
MINNESOTA STATE UNIVERSITY MANKATO

Undergraduate Catalog
2015-2016

315 Wigley Administration Center
Mankato, MN 56001

Toll Free in Minnesota: 800-722-0544
MRS/TTY: 800-627-3529 or 711

Applications and transcripts should be sent to the following address:
Office of Admissions
Minnesota State University, Mankato
122 Taylor Center
Mankato, MN 56001
Admissions Phone: 507-389-1822; Admissions Fax: 507-389-1511

Find out more about us on the World Wide Web at:
www.mnsu.edu

*****NOTE TO STUDENTS*****

Email is the University's Official Means of Communication

University assigned student email accounts shall be the University's official means of communication with all students.

Students are responsible for all information sent to them via the University assigned email account. If a student chooses to forward the University email account, she or he is still responsible for all information, including attachments, that is sent to the University email account.

SAVE THIS BOOK

If your general education or major requirements change during that time, you may still choose to graduate under the curricular requirements in this catalog. In the case of licensure programs, changes in licensure requirements may lead to changes in curricular requirements.

The requirements cited in this catalog are valid for seven years.

The Minnesota State Mankato, Undergraduate Catalog is a general catalog of information regarding curricula, fees, and related policies and procedures. Every effort has been made to make the catalog 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 provisions of this Catalog DO NOT constitute a contract between the student and university.

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 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), 800-627-3529 or 711 (MRS/TTY).

A member of the Minnesota State Colleges and Universities System. Minnesota State Mankato is an Affirmative Action/Equal Opportunity University.

List of academic programs is available online at www.mnsu.edu/programs/

ACCREDITATIONS

Minnesota State University, Mankato is accredited by the Higher Learning Commission. In addition, all individual programs undergo periodic reviews, generally every five years. Some professional associations also accredit specific programs.

GENERAL ACCREDITATIONS

1929: Higher Learning Commission (last renewed 2006)

1952: The American Association of University Women

1954: The National Council for Accreditation of Teacher Education (last renewed 2004)

University Vision, Values & Mission

Mission

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

Vision

Minnesota State Mankato will be known as a university where people expect to go further than they thought possible by combining knowledge and the passion to achieve great things.

Our foundation for this vision is our heritage of both dedicated teaching and the direct application of knowledge to improve a diverse community and world. We will achieve it by actively nurturing the passion within students, faculty and staff to push beyond possibility on the way to realizing dreams.

Core Values

Minnesota State University, Mankato is an innovative, student-centered learning community that values:

- **Integrity** and respect in the way we conduct ourselves;
- **Diversity** in who we are and what we do;
- **Access** to our programs and services that create opportunities for all to pursue their dreams;
- **Responsibility** to those we serve by providing an education that inspires solutions to society's challenges; and
- **Excellence** in our academic and non-academic pursuits.

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DIRECTORY OF PROGRAMS

MAJORS

MAJOR	DEGREE(S) OFFERED	MINOR REQUIRED
Accounting	BS	None.
Alcohol & Drug Studies (See Health Science)	BS	Yes. Any.
American Indigenous Studies	BA, BS	Yes. Any.
Anthropology	BA, BS	Yes. Any.
Applied Organizational Studies	BS	None.
Art	BA, BFA	Yes. Any for BA. No minor required for BFA.
Ceramics	BFA	None.
Drawing	BFA	None.
Graphic Design	BFA	None.
Installation	BFA	None.
Painting	BFA	None.
Photography	BFA	None.
Printmaking	BFA	None.
Sculpture	BFA	None.
Art History	BA	Yes. Any.
Automotive Engineering Tech.	BS	None.
Aviation	BS	None.
Biochemistry	BA, BS	None.
Biology	BS	None.
General, Non-Specialized		
Biomedical Sciences		
Biology Cytotechnology		
Ecology		
Microbiology		
Plant Science		
Toxicology		
Zoology		
Biotechnology	BS	None.
Chemistry	BA, BS	Yes. Any but Chemistry for BA. None for BS.
Civil Engineering	BSCE	None.
Cognitive Science	BS	None.
Computer Science		
Philosophy		
Psychology		
Communication Disorders	BA, BS	None.
Communication Studies	BA, BS	Yes. Any for BS and Language for BA.
Community Health Education (See Health Science)	BS	None.
Computer Engineering	BSCE	None.
Computer Engineering Technology	BS	None.
Computer Information Technology	BS	Yes. Any(Computer Science Excluded).
Construction Management	BS	None.
Corrections	BS	Yes. Any.
Dance	BA, BS, BFA	Yes. Any.
Dental Hygiene	BS	None.
Earth Science	BA, BS	None.
Earth Science Geology	BS	None.
Economics	BA, BS	Yes. Any for BA. No minor required for BS.
Electrical Engineering	BSEE	None.
Electronic Engineering Technology	BS	None.

