE 403 SPEE 404

SPEE 412 SPEE 413 SPEE 430

SPEE 440 SPEE 490 SPEE 497

SPEE 498 SPEE 499

12 of the 18 elective credits must be in upper level classes.

Required for Bachelor of Arts (BA) ONLY degree:

Language (8)

Required Minor: Yes. Any.

ENGLISH/SPEECH: TEACHING SPEECH CONCENTRATION

Required for Major (Speech Core, 27 cr):

SPEE 101 Interpersonal Communication (3)

SPEE 201 Small Group Communication (3)

SPEE 203 Intercultural Communication (3)

SPEE 310 Performance of Literature (3)

SPEE 315 Effective Listening (3)

SPEE 321 Argumentation and Debate (3)

SPEE 404 Teaching of Speech Communication (3)

SPEE 430 Directing Forensic Activities (3)

Choose either:

SPEE 333 Advanced Public Speaking (3)

SPEE 220 Forensics (1-3)

Required for Major (Electives, 9 cr):

SPEE 190 Introduction to Communication Studies (3)

SPEE 202 Nonverbal Communication (3)

SPEE 220 Forensics (1-3)

SPEE 240 Special Topics (1-3)

SPEE 300 Ethics and Free Speech (3)

SPEE 325 Interviewing (3)

SPEE 333 Advanced Public Speaking (3)

SPEE 400 American Public Address (3)

SPEE 401 Rhetoric of Western Thought (3)

SPEE 403 Gender and Communication (3)

SPEE 412 Organizational Communication (3)

SPEE 413 Advanced Intercultural Communication (3)

SPEE 440 Special Topics (1-3)

SPEE 490 Workshop (3)

SPEE 497 Teaching Internship (3)

SPEE 498 Internship (3)

SPEE 499 Individual Study (3)

Required for Major (English, 24 cr):

ENG 275 Intro to Literary Studies (4)

ENG 285 Practical Grammar (2)

ENG 361 Teaching English in the High School (2)

ENG 362 Teaching Lang., Comp., & Reading (4)

ENG 381 Intro to Linguistics (4)

Choose either:

ENG 463 Adolescent Literature (2)

ENG 464 Teaching Literature in the Middle School (3)

Choose either:

ENG 405 Shakespeare: Comedies and Histories (2)

ENG 406 Shakespeare: Tragedies (2)

Choose one from:

ENG 320 ENG 321 ENG 327

ENG 328

Required General Education Courses

SPEE 102 Public Speaking (3)

MASS 110 Introduction to Mass Communication (3)

ENG xxx English Elective (4)

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

SPEECH COMMUNICATION MINOR

Required for Minor (6 cr):

SPEE 101 Interpersonal Communication (3)

SPEE 102 Public Speaking (3)

Required for Minor (Electives, 12 cr):

Choose up to 12 credits from the Speech department.

SPEE xxx SPEE xxx

SPEE xxx SPEE xxx

POLICIES/INFORMATION

GPA Policy. Students must maintain a minimum of 2.2 GPA.

P/N Grading Policy. Total credits in the department must not exceed 25 percent P/N for a major or a minor.

Internships: Internships are P/N option only.

Academic Probation Advising: Refer to the information listed in the College of Arts and Humanities section of the bulletin.

Speech Communication minors may apply no more than 3 credits of SPEE 498 and 3 credits of SPEE 499 to fulfillment of the minor. Additional credits may be applied for graduation requirements. Speech Communication majors may apply no more than 6 credits of SPEE 498 and 3 credits of SPEE 499 to fulfillment of the major. Additional credits may be applied for graduation requirements.

COURSE DESCRIPTIONS

100 (3) Fundamentals of Speech Communication

A course designed to improve students' understanding in communication, including the areas of interpersonal, nonverbal, listening, small group and public speaking.

101 (3) Interpersonal Communication

A course blending theory and practice to help individuals build effective relationships through improved communication.

Speech Communication

102 (3) Public Speaking

A course in communication principles to develop skills in the analysis and presentation of speeches.

190 (3) Introduction to Communication Studies

This course is designed to introduce students to the basic theories, principles, concepts, and research methodologies in the field of communication.

201 (3) Small Group Communication

Development of communication skills for working with others in small group situations.

202 (3) Nonverbal Communication

Investigation of the concepts and theories of nonverbal communication. Designed to assist students in increasing their awareness and understanding of their nonverbal communication and in analyzing and understanding the nonverbal communication of others.

203 (3) Intercultural Communication

The course explores communication with people from other cultures, why misunderstandings occur and how to build clearer and more productive cross-cultural relationships.

220 (1-3) Forensics

Activity course involving participation in intercollegiate speech tournaments. Course can be repeated for credit.

233 (3) Public Speaking for Technical Professionals

This course is designed to introduce and develop the skills and knowledge necessary to create and present effective public communication of technical content for a technical or general audience.

240 (1-3) Special Topics

Special interest courses devoted to specific topics within the field of speech communication. Topics vary, and course may be retaken for credits under different topic headings.

300 (3) Ethics and Free Speech

This course is divided into two sections. First the class explores ethical parameters involved in communication from a variety of social and cultural perspectives. Second, the class investigates current standards and issues involving freedom of speech.

310 (3) Performance of Literature

This course is designed to develop the skills to complete the artistic process of studying literature through performance and sharing that study with an audience.

315 (3) Effective Listening

This course is designed to provide students with skills of effective listening, and the ability to apply that knowledge in a variety of educational and professional settings.

321 (3) Argumentation and Debate

Development of skills in the analysis, application and evaluation of argumentative communication.

325 (3) Interviewing

This course is designed to prepare students to use communication skills in a variety of interview settings.

333 (3) Advanced Public Speaking

This is an advanced course in public presentation focused on improving presentational skills of speech delivery and language choice.

400 (3) American Public Address: A Tradition

Survey of significant American speakers and their speeches from the colonial period to the Twentieth Century.

401 (3) Rhetoric of Western Thought

The course explores the history of rhetoric and communication from the ancient Greeks to the present day. The course is designed for students interested in expanding their understanding of rhetoric as a force in contemporary intellectual, political and academic fields.

403 (3) Gender and Communication

This course is designed to develop an understanding of how gender and communication interact. Students learn the basic theories and principles of communication as it applies to gender and develop skills to enhance communication between and among gender groups.

404 (3) Teaching of Speech Communication

This course is designed to fulfill the Secondary Licensure requirement. The course covers teaching methods and materials needed to develop speech communication units for speech communication courses in grades 5-12.

412 (3) Organizational Communication

This course is designed to develop an understanding of speech communication in the organizational context. The course will aid each individual in working more effectively within any type of organization through exposure to major theories and works in the area of organizational communication.

413 (3) Advanced Intercultural Communication

This course is designed for advanced studies dealing with theories and issues raised by both international and domestic intercultural communication.

430 (3) Directing Forensic Activity

Methods and techniques in the development of competitive speech programs in grades 5-12.

440 (1-3) Special Topics

A course designed for students who have a general interest in speech communication. Content of each special topics course will be different. May be retaken for credit.

445 (3) Conflict Management

This theory and research-oriented course examines the relationship between communication and conflict, and is designed to provide students with knowledge and skills in dealing with conflict situations.

485 (3) Senior Seminar

This is a required capstone course of all speech communication majors and involves the completion and presentation of a senior level research project. Teaching majors are excluded from this requirement.
Pre: SPEE 190

490 (1-4) Workshop

Topics vary as announced in class schedules.

497 (1-12) Teaching Internship

First-hand experience in the classroom assisting a faculty member.

498 (1-6) Internship

Provides first-hand experience in applying communication theories in the workplace under the direction of an on-site supervisor.

499 (1-3) Individual Study

Independent study under the supervision of an instructor.

Statistics

College of Science, Engineering, & Technology

Department of Mathematics & Statistics

273 Wissink Hall • 507-389-1453

Website: <http://www.mnsu.edu/dept/mathstat/>

Chair: Larry Pearson

Mezbahur Rahman

Statistics in this department is designed to provide a basic theoretical background for statistical inference and some techniques and practice in applying the theory. Courses in statistics would be useful for anyone as a tool in another area of study or as preparation for more advanced study of statistics.

STATISTICS BA, BS MINOR

Required for Minor (20-21 cr):

MATH 121 Calculus I (4)

MATH 122 Calculus II (4)

STAT 354 Concepts of Probability and Statistics (3)

STAT 450 Regression Analysis (3)

STAT 451 Experimental Designs (3)

Choose one course from the following:

STAT 357 Sample Survey and Design (3)

STAT 358 Categorical Data Analysis (3)

STAT 359 Nonparametric Methods (3)

STAT 455 Theory of Statistics I (4)

POLICIES/INFORMATION

GPA Policy. Statistics minors must earn a grade of C or better in all courses applied to the minor.

P/N Grading Policy. All 300- and 400-level courses are offered for grade only with the exception of STAT 498 and 499 which is available for both P/N and letter grade.

Credit by examination. Will not be approved for courses in which a student has already received a grade.

Credit Limitation. A student may not receive credit for STAT 354 after completing MATH 455 or STAT 455.

COURSE DESCRIPTIONS

154 (3) Elementary Statistics

Basic descriptive measures of data, elementary probability concepts and their relation to statistical inference, tests of hypotheses and confidence intervals. An appropriate preparation for more advanced statistics courses in any area.

Pre: Three years high school algebra or MATH 098
F, S

354 (3) Concepts of Probability and Statistics

This is a calculus-based course covering introductory level topics of probability and statistics. It is designed to meet the needs of both the practitioner and the person who plans further in-depth study. Topics include probability, random variables and probability distributions, joint probability distributions, statistical inference (both estimation and hypothesis testing), analysis of variance, regression, and correlation. Same as MATH 354.

Pre: MATH 122
F, S

357 (3) Sample Survey and Design

Random sampling, systematic sampling methods including stratified random sampling, cluster sampling and two-stage sampling, ratio estimation, regression, and population size estimation.

Pre: elementary STAT course or consent
ALT-F

358 (3) Categorical Data Analysis

Forms of multivariate analysis for discrete data, two dimensional tables, models of independence, log linear models, estimation of expected values, model selection, higher dimensional tables, logit models and incompleteness.

Pre: elementary STAT course or consent
ALT-F

359 (3) Nonparametric Methods

Derivation and usage of nonparametric statistical methods, applications in count and rank data, analysis of variance for ranked data, statistical quality control.

Pre: any STAT course
ALT-S

450 (3) Regression Analysis

Simple and multiple regression, correlation, analysis of variance and covariance.

Pre: MATH/STAT 354 or 455
ALT-S

451 (3) Experimental Designs

Completely randomized, randomized block, fractional factorial, incomplete block, split-plot, Latin squares, expected mean squares, response surfaces, confounding, fixed effects and random effects models.

Pre: MATH/STAT 354 or 455
ALT-S

455 (4) Theory of Statistics I

A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications. Includes probability, continuous probability distributions, multivariate distributions, functions of random variables, central limit theorem and statistical inference. Same as MATH 455.

Pre: MATH 223
F

Teaching English As A Second Language (TESL)

456 (4) Theory of Statistics II

A mathematical approach to statistics with derivation of theoretical results and of basic techniques used in applications, including sufficient statistics, additional statistical inference, theory of statistical tests, inferences about normal models and nonparametric methods. Same as MATH 456.

Pre: MATH/STAT 455

S

488 (1-3) Seminar

The study of a particular topic primarily based upon recent literature. May be repeated for credit on each new topic.

491 (1-4) In-Service

A course designed to upgrade the qualifications of persons on-the-job. May be repeated for credit on each new topic.

495 (1-4) Selected Topics

A course in an area of statistics not regularly offered. May be repeated for credit on each new topic.

498 (1-12) Internship

Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

499 (1-4) Individual Study

Independent individual study under the guidance and direction of a faculty member. Special arrangements must be made with an appropriate faculty member. May be repeated for credit of each new topic.

Teaching English As A Second Language (TESL)

College of Arts & Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Chair: Kimberly Contag

Tina Edstam, Patricia Wilcox Peterson, Harry Solo, Steve Stoyanoff

The TESL non-licensure program prepares students to teach English as a second language in situations where licensure is not required, such as in Peace Corps schools abroad.

The TESL licensure minor prepares students to teach English as a second language (ESL) in grades K-12. As a free-standing licensure program, it is the fully recognized standard for teaching ESL in Minnesota and need not be upgraded to a major at any time.

ESL licensure is also attainable through courses at the graduate level which fulfill program requirements. Further information is available from the department.

TEACHING ENGLISH AS A SECOND LANGUAGE, NON-LICENSURE MINOR

Required for Minor (23 cr):

ENG	381	Introduction to English Linguistics (4)
MODL	470	Theory and Methods of TESL I (4)
MODL	471	Theory and Methods of TESL II (4)
ENG	482	English Phonetics and Grammar for TESL (4)
ENG	485	Language and Culture in TESL (4)
CI	417	Teaching Reading to ESL Students (3)

TEACHING ENGLISH AS A SECOND LANGUAGE MINOR

Required for Minor (24 cr):

ENG	381	Introduction to English Linguistics (4)
MODL	470	Theory and Methods of TESL I (4)
MODL	471	Theory and Methods of TESL II (4)
MODL	472	TESL Practicum (1)
ENG	482	English Phonetics and Grammar for TESL (4)
ENG	485	Language and Culture in TESL (4)
CI	417	Teaching Reading to ESL Students (3)

Required for Minor (Professional Education K-12, minimum 30 cr):

See the SECONDARY AND K-12 PROFESSIONAL EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. This 30 credit requirement includes 11 credits of student teaching as outlined below. Students must satisfactorily complete a student teaching component of full-day experiences for one academic semester, or its equivalent, including both elementary and secondary education levels with students of limited English proficiency. Includes supplementary teaching.

Elementary:

CI	476	Supplementary Student Teaching Secondary (6)
CI	478	Supplementary Student Teaching Elementary (5)

Secondary:

CI	476	Supplementary Student Teaching Secondary (6)
CI	478	Supplementary Student Teaching, Elementary (5)

Non-teaching Major:

CI	476	Supplementary Student Teaching, Secondary (6)
CI	478	Supplementary Student Teaching, Elementary (5)

POLICIES/INFORMATION

GPA Policy. A grade of "C" or better must be earned for minor credit or for licensure.

P/N Grading Policy. Work done for the minor or for licensure must be done for a letter grade above the 200 level.

COURSE DESCRIPTIONS

470 (4) Theory and Methods of TESL I

Introductio to theories of second languages acquisition and description of program models for second languages literacy and academic success. Treats oral language development, literacy, content-based instruction, testing and placement of second language learners.