MAJOR	DEGREE(S) OFFERED	MINOR REQUIRED
English		
Creative Writing	.BA	Yes. See Advisor.
Creative Writing	BFA.	None.
Communication Arts and Literature Education	.BS	None.
English Literature	.BA	Yes. See Advisor.
English Studies	.BA	None.
Technical Communication	.BS	Yes. See Advisor.
Environmental Sciences	.BS	Yes. See Advisor.
Ethnic Studies	.BS	Yes. Any.
Business/Corporate Emphasis		
International Community and Human Services Emphasis		
Local Community and Human Services Emphasis		
Public/Government Emphasis		
Exercise Science	.BS	None.
General Exercise Science		
Pre-Physical Therapy		
Family Consumer Science	.BS	Yes. Any.
Child Development and Family Studies		
Dietetics		
Food and Nutrition		
Film and Media Studies	.BA	
Finance	.BS	None.
Corporate Finance Emphasis		
Financial Planning and Insurance Emphasis		
General Finance Emphasis		
Institutional Finance Emphasis		
Investment Analysis Emphasis		
Food Science Technology	.BS	None.
French	.BA, BS	Yes. Any BA. None BS.
Gender and Women's Studies	.BA, BS	Yes. Any.
Geography		
Standard Major	.BA, BS	Yes. Any.
Professional Major	.BA, BS	None.
German	.BA, BS	Yes. Any.
Health Science		
Alcohol and Drug Studies	.BS	Yes. Any.
Community Health Education	.BS	None.
Health & Physical Education	.BS	None.
School Health Education	.BS	None.
History	.BA, BS	Yes. Any.
Humanities	.BA	Any.
Human Performance		
Health and Physical Education	.BS	None.
Information Systems	.BS	None.
Integrated Engineering	.BSE	None.
Interdisciplinary Studies (Previously Open Studies)	.BS	None.
International Business	.BS	None.

MAJOR	DEGREE(S) OFFERED	MINOR REQUIRED
International Relations	BA	Yes. Any.
Security & Peace (S&P) Emphasis		
International Political Economy (IPE) Emphasis		
International Norms & Institutions (INI) Emphasis		
Regional Studies (RS) Emphasis		
Law Enforcement		
MN POST Board Cert.	BA, BS	None.
Non-POST Board Cert	BA, BS	Yes. Any.
Liberal Studies	AA	None.
Management	BS	None.
Business Management Emphasis	BS	None.
Human Resource Management Emphasis	BS	None.
Manufacturing Engineering Technology	BS	None.
Marketing	BS	None.
Mass Media	BA, BS	Yes. Any.
Mathematics	BA, BS	Yes. Any.
Mechanical Engineering	BSME	None.
Medical Laboratory Science	BS	None.
Music	BA	None.
Music (Voice, Piano, or Instrumental)	BMUS.	None.
Music Industry	BS	Yes. See Advisor.
Music Industry Audio Production Specialist	BS	Yes. See Advisor.
Nursing	BS	None.
Basic Nursing Option		
LPN Option (Available with sufficient applications)		
RN Baccalaureate Completion		
Philosophy	BA, BS	Yes. Any.
Philosophy, Politics, and Economics (PPE)	BA, BS	None.
Economics Emphasis		
Philosophy Emphasis		
Political Science Emphasis		
Physical Education (See Human Performance)	BS	
Physics	BS	None.
Political Science	BA, BS	Yes. Any.
Psychology	BA, BS	Yes. Any.
Recreation, Parks & Leisure Services	BS	None.
Leisure Planning and Management Emphasis		
Therapeutic Recreation Emphasis		
Resource Management Emphasis		
Scandinavian Studies	BA	Yes. Any.
Science Teaching		
Chemistry 9-12 Teaching	BS	None.
Earth Science 5-12 Teaching	BS	None.
Life Science 5-12 Teaching	BS	None.
Physics 5-12 Teaching	BS	None.

MAJOR	DEGREE(S) OFFERED	MINOR REQUIRED
Social Studies	BS	None.
Anthropology		
Economics		
Geography		
History		
Political Science		
Psychology		
Sociology		
Social Work	BSSW	None.
Sociology	BA, BS	Yes. Any.
Applied Option		
General Option		
Sociology Globalization Studies	BA, BS	Yes, Any.
Spanish	BA, BS	Yes. Any.
Spanish for the Professions	BS	Yes. Any.
Special Education: Academic and Behavioral Strategist	BS	Yes.. Any.
Sport Management	BS	Yes. See Advisor.
Statistics	BS	None.
Theatre Arts		
Generalist	BA, BS	None.
Acting	BFA	None.
Theatre Design/Technology	BFA	None.
Musical Theatre	BFA	None.
Urban and Regional Studies	BS	Yes. Any.

EDUCATION DEGREES	GRADE LEVEL
Art	Grade K-12
Business Education	Grade 5-12
(Inter-institutional with Winona State)	
Communication Arts & Literature	Grade 5-12
Dance Education	Grade K-12
Elementary Education	Grade K-6
Modern Language French	Grade K-8
Modern language German	Grade K-8
Modern Language Spanish	Grade K-8
English/Speech	Grade 5-12
English	
Speech	
Family Consumer Science	Grade 5-12
French	Grade K-12
German	Grade K-12
Health & Physical Education (See Health Science)	Grade K-12
Mathematics	Grade 5-12
Music Education	Grade K-12
Instrumental Band/Orchestra	
Vocal/General Music	
School Health Education (See Health Science)	Grade 5-12
Science Teaching	Grade 5-12
Life Science (Biology)	
Chemistry	
Earth Science	
Physics	
Social Studies	Grade 5-12
Anthropology Option	
Economics Option	
Geography Option	
History Option	
Political Science Option	
Psychology Option	
Sociology Option	
Spanish	Grade K-12
Special Education	Grade K-12
Academic and Behavioral Strategist	

NON-DEGREE PROGRAMS

Certificate

American Indigenous Studies
Critical Thinking (See Philosophy)
Database Technologies (See Computer Information Technology)
Elementary Education STEM
Geoaerchology (See Earth Science)
Geomorphology and Earth Science Processes (See Geography)
Geographic Information Science (GISc)
Information Security (See Computer Information Technology)
Law Enforcement Management
Long-Term Administration (See Aging Studies)
Museum Studies (See Anthropology)
Networking Technologies (See Computer Information Technology)
Nonprofit Leadership
Nursing Home Administration
Renewable Energy (See Electronic Engineering Technology)
Software Development (See Computer Information Technology)
Technical Communication (See English)

Licensure

Aging Studies - Nursing Home Administration Track

Pre-Professional Programs

Pre-Chiropractic
Pre-Dental
Pre-Engineering
Pre-Law
Pre-Medicine
Pre-Mortuary Science
Pre-Occupational Therapy
Pre-Optometry
Pre-Osteopathic Medicine and Surgery
Pre-Pharmacy
Pre-Physical Therapy
Pre-Podiatric Medicine and Surgery
Pre-Veterinary Science

MINORS

Accounting
Actuarial (See Mathematics)
Aging Studies
 Aging Studies for Nursing
Alcohol & Drug Studies (See Health Science)
American Indigenous Studies
Anthropology
Art History
Art Studio
Astronomy
Athletic Coaching
Automotive Engineering Technology
Aviation
 Aeronautics
 Private Flight
 Professional Flight
Biology
Business Administration
Business Law
Chemistry
Child Development and Family Studies (See Family Consumer Science)
Communication Disorders
Communication Studies
 Interdisciplinary (See Communication Studies & English)
Computer Information Science (See Computer Information Technology)
Computer Technology (See Computer Information Technology)
Computer Science
Consumer Studies (FCS)
Corporate and Community Fitness/Wellness
Corrections
Critical Thinking (See Philosophy)
Dance
Database Technologies (See Computer Information Technology)
Earth Science
Economics
Electronic Engineering Technology
Elementary Education
 Middle School Math
 Middle School Science
 Middle School Communication Arts & Literature
English
 General
 Creative Writing
 Interdisciplinary Communications
 Linguistics
 Teaching English as a Second Language Non-Licensure
 Teaching English as a Second Language
 Technical Communication
 Writing Studies
Entrepreneurship and Innovation (See Management)
Environmental Science
Ethics (See Philosophy)
Ethnic Studies Online
Family Consumer Science
Film Studies
Financial Planning (See Finance)
Food and Nutrition (See Family Consumer Science)
French
Gender and Women's Studies
Geography
Geology
German
Health Science
History
Human Resource Management (See Management)
Humanities
International Business
International Relations
International Technology (Computer Information Technology)
Latin American Studies
Law Enforcement
Manufacturing Engineering Technology
Marketing
Mass Media
Mathematics
Middle School Mathematics (See Elementary Education)
Middle School Science (See Elementary Education)
Middle School Communication Arts & Literature
 (See Elementary Education)
Military Science
Music
Networking and Information Security
 (See Computer Information Technology)
Nonprofit Leadership
Philosophy
Physical Education (Non-Teaching) (See Human Performance)
Physics
Political Science
Public Administration
Psychology
Recreation, Parks & Leisure Services
Scandinavian Studies
Sexuality Studies (See Gender and Women's Studies)
Social Welfare (See Social Work)
Sociology
Software Development (See Computer Information Technology)
Spanish
Special Education: Academic and Behavioral Strategist
Sport Medicine (See Human Performance)
Statistics
Theatre Arts
Urban and Regional Studies

Programs at 120 Credits

Accounting - BS
American Indian Studies - BS
Anthropology - BA/BS
Applied Organizational Studies - BS
Art -BA
 Ceramic - BFA
 Drawing - BFA
 Graphic Design - BFA
 Painting - BFA
 Photography - BFA
 Printmaking - BFA
 Sculpture - BFA
Art Teaching - BS
Art History - BA
Athletic Training - BATR
Aviation - BS
Biochemistry - BA/BS
Biology - BS
Biotechnology - BS
Chemistry BA/BS
Cognitive Science - BS
Communication Arts & Literature - BS
Communication Arts & Literature Education (English Emphasis) - BS
Communication Disorders - BA/BS
Communication Studies - BA/BS
Computer Information Technology - BS
Construction Management - BS
Corrections - BS
Dance - BA/BS
Dance Education (K-12) - BS
Dental Hygiene - BS
Earth Science - BA/BS
Economics - BA/BS
Elementary Education - BS
English BA/BS
 Creative Writing - BA
 Creative Writing - BFA
 English Literature - BA
 English Studies - BA
 Technical Communication - BS
Environmental Sciences - BS
Ethnic Studies - BS
Exercise Science - BS
Family Consumer Science - BS
 Child Development and Family Studies - BS
 Dietetics - BS
 Food and Nutrition-BS
Finance - BS
Food Science Technology - BS
French - BA/BS
 French Teaching - BS
Gender and Women's Studies - BA/BS
Geography - BA/BS
German - BA/BS
 German Teaching - BS
Health Science
 Alcohol and Drug Studies - BS
 Community Health Education - BS
 Health and Physical Education - BS
 School Health Education - BS
History - BA/BS
Humanities - BA
Information Systems - BS
Interdisciplinary Studies - BS
International Business - BS
International Relations - BA
Law Enforcement - BA/BS

Liberal Arts & Sciences - AA
Management - BS
Marketing - BS
Medical Laboratory Science - BS
Mass Media - BA/BS
Mathematics - BA/BS
Mathematics Teaching - BS
Music - BA
 Music Industry - BS
 Music Industry, Audio Production Specialist - BS
Nursing - BS
Philosophy - BA/BS
Philosophy, Politics & Economics (PPE) - BA/BS
Physics - BS
Physics Science Teaching - BS
Political Science - BA/BS
Psychology - BA/BS
Recreation, Parks & Leisure Services - BS
Scandinavian Studies - BA
Science Teaching
 Chemistry 5-12 Teaching - BS
 Earth Science 5-12 Teaching - BS
 Life Science 5-12 Teaching - BS
Social Studies - BS
Social Studies Teaching - BS
Social Work - BSSW
Sociology - BA/BS
Spanish - BA/BS
 Spanish for the Professions - BS
 Spanish Teaching - BS
Special Education (Developmental Cognitive Disabilities) - BS
Sport Management - BS
Statistics - BS
Theatre Arts (Generalist) - BA/BS
Theatre
 Acting - BFA
 Musical Theatre - BFA
 Theatre Design/Technology - BFA
Urban & Regional Studies - BS

Programs at 128 Credits

All programs listed below have an approved MnSCU credit waiver.