F

471 (4) Theory and Methods of TESL II

Teaching English as a second language: treats the skills of listening, speaking, reading, writing and vocabulary use. Consideration of individual and sociocultural factors in language learning.

S

472 (1) Teaching English as a Second Language Practicum

A field experience including placement in the K-12 public school setting for students in the TESL licensure minor. Practicum students work with ESL students at the elementary and/or secondary level. Take concurrently with or following MODL 470 and MODL 471.

475 (1-4) Topics in TESL

Topics in learning and teaching English as a Second/ Foreign Language. May be repeated for credit.

V

499 (1-4) Individual Study

Special topics in language education. May be repeated for credit.

F, S

Theatre and Dance

College of Arts & Humanities

Department of Theatre and Dance

201 Performing Arts Center • 507-389-2118

Website: <http://www.MSUTheatre.com>

Fax: 507-389-2922

Chair: Paul J. Hustoles

Thomas Bliese, Jennifer Engler, Gary Erickson, Julie Kerr-Berry, David McCarl, Mike Lagerquist, Nina LeNoir, Steven Smith

The Department of Theatre and Dance is dedicated to two primary goals: to provide students with the highest caliber of training in theatre and dance that will allow them to create performances of any kind at any level, and to provide the southern Minnesota region with a multifaceted, high quality theatrical experience. These goals interweave to provide entertainment and education to those on both sides of the curtain.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

THEATRE BA, BS

Required General Education for Major (3 cr):

THEA 100 Introduction to Theatre (3)

Required for Major (Core, 19 cr):

THEA 110 Fundamentals of Acting (3)
(THEA 101 (3) for Design/Technical Option)

THEA 235 Fundamentals of Directing (3)

THEA 252 Theatre Technology (3)

THEA 481 Theatre History I (3)

THEA 482 Theatre History II (3)

Choose a minimum of 4 credits from the following (2 areas must be represented):

THEA 102 Theatre Activity: Acting (1)

THEA 103 Theatre Activity: Management (1)

THEA 105 Theatre Activity: Stagecraft (1)

THEA 107 Theatre Activity: Costume (1)

THEA 108 Theatre Activity: Lighting (1)

THEA 109 Theatre Activity: Sound (1)

Required for Major (Options, 29 cr):

Choose one of the following options.

ACTING/DIRECTING (29 cr):

THEA 121 Movement for Theatre I (1)

THEA 122 Movement for Theatre II (1)

THEA 210 Intermediate Acting (3)

THEA 265 Stage Makeup (2)

THEA* 411 Music Theatre (3)

THEA 412 Theatre Speech I (1)

THEA 413 Theatre Speech II (1)

THEA 416 Acting Scene Studies (3)

THEA 417 Acting Techniques (3)

THEA 418 Acting Styles (3)

THEA* 419 Acting for Radio/TV (3)

THEA xxx Dance Electives (2)

THEA xxx Elective (3)

THEA xxx Elective (3)

*Choose 1 of 2

DESIGN/TECHNICAL (29 cr):

THEA 255 Stagecraft (3)

THEA 260 Costume Construction (3)

THEA* 440 Scene Design I (3)

THEA 451 Drafting for the Theatre (3)

THEA* 460 Costume Design I (3)

THEA 464 Costume History (3)

THEA* 470 Lighting Design I (3)

THEA* 475 Sound Design (3)

THEA xxx Elective (3)

THEA xxx Elective (3)

*Choose 3 of 4

Choose a minimum of 2 credits from the following:

THEA 303 Practicum: Theatre Management (1)

THEA 304 Practicum: Scene Design (1)

THEA 305 Practicum: Tech Theatre (1)

THEA 306 Practicum: Costume Design (1)

THEA 307 Practicum: Costume Construction (1)

THEA 308 Practicum: Light Design (1)

THEA 309 Practicum: Sound (1)

Theatre and Dance

Required for Bachelor of Arts (BA) degree ONLY:

Language (8)

Required Minor: BA, Yes. BS, No.

DANCE and THEATRE ARTS BS TEACHING

Required General Education for Major (15 cr):

THEA	100	Introduction to Theatre (3)
THEA	123	Beginning Jazz Dance (1)
THEA	128	Beginning Modern Dance (1)
THEA	225	World Dance in Cultural Perspectives (3)
MUS	120	Introduction to Music (3)
HP	178	Social, Folk, & Square Dance Techniques (1)
HLTH	310	Drug Education (3)

Required for Major (Core, 38 cr):

THEA	110	Fundamentals of Acting (3)
THEA	200	Careers in Theatre (1)
THEA	223	Intermediate Jazz Dance (2)
THEA	235	Fundamentals of Directing (3)
THEA	252	Theatre Technology (3)
THEA	265	Stage Makeup (2)
THEA	324	Methods and Materials for Teaching Creative Dance & Dramatics (2)
THEA	411	Music Theatre (3)
THEA	424	Dance and Theatre Pedagogy (3)
THEA	430	Theatre Management (3)
THEA	475	Sound Design (3)
THEA	481	Theatre History I (3)
THEA	482	Theatre History II (3)

Choose one of the following:

THEA	440	Scene Design I (3)	<i>or</i>
THEA	460	Costume Design (3)	<i>or</i>
THEA	470	Lighting Design (3)	<i>or</i>

Choose a minimum of 4 credits from the following (2 areas must be represented):

THEA	102	Theatre Activity: Acting (1)
THEA	103	Theatre Activity: Management (1)
THEA	105	Theatre Activity: Stagecraft (1)
THEA	107	Theatre Activity: Costume (1)
THEA	108	Theatre Activity: Lighting (1)
THEA	109	Theatre Activity: Sound (1)
THEA	129	Dance Activity (1)

Required for Major (Options, 16 cr):

Choose one of the following options.

DANCE (16 cr):

THEA	125	Afro-Caribbean Dance (1)
THEA	126	Beginning Ballet (1)
THEA	127	Beginning Tap Dance (1)
THEA	226	Intermediate Ballet (2)
THEA	227	Intermediate Tap Dance (2)
THEA	228	Intermediate Modern Dance (2)
THEA	321	Dance Composition & Improvisation (2)
THEA	328	Advanced Modern Dance (2)
THEA	429	Senior Dance Project (1)
THEA	xxx	Electives (2)

THEATRE (16 cr):

THEA	121	Movement for Theatre I (1)
THEA	122	Movement for Theatre II (1)
THEA	210	Intermediate Acting (3)
THEA	255	Stagecraft (3)
THEA	260	Costume Construction (3)
THEA	435	Advanced Directing Methods (3)
THEA	xxx	Electives (2)

Required for Major (Professional Education, 30 cr):

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

THEATRE MINOR

Required General Education for Minor (3 cr):

THEA	100	Introduction to Theatre (3)
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Required for Minor (19 cr):

THEA	110	Fundamentals of Acting (3)
THEA	235	Fundamentals of Directing (3)
THEA	252	Theatre Technology (3)
THEA	481	Theatre History I (3)
THEA	482	Theatre History II (3)

Choose a minimum of 4 credits from the following courses (2 areas must be represented):

THEA	102	Theatre Activity: Acting (1)
THEA	103	Theatre Activity: Management (1)
THEA	105	Theatre Activity: Stagecraft (1)
THEA	107	Theatre Activity: Costume (1)
THEA	108	Theatre Activity: Lighting (1)
THEA	109	Theatre Activity: Sound (1)

DANCE MINOR

See the DANCE section for additional information

Required for Minor (15 cr):

THEA	123	Beginning Jazz Dance (1)
THEA	125	Afro-Caribbean Dance Forms (1)
THEA	126	Beginning Ballet (1)
THEA	127	Beginning Tap Dance (1)
THEA	128	Beginning Modern Dance (1)
THEA	223	Intermediate Jazz Dance (2)
THEA	226	Intermediate Ballet (2)
THEA	227	Intermediate Tap Dance (2)
THEA	228	Intermediate Modern Dance (2)
THEA	328	Advanced Modern Dance/Company Class (2)

Choose ONE of the following tracks:

Performance (6 cr):

THEA	225	World Dance in Cultural Perspectives (3)
THEA	321	Dance Composition & Improvisation (2)
THEA	429	Senior Dance Project (1)

Teaching Track (6 cr):

THEA	424	Dance and Theatre Pedagogy (3)
THEA	324	Methods and Materials for Teaching Creative Dance and Dramatics (2)
THEA	329	Dance Practicum (1)

POLICIES/INFORMATION

GPA Policy. A grade of C or better must be earned for major or minor credit.

P/N Grading Policy. Courses applied to a major or minor in the department may not be taken on a P/N basis, except by permission of the chair.

COURSE DESCRIPTIONS

100 (3) Introduction to Theatre

Survey of theatre arts; lectures, with lab experience available. F, S

101 (3) Acting for Everyone

Performance scenes and exercises for the beginner. F, S

102 (1-2) Theatre Activity: Acting

Acting in a mainstage or approved production. Pre: Consent F, S

103 (1-2) Theatre Activity: Management

Work on stage or house management, or public relations. Pre: Consent F, S

105 (1-2) Theatre Activity: Stagecraft

Work on stage crew in a mainstage production. Pre: Consent F, S

107 (1-2) Theatre Activity: Costume

Work on costume crew in a mainstage production. Pre: Consent F, S

108 (1-2) Theatre Activity: Lighting

Work on lighting crew in a mainstage production. Pre: Consent F, S

109 (1-2) Theatre Activity: Sound

Work on sound crew in a mainstage production. Pre: Consent F, S

110 (3) Fundamentals of Acting

Performance scenes and acting exercises for the beginning theatre major. Pre: Consent F

121 (1) Movement for Theatre I

Instructs the student through a series of movement exercises in body alignment, breathing, flexibility, strength and coordination. Pre: Consent F

122 (1) Movement for Theatre II

A continuation of Movement for Theatre I. Pre: THEA 121 S

123 (1) Beginning Jazz Dance

Fundamentals of beginning jazz dance technique. S

125 (1) Afro-Caribbean Dance

Fundamentals of African-based dance forms explored through West African and Caribbean roots. ALT-F

126 (1) Beginning Ballet

Fundamentals of beginning ballet technique. F

127 (1) Beginning Tap Dance

Fundamentals of tap dance technique utilized in musical theatre. S

128 (1) Beginning Modern Dance

Fundamentals of beginning modern dance technique and improvisation. F

129 (1) Dance Activity

Performing in a mainstage dance production. Pre: Consent F, S

200 (1) Careers in Theatre

Introduction to the various career opportunities directly in or appertaining to the theatrical arts. Pre: THEA 100 ALT-S

210 (3) Intermediate Acting

The process of character structuring through script analysis and scene work. Pre: THEA 110 or consent F

215 (2) Audition Methods

The development of a repertoire of audition pieces to increase the ability to perform with confidence on short notice. Pre: THEA 110 or consent ALT-S

223 (2) Intermediate Jazz Dance

Expanding jazz dance technique moving into musical theatre dance combinations. Pre: THEA 123 or consent F

225 (3) World Dance in Cultural Perspectives

Cross-cultural survey of dance with emphasis on historical, social and cultural dimensions. Pre: THEA 125, 126 or 128 ALT-F

226 (2) Intermediate Ballet

Expanding ballet technique with emphasis on longer and more complex adagio, petite allegro, and grand allegro sections. Pre: THEA 126 or consent S

227 (2) Intermediate Tap Dance

Expanding tap dance technique including advanced combinations utilized in musical theatre. Pre: THEA 127 or consent F

228 (2) Intermediate Modern Dance

Expanding modern dance technique with emphasis on center floor combinations and longer, more complex traveling combinations. Pre: THEA 128 or consent S

229 (1) Kinetic Learning in the Classroom

Acquiring a fundamental understanding of dance/movement elements and skills, and applying these concepts to the pre-school through elementary school curriculum. Pre: Consent F, S

Theatre and Dance

235 (3) Fundamentals of Directing

Introduction to the theory and practice of directing for the theatre.

Pre: THEA 100 and 101 or 110 F

252 (3) Theatre Technology

Fundamental concepts of technical theatre; an overview of basic stagecraft, costuming, lighting, and sound in the contemporary theatre.

Pre: THEA 100 S

255 (3) Stagecraft

Introduction to theory and practice of construction techniques used in the theatre.

Pre: THEA 100 ALT-F

260 (3) Costume Construction

Theory and techniques in stage costume construction.

Pre: THEA 100 S

285 (3) Theatre of Diversity

A survey of literature, artists and performances with specific regard to the theatre of diversity including, but not restricted to: Feminist Theatre, Gay and Lesbian Theatre, African-American Theatre, Asian American Theatre, Hispanic Theatre, etc.

ALT-S

291 (1-4) Individual Study

Pre: Consent F, S

295 (1-4) Touring Theatre

Work on the actual mounting and performance of a touring theatrical production.

Pre: Consent S

300 (1-4) Summer Stock

Technical work and/or acting in summer theatre productions.

Pre: Consent Sum

301 (1-2) Practicum: Directing

A considerable production responsibility which utilizes skills in script analysis, actor coaching, design coordination and general production management.

Pre: Consent F, S

302 (1-2) Practicum: Acting

A considerable production responsibility dealing with the preparation and performance of a major acting role.

Pre: Consent F, S

303 (1-2) Practicum: Theatre Management

Special assignments in stage management, house, and/or concessions management, public relations or related areas.

Pre: Consent F, S

304 (1-2) Practicum: Scene Design

Preparation and execution of a major scene design assignment. Requires a design and construction schedule, preliminary and final design concepts, and necessary drafting details.

Pre: Consent F, S

305 (1-2) Practicum: Tech Theatre

A considerable production responsibility dealing with some technical aspects including technical drawings, budget management, or construction techniques.

Pre: Consent F, S

306 (1-2) Practicum: Costume Design

Full and assistant costume design assignments for theatre productions.

Pre: Consent F, S

307 (1-2) Practicum: Costume Construction

The construction of costumes for theatre productions.

Pre: Consent F, S

308 (1-2) Practicum: Light Design

Preparation and execution of a major lighting design assignment. Requires a design with appropriate schedules, supervision of hanging, focusing and cues.

Pre: Consent F, S

309 (1-2) Practicum: Sound

Preparation and execution of a major sound design assignment including all sound effects, reinforcement and amplification.

Pre: Consent F, S

321 (2) Dance Composition and Improvisation

The study of dance making, dance structure, dance accompaniment, and dance criticism through the creation of dance works.

Pre: THEA 125, 126, 228 ALT-S

324 (2) Methods and Materials for Teaching Creative Dance and Dramatics

Exploration of teaching creative dance and dramatics in the K-12 setting.