Automotive Engineering Technology - BS
Civil Engineering - BSCE
Computer Engineering - BSCE
Computer Engineering Technology - BS
Electrical Engineering - BSEE
Electronic Engineering Technology - BS
General Engineering - BSE
Manufacturing Engineering Technology - BS
Mechanical Engineering - BSME

Programs at 136 Credits

This program is part of a state-wide MnSCU credit waiver.

Music Education - BS

POLICIES

The activities of the University are administered in accordance with a variety of federal and state laws, Minnesota State Colleges and Universities (MnSCU) Board policies, assorted rules and regulations, and staff and student rights and responsibilities. For more information concerning applicable University and system policy, contact the Office of Academic Affairs or go to <http://www.mnsu.edu/acadaf/policies/>.

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

- 1. The right to inspect and review the student's education records within 45 days of the day the University receives a request for access.** Students should submit to the Office of the Registrar, dean, head of the Department of Academic Affairs, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- 2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.** Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- 3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent FERPA authorizes disclosure without consent.** One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administration, supervisory, academic or research, or support staff position (including health or medical staff) and also clerical staff who transmit the education record; a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person who is employed by Minnesota State Mankato Security Department acting in a health or safety emergency; or a student serving on an official committee, such as disciplinary or grievance committee, or assisting school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Nondiscrimination in Employment and Education Opportunity. Minnesota State Mankato 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 variety 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 Mankato. 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, 112 Armstrong Hall, or at 507-389-2986 (V) or 1-800-627-3529 or 711 (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 Mankato 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, email 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, 132 Wigley Administration Center.

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 Mankato 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 Finance and Administration, 238 Wigley Administration Center, 507-389-6621.

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 Mankato new entering first year students, fall term 2001 cohort, is 50 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 2001 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 Educa-

tion 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 in 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, 222 Wiecking Center, 389-2111, the Women's Center, 246 Centennial Student Union, 389-6146, New Student & Family Programs Office 103 Preska Residential Community, and Human Resources, 325 Wigley Administration Center, 389-2015. The brochure is also available at www.mnsu.edu/safety.

DEGREES

Minnesota State Mankato offers programs leading to undergraduate certificates, associate of arts degree, baccalaureate degrees, master's degrees, graduate certificates, education specialist degrees and doctoral degrees. (The Graduate Studies Bulletin contains complete information regarding graduate degree programs.)

Please note that for any degree program, completion of a major and a minor in the same discipline is not permitted. 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. **Please be aware that we only award a specific undergraduate degree once. Students can always add majors and minors to a degree.** No majors appear on the diploma, only on the transcript.

BACCALAUREATE DEGREES

The baccalaureate degrees available are Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Music (B.Mus.), Bachelor of Science (BS), Bachelor of Science in Electrical Engineering (BSEE), Bachelor of Science in Civil Engineering (BSCE), Bachelor of Science in Computer Engineering (BSEC), Bachelor of Mechanical Engineering (BSME), and Bachelor of Science in Social Work (BSSW). 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 120 credits (or up to 128 for certain programs).

Bachelor of Arts (BA). The Bachelor of Arts degree emphasizes both breadth and depth in its curriculum.

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 47 semester credits do not require the completion of a minor.

BA degrees require completion of one full sequence (minimum 8 credits) of a single modern language (including American Sign Language) at the elementary or intermediate level. Please consult the Department of World Languages & Cultures for acceptable sequences.

BA 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. Students will then earn a Bachelor of Science (teaching) in addition to, or instead of the Bachelor of Arts. They may alternatively choose to complete the Master of Arts in Teaching degree described in the Minnesota State Mankato Graduate Catalog.

Bachelor of Fine Arts (BFA). The Bachelor of Fine Arts degree program is designed for students who desire a professional career in the Fine Arts, Creative Writing and Theatre.

Bachelor of Music (B.Mus.). 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. Vocal majors seeking the B.Mus. degree should complete 8 semester credits for elementary or intermediate foreign language coursework as part of the degree requirements.

Bachelor of Science (BS). The Bachelor of Science degree emphasizes professional or technical preparation. BS 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 47 semester credits do not require the completion of a minor.

Bachelor of Science in Electrical Engineering (BSEE). This degree is a professional degree designed for students planning a career in Electrical Engineering.

Bachelor of Science in Civil Engineering (BSCE). This degree is a professional degree designed for students planning a career in Civil Engineering.

Bachelor of Science in Computer Engineering (BSEC). This degree is a professional degree designed for students planning a career in Computer Engineering.

Bachelor of Science in Engineering (BSE). This degree is a professional degree designed for students planning a career in General Engineering.

Bachelor of Science in Mechanical Engineering (BSME). This degree is a professional degree designed for students planning a career in Mechanical Engineering.

Bachelor of Science in Social Work (BSSW). This degree is designed for students preparing for a professional career in the social work field.

ASSOCIATE DEGREES

Associate of Arts (AA). The Associate of Arts (AA) degree can only be earned through the Liberal Studies program. Students must complete the general education requirements plus 16 credits of lower division electives for a total of 60 semester credits. This Associate of Arts (AA) degree is intended for those students who wish to pursue a two-year balanced program of liberal education.

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. These programs provide evidence of specialized study and expertise in given fields such as non-profit leadership.

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.

ACADEMIC STANDARDS

This Catalog only provides a review of the most frequently consulted academic policies and procedures. Please note that the official and entire version of each University policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

ACADEMIC HONESTY

As members of this University community, students assume the responsibility to fulfill their academic obligations in a fair and honest manner. This responsibility includes avoiding inappropriate activities such as plagiarism, cheating or collusion. Students found responsible for one or more of these activities may face both academic sanctions (such as lowering a grade, failing of a course, etc.) and disciplinary sanctions (such as probation, suspension, or expulsion).

It is the intent of Minnesota State University, Mankato to encourage a sense of integrity on the part of students in fulfilling their academic requirements. To give students a better understanding of behaviors that may constitute academic dishonesty, the following definitions are provided.

Plagiarism: Submission of an academic assignment as one's own work, which includes critical ideas or written narrative that are taken from another author without the proper citation. This applies both to direct quotes and to critical ideas paraphrased by the student. Plagiarism includes but is not limited to: submitting the work of others as your own;

- submitting others' work as your own with only minor changes;
- submitting others' work as your own without adequate footnotes, quotations, and other reference forms; or
- multiple submission of the same work, written or oral, for more than one course without both instructor's permission, or making minor revisions on work which has received credit and submitting it again as new work.

Cheating: Use of unauthorized material or assistance to help fulfill academic assignments. This material could include unauthorized copies of test materials, calculators, electronics, crib sheets, help from another student, etc.

Collusion: Assistance to another student or among students in committing the act of cheating or plagiarism.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

ACCESS FOR STUDENTS WITH DISABILITIES.

A qualified individual with a disability must be ensured the same access to programs, opportunities, and activities at the University as all others.

All programs, services, and activities of the University when viewed in their entirety, will be accessible to and usable by qualified students with disabilities. 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 accommodation of disabilities upon request.

Requests for accommodation must be initiated by the student and supported by documentation of the disability indicating a current need for accommodation. Reasonable accommodations may include the following: alterations to rules, policies, or practices, removal of architectural or communication barriers, or the provision of auxiliary aids.

Minnesota State Mankato has the right to refuse to provide an accommodation that poses a direct threat to the health and safety of others, constitutes a substantial change or alteration to an essential element of a course or program, results in undue financial or administrative hardship, or is considered a personal device or service (i.e. wheelchairs, hearing aids, personal transportation).

The official version of the entire policy and procedure statement, including statements of responsibility, confidentiality of records and discrimination appeal procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

ADMINISTRATIVE DROP

Courses in which it is anticipated that enrollment demand will exceed course capacity may be designated as Administrative Drop courses. Administrative Drop refers to a process whereby a student's enrollment in a course is terminated by action of an academic department.

In these courses, an Administrative Drop will be processed for students who fail to attend the first class session, unless an acceptable reason for the absence is provided to the instructor or designated contact prior to that session. For online courses, an Administrative Drop will be processed for any student who does not electronically log into his/her class before or during the first day of the academic term.

Courses to which this policy applies will be designated in the class schedule each semester. An administrative drop will not result in a grade of "W" being entered on the student's transcript.

Students are responsible for confirming their status in courses and should not assume they are automatically dropped for non-attendance.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

ASSESSMENT OF ENGLISH LANGUAGE PROFICIENCY OF INTERNATIONAL STUDENTS

International students who are enrolled in undergraduate bachelor's degree programs at Minnesota State University, Mankato and who need to complete general education goal area 1B: Speech and Oral Reasoning must demonstrate their readiness to succeed in the courses in that goal area through one of the following means:

- a Test of English as a Foreign Language (TOEFL) score of 575 or above (paper-based), 232 or above (computer-based), 89 or above (web-based),
- or, an academic International English Language Testing System (IELTS) score of 6.5 or above.

International students with TOEFL scores below 575 (paper-based), below 232 (computer-based), below 89 (web-based), or academic IELTS scores below 6.5 must take the Accuplacer Listening Test and pass it with a score of 90 or higher to be able to enroll in CDIS 201, CMST 100, CMST 102, CMST 212, or POL 234.

Students with a score below 90 must pass English 105 with a grade of "C" or higher before enrolling in CDIS 201, CMST 100, CMST 102, CMST 212, or POL 234.

International students enrolled in bachelor degree programs must also follow the English 101 Placement policy.

CONTINUANCE AND COMPLETION IN A MAJOR

In order to support students' learning and success in completion of their undergraduate education, Minnesota State University, Mankato establishes and upholds standards of performance within academic majors. Failure to meet any of the continuation requirements of the department, program, school or college of the student's declared major may result in the student being discontinued in the major. A review will be initiated if performance issues arise. Identified deficiencies are to be based on observable behaviors and measurable performance indicators that may include ethical codes or standards important to a profession. Depending on the nature of the deficiencies identified, disciplinary action may also be initiated and imposed by the University.

Notice of students' rights and responsibilities in pursuing successful completion of program requirements will be provided in departmental brochures and websites. Each department/program shall inform students of any changes to program requirements. Under exceptional circumstances, Department/Program requirements may be adjusted at the discretion of the designated person. In consultation with the Disability Services Office, the Department/Program may also adjust program requirements when reasonable accommodations would enable an otherwise qualified individual to successfully complete program requirements without significantly altering the program.