Pre: THEA 121, 122, 128 ALT-F

328 (2) Advanced Modern Dance/Company Class

Advanced modern dance technique with emphasis on performance skills, elevation, and turns.

Pre: THEA 228 or consent F, S

329 (1) Dance Practicum

Individualized teaching experience of dance in the private or public sector.

Pre: Consent F, S

411 (3) Music Theatre

Introductory survey of American Musical Theatre history and repertoire, as well as performance techniques for the singing actor.

Pre: Consent ALT-F

412 (1) Theatre Speech I

Study and exercises in vocal development emphasizing the demands of stage speech.

Pre: THEA 210 or consent ALT-S

413 (1) Theatre Speech II

Continuation of Theatre Speech I, including the study of the IPA.

Pre: THEA 412 ALT-F

414 (1) Stage Dialects I

A study and practice of vocal dialects most often used in performance.

Pre: THEA 413 or consent. ALT-S

415 (1) Stage Dialects II

A continuation of Stage Dialects I.

Pre: THEA 413 or consent. ALT-F

416 (3) Acting Scene Studies

Advanced scene studies with a focus on analysis and the varied approaches to developing motivations.

Pre: THEA 210 ALT-S

417 (3) Acting Techniques

The development of individual performance craft and advanced acting methodologies.

Pre: THEA 210 ALT-F

418 (3) Acting Styles

Advanced scene studies in classical and stylized dramatic literature.

Pre: THEA 210 ALT-S

419 (3) Acting for Radio/TV

Development of performance craft for the media.

Pre: THEA 210 ALT-S

424 (3) Dance and Theatre Pedagogy

Pedagogy of dance and theatre in the K-12 setting. Emphasis will include: national and state standards, assessment practices, lesson planning and curriculum development. Taken in conjunction with C&I 448, this course will include pre-service teaching experience.

Pre: THEA 324 ALT-S

425 (1) Styles of Motion

Specialized training in a variety of physical techniques.

Pre: Consent ALT-F, ALT-S

426 (1) Stage Combat

An exploration of basic skills involved in unarmed combat and a variety of historical weapons systems with primary emphasis on theatricality and safety.

Pre: Consent F

429 (1) Senior Dance Project

This course represents a culminating experience for all dance minors. Individually paced and directed, this project can take either choreographic or written (academic) form. Periodic meetings will occur between student and instructor to assess progress.

Pre: Completion of all dance minor requirements.

S

430 (3) Theatre Management

Exposes students to the functions of theatre managers through case studies, discussions, practical application and readings.

Pre: THEA 235 ALT-S

435 (3) Advanced Directing Methods

Advanced studies in script analysis, actor psychology and staging techniques culminating in performance projects with critical analysis.

Pre: THEA 235 and consent. S

440 (3) Scene Design I

Development of techniques and skills in the creation of scenery.

Pre: THEA 252 or consent F

441 (3) Scene Design II

Refinement of model building and drawing skills in theatrical design.

Pre: THEA 440 S

445 (3) Scene Painting

Provides information on materials and techniques of scenic painting with a large amount of lab time for experimentation with technique.

Pre: THEA 252 or consent ALT-F

451 (3) Drafting for the Theatre

Enhances the advanced theatre student's ability to show complex elements of a theatrical design in a clear manner using accepted theatrical drafting methods.

Pre: THEA 255 or consent ALT-F

455 (3) Technical Direction

Explores all facets of technical direction, construction techniques, and project management.

Pre: THEA 252 and 255 ALT-F

460 (3) Costume Design I

Theory and techniques in costume design and execution.

Pre: THEA 252 or consent F

461 (3) Costume Design II

Advanced costume design theory and techniques.

Pre: THEA 460 ALT-S

464 (3) Costume History

Survey of costume history from ancient Egypt to 1900.

Pre: Consent S

465 (3) Advanced Make-Up

Practical application of advanced makeup techniques.

Pre: THEA 265 ALT-S

470 (3) Lighting Design I

The study of lighting equipment, usage, techniques and stage lighting design.

Pre: THEA 252 ALT-F, ALT-S

471 (3) Lighting Design II

Solving particular lighting design challenges.

Pre: THEA 470 ALT-S

475 (3) Sound Design

Production and sound effects, electronic sound reinforcement of live performance, choice and operation of sound equipment, as well as basic music styles and terminology.

Pre: THEA 252 S

Urban & Regional Studies

481 (3) Theatre History I

Survey of theatrical history from its origins to 1700.
Pre: THEA 100 ALT-S

482 (3) Theatre History II

Survey of theatrical history from 1700 to the present.
Pre: THEA 100 ALT-S

492 (1-3) Theatre Field Studies

Pre: Consent

497 (1-8) Internship

Pre: Consent

499 (1-3) Individual Study

Pre: Consent

Urban & Regional Studies

College of Social & Behavioral Sciences

Urban & Regional Studies Institute

106 Morris Hall • 507-389-1714

Website: <http://www.mnsu.edu/dept/ursi>

Institute Director: David Laverny-Rafter

Bill Bernhagen, Miriam Porter, H. Roger Smith,
Perry S. Wood, Janet Cherrington

The Urban and Regional Studies Institute is an interdisciplinary degree program oriented toward examining and understanding the broad range of problems and challenges associated with the nation's urban and regional areas. There are many career opportunities in community development, urban/regional planning, design, and management. Also, the major is excellent preparation for graduate work in the professional fields of planning, management, business, etc.

This national award-winning program includes classroom, research and field experience. In addition to formal course work, students are encouraged to undertake independent study, become involved in community service projects, participate in field studies, and accept internships in local agencies. Students should contact the Urban and Regional Studies Institute for further information.

It is suggested that interested students include a second major in a related field. Students are encouraged to discuss their program with an advisor.

Admission to Major is granted by the department. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

URBAN AND REGIONAL STUDIES BS

Required for Major (Core, 18 cr):

URBS 150 Sustainable Communities (3)

URBS 200 Urban Spaces People Places (3)

URBS 230 Community Leadership and Service Learning (3)

URBS 301 Urban Analysis I: Field (3)

URBS 302 Urban Analysis II: Research (3)

URBS 489 Capstone Seminar (3)

Required for Major (Electives, 15 cr):

Select 15 credits. See your advisor for an approved list of electives.

Required Minor: Yes. Any.

URBAN AND REGIONAL STUDIES MINOR

Required for Minor (9 cr):

URBS 150 Sustainable Communities (3)

URBS 200 Urban Spaces People Places (3)

URBS 230 Community Leadership and Service Learning (3)

Required for Minor (Electives, 9 cr):

Select 9 credits. See your advisor for an approved list of electives.

POLICIES/INFORMATION

P/N Grading Policy. The internship must be taken on a P/N basis. No other required course may be taken on a P/N basis.

COURSE DESCRIPTIONS

100 (3) Introduction to the City

A fresh look at the city, with emphasis on the reasons why cities have grown and how people can make cities livable. F, S

110 (3) The City: Design and Architecture

Appreciation of the city as the highest cultural achievement in design and architecture. F, S

150 (3) Sustainable Communities

This course will identify and analyze global social, economic, political and environmental problems impacting community viability and explore the full range of solutions to these problems. The course will view communities as complex, sustainable organisms and bring together the works of the great minds working on sustainability. F, S

200 (3) Urban Spaces People Places

Sensitizes students to the elements of urban places which make cities great and memorable. F

230 (3) Community Leadership and Service Learning

Introduction to community leadership—elected, professional, or voluntary—and the skills and values which support it. S

301 (3) Urban Analysis I: Field

Introduces the basic techniques involved in urban research. F

302 (3) Urban Analysis II: Research

Lecture and laboratory class designed to provide a basic understanding of formal research techniques used in urban studies. S

411 (3) Urban Policy Analysis

Prepares students to analyze problems, identify alternative solutions and utilize techniques of analysis.

ALT-S

413 (3) Urban Program Evaluation

Reviews processes and techniques related to evaluation of public programs.

ALT-S

415 (3) Urban Housing Policy

Public policy and programs that address issues of housing supply, quality, costs, and neighborhood revitalization.

ALT-F

417 (3) Urban Law

An overview of local government law and local governing powers. In addition, public issues in the legal context will be examined from a management and operational perspective.

ALT-F

431 (3) Urban Design Principles

A basic working knowledge and vocabulary of urban design concepts and techniques in an applied problem-solving context.

ALT-S

433 (3) Urban Development

Theory and applications of principles of landscape architecture or urban design.

ALT-S

435 (3) Downtown Revitalization

Examines the problem of central business district deterioration and explores the changing patterns of economic and social mobility with primary focus upon the trends of downtown revitalization currently being employed by the public and private sectors.

ALT-S

437 (3) Urban Heritage Preservation

Preservation techniques, principles of structural evaluation, adaptive use potentials and options, economic consideration in preservation and the role of legislation.

ALT-S

450 (3) The Urban Context

Advanced course to explore the interactions of space and social institutions in an urban context.

F

451 (3) Nonprofit Sector

Nature of the Third Sector, from a variety of perspectives, and implications for managing both internal and external relations of nonprofit organizations.

ALT-S

453 (3) Grants Administration

Raising resources for public and nonprofit organizations—from needs assessment through obtaining funding to managing the grant after it is awarded.

ALT-S

455 (3) Regional & County Development

Regional and county planning content and procedures, including basic research, land use planning, and implementation of regulations.

ALT-F

457 (3) Economic Development

A survey course covering the concepts, processes, tools and strategies of economic development in local communities. Emphasis is on the “why” and “how” of economic development.

ALT-S

471 (3) Urban Transportation

Examines transportation problems of, and solutions for large and medium sized cities. Special emphasis on reducing traffic congestion, improving management of transit systems, and linking transportation and land-use planning.

ALT-S

481 (1-3) Selected Topics

Varying topics dealing with emerging trends and contemporary needs facing urban America.

F, S

483 (1-6) Workshop

Varying topics using applied techniques to address community issues.

F, S

485 (1-6) Community-Based Problem Solving

Problem solving in communities and direct involvement into specific areas of study of student interest.

Pre: Consent

F, S

489 (3) Capstone Seminar

Assemble and evaluate information and opinions into a coherent position on what makes cities work, and prepare for entry into professional world of work in cities.

S

497 (1-12) Internship

Scheduled work assignments, varying in length and content, under the supervision of selected professional sponsors.

Pre: Consent

F, S

499 (1-4) Individual Study

Independent study under supervision of an instructor with a research paper or report to be presented.

Pre: Consent

F, S

Women's Studies

College of Social & Behavioral Sciences

Department of Women's Studies

109 Morris Hall • 507-389-2077

Website: <http://www.mnsu.edu/dept/womenst/>

Chair: Carol O. Perkins

Donna Langston

Maria Bevacqua

Courses in women's studies consider the roles and accomplishments of women in the past and the social, psychological, political, economic, and cultural forces influencing their present and future condition. The women's studies curriculum addresses systems of oppression as they affect women: sexism, racism, classism, anti-Semitism and xenophobia, ageism, ableism, sizeism and heterosexism. The program shares the aim of extending human knowledge by examining traditional dis-

Women's Studies

ciplines from a women's studies perspective and by pioneering research into new areas.

The department supports a variety of social and educational opportunities, including student organizations, forums, workshops, and research projects. Students are encouraged to take leadership roles in the development of special programs and to become actively involved with community women's organizations and with related campus groups.

Admission to Major is granted by the department. Admission requirements are:

- a minimum of 32 earned semester credit hours.

- a minimum cumulative GPA of 2.00 (C).

Contact the department for application procedures.

WOMEN'S STUDIES BA (33 cr):

Required for Major (Core, 15 cr):

- WOST 110 Intro to Women's Studies (3)
WOST 220 Perspectives on Women and Change (3)
WOST 310 Perspectives on Feminist Thought (3)
WOST 320 Undergraduate Seminar (3)
WOST 430 Feminist Research and Scholarship (3)

Required for Major (Program Electives, 18 cr):

Choose 18 credits from the following and from Interdisciplinary Courses listed at the end of this section:

- WOST 120 Violence Prevention Education (3)
WOST 230 Assertiveness and Self Esteem (2-3)
WOST 240 Rural Studies (3)
WOST 251 Coming of Age: Gender & Culture (3)
WOST 260 Selected Topics (1-4)
WOST 277 Individual Study (1-6)
WOST 290 Workshop (1-4)
WOST 445 Women and Aging (3)
WOST 455 Women, Sex & Identity (3)
WOST 460 Selected Topics (1-4)
WOST 477 Individual Study (1-6)
WOST 490 Workshop (1-4)
WOST 497 Internship (1-6)
WOST 497 Internship: College Teaching (1-6)

Required for Bachelor of Arts (BA) degree ONLY:
Language (8)

Required Minor: Yes. Any.

WOMEN'S STUDIES BS (33 cr):

Required for Major (Core, 18 cr):

- WOST 110 Intro to Women's Studies (3)
WOST 220 Perspectives on Women and Change (3)
WOST 310 Perspectives on Feminist Thought (3)
WOST 320 Undergraduate Seminar (3)
WOST 430 Feminist Research and Scholarship (3)
Three credits of internship required.
WOST 497 Internship (1-6)

or

- WOST 497 Internship: College Teaching (1-6)

Required for Major (Program Electives, 15 cr):

Choose 15 credits from the following and from Interdisciplinary courses listed at the end of this section:

- WOST 120 Violence Prevention Education (3)
WOST 230 Assertiveness and Self Esteem (2-3)
WOST 240 Rural Studies (3)
WOST 251 Coming of Age: Gender and Culture (3)
WOST 260 Selected Topics (1-4)
WOST 277 Individual Study (1-6)
WOST 290 Workshop (1-4)
WOST 445 Women and Aging (3)
WOST 455 Women, Sex & Identity (3)
WOST 460 Selected Topics (1-4)
WOST 477 Individual Study (1-6)
WOST 490 Workshop (1-4)

Required Minor: Yes. Any.

WOMEN'S STUDIES MINOR (21 cr):

Required for Minor (12 cr):

- WOST 110 Intro to Women's Studies (3)

or

- WOST 220 Perspectives on Women and Change (3)

and

- WOST 310 Perspectives on Feminist Thought (3)
WOST 320 Undergraduate Seminar (3)
WOST 430 Feminist Research and Scholarship (3)

Required for Minor (Electives, 9 cr):

- WOST 120 WOST 230 WOST 240
WOST 251 WOST 260 WOST 290
WOST 445 WOST 455 WOST 460
WOST 490

Women's Studies Program Interdisciplinary Courses

- ANTH 431 Applied Cultural Research (3)
ANTH 433 Anthropology of Gender (3)
ANTH 485 Selected Topics (1-3)
ART 419 Gender in Art (3)
BIOL 101 Biological Perspectives: Biology of Women (3)
CORR 485 Topics: Women, Crime & Justice (2-6)
EDFN 423 Sexist Influences in Human Development (3)
ENG 215 Topics (1-3)
ENG 495 Special Study: Sex and Language (3)
ETHN 401 Applied Cultural Research (3)
ETHN 470 Women of Color (3)
ETHN 480 Social Justice in Ethnicity & Gender (3)
HIST 155 History of the Family in America (3)
HIST 487 United States Women's History (4)
HLTH 400 Women's Health (3)
LAW 235 Women in Law Enforcement (3)
PHIL 450 Special Topics (3)
POL 484 Women and Politics (3)
PSYC 460 Psychology of Women (3)
SOWK 420 Women's Issues in Social Work (3)

SOC	307	Sex and Gender in Contemporary Society (3)
SOC	409	Family Violence (3)
SOC	485	Topic: Violence Against Women (2-6)

POLICIES/INFORMATION

GPA Policy. A GPA of 2.0 is required, and a grade of "C" or better must be earned in all Women's Studies courses.

P/N Grading Policy. With the exception of workshops and internships, only two classes may be taken on a P/N basis.

COURSE DESCRIPTIONS

110 (3) Intro to Women's Studies

Focus is on the social construction of gender, race, class, and sexual identity. Gaps between reality and stereotypes are examined. The goal of this course is to familiarize students with Women's Studies scholarship and provide the tools to connect what one learns to one's life and to further academic study.

F, S

120 (3) Violence and Prevention Education

Students will examine the gendered and systematic nature of violence. Special attention will be given to the ways in which violence against women is perpetuated through interpersonal relationships and through institutions such as schools, the judicial system, welfare policies. The effects of internalized oppressions, such as internalized sexism, racism, homophobia, and how caregivers deal with the problem of vicarious traumatization will be discussed. Emphasis on building skills for educating ourselves and others about constructing non-violent cultures.

F or S

220 (3) Perspectives on Women & Change

Focus is on women activists in past and current social change movements in the US and around the world; strategies and tactics which have been used to create social, political and economic change; the self as an agent of change in terms of personal empowerment and group activism; all in the context of interlocking systems of oppression.

V

230 (2-3) Assertiveness & Self Esteem

Increase awareness of human rights, including contemporary arguments about women's and children's rights; sharpen interpersonal and public communication skills as tools for building self-esteem; heighten self-confidence; develop/enhance group communication/activism skills.

V

240 (3) Rural Studies

Students will explore some of the major variables that impact the lives of rural populations. Emphasis will be placed on understanding the diversity in experiences and history in both national and international rural communities, as well as on understanding which public policies can maximize the success of rural environments.

F or S

251 (3) Coming of Age: Gender and Culture

Students will become aware of diverse experiences of coming of age and will reflect on their own experiences. Diversity of experiences presented will include: race/ethnicity, gender, sexual orientation, religion, socio-economic class, ability/disability and nationality.

V

260 (1-4) Selected Topics

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.

V

277 (1-6) Individual Study

Concentrated study and research in areas of student's special interests/expertise under supervision of a faculty member.

Pre: Women's Studies major/minor

F, S

290 (1-4) Workshop

Topics to be announced. May be retaken for credit.

V

310 (3) Perspectives on Feminist Thought

Examine major theories of feminism and salient issues in women's movements of the nineteenth and twentieth centuries.

F

320 (3) Undergraduate Seminar

Focus is on systems of oppression and the concept of praxis. The life experiences of women are marked by socially constructed distinctions such as race, class, sexual identity, and gender hierarchies. The class examines the transformation of these experiences into standpoints for theory and action. An integrative paper is required.

Pre: WOST 110 or 220 or consent

S

430 (3) Feminist Research and Scholarship

This course explores fields of feminist research and scholarship that have emerged in the 20th century with emphasis on contemporary debates about feminist methodologies. Focus will be on the relation between feminist critiques and research being done by feminist scholars in the social sciences and humanities.

Pre: WOST 110 or 220, or consent

S

445 (3) Women and Aging

Exploration of the forces of ageism in women's lives with goal of naming and deconstructing interacting systems of oppression. Focus on work, health, sexuality, relationships and on policy issues affecting women across the life cycle. Cross cultural emphasis.

ALT

455 (3) Women, Sex & Identity

An exploration and overview of lesbian/bisexual/transgender identities. Possible topics include historical and cross-cultural perspectives; lesbian/bisexual/transgender identities in relation to class, race, age, ethnicity, and disability; lesbian feminism, images and stereotypes; legal status, and lesbian/bisexual/transgender cultures.

ALT

Miscellaneous

460 (1-4) Selected Topics

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis. V

477 (1-6) Individual Study

Concentrated study and research in areas of student's special interests/expertise under supervision of a faculty member.

Pre: Must be department major/minor F, S

490 (1-4) Workshop

Topics to be announced. May be retaken for credit. V

497-00 (1-6) Internship: College Teaching

Students assist a faculty member in teaching Women's Studies 110 or 220.

Pre: WOST 110 or 220 and consent F, S

497-49 (1-6) Internship

Placement in a community or university-based internship provides the student with experience and practical skills in a particular field of work or service and/or provides an opportunity to pursue a specific research interest.

F, S

MISCELLANEOUS COURSE DESCRIPTIONS

Counseling & Student Personnel

110 (3) Decision Making for Career and Life

The purpose of this course is to help students develop critical thinking, problem solving and decision making skills necessary to manage the challenges they face now (choice of major) and in the future (career choice and balancing work and life roles.) F, S

470 (3) Group Procedures

Strategies for establishing a group. A review of concepts related to group membership, group member roles and group techniques, therapeutic factors and leadership roles. An experiential component is included in this course.

Pre: CSP 471 SS

471 (3) Interpersonal Helping Skills

Provides the developing helping professional with an introduction to basic helping skills: attending, listening, responding to content and affect, probing, and providing feedback. The course is experiential in nature and includes small group interaction, videotaping, and role playing simulations.

S, SS

473 (3) Counseling the Chemically Dependent Family

Understanding the impact of chemical dependency on the family. Family counseling skills and relapse prevention strategies will also be included.

Pre: CSP 471 S

Educational Foundations

110 (3) Exploring and Applying Values

This course focuses on students' personal history, ethical views and values. Students will be asked to state and apply those views and values to current political and social issues. A service-learning experience is required for this class. V

222 (4) Human Relations and Cultural Diversity

Study of interpersonal skills, motivation, and group skills. Applied to educational settings. Requires 18 hours clinical experiences (out-of-class). Meets State of Minnesota human relations requirements for teacher licensure.

F, S

235 (3) Human Development

Designed for non-teacher education students, this is a general education course considering human development from a life-span perspective. It is not appropriate for professional education credits. V

250 (1) Social Justice in School and Community

Analyzing justice as it relates to education and the criminal justice system. Emphasis is a comparing Retributive Systems with the new Restorative Justice. Active learning methods in the classroom, schools, and communities, including Service-Learning. V

251 (3) Coming of Age: Gender and Culture

Students will become aware of diverse experiences of coming of age and will reflect on their own experiences. Diversity of experiences presented will include: race/ethnicity, gender, sexual orientation, religion, socio-economic class, ability/disability and nationality.

Library Media Education

101 (1) Library Orientation

A basic course to help students become familiar with the library of Minnesota State University, Mankato and the use of information resources.

401 (2) Instructional Media Utilization

Instructional media used in the elementary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer aided instruction, telecommunications, and standard classroom media applications are stressed.

402 (2) Media Utilities for Secondary Education

Instructional media used in the secondary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer aided instruction, telecommunications, and standard classroom media applications are stressed.

403 (2) Media Utility for K-12

Learning theory and visual literary skills. Elements of visual communications. Conventions of photograph and film. Propaganda techniques. Advertising. Typography and graphic design. Designing and producing visuals that get a message across.

410 (2) Materials for Younger Children

Examination of print and audiovisual media for younger children birth to age seven. Identification of selection sources to identify materials. Evaluation of resources and practice in using them. Use of electronic search engines to identify resources, including but not limited to, research collections, discussion groups, and electronic periodicals.

411 (2) Information Resources

Examination of information resources used in K-12 school library media programs. Categories include but are not limited to encyclopedias, dictionaries, atlases, government publications, biography sources, indexes, on-line public access catalogs (OPACS), ERIC, and electronic reference resources.

412 (3) Materials for Children

Print, audiovisual and electronic media: their selection, evaluation, and use with children in grades K-6. 3 credit section includes storytelling.

Pre: LME 401

413 (3) Materials for Young Adults

An overview of resources for young adults in relation to their characteristics, information needs interests and abilities, emphasizing gender-fair and multicultural resources and the attitudes, interests, problems, and opportunities of adolescents and young adults in contemporary society. Additionally, the courses will focus on reading, discussing, selecting, and evaluating resources in the context of adolescent development and curricular issues and trends.

422 (2) Design and Production of Resources

Design and production of instructional media for the classroom. Design and production of media for a professional presentation. Basic 35mm color slide and print photography. Utilization of computers in instructional settings. Presentation of designed resources.

429 (2) Utilization of Internet Resources

The student will understand the Internet and learn how to utilize Internet resources and apply them to K-12 media programs.

430 (2) WWW Construction for Educators

This course will teach professional educators how to design and produce World Wide Web (WWW) pages of their own and how this knowledge can be transferred to the classroom.

441 (2) Organization of Educational Media

Dewey Decimal Classification system, Introduction to the Library of Congress Classification, Sears and LC Subject Headings, Commercial processing.

Pre: LME 411

451 (2-4) Practicum

Practical library media experience set up between faculty, student, and on-site supervisor.

480 (1-3) Seminar

In depth study and narrow focus on an educational topic. Students do extended research outside of class and defend their research in class.

489 (1-3) Selected Topics

Specific focus on an educational topic that may be taught as a regular course such as: Topic: Web Resources for the Classroom (usually a group requests a specific topic).

490 (1-6) Workshop

Specific focus on an educational topic that is conducted for a special group.

497 (1-8) Internship

On-the-job training in school library media center. Work is jointly supervised by the academic unit and the co-operating school. Six credits of internship is required for Media Generalist licensure.

499 (1-6) Individual Study

Student and faculty agree upon a specific unit of study. Student presents unit to faculty member for evaluation.

Modern Language**460 (3) Methods of Teaching Modern Languages**

Introduction to theory and practice of modern language teaching, including lessons in listening, speaking, reading, writing, vocabulary, and culture. Includes testing, program design, lesson planning, and use of technology.

F

461 (1) Applied Modern Language Teaching Methods

A field experience including placement in the secondary level school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

462 (3) Foreign Languages in the Elementary School Methods

Introduction to theory and practice of modern language teaching for children grades K-6, including oral language development, second language literacy development, content-based language instruction, and techniques for language immersion programs.

463 (1) Applied Foreign Languages in the Elementary School Methods

A field experience including placement in the elementary level school setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462.

465 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.

V

Miscellaneous

470 (4) Theory and Methods of TESL I

Introduction to theories of second language acquisition and description of program models for second language literacy and academic success. Treats oral language development, literacy, content-based instruction, testing and placement of second language learners.

F

471 (4) Theory and Methods of TESL II

Teaching English as a second language: treats the skills of listening, speaking, reading, writing and vocabulary use. Consideration of individual and sociocultural factors in language learning.

S

472 (1) Teaching English as a Second Language Practicum

A field experience including placement in the K-12 public school setting for student in the TESL licensure minor. Practicum students work with ESL students at the elementary and/or secondary level. Take concurrently with or following MODL 470 and MODL 471.

475 (1-4) Topics in TESL

Topics in learning and teaching English as a Second/ Foreign Language. May be repeated for credit.

V

499 (1-4) Individual Study

Special topics in language education. May be repeated for credit.

F, S

Rehabilitation Counseling

110 (3) Sensitivity to Disability

Promotes an understanding of the impact of physical and mental disabilities on people in their daily lives through in-class contacts and exercises with and about persons with disabilities.

F, S

410 (3) Introduction to Independent Living

Introduction to independent living services and philosophy is presented. Students will attend labs at selected sites.

V

424 (3) Rehabilitation of the Chemically Dependent

Exploration and development of research and entry-level skills in diagnosis, treatment planning, service provision, and after-care with chemically dependent persons, particularly those with co-existing physical and mental conditions.

F

435 (3) Disability Legislation/Advocacy and Independent Living

Disability legislation and the implications for the practice of independent living and empowerment of persons with disabilities will be presented from a self and systems advocacy perspective.

V

440 (3) Case Management in Independent Living

Training in the rationale, techniques and processes of case management used in independent living practice across various settings.

V

490 (1-2) Workshop

Special training/education offered by a faculty member in an area of expertise.

V

497 (1-6) Internship

A part-time placement in a community independent living facility or organization under the sponsorship of an agency mentor and faculty supervisor.

Pre: Consent

V

499 (1-4) Individual Study

A project performed under the prior approval and close supervision of a faculty member to enhance the student's education.

Pre: Consent

V

Russian

101 (4) Elementary Russian I

First semester Russian. Course offered at Gustavus Adolphus College.

102 (4) Elementary Russian II

Second semester Russian. Course offered at Gustavus Adolphus College.

Pre: RUSS 101 or equivalent

201 (4) Intermediate Russian I

Third semester Russian. Course offered at Gustavus Adolphus College.

Pre: RUSS 102 or equivalent

202 (4) Intermediate Russian II

Fourth semester Russian. Course offered at Gustavus Adolphus College.

Pre: RUSS 201 or Equivalent

301 (4) Advanced Composition and Conversation I

Course offered at Gustavus Adolphus College.

302 (4) Advanced Composition and Conversation II

Course offered at Gustavus Adolphus College.

304 (1-4) Conversation and Phonetics

Course offered at Gustavus Adolphus College.

401 (4) Russian Literature I

Course offered at Gustavus Adolphus College.

402 (4) Russian Literature II

Course offered at Gustavus Adolphus College.

492 (2-6) Independent Study

Course offered at Gustavus Adolphus College.

499 (1-4) Individual Study

Course offered at Gustavus Adolphus College.