Departments/Programs also have the right to determine if courses from other institutions may be substituted for Minnesota State Mankato courses as they relate to degree requirements within that Department/Program. Although it is recognized that faculty with expertise in the area of a course/competency in question are the best source of information regarding equivalency, a student will have the right to appeal a negative decision on equivalency.

The official version of the entire policy, including procedures, student rights and the appeal process, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

CONTINUING EDUCATION REGISTRATION (This policy is under review)

Continuing Education is defined as participation in a Non-Credit (NC) learning experience, which includes one or more of the following:

- a formally organized instructional activity (not intended solely for academic credit)
- a conference which provides participants with educational information and experiences
- any activity or event that contains educational value for audiences as determined by the university

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

COURSE REPEAT (UNDERGRADUATE)

A course repeat takes place anytime a student retakes a course for which that student has already received an A, B, C, D, P, F, NC, or W. This policy does not apply to completion of I or IP grades; however, it does apply if a student received an I or IP, did not successfully complete the I or IP, and then had the I or IP convert to a grade of F or NC. Courses which are designed to be repeated (e.g. Independent Study, Special Topics, Music Recital, etc.) are exempt from this policy.

The last grade earned in a repeated course will be the student's final, "official" grade and the only grade included for that course in GPA calculations. A repeated course for which a student receives a W will result in the last letter grade (A, B, C, D, F, P, NC) earned being the student's final "official" grade and the grade included for that course in GPA calculations.

This course repeat policy will apply for MSU courses. All courses attempted will appear on the student's transcript. Each time a course is taken it will count as attempted credits in calculation of course completion rate and in calculation of credit limit for financial aid. Therefore, overuse of the course repeat process may result in academic probation or suspension as well as financial aid suspension.

Individual departments and major programs may limit the number of repeats allowed in courses which apply to the major or minor. Individual departments and major programs also may determine whether all courses and grades will be used in the GPA computation for program admission or for completion of the major.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

Advanced Placement Credits. Minnesota State Mankato awards credit for AP examinations. Credits are granted for a score of 3, 4, or 5 in the following areas.

Art, Economics, English, History, Languages (French, German, Spanish), Music, Political Science, Psychology, Sciences, Mathematics

Students must insure that AP examination scores are forwarded to the University in order for credit review process to occur. Students should avoid registering for courses for which AP credit may be granted. AP credit granted by other colleges/universities is not automatically granted by Minnesota State Mankato. Original AP examination scores must be submitted for possible determination of credits to be awarded.

The official version of the entire policy, including the procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

International Baccalaureate (IB) Credits. Minnesota State Mankato may award academic credit to students who complete an International Baccalaureate diploma in high school. Students may earn specific University course credits by demonstrating a specified level of performance on selected higher level (HL) (SL) standardized IB examinations taken prior to enrolling at the University. Students must forward IB examination scores to the University to initiate the credit review process. IB credits granted by other colleges/universities do not automatically translate into course credits at Minnesota State Mankato. Original IB examination scores must be submitted for determination of credits to be awarded.

The official version of the entire policy, including procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

College Level Examination Program (CLEP). Minnesota State Mankato awards academic credit if certain scores are achieved on College Level Examination Program (CLEP) tests. Minnesota State Mankato grants credits based on the American Council of Education's (ACE) recommended credit-granted score guidelines for all computer-based general or subject exams if a score of 50 or greater is obtained (based on a CLEP 20-80 scale).

Students are not eligible to take CLEP exams that cover University course work for which credit has already been earned at any current or prior college/university. CLEP credits granted by other colleges/universities do not automatically translate into course credit at Minnesota State Mankato. Original examination scores must be submitted for determination of credits to be awarded. Students will not be awarded double credit for a course if both General and Subject exams have been taken.

The official version of the entire policy, including the procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

Military Service Credits. This policy was undergoing review by the University community during the printing of this catalog. The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

Project Lead the Way. This policy was undergoing review by the University Community during the printing of the catalog. The official version of the entire policy, including procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

DEAN'S LIST/ACADEMIC HONORS

An undergraduate student who carries 12 or more credits for a grade (not including P/N) during fall or spring semester and achieves a grade-point average of 3.5, with all grades reported without incomplete grades or a grade in-progress when the report is run 6 weeks after the end of each term, will be included on the Academic Honors List (Dean's List) for that semester. The words "Dean's List" will appear on the transcript. If a 4.0 grade-point average is achieved, the student will also be on the Academic High Honors List.

ENGLISH 101 PLACEMENT

Students who have been admitted to undergraduate degree programs at Minnesota State University, Mankato, and who need to complete English 101 must demonstrate readiness to succeed in English 101 through one of the following means:

an ACT English score of 18 or above,
an SAT writing score of 440 or above,

or, if the student is an international student, a Test of English as a Foreign Language (TOEFL) score of 575 or above (paper-based), 232 or above (computer-based), 89 or above (web-based), or an academic International English Language Testing System (IELTS) score of 6.5 or above.

ACT/SAT

Students with ACT English scores below 18, students with SAT writing scores below 440, or students admitted to the university without an ACT English score or SAT writing score must take the Accuplacer Reading Comprehension Test and pass it with a score of 78 or higher to enroll in English 101.

If his or her Accuplacer Reading Comprehension test score is below 78, the student must pass either English 100 or English 206 or English 207 with a grade of "C" or better before enrolling in English 101.

TOEFL/IELTS

International students with TOEFL scores below 575 (paper-based), below 232 (computer-based), below 89 (web-based), or with an academic IELTS scores below 6.5 must take both the Accuplacer ESL Reading Test and the Accuplacer WritePlacer.

International students with an Accuplacer WritePlacer score of 6 can enroll in English 101, and students with both an Accuplacer ESL Reading test score of 110 or higher and an Accuplacer WritePlacer score of 4 or 5 can also enroll in English 101.

International students with either (1) an Accuplacer WritePlacer score below 4 or (2) an Accuplacer ESL Reading test score below 110 and an Accuplacer WritePlacer score of 4 or 5 must pass either English 100 or English 206 or English 207 with a grade of C before enrolling in English 101.

The official version of the entire policy, including procedures, is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

GRADE APPEALS

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 filed 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 (280 Centennial Student Union; phone 389-2611). Note: Students are encouraged to talk to their instructors before beginning this process to attempt to resolve the matter informally.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

GRADING

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 Office of the Registrar (Dates page) for the deadline pertaining to change of grading system at www.mnsu.edu/registrar

- 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 (P/N graded courses).
- P represents passing performance (P/N graded courses).

In addition to use of straight A, B, C, D, F, NC and P letter grades, faculty members will have the option of using +/- additions.

Pass/No Credit. 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 will be required to perform at "C" (2.0) level or better. "C-" does not constitute a passing grade.

Individual departments may offer pass/no credit courses at any level of undergraduate instruction. Departments offering courses at the graduate level may use Pass/No Credit grades for theses, individual study courses, practicums, workshops, tours, seminars, and internships in the major field. They may not use Pass/No Credit grades for other courses in the student's major without specific approval of the Dean of the College of Graduate Studies and Research.

Courses taken for P/NC 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 32 credits 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.

Incomplete Grades. The grade of "incomplete" is reserved for special cases and means that, because of extenuating circumstances, the student failed to meet 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. Students 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. 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. Quality point calculations are as follows:

A+ = 4.00	A = 4.00	A- = 3.67	B+ = 3.33	B = 3.00
B- = 2.67	C+ = 2.33	C = 2.00	C- = 1.67	D+ = 1.33
D = 1.00	D- = 0.67	F = 0	P = 0	NC = 0

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 2.12. Grades of NC and P have no effect upon the calculation of a grade-point average. The cumulative GPA includes transfer work and Minnesota State Mankato credits.

This policy was undergoing review by the University community during the printing of this catalog. The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

UNDERGRADUATE GRADUATION REQUIREMENTS (This policy is under review) **Baccalaureate Degree**

To be eligible for graduation with a baccalaureate degree from Minnesota State University, Mankato, a student:

1. Must have earned a minimum of 120 semester credit hours; some programs may be in excess of 120 credits.
2. Must have a cumulative (including transfer credits) and a local Minnesota State Mankato grade point average (GPA) of at least 2.0.
3. Must have all grades finalized (all grades of I, IP, or Z may not be on the permanent record).
4. Must have completed at least 40 semester credits of upper-division (300-400) courses.
5. Must have completed the Minnesota State Mankato general education requirements or the Minnesota Transfer Curriculum.
6. Must meet the Minnesota State Mankato Cultural Diversity or Diverse Cultures requirement, whichever is applicable.
7. Must meet the Minnesota State Mankato writing-intensive requirement.
8. Must not complete more than one quarter of total degree credits with a pass/no credit grade.

9. Must meet the requirements for an academic major:
 - a. Standard Majors are 32-47 credits. Standard majors require completion of a minor. Departments may recommend waiver of a minor for students completing a double major.
 - b. Broad majors exceed 47 credits and do not require a minor.
 - c. Academic requirements for majors and minors may be more stringent than university minimum requirements.
10. Must graduate under requirements identified in a catalog of no more than seven years preceding the date of graduation. Students also must complete all of the requirements under a single catalog.
11. Must have earned at least 30 semester undergraduate credit hours from Minnesota State Mankato. Departments and Colleges may have more stringent residency requirements.

Associate in Arts Degree

To be eligible for graduation with an Associate in Arts (AA) degree from Minnesota State University, Mankato, a student:

1. Must have earned at least 60 semester credit hours.
2. Must have completed the Minnesota State Mankato general education program. Completion of the Minnesota State Mankato general education program is required as part of the AA degree program and completion of general education meets the Minnesota Transfer Curriculum requirements.
3. Must have a cumulative (including transfer credits) and a local Minnesota State Mankato grade point average (GPA) of at least 2.0.
4. Must have all grades finalized (all grades of I, IP, or Z may not be on the permanent record).
5. Must not exceed 15 credits of P/NC grading.
6. Must have earned at least 20 credits from Minnesota State Mankato.

Graduation with Honors

To qualify for graduation with honors (Cum Laude, Magna Cum Laude or Summa Cum Laude), a student:

1. Must meet all requirements for a bachelor's degree.
2. Must earn a minimum of 40 semester undergraduate credit hours from Minnesota State Mankato.
3. Must have the appropriate minimum cumulative (including transfer credits) grade point average (GPA) to satisfy honor requirements.
 - a. Cum Laude: minimum cumulative GPA of 3.3
 - b. Magna Cum Laude: minimum cumulative GPA of 3.5
 - c. Summa Cum Laude: minimum cumulative GPA of 3.8

For a student's name to be listed in the Commencement Program as graduation with honors, the GPA requirements must be met the semester BEFORE graduation. 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 during the graduation term are considered in calculating the final GPA which determines the graduation honors for the transcript and diploma. To be recognized in the Commencement Program as achieving graduation honors, students must be graduating the term in which commencement is held.