Minnesota State Colleges and Universities, Board of Trustees

The Honorable Andrew Boss, St. Paul
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The Honorable Christine Fritsche, Marshall
The Honorable Michael Nesdahl, Marshall
The Honorable Michael M. Vekich, St. Louis Park, Chair
The Honorable James Wafler, Little Canada, Secretary

Minnesota State University, Mankato Administration

President, Richard R. Rush, Ph.D., U. of California, Los Angeles. 1992-

Karen A. Boubel, Senior Vice President and Vice President for Academic Affairs, Ph.D., U. of Wisconsin-Madison. 1996-
Susan Coultrap-McQuin, Dean, College of Social and Behavioral Sciences, Ph.D., U. of Iowa. 1995-
Jane F. Earley, Dean, College of Arts and Humanities, Ph.D., Northwestern U. 1969-
Michael T. Fagin, Associate Vice President for Cultural Diversity, Ph.D., U. of Minnesota. 1970-
Anthony Filipovitch, Dean, College of Graduate Studies, Ph.D., Portland State U. 1978-
Sylverna Ford, Director of Library Services, Ph.D., U. of Pittsburgh. 1995-
John Frey, Dean, College of Science, Engineering and Technology, D.A., U. of Northern Colorado. 1971-
Margaret Healy, Vice President for Student Affairs, Ph.D., Iowa State U. 1993-
Rene Hersrud, Interim Assistant Vice President for Undergraduate Studies, Ph.D., University of Minnesota. 1988-
Leroy Kemp, Dean, College of Education, Teachers College, Columbia U. 1998-
Ronald Korvas, Vice President for University Advancement, Ph.D., U. of Missouri-Kansas City. 1994-
Kristi Maruska, Assistant to the Dean, College of Business, M.B.A. U. St. Thomas. 1994-
Malcolm O'Sullivan, Assistant Vice President for Student Affairs, M.A., U. of Maryland. 1977-
Cheryl Samuels, Dean, College of Allied Health & Nursing, Ph.D., U. of Maryland, 1995
Norman Solomon, Dean, College of Business, Ph.D., U. of Wisconsin-Madison. 1998-
H. Dean Trauger, Vice President of Finance and Administration, B.S., Mankato State U. 1970-

Kathy Trauger, Assistant to the President, M.S., Mankato State U. 1974-
Barbara Updike, Director of Human Resources, M.S., Northern Michigan U. 1997-
Susan Ward, Assistant to the Dean, College of Science, Engineering and Technology, M.S. Mankato State U. 1997-
John Winkworth, Assistant Vice President for Academic Affairs, Ph.D., U. of Nebraska, Lincoln. 1978-
Phyllis Wisen, Affirmative Action Officer and ADA Coordinator, Ph.D., U. of Minnesota. 1963 -

Administrative and Service Faculty

Torin Akey, Complex Director, M.S.Ed., University of Miami, Ohio. 1998-
Paul Allan, Sports Information Director, B.S., West Texas State. 1985-
Don Amiot, Director, Athletics, B.S. Mayville State College, M.S. South Dakota State University. 1998-
Maria Baxter-Nuamah, Assistant Director, African-American Affairs, M.S., Mankato State U. 1991-
Greg Bednar, Director, University Development, B.S., Mankato State University. 1998-
Ben Benson, Assistant Director, American Indian Affairs, B.S., Mayville State College. 1993-
Diane Berge, Associate Director, Admissions, Ph.D., U. of Minnesota. 1978-
William D. Bieber, Assistant Director, Admissions, M.S., Mankato State U. 1973-
Evan Bohnen, Director, Development, M.A., U. of Wisconsin. 1995-
Becky Boyd, Director, Career Development and Counseling Center, M.S. Southwest Missouri State University. 2000-
Suzanne Bunkers, Director, Honors Program, Ph.D., University of Wisconsin-Madison. 1980-
George Cejka, Maverick Gameroom Manager, B.S. Florida State. 1998-
Jeff Chambers, Head Athletic Trainer, M.A., U. of Northern Colorado. 1999-
Tami Christensen, Internship Coordinator for Continuous Learning, B.S., Minnesota State U. 1999-
Reiko Clark, Director, International Student Office, M.A., Hofstra U. 1998-
Lisa Dahman, Assistant Director Athletics for Development, B.S. Minnesota State U. 1998-
Marsha Danielson, Director, Alumni Affairs, B.S., Mankato State U. 1995-
Lynette Dibrito, First Year Experience, M.Ed., Arizona State U. 1995-
Heather M. Dolan, Academic Advisor, Educational Talent Search, B.S., University of Minnesota-Duluth. 2000-
Mary Dowd, Director, Student Rights and Responsibilities, M.S., Mankato State U. 1993-
Tanya Dowd-Burnett, Program Coordinator, Student Leadership, Development and Service-Learning, B.A. Gustavus Adolphus. 1998-

- Shane Drahota, B.S. Minnesota State University, Mankato. 1999-
- Suzanne Dugan, Director, University Security, B.S. Minnesota State U. 1972-
- Daniel Elliott, Assistant Director, Residential Life, M.A., Bowling Green State U. 1994-
- Gary Erickson, Musical Director, M.Mus., Mankato State U. 1995-
- Jason Feiner, Program Coordinator-SLD & SL, M.S. Illinois State. 1999-
- Greg Fritz, Marketing and Communications Director, B.A., Iowa State U. 1997-
- Kim Fritz, Admissions Officer, B.A., Simpson 1999-
- Myra Fritz, Student Relations Coordinator-College of Arts & Humanities
- Myra Katherine Fritz, Arts and Humanities, M.M., U. of Nebraska. 1997-
- David S. Gjerde, Registrar, M.S., Mankato State U. 1976-
- Dale Haefner, Events Coordinator Music, M.S., Minnesota State U. 1995-
- Scott P. Hagebak, Director, Operations Centennial Student Union, M.S., Mankato State U. 1980-
- Karen Hatfield, Financial Aid Advisor, M.S., Mankato State U. 1996-
- David J. Hendel, Community Liason, M.S., Mankato State U. 1965-
- Margaret Hesser, Assistant Director, Ex.C.E.L. Student Support Services, M.S., Mankato State U. 1987-
- Michael Hodapp, Assistant Director, Centennial Student Union, B.S., Mankato State U. 1970-
- Tracy Harris, First Year Experience, M.S., U. of Miami, Ohio. 1998-
- Cathy Hughes, Residential Life, B.S., Mankato State U. 1998-
- Lucette Hurley, Assistant Director, Annual Giving. 1998-
- Cynthia Janney, Associate Director, Residential Life, M.Ed., U. of Missouri. 1996-
- Sandra Jessen, Interim Director Children's House, M.S., Minnesota State University. 1993-
- April A. Johnson, Academic Advisor, Educational Talent Search, B.S., Minnesota State University, Mankato. 2000-
- Joel Johnson, Director, First Year Experience, M.S., Western Illinois. 1999-
- Todd Kanzenback, Staff Physician, M.D., U. of Minnesota. 1998-
- Sarr Kirklin, Director of Corporate and Foundations Relations, B.A., Knox College. 1996-
- Micheal Lagerquist, Public Relations, Theater and Dance, B.S., Minnesota State U. 1999-
- Deenna Latus, Coordinator Career Exploration, M.S., St. Cloud State. 1998-
- Jayne Larsen, Assistant to Associate Vice President for Cultural Diversity, Ph.D., U. of Minnesota. 1970-
- Jennifer Loaney-Franke, Assistant Director of Alumni Affairs, B.S., St. Cloud State U. 1997-
- Sandra Loerts, Director, Student Financial Aid, M.S., Mankato State U. 1979-
- Timothy Marshall, Assistant Director Athletics, M.S., St. Cloud State U. 1999-
- Patricia McAuly, Financial Aid Advisor, J.D., Hamline. 1999-
- Kelly Meier, Director, Student Leadership Development and Service-Learning, M.S., Mankato State U. 1991-
- Linda Meidl, Assistant Director of Admissions, B.A., Gustavus Adolphus College. 1993-
- Edward Micus, Assistant Director, Learning Center, M.A., Mankato State U. 1988-
- Gael Mericle, Interim Director Learning Center, M.S., Minnesota State University. 1986-
- Christopher Mickle, Director Graduate Programs, M.A., Binghamton U. 1999-
- Jessica Miler, Interim Event & Facility Manager, Centennial Student Union, B.A., Minnesota State University, Mankato. 2000-
- Susan Monk-Kjos, Assistant Director Development, M.A., Nebraska. 1991-
- Tracy Hammell, Admissions Office, B.A. University of Wisconsin-Eau Claire. 2000-
- Henry Morris, Director, Student Affairs, M.A., U. of Rhode Island. 1990-
- Margaret O'Connor, Medical Director, Physician, Student Health Services, M.D., U. of Minnesota. 1989-
- Chris Connolly, Director, Student Health Services, M.A., Ball State University. 2000-
- Prisilla Olson, Interim Director Extended Campus Philip Oswald, Director, University Development, M.S., U. of Oregon. 1998-
- Joe Totman, Complex Director, M.S., University of North Dakota. 2000-
- Paris Parham, Men's Assistant Basketball Coach, M.S., Minnesota State U. 1997-
- Paula Paul-Wagner, M.E., South Dakota State U. 1997-
- Todd Pfingsten, Director of Campus Recreation, M.A., Mankato State University. 1999-
- Tuan Phan, Director, Asian-American Affairs, B.A., Mankato State U. 1990-
- Shirley Piepho, Conference Coordinator, Centennial Student Union, B.S., Mankato State U. 1974-
- Lynn Meyer, First Year Experience, M.A., Bowling Green State University. 2000-
- Mario Quintero, Assistant Director, Chicano, Mexicano and Latino Affairs, B.F.A., Mankato State U. 1990-
- Wayne Quirk, Director Research and Sponsored Program, Ph.D., Washington State U. 1997-
- Cheryl Regan, Special Athletic Projects Director, B.S., Mankato State U. 1985-
- Susan Reinders, Associate Director of Athletics, Ph.D. University of Iowa, 1999-

David Reinen, Assistant Registrar, M.S., Mankato State U. 1985-

Marilee Rickard, News Director, KMSU, M.S., Mankato State U. 1984-

Keith Robinder, Complex Director, M.S., Colorado State U. 1997-

Deirdre Rosenfeld, Director of the Women's Center, M.A., Bowling Green State University. 2000-

Ann Rosenquist-Fee, Director Campaign Communications, M.A., Illinois State. 1997-

Rolland Rowe, Director, Institutional Research, M.S., U. of Wisconsin. 1967-

James Schaffer, Coordinator, Athletic Promotions, M.S., Mankato State U. 1984-

Kathryn Salin, Admissions Officer, B.A., College of St. Scholastica. 2000-

Ryan Stevens, Program Coordinator, Campus Recreation, M.S. Virginia Tech. 2000-

Steven Smith, Lighting Designer Theater, M.F.A., U. of Wisconsin. 1999-

Diane Solinger, Director, Residential Life, M.S. Western Illinois U. 1994-

William B. Steil, Centennial Student Union, M.A., Mankato State U. 1967-68. 1970-

Tonya Stoffregen, Director Development College of Business, B.S., St. Olaf. 1999-

Thomas Gjersvig, Assistant Director, International Students, M.S., Winona State University. 2000-

Debra Ubl-Mitzel, Associate Registrar, M.E., U. of Maryland. 1997-

Fred Vette, Radio Producer, KMSU, B.A., U. of Minnesota. 1987-

Lauren Weisblatt, Assistant Director, Student Leadership Development & Service-Learning, Programs and Activities, M.S., Indiana State U. 1996-

Pamela Weller-Dengel, Assistant Director, Career Development, MS., Mankato State U. 1994-

Bobbi J. West, Academic Coordinator, Student Support Services, M.S., Mankato State U. 1999-

Richard Wheeler, Assistant Director, Residential Life, B.S., Mankato State U. 1978-

Walter Wolff, Admissions Director, M.S., Mankato State U. 1982-

Karen Wright, Director Media Relations, B.A. U. of Minnesota. 1998-

Stacy Yokiel, Admissions Officer, M.S., Mankato State University. 1999-

Faculty

*Indicates Department Chair

College of Allied Health and Nursing

Interim Dean: Kaye A. Herth, Ph.D., Texas Women's University. 1998

Student Relations Coordinator: Mark Schuck, M.S., Mankato State U. 1969-

DENTAL HYGIENE

Assistant Professors:

*Esther Andrews, M.A. Michigan State U. 2000-

Lisa Fleck, M.S., Mankato State U. 1995-

Nancy Geistfeld, M.S., U. of Minnesota. 1976-Instructors:

Terri Brown, M.S., Mankato State U. 1982-

Lynnette Engeswick, M.S., Mankato State University, 1998-

Karon Metz, B.S., Mankato State U. 1980-

FAMILY CONSUMER SCIENCE

Associate Professors:

*Kelley Brigman, Ph.D., U. of Nebraska, Lincoln. 1980-

Sally Weerts-Thomas, Ph.D., U. of Minnesota. 1992-

Betty Young, Ph.D., Virginia State U. 1983-

Assistant Professors:

Joye Bond, Ph.D., NDSU, 1997-

HEALTH SCIENCE

Professors:

Steve Bohnenblust, Ed.D., U. of Tennessee. 1980-

*Judith Luebke, Ph.D., Souther Illinois U., Carbondale. 1985-

John Romas, Ph.D., U. of Michigan, Ann Arbor. 1984-

Harold Slobof, Ed.D., U. of Toledo. 1973-

Associate Professors:

Dawn Larsen, Ph.D., Southern Illinois U., Carbondale. 1991-

Linda Marshall, Ph.D., Kent State U. 1982-

Bikash Nandy, Ph.D., Southern Illinois U., Carbondale. 1991-

Assistant Professors:

Marge Murray-Davis, Ph.D., U. of Minnesota. 1986-

HUMAN PERFORMANCE

Professors:

*Harry Krampf, Ph.D., U. of Minnesota. 1990-

Sherry Folsom-Meek, Ph.D., Texas Woman's U. 1992-

Joe Walsh, Ed.D., U. of California, Berkeley. 1977-

Associate Professors:

Marge Burkett, Ph.D., U. of New Mexico. 1986-

Kent Kalm, Ed.D., U. of Utah. 1980-

Gary Rushing, Ed.D., U. of Northern Colorado. 1988-

Robert Weber, Ed.D., U. of Utah. 2000-

Assistant Professors:

Dean Bowyer, M.S., Mankato State U. 1976-

Ken Ecker, Ph.D., U. of Maryland. 1992-

Patricia Hale, M.S., U. of Wisconsin, Madison. 1973-

Dan McCarrell, M.A., Roosevelt U. 1984-

Lori Meyer, M.A., Mankato State U. 1984-

Philip Rhoads, M.A., Mankato State U. 1984-

Dan Runkle, M.S., Western Illinois U. 1981-

Debra Runkle, M.A., Mankato State U. 1985-

Patrick Sexton, M.S. U. of Arizona. 1993-

Mary Visser, Ph.D., U. of Kansas. 1994-

Ann Walker, M.A., U of Iowa. 1998-

Instructors:

Greg Clough, M.S., Montana State U. 1997-
 Jim Makovsky, B.S., Valley City State U. 1993-
 Chris Miskec, M.S., U. of Kansas. 1996-
 Jerry Olszewski, M.S., Mankato State U. 1999-
 Christina Ruff, M.Ed., Arizona State U. 2000-
 Peter Toews, M.A., Mankato State U. 1992-
 Doug Tully, M.S., Michigan State U. 1998-
 Suzanne Venet, B.S., Mount Union College. 2000-

SCHOOL OF NURSING

Intrinsic Associate Dean: Mary Huntley, Ph.D. Texas
 Women's U. 1972-

Student Relations Coordinators:

Candice Mentele, (Basic & LPN), M.N., U. of
 Washington, 1986-87. 1988-

Professors:

Sharon Aadalen, Ph.D., U. of Minnesota. 1991-
 Mary Bliesmer, D.N.Sc., Rush U. 1975-79. 1982-
 Elizabeth Dixon, Ph.D., U. of Minnesota, 1974-
 Mary Huntley, Ph.D., Texas Woman's U. 1972-

Associate Professors:

Patricia Earle, Ph.D., U. of Minnesota. 1982-
 Carol Heupel, Ph.D., U. of Minnesota. 1980-
 Marilyn Kosmala, Ph.D., U. of Illinois Medical Ctr.
 (Chicago). 2000-

Carol Larson, Ph.D., Texas Woman's U. 1980-
 Diane Manahan, M.S. and M.S.N., Mankato State U.
 1991-

Linda Rosenbaum, Ph.D., U. of Pennsylvania. 1992-
 Marcia Stevens, D.N.Sc., U. of California, San
 Francisco. 1989-

Assistant Professors:

Kathleen Brandenburg, M.S., U. of Minnesota. 1999-
 Carol Brown, M.P.H., U. of Minnesota. 1990-
 Sandra Eggenberger, M.S., U. of California, San
 Francisco. 1975-76. 1978-
 Julie Hebenstreit, M.A., U. of Iowa. 1984-
 Norma Krumwiede, Ed.D., U. of SD-Vermillion
 1994-

June McLachlan, M.S.N., U. of North Dakota. 1998-
 Nancy McLoone, M.S., U. of Minnesota. 1984-
 Sonja Meiers, M.S., Winona State U. 1991-
 Candice Mentele, M.N., U. of Washington. 1986-87.
 1988-

Kathleen Rowe, M.S.N., St. Louis U. 2000-
 Dottie Salisbury, M.S., U. of Minnesota. 2000-
 Kathleen Sheran, M.S., Mankato State U. 1975-80;
 1999-

Regina Smith, M.S.N., U. of Florida. 1989-
 Linda Wenkel, M.S., U. of Colorado. 1975-
 Karen Willette-Murphy, Ph.D., U. of Neb., 1984-
 Diane Witt, M.A., A.N.P., Coll. of St Catherine, 1997-
 Patricia Young, Ph.D., U. of Wisc. 1986-94, 1998-

SPEECH, HEARING AND REHABILITATION SERVICES

Professors:

Patricia M. Hargrove, Ph.D., Kent State U. 1981-
 Glen Peterson, Ph.D., U of Northern Colorado. 1998-

Gerald Schneck, Ph.D., U. of Minnesota. 1982-

Associate Professors:

Judith Kuster, M.S., U. of Wisconsin-Madison. 1987-
 *Bruce J. Poburka, Ph.D., U. of Wisconsin-Madison.
 1994-
 Ronald D. Poole, M.A., U. of Kansas. 1965-

RECREATION, PARKS AND LEISURE SERVICES Professor:

Joy Joyner, Re.D., Indiana U., Bloomington. 1977-82.
 1984-

*James Petersen, Ph.D., U. of Minnesota. 1982-
 Assistant Professor:

Ron Nickerson, Ph.D., U. of Minnesota. 1999-
 James Wise, Ph.D., U. of Utah. 2000-

College Of Arts And Humanities

Dean: Jane F. Earley, Professor, Ph.D., Northwestern
 U. 1969-

Student Relations Coordinator: Carrie Williams,
 M.A., Minnesota State U., Mankato. 2000-

ART

Professors:

Brian Frink, M.F.A., U. of Wisconsin. 1989-
 Ralph Jacobs, D.Ed., Pennsylvania State U. 1976-
 *Roy Strassberg, M.F.A., U. of Michigan. 1976 -
 James Tanner, M.F.A., U. of Wisconsin-Madison.
 1968-

Nancy Wicker, Ph.D., U. of Minnesota. 1990-
 Associate Professors:

Harlan Bloomer, M.F.A., U. of Michigan. 1968-
 Hope Cook, M.F.A., Indiana U., Bloomington. 1976-
 James B. Johnson, M.F.A., U. of California, Los
 Angeles. 1979-

Elizabeth Menon, Ph.D., U. of Minnesota. 1995-
 Rea Mingeva, M.F.A., U. of Tennessee, Knoxville.
 1992-

David Morano, M.F.A., U. of Wisconsin, Madison.
 1983-

Assistant Professors:

Diana Black, M.F.A., U. of Wisconsin, Madison.
 1999-

ENGLISH

Professors:

John Banschbach, Ph.D., Indiana U., Bloomington.
 1988-

Suzanne Bunkers, Ph.D., U. of Wisconsin-Madison.
 1980-

Donna Casella, Ph.D., Michigan State U. 1984-
 Terry Davis, M.F.A., U. of Iowa. 1986-
 William Dyer, Ph.D., U. of Massachusetts, Amherst.
 1981-

Terrance Flaherty, Ph.D., Northwestern U. 1978-
 Donald F. Larsson, Ph.D., U. of Wisconsin, Madison.
 1981-

Nancy MacKenzie, D.A., Drake U. 1985-
 JoAnna Mink, D.A., Illinois State U. 1990-

*Anne O'Meara, Ph.D., U. of Minnesota. 1989-
 Roland Nord, D.A., Idaho State U. 1989-

David Popowski, Ph.D., Bowling Green State U. 1965-
 Kay Puttock, Ph.D., Brandeis U. 1987-
 Richard Robbins, M.F.A., U. of Montana. 1984-
 Roger Sheffer, D.A., State U. of New York at Albany. 1980-
 Louisa Smith, Ph.D., U. Of Minnesota. 1984-
 Richard Terrill, A.M., U. of Michigan. 1990-
 Harry Solo, Ph.D., Princeton U. 1982-
 Associate Professors:
 Gwen Griffin, Ph.D., U of Kansas. 1992-
 Kathleen Hurley, Ph.D., Iowa State U. 1992-
 Mary Susan Johnston, Ph.D., U. of Minnesota. 1989-
 Stephen Stoyloff, Ph.D., U of Oregon-Eugene. 1996-
 Assistant Professors:
 Tina Edstam, Ph.D., U. of Minnesota. 1999-

MASS COMMUNICATIONS

Professor:

Marshel D. Rossow, Ph.D., U. of Wisconsin-Madison. 1984-

*Charles Lewis, Ph.D., U. of Minnesota. 1986-88, 1991-

Associate Professors:

Ellen M. Mrja, M.A., U. Of Minnesota. 1978-80, 1982-

Assistant Professor

John Gaterud, Ph.D., Union Institute. 1981-84, 1991-

MODERN LANGUAGES

Professors:

Karl H. Heise, Ph.D., Michigan State U. 1976-

John J. Janc, Ph.D., U. of Wisconsin-Madison; U. of Paris. 1979-

Pat Wilcox Peterson, Ph.D., U. of Minnesota. 1988-

Associate Professors:

*Kimberly Contag, Ph.D., U. of Minnesota. 1992-

Damon DiMauro, Ph.D., U. of Wisconsin. 1992-

Patricia Longwell-Wera, M.A., U. of Iowa. 1965-

Enrique Torner, Ph.D., U. of Indiana. 1992-

Assistant Professors:

James Grabowska, Ph.D., U. of Minnesota. 1998-

Birgitta Hendrickson, Fil. Mag., U. of Uppsala. 1974-

Edith White, M.A., U. of Wisconsin-Madison. 1966-

MUSIC

Professors:

David Dickau, D.M.A., U. of Southern California. 1991-

*Linda Duckett, D. Mus., Indiana U.-Bloomington. 1987- (on leave, 11/01/00 - 12/31/01)

Harry Dunscombe, D.M.A., U. of Michigan. 1987-

*John Lindberg, Ph.D., U. of Cincinnati. 1990-

Diana Moxness, D.M.A., U. of Iowa. 1986-

Stewart Ross, Ph.D., Northwestern U. 1977-

Assistant Professors:

Gerard Aloisio, D.M.A., U. of Cincinnati, 1997-

Stephen Bomgardner, D.M.A., Boston U. 2000-

Paul Moxness, D.M.A., U. of Iowa, 1997-

Douglas Snapp, D.A., U. of Northern Colorado. 2000-

David Viscoli, D.N.A., U. of Southern Calif. 1999-

PHILOSOPHY

Professors:

Hal Walberg, M.A., U. of California-Santa Barbara. 1968-

Ronald Yezzi, Ph.D. Southern Illinois U., Carbondale. 1969-

Associate Professors:

Cathryn Bailey, Ph.D. U. of Missouri-Columbia. 1994-

John Humphrey, Ph.D. Washington U. 1988-

*Richard Liebendorfer, Ph.D., U. of California-Santa Barbara. 1988-

SPEECH COMMUNICATION

Professors:

Sheryl Dowlin, Ph.D., Southern Illinois U. 1985-

Patricia Palm, Ph.D. U. of Minnesota. 1963-67; 1968-

Associate Professors:

Daniel Cronn-Mills, Ph.D., U. of Nebraska. 1992-

Warren Sandman, Jr., Ph.D., U. of Iowa. 1996-

Assistant Professor

Lisa Perry, Ph.D., U. of Maryland. 1998-

THEATRE AND DANCE

Professors:

Thomas Bliese, M.F.A., U. of Wisconsin, Madison. 1977-

*Paul J. Hustoles, Ph.D., Texas Tech U. 1985-

Associate Professor:

Julie Kerr-Berry, Ed.D., Temple U. 1988-

David McCarl, M.F.A., Indiana U. 1985-

Assistant Professor:

Nina LeNoir, Ph.D., U. of Texas. 1999-

Jennifer Engler, M.F.A., Michigan State U. 2000-

College Of Business

Dean: Norman Solomon, Ph.D., U. of Wisconsin-Madison. 1998-

Assistant to the Dean: Corinne Dickey, Ph.D., U of Minnesota. 1999-

Coordinator of Undergraduate Admissions: Larry Herke, Ed.Sp., Mankato State U. 1967-

ACCOUNTING & BUSINESS LAW

Professors:

Abo Habib, Ph.D., North Texas State U. 1988-

Penny Herickhoff, J.D., William Mitchell College of Law. 1987-

Georgia Holmes, J.D., William Mitchell College of Law. 1980-

Marilyn Okleshen, Ph.D., U. of Nebraska, CPA, CMA, 1983-

*Paul Schwinghammer, Ph.D., U. of Arkansas. CPA, 1986-

Stephen Woehle, Ph.D., U. of Nebraska. 1981-

Robert Zelin II, Ph.D., Indiana U. CPA, CMA, 1993-

Associate Professors:

Ellsworth C. Granger, Jr., M.B.A., Indiana U.

CPA, 1968- (will retire 5-15-01)

Mary Swanson Rolfes, M.A.S., U. of Illinois. CPA, 1979-

Bruce W. Smith, M.S., U. of North Dakota. CPA. 1970-

Ray Williams, D.B.A., Mississippi State U. CPA, CMA, 1992-

Assistant Professors:

Jane Baird, Ph.D., Ohio U. CPA, 1993-

Dan Levin, J.D., U of Pacific. 1996-

FINANCE, INSURANCE AND REAL ESTATE

Professors:

Chan Lee, Ph.D., Northern Illinois U. 1982-

Henry Okleshen, Ph.D., U. of Arkansas. 1980-

Roger Severns, Ph.D., U. of Nebraska. 1987-

Richard N. Swanson, Ed.D., U. of Florida. 1974-

*Harold Thiewes, Ph.D., U. of Iowa. 1984-

Steve Wilcox, Ph.D., U. of Nebraska. 1991-

Assistant Professor:

John Genter, M.D., U. of Illinois, 2000-

MANAGEMENT

Professors:

Marilyn Fox, Ph.D., U. of Nebraska. 1990-

Jon Kalinowski, Ph.D., U. of Iowa. 1984-

Ronald Klocke, Ph.D., Washington State U. 1966-

Howard Miller, Ph.D., U. of Illinois. 1986-

Paul Schumann, Ph.D., Cornell U. 1987-

Timothy Scott, Ph.D., U. of Minnesota. 1981-

Dooyoung Shin, Ph.D., U. of Iowa. 1987-

Associate Professors:

Rakesh Kawatra, Ph.D., U. of Iowa. 1990-

Claudia Pragman, Ph.D., U. of Nebraska. 1991-

Buddhadev Roychoudhury, Ph.D., Indiana U. 1990-

*Miles Smayling, Ph.D., U. of Minnesota. 1987-

Assistant Professor:

William Brown, M.A., St. Thomas. 1999-

Yong Scott Choi, Ph.D., U. of Neb.-Lincoln. 1999-

Brenda Flannery, Ph.D., U. of Nebraska. 1996-

Sung Kim, Ph.D., U. of Nebraska. 2000-

MARKETING & INTERNATIONAL BUSINESS

Professors:

Kevin Elliott, Ph.D., U. of Arkansas. 1990-

Mark Hall, Ph.D., U. of Arkansas. 1989-

*M. Anaam Hashmi, D.B.A., Kent State U. 1987-

Basil Janavaras, Ed.D., Northern Illinois U. 1974-

1991, 1996-

John R. Kuzma Ph.D., Kent State U. 1989-

Gerald Stiles, Ph.D., U. of Minnesota. 1972-

Associate Professors:

Ken Anglin, Ph.D., U. of Nebraska. 1991-

Linda Anglin, Ph.D., U. of Nebraska. 1991-

H. Turgut Guvenli, Ph.D., Georgia State U. 1989-

Ann Kuzma, Ph.D., Kent State U. 1989-

Li Zhang, Ph.D., Georgia State U. 1993-

College of Education

Dean: Leroy Kemp, Ed.D, Teachers College,

Columbia U. 1998-

Student Relations Coordinator: Cheryl Kalakian,

Ed.Sp., Mankato State U. 1984-

BUSINESS AND TECHNOLOGY EDUCATION AND AVIATION

Professors:

Janet Adams, Ed.D., U. of Georgia. 1987-

Assistant Professors:

*John Roberts, M.B.A., Wichita State U. 1981-

CENTER FOR SCHOOL - UNIVERSITY PARTNERSHIPS

Dorothy Engan-Barker, Director, Ph.D., U. of Minnesota. 1991-

CHILDREN'S HOUSE

Sandra Jessen, M.S., Mankato State U. 1993-

Jodi Malecha, B.S., Mankato State U. 1990-

Susan Schwieger, B.S.E., Drake U. 1989-

Bonnie Shult, B.S., Winona State U. 1989-

Geraldine Skarpohl, B.S., Mankato State U. 1984-

COUNSELING AND STUDENT PERSONNEL

Professors:

Joanne Brandt, Ph.D., U. of Iowa. 1984-

Diane Coursol, Ph.D., U. of Akron. 1986-

Associate Professors:

Richard Auger, Ph.D., U. of Iowa. 2000-

*Anne Blackhurst, Ph.D., Ohio U. 1994-

Walter Roberts, Jr., Ed.D., U. of Arkansas. 1993-

Assistant Professors:

Jacqueline Lewis, PH.D., U. of Iowa. 1997-

CURRICULUM AND INSTRUCTION

Professors:

Edward Babel, Ed.D., Pennsylvania State U. 1969-

Robert Major, Ed.D., U. of Northern Colorado. 1968-

*Maureen Prenn, Ph.D., U. of Minnesota. 1987-

Steven Reuter, Ph.D., U. of Minnesota. 1988-

Associate Professors:

Debra Anderson, Ed.D., U. of N. Colorado, Greeley-1983-

Peggy Ballard, Ph.D., Purdue U. 1989-

Ron Browne, Ph.D., U. of Toledo. 1997-

Andrew Johnson, Ph.D., U. of Minnesota. 1996-

Marla Mastin, Ph.D., U. of North Dakota. 1995-

Karl Matz, Ed.D., U. of North Dakota. 1991-

Associate Professor:

Debra Anderson, Ed.D., U. of N. Colorado, Greeley-1983-

Assistant Professors:

Sandra Mullins, Ed.D., Indiana U. 1996-

Scott Page, Ph.D., Indiana U. 1997-

EDUCATIONAL FOUNDATIONS

Professors:

Guynel Reid, Ph.D., U. of Minnesota. 1987-

Associate Professors:

Johnson Afolayan, Ph.D., Iowa State U. 1996-

Darrol Bussler, Ph.D., U. of Minnesota. 1992

Marcia Gentry, Ph.D., U of Connecticut-Storrs. 1996-

Assistant Professor:

Terry Fogg, Ph.D., U. of Toronto. 1998-

EDUCATIONAL LEADERSHIP

Professors:

Brian E. Boettcher, Ed.D., U. of Minnesota. 1988-
Prudence Gushwa, Ph.D., U. of Minnesota. 1995-
Jasper Hunt, Ph.D., U. of Colorado. 1983-87. 1988-
Robert Vanderwilt, Ph.D., Iowa State U. 1968-
Associate Professor:
Terry Shultz, Ph.D., U. of Minnesota. 1999-

LIBRARY MEDIA EDUCATION

Professor:

Francis R. Birmingham, Ph.D., Catholic U. of
America. 1970-
Don Descy, Ph.D., U. of Connecticut. 1989-
Associate Professors:
*Kenneth Pengelly, M.L.S., U. of Hawaii. 1968-
(retires 2001)
Janice Hardy, Ed.D. Cand. U. of. Georgia, Athens.
2000-

MILITARY SCIENCE

Professor:

*LTC Thomas Evelyn, M.S.A., Central Michigan.
1998-
Assistant Professors:
MAJ Mike Larsen, B.A., Condordia College, MN.
2000-
MSG Charles Jasken, A.A., U. of Alaska, Anchorage.
1998-
Instructors:
Scott Forsyth, 1998-
SFC Clint Watkins, 2000-

SPECIAL EDUCATION

Professors:

*Robert Miller, Ph.D., U. of Iowa. 1989-
Mary Ellen Pearson, Ph.D., George Peabody College.
1974-
Assistant Professor:
Candice Hollingsead, Ph.D., U. of Kansas. 1997-
Gail Zahn, Ed.D., BYU. 1997-
Carole Milner, Ph.D., U. of North Dakota. 2000-

College of Sciences, Engineering And Technology

Dean: John E. Frey, D.A., U. of Northern Colorado.
1971-
Student Relations Coordinator: Angie B. Bomier,
M.Ed., Colorado State U. 1986-

AUTOMOTIVE AND MANUFACTURING ENGINEERING TECHNOLOGY

Professors:

Bruce Jones, Ph.D., U. of Maryland. 1991-
Andrzej Markowski, Ph.D., Technical U. of Wroclaw.
1987-
*Kirk Ready, Ed.Sp., Mankato State U. 1971-
Associate Professor:
Harry Petersen, Ph.D., Texas A & M. 1994-
Assistant Professor:
Lee Anderson, M.B.A., U. of St. Thomas. 2000-

Ann Goebel, M.S., Minnesota State U., Mankato.
2000-

Paul Sullivan, Ph.D., U of Minnesota. 1997-

BIOLOGICAL SCIENCES

Professors:

Daryl Adams, Ph.D., U. of Georgia. 1987-
Michael Bentley, Ph.D., U. of Minnesota. 1989-
Bill Bessler, Ed.D., Ball State U. 1969-
Fred Goetz, Ph.D., U. of Minnesota. 1981-
Keith Klein, Ph.D., U. of Minnesota. 1987-
Mark Lyte, Ph.D., Weizmann Institute of Science.
1988-
*Gregg Marg, Ph.D., Cornell U. 1988-
Steven Mercurio, Ph.D., U. of Pennsylvania. 1986-
Donovan Nielsen, Ph.D., Tulane U. 1971-
Beth Proctor, Ph.D., State U. of New York at Buffalo.
1987-
Dorothy Wrigley, Ph.D., Hahnemann Medical
College. 1984-
Associate Professor:
Chris Collin, Ph.D., Case Western Reserve U. 1993-
Edward Williams, Ph.D., Emory U. 1990-
Assistant Professors:
Elaine Hardwick, Ph.D., U. of Georgia. 2000-
Penny Knoblich, Ph.D., U. of North Dakota. 1997-
John D. Krenz, Ph.D., U. of Georgia. 1998-
John D. Madsen, Ph.D., U. of Wisconsin-Madison.
2000-
Alison Mahoney, Ph.D., U. of Wisconsin-Madison.
1999-
Brock R. McMillan, Ph.D., Kansas State U. 2000-

CHEMISTRY AND GEOLOGY

Professors:

*Jeffrey Pribyl, Ph.D., Purdue U. 1989-
Associate Professors:
Michael Lusch, Ph.D., Purdue U. 1989-
James Rife, Ph.D., U. of Wisconsin. 1986-
Theresa Salerno, Ph.D., U. of Wisconsin, Madison.
1986-
Assistant Professors:
Brian Groh, Ph.D., Iowa State U. 1998-
Bryce Hoppie, Ph.D., UC Santa Cruz. 1996-
Greg Long, Ph.D., Washington State U. 1999-
Shannon Long, Ph.D., Washington State U. 1997-
Sadredin Moosavi, Ph.D., U. of New Hampshire.
2000-
Marie Pomije, Ph.D., U or Minnesota. 1998-
John Thoenke, Ph.D., U. of Wisconsin. 1995-

COMPUTER AND INFORMATION SCIENCES

Professors:

Cyrus Azarbod, Ph.D., North Dakota State U. 1985-
Richard Roiger, Ph.D., U. of Minnesota. 1979-
Hamed Sallam, Ph.D., Tbilisi State U. 1984-
Mahbubur Syed, Ph.D., Budapest Technical U. 2000-
Leon Tietz, Ph.D., U. of Illinois. 1989-

Associate Professors:

Gregg W. Asher, Ph.D., U. of Minnesota. 2000-
 Lee Cornell, M.S., Moorhead State U. 1986-
 David Haglin, Ph.D., U. of Minnesota. 1991-
 Dean Kelley, Ph.D., U. of Minnesota. 1999-
 Ann Quade, Ph.D., U. of Minnesota. 1984-
 Julio Sanchez, Ph.D., North Dakota State U. 1998-
 James Slack, Ph.D., Kansas State U. 1992-
 *Colin Wightman, Ph.D., Boston U. 1998-
 Assistant Professors:
 Steven Case, M.S., Nova Southeastern U. 2000-
 Allan Hart, Ph.D., Michigan State U. 1999-
 Sarah Klammer, M.S., Texas Woman's U. 1999-
 Susan Schilling, M.A., Mankato State U. 1982-
 Christophe Veltsos, Ph.D., U of Southwestern
 Louisiana. 1998-
 Michael Wells, Ph.D., U. of Nebraska-Lincoln. 1998-

**ELECTRICAL AND COMPUTER ENGINEERING
AND TECHNOLOGY**

Professors:

Carl Gruber, Ph.D., U. of Illinois. 1983-
 *Tom Hendrickson, Ph.D., U. of Minnesota. 1990-
 Lindsay Hess, Ph.D., Ohio U. 2000-
 Han-Way Huang, Ph.D., Iowa State U. 1988-
 William Hudson, Ph.D., New Mexico State U. 2001-
 Muhammad A. Khaliq, Ph.D., U. of Arkansas. 1988-
 Paul Lindfors, Ph.D., U. of Minnesota. 1986-
 Julio Mandojana, Ph.D., U. of Washington. 1990-
 Ramakrishna Nair, Ph.D., U. of Roorkee, India. 1986-
 George O'Clock, Ph.D., South Dakota School of
 Mines and Technology. 1982-

Associate Professors:

Rajiv Kapadia, Ph.D., Oklahoma U. 1983-

**INTERIOR DESIGN AND CONSTRUCTION
MANAGEMENT**

Associate Professors:

*Carl M. Egan, Ed.D., U. of Alabama. 1979-
 C. Michael Lindstrom, M.A., Mankato State U. 1989-
 Chris Priest, M.S., Florida State U. 1989-
 Assistant Professors:
 Scott Fee, M.S., Illinois State U. 1997-
 Shari Kagermeier, M.S., Minnesota State U.,
 Mankato. 2000-

MATHEMATICS AND STATISTICS

Professors:

Ernest Boyd, Ph.D., U. of Montana. 1983-
 Maureen Fenrick, Ph.D., U. of Florida. 1987-
 Francis Hannick, Ph.D., U. of Montana. 1979-
 Kil Lee, Ed.D., U. of Georgia. 1986-
 Mary Ann Lee, Ph.D., Purdue U. 1989-
 R. Bruce Mericle, Ph.D., Washington State U. 1977-
 *Larry Pearson, Ph.D., U. of Minnesota. 1984-
 Malcolm Lee Riddle, Ph.D., Temple U. 1980-
 Gary Rockswold, Ph.D., Iowa State U. 1983-
 Chia-Chi Tung, Ph.D., U. of Notre Dame. 1982-
 Charles Waters, Ph.D., U. of Wyoming. 1984-

Associate Professors:

Mary Wiest, Ph.D., Washington State U. 1987-
 Assistant Professors:
 Robert Bohland, M.S., Minnesota State U., Mankato.
 2000-
 Pavel Kitsul, Ph.D., Moscow Institute of Physics &
 Tech. 1996-
 Namyong Lee, Ph.D., U. of Minnesota. 2000-
 Mezbahur Rahman, Ph.D., U. of California-Riverside.
 1999-
 Hossein Shahmohamad, Ph.D., U. of Notre Dame.
 2000-

**MECHANICAL AND CIVIL ENGINEERING
Professors:**

Vance Browne, Ph.D., U. of Maryland. 1992-
 Jerzy Fiszdon, Ph.D., Institute of Nuclear Research.
 1987-

Charles W. Johnson, Ph.D., Iowa State U. 1989-
 *Saeed Moaveni, Ph.D., Colorado State U. 1990-
 Associate Professor:

Vojin Nikolic, Ph.D., U. of Notre Dame. 2000-

PHYSICS AND ASTRONOMY

Professors:

Edward R. Borchardt, Ph.D., U. of North Dakota.
 1969-

Robert Herickhoff, Ph.D., Vanderbilt U. 1967-
 Steven Kipp, Ph.D., U. of Pittsburgh. 1981-
 James Pierce, Ph.D., Iowa State U. 1980-
 *Louis A. Schwartzkopf, Ph.D., U. of California,
 Berkeley. 1982-

Associate Professors:

Mark Pickar, Ph.D., Indiana U. 1997-
 Hai-Sheng Wu, Ph.D., Iowa State U. 1988-
 Youwen Xu, Ph.D., Iowa State U. 1994-
 Assistant Professors:
 Jeffrey Sudol, B.A., Macalester College. 2000-

WATER RESOURCES CENTER

Assistant Professor:

Robert Finley, M.A., U. of Minnesota. 2000-

College Of Social And Behavioral Sciences

Dean: Susan Coultrap-McQuin, Ph.D., U. of Iowa.
 1995-

Assistant to the Dean: Denise Thompson,
 M.S., M.B.A.

Student Relations Coordinator: Clark Johnson, M.S.,
 Mankato State U. 1985-

ANTHROPOLOGY

Professors:

*Paul Brown, Ph.D., U. of Colorado. 1980-
 Winifred Mitchell, Ph.D., U. of Colorado. 1985-
 Michael Scullin, M.A., U. of Illinois. 1969-
 Richard Strachan, Ph.D., Wayne State U. 1971-
 Assistant Professor:
 Wayne Allen, Ph.D., U. of California-Santa Barbara.
 2000-

ECONOMICS

Professors:

Ashok Chowdhury, Ph.D., Iowa State U. 1980-
Steven Hickerson, Ph.D., U. of Nebraska, Lincoln.
1980-
Donald E. Renner, Ph.D., U. of Cincinnati. 1979-
Richard C. Schiming, Ph.D., Ohio State U. 1981-
*Ved P. Sharma, Ph.D., Washington U. 1976-
Robert D. Simonson, Ph.D., U. of Nebraska, Lincoln.
1981-
Arlen J. Skorr, Ph.D., U. of Nebraska, Lincoln. 1970-
Gerald A. Smith, Ph.D., Louisiana State U. 1979-
Arnold R. Wells, Ph.D., U. of Minnesota. 1966-
Assistant Professors:
David R. Abel, B.A., Grinnell College. 1969-

ETHNIC STUDIES

Associate Professors:

*Yueh-Ting Lee, Ph.D., U. of New York at Stony
Brook. 2000-
Hanh Huy Phan, M.S., Mankato State U. 1974-
Assistant Professor:
Luis Posas, Ph.D., Kansas State U. 1998

GEOGRAPHY

Professors:

Branko Colakovic, Ph.D., U. of Minnesota. 1970-
Cecil Keen, Ph.D., U. of Wisconsin, Milwaukee.
1987-
*Martin Mitchell, Ph.D., U. of Illinois. 1993-
Assistant Professors:
Donald A. Friend, Ph.D., Arizona State U. 1997-
Jose J. Lopez, Indiana State University. 1998-
Cynthia A. Miller, Ph.D., Syracuse U. 1991-
Instructors:
Kimberly Musser, M.A., U. of Oregon. 1997-
Catherine Hansen, M.A., Mankato State U. 1998-

GERONTOLOGY

Professors:

Kathryn "Jay" Elliott, Ph.D., Harvard U. 1998-

HISTORY

Professors:

Loretta T. Burns, Ph.D., U. of Nebraska. 1986-
*Erwin P. Grieshaber, Ph.D., U. of North Carolina at
Chapel Hill. 1979-
Richard C. Hall, Ph.D., Ohio State U. 1990-
William E. Lass, Ph.D., U. of Wisconsin-Madison.
1960-
Charles K. Piehl, Ph.D., Washington U.-St. Louis.
1981-
Associate Professors:
Melodie Andrews, Ph.D., U. of Houston. 1990-
Margaretta S. Handke, Ph.D., U. of Colorado. 1986-
Donald H. Strasser, M.A., U. of Maryland. 1964-

POLITICAL SCIENCE/LAW ENFORCEMENT

Professors:

*Doran Hunter, Ph.D., U. of Washington. 1969-
Joseph Kunkel, Ph.D., U. of Minnesota. 1979-

Carolyn Shrewsbury, Ph.D., U. of Oklahoma. 1968-
Jackie Viecei, Ph.D., Indiana U., Bloomington. 1987-
Associate Professors:

Susan Burum, J.D., U. of North Dakota. 1989-
William Lewinski, Ph.D., Union for Experimenting
Colleges and Universities. 1981-
John Parham, Ph.D., U. of Houston. 1992-
Assistant Professors:
Abdalla Battah, Ph.D., American U. 1993-
Carl Ekstrom, Ph.D., SUNY, Albany. 1999-
Tomasz Inglot, Ph.D., U. of Wisconsin-Madison.
1998-
Mark Robbins, Ph.D., Northern Illinois University.
1999-

Richard Seklecki, Ph.D., Syracuse U. 1999-
Fred Slocum, Ph.D., U. of Iowa. 1998-
Tamara Wilkins, M.S., East Texas State Univ.
Commerce. 1993-

PSYCHOLOGY

Professors:

Paul K. Brandon, Ph.D., U. of Michigan, Ann Arbor.
1969-
Michael Fatis, Ph.D., U. of Ottawa. 1978-
Nancy Fenrick, Ph.D., State U. of New York at Stony
Brook. 1979-
Kenneth J. Good, Ph.D., U. of Iowa. 1972-
Daniel Houlihan, Ph.D., U. of Utah. 1987-
*Rosemary Krawczyk, Ph.D., State U. of New York
at Stony Brook. 1984-
D.C. Royal, Ph.D., U. of Michigan, Ann Arbor. 1966-
Associate Professors:
Leslie Eckert, Ph.D., Wayne State U. 1992-
Phillip Goernert, Ph.D., Miami U. 1990-
Daniel Sachau, Ph.D., U. of Utah. 1989-
Douglas J. Wallen, B.A., U. of Minnesota. 1970-
Assistant Professors:
Edison Perdomo, Ph.D., U. of Iowa. 2000-
Barry Ries, Ph.D., Oklahoma State U. 1996-
Seiji Takaku, Ph.D., Claremont Graduate College.
2000-

SOCIAL WORK

Professors:

William A. Anderson, Ph.D., Florida State U., MSW,
Florida State U. 1977-
*Richard Wintersteen, Ph.D., U. of Kansas., MSW,
Case Western. 1986-
Vanda Manahan, Ph.D., U. of Minnesota., MSW,
Virginia Commonwealth U. 1979-
Associate Professor:
Christine Black-Hughes, Ph.D., The Union Institute,
Ohio., M.S.W., Ohio State U. MSW. 1994-
Assistant Professor:
Marilyn Frank, Ph.D., U. of Minnesota., MSW, U. of
Illinois-Chicago Circle. 1994-
Debra Gohagan, Ph.D. MSW, U. of South Carolina,
Columbia. 1998-

SOCIOLOGY AND CORRECTIONS**Professors:**

Dennis Braun, Ph.D., American U. 1971-
 Steven Buechler, Ph.D., State U. of New York at Stony Brook. 1986-
 Joe Davis, Ph.D., U. of Missouri. 1983-
 W. Roy DeMaree, Ph.D., U. of Minnesota. 1967-
 Barbara Keating, Ph.D., U. of Nebraska, Lincoln. 1981-
 James Robertson, Dipl.L., Oxford U. 1979-
 Thomas Schmid, Ph.D., U. of Minnesota. 1976-
 Steven Vassar, Ph.D., U. of Illinois at Chicago. 1970-
 *William Wagner, Ph.D., Washington State U. 1985-
Associate Professors:
 Barbara Carson, Ph.D., U. of New Hampshire. 1992
 Diane Graham, Ph.D., Southern Illinois U. at Carbondale. 1992-
 Leland McCormick, M.A., U. of Minnesota. 1973-
Assistant Professors:
 Afroza Anwary, Ph.D., U. of Minnesota. 2000-
 Kimberly Greer, Ph.D., Southern Illinois U. at Carbondale. 1998-
 Luis Posas, Ph.D., Kansas State U. 1998-
 Robert Redhead, M.S., South Dakota State U. 1967-
 Pedro Thomas, Ph.D., Washington State University. 1999-

URBAN AND REGIONAL STUDIES**Professors:**

*David Laverny-Rafter, Ph.D., U. of Wisconsin, Madison. 1982-
 H. Roger Smith, Ph.D., Michigan State U. 1972-
 Perry S. Wood, Ph.D., U. of Nebraska. 1976-
Associate Professor:
 William R. Bernhagen, Ph.D., U. of Wisconsin. 1987-
Assistant Professor:
 Janet Cherrington-Cucore, Ph.D., U. of Delaware. 1999-
 Miriam Porter, D.P.A. Mankato State U., Ph.D. Hamline U. 1998-

WOMEN'S STUDIES**Professors:**

Donna Langston, Ph.D., U. of Washington. 1989-
 *Carol Perkins, Ph.D., San Diego State U. 1993-
Assistant Professor:
 Maria Bevacqua, Ph.D., Emory University. 1999-

College Of Graduate Studies**Dean of Graduate Studies and Research:**

Anthony J. Filipovitch, Ph.D., Portland State U. 1978-

Academic Computing and Technical Services**Associate Professor:**

Gregg Asher, Ph.D., U. of Minnesota. 1996-
 Wayne Sharp, MBA, Minnesota State U. 1978-
Assistant Professor:
 Mark Kump. 1988-

Library Services And Information Technology

Interim Dean: Joan Roca, Ph.D., U. of Minnesota. 1982-

Assistant to Dean: Leslie McPhail Peterson, M.L.S., U. of Kentucky. 1998-

Professors:

Kathy Piehl, M.S., U. of Illinois. 1985-
 Joan Roca, Ph.D., U. of Minnesota. 1982-
Associate Professors:
 David W. Allan, Ph.D., Union Institute. 1974-
 Yen Yen Chin, M.L.S., George Peabody College. 1968-

Gary A. Hudson, M.L.S., Emporia State U. 1989-
 Sandra K. Ready, Ed.Sp., Mankato State U. 1974-
Assistant Professors:

Lisa A. Baures, M.L.S., U. of Minnesota. 1990-
 Joanne H. Boelke, M.A., U. of Minnesota. 1990-
 Kellian Clink, M.L.S., U. of Wisconsin, Madison. 1987-

Polly Frank, M.A., U. of Minnesota. 1985-
 Lance J. Leipold, M.A., U. of Minnesota. 1964-
 Mark McCullough, M.L.S., Indiana U. 1997-
 Marilyn Montgomery, M.A.L.S., Rosary College. 1970-

Diane Richards, M.L.S., U. of Oregon. 1996-
 *Rebecca Schwartzkopf, M.L.S., Indiana U. 1984-
 Pamela L. Schmutz, M.S.L.S., Florida State U. 2000-
 Daardi Sizemore, M.L.I.S., U. of Wisconsin-Milwaukee. 1999-
 Lynne N. Weber, M.A.L.S., U. of Iowa. 1999-

Student Affairs**ATHLETICS****Assistant Professors:**

#Dean Bowyer, M.S., Mankato State U. 1976-
 Todd Carroll, M.S., St. Cloud State U. 1997-
 #Dan McCarrell, M.A., Roosevelt U. 1983-
 #Lori Meyer, M.A., Mankato State U. 1984-
 #Philip Rhoads, M.A., Mankato State U. 1982-
 #Dan Runkle, M.S., Western Illinois U. 1981-
 #Debra Runkle, M.A., Mankato State U. 1985-
 #Mark Schuck, M.S., Mankato State U. 1969-
 #Pat Sexton, M.S., U. of Arizona. 1993-
 #Ann Walker, M.A., U. of Iowa. 1998-
Instructors:
 Darren Blue, B.S., Minnesota State U., Mankato. 2000-
 Shane Bowyer, M.S., Mankato State U. 2000-
 #Greg Clough, M.S., Montana State U. 1997-
 Chris Hvinden, M.S., Minnesota State U., Mankato. 1998-

Troy Jutting, M.S., Mankato State U. 1992-
 #Jim Makovsky, M.S., Mankato State U. 1993-
 Eric Means, M.A., Mankato State U. 1997-
 #Chris Miskec, M.S., U. of Kansas. 1996-
 Jerry Olszewski, M.S. Minnesota State U., Mankato, B.S., U. of Wisconsin. 1999-
 Tina Ruff, Masters in Higher Ed., Arizona State U. 2000-

Kelly Scholten, B.A., Augustana College. 1997-
#Pete Toews, M.A., Mankato State U. 1992-
Carlene Tully, B.S., Virginia Western College. 1996-
#Doug Tully, M.S., Michigan State U. 1994-
Suzanne Venet, B.S., Mount Union College. 2000-
Alex Wood, B.S., Winston-Salem State U. 1998-

joint appointment with Human Performance

COUNSELING CENTER

Professors:

Charles K. Draheim, Ed.D., U. of South Dakota. 1969-

Steven Gilbert, Ph.D., U. of Pennsylvania. 1989-
Gary L. Hudson, Ed.D., U. of South Dakota. 1969-

Sandra L. Hyde, Ph.D., Kent State U. 1970-

Associate Professor:

Nancy S. Rolfsrud, M.A., Mankato State U. 1990-

TRIO PROGRAMS

Professor:

Charles W. Cantale, Director, Ed.S., Mankato State U. 1978-

Assistant Professor:

George Corey, Associate Director, Upward Bound, M.S., Mankato State U. 1980-

Nancy Sprengeler, Assistant Director, Talent Search, M.S., Mankato State U. 1991-

Emeriti Faculty

Donald L. Aaker, University Security

Phyllis R. Abbott, History

James L. Adams, Mathematics and Statistics

C. Dean Alders, Mathematics and Statistics

Kent G. Alm, Office of the President

Ross C. Alm, Speech Communication

John "Jack" W. Amann, Physical Education

Russell K. Amling, Library

Donald N. Anderson, Industrial and Technical Studies

Donald E. Anderson, Electrical Engineering and Electronic Engineering Technology

Julie Anderson

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 Ellie McKinney, Library
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Sandra M. Mitchell, Library	Donald D. Robinson, Human Performance
Florence E. Moller, First Year Experience	Donald L. Roscoe, Geography
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MINNESOTA STATE UNIVERSITY CALENDAR OF DAYS OF INSTRUCTION
2001-02 (Fall through Summer)
(tentative as of 3/14/01)

Fall Semester (72 Class Days)

Aug. 22-24	International Student Orientation
Aug. 21	Residence Halls Open for New Residents 9:00 A.M.-4:00 P.M.
Aug. 23	Residence Halls Open for Returning Residents 9:00 A.M.-10:00 P.M.
Aug. 23/24	New Student Orientation (one-day session)
Aug. 27	Classes Begin
Aug. 31	Deadline for General Registration for On-Campus Classes
Sept. 1	Saturday Classes Begin 9:00 A.M.
Sept. 3	Labor Day (No Classes)
Sept. 10	Deadline for Grading Method Change
Oct. 8	Columbus Day (Classes Scheduled)
Nov. 14	Deadline for Dropping Classes
Nov. 21	No Evening Classes
Nov. 22-25	Thanksgiving Break (No Classes)
Nov. 30	Deadline for Official Withdrawal from the University
Dec. 10-14	Final Examinations
Dec. 14	Last Day Fall Semester
Dec. 15	Graduation Day
Dec. 17	Grading Day (No Classes)
Dec. 18-Jan. 13/02	Winter Break

Spring Semester (74 Class Days)

Jan. 9-11	International Student Orientation
Jan. 9-11	New Student Orientation
Jan. 11	Residence Halls Open for New Residents 12:00 NOON-7:00 P.M.
Jan. 13	Residence Halls Open for Returning Residents 12:00 NOON
Jan. 14	Classes Begin
Jan. 18	Deadline for General Registration for On-Campus Classes
Jan. 21	Dr. Martin Luther King, Jr. Day (No Classes)
Jan. 28	Deadline for Grading Method Change
Feb. 18	Presidents' Day (Classes Scheduled)
Mar. 11-15	Spring Break
Apr. 12	Deadline for Dropping Classes
Apr. 26	Deadline for Official Withdrawal from the University
May 6-10	Final Examinations
May 10	Last Day Spring Semester
May 11	Graduation Day
May 13	Grading Day (No Classes)

Summer Session (48 Class Days)

May 20	Classes Begin—General Registration
May 24	Deadline for General Registration
June 3	Deadline for Grading Method Change
June 27	Deadline for Dropping Classes
July 4	Independence Day (No Classes)
July 12	Deadline for Official Withdrawal from the University
July 26	Last Day of Summer Session

To obtain an application for admission or to schedule a campus visit,
please contact the MSU Office of Admissions.

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209 Wigley Administration Center
Mankato, MN 56001

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