Applying for Graduation. Applications must be made no later than one calendar year prior to the expected graduation term. A minimum of ten weeks must be allowed for application processing and notification. Applications received within two weeks of graduation day will be moved to the next graduation term. 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.

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

The requirements outlined in this catalog become effective at the beginning of the of fall semester of 2015. Although no student can graduate under requirements outlined in a catalog of more than seven years preceding the date of graduation, the student may elect to graduate under a more recent catalog. However, students must complete all the requirements under a single catalog, 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 catalog.

Minimum Credits. Graduation with an associate degree is based upon successful completion of a minimum of 60 semester hours of credit. Graduation with a baccalaureate degree requires a minimum of 120 semester hours of credit (or up to 128 for certain programs).

Majors. A standard major has a minimum of 32 semester credits and requires a minor. A broad major has a minimum of 48 semester credit hours and requires no minor. Students may earn more than one major.

Minor. Students completing a standard major of 32 to 47 credits must complete a minor (which is a minimum of 16 credit hours). At the department's recommendation a required minor may be waived for a student completing a double major within the same degree. Required minors may also be waived at the department's recommendation for a student adding a major to a previous baccalaureate degree. In either case, students must complete a total of 120 semester hours of credit (or up to 128 for certain programs).

Minor for Teaching Majors. A minor will not be required for Teaching majors. Unless they have more than 48 credits in addition to the 30 professional education credits, teaching majors are not considered broad majors. This does not prohibit a teaching major from requiring a minor. All teaching majors must have a minimum of 32 required credits outside of the required 30 credits in professional education.

Major and Minor in Same Discipline. Please note that for any degree program, completion of a major and a minor in the same discipline is not permitted. 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.

Returning Student and Honor Designations. Returning students adding a new major or minor will not be eligible for receiving additional honor designations. However, if a student is seeking a different degree, they qualify for university honors under the current code system.

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 year to remove grades of "I" or "IP". Special cases will be treated individually upon appeal to the Office of Academic Affairs.

LAST DAY OF ATTENDANCE

The University is obliged to provide attendance information to various stakeholders about certain student populations, e.g. student athletes, international students on student visas, and students who receive Financial Aid or funding as veterans.

This information is collected from instructors for each course twice each term: during Mid-Term Reporting for advising purposes, and at the end of the term when grades are submitted. End-of-term Last Day of Attendance (LDA) information is only collected if a student receives a grade of "F" or "NC" for a particular course.

Instructors define what attendance means for each course. In general, the "last day of attendance" is considered to be:

- the last day the student attended class in courses in which attendance is taken by the instructor,
- the last day on which a student submitted an assignment, quiz, or test,
- or the last day on which a student actively participated in a group or online activity in classes in which attendance is not regularly taken.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

MAKE-UP WORK AND MISSED CLASSES

Students represent the University through participation in University sponsored or sanctioned activities, such as the arts, theater, music, forensics, and intercollegiate athletics. When the activity schedule occasionally conflicts with academic obligations, student-participants will follow a standard protocol to provide their faculty members with prior, written notification of their absences from classes. Faculty members will determine, in consultation with student-participants, how missed classes and assignments are made up in a manner that fulfills academic obligations and accommodates participatory obligations.

Except for absences resulting from sponsored or sanctioned activities, student-participants have the same responsibility with regard to class attendance and assignments as do all other students.

University-sponsored activities are defined as those activities that involve Minnesota State University, Mankato students serving as representatives of the university in:

- National Collegiate Athletic Association (NCAA) athletic competitions.
 - Competition time includes time required to travel to and from the competition.
 - Practices, exhibitions and scrimmages are not NCAA competitions and are not included in this policy.
 - This policy also does not apply to Minnesota State Mankato Club Sports
- Presentations and performances involving theater, music or forensics when such activities are requirements for the students in those activities. Regularly scheduled practices and rehearsals are not included in this policy.

The official version of the entire policy, including the required procedures for informing faculty about absences is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

MAXIMUM CREDIT REGISTRATION LIMIT

Undergraduate students who are otherwise eligible for registration may register for up to 18 credit hours per term with no additional permission. Students should note that, under current University policy, banded tuition only applies up to 18 credits. All credits over 18 are not included in the band.

To register for 19-21 credits, an undergraduate student needs written permission from his or her advisor and the chair of the department in which the student is registered as a major. To register for 22-24 credits, an undergraduate student needs written permission from his or her advisor, the chair of the department in which the student is registered as a major and the dean of that college (or designee). To register for 24-27 credits, an undergraduate student needs written permission from his or her advisor, the chair of the department in which the student is registered as a major, the dean of that college (or designee) and the Assistant Vice President for Undergraduate Education (or designee). Students who have yet to declare a major must work with an advisor in the program in which they are planning to major.

An undergraduate student is allowed to register for more than 27 credits only under exceptional circumstances. Students seeking to register for more than 27 credits must get written permission from his or her advisor, the chair of the department in which the student is registered as a major, and the dean of that college (or designee). The student must then make an appointment to meet with the Assistant Vice President for Undergraduate Education (or designee) to explain the need for registration in excess of 27 credits.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

PRIORITY REGISTRATION

In order to accommodate student groups impacted by schedules or other constraints outside their control, approved groups will be allowed to register in advance of the regular registration period. The policy is tailored to allow students to have access to general education and lower division (100-200) courses, many of which have multiple sections, so that students can have access to the sections

that allow them to attend class while accommodating their specific obligations or circumstances which would otherwise hinder timely academic progress. Priority registration begins during the second term of full-time study (12 credits or more). Designated students may use priority registration until they have earned 64 credits. However, in cases where a need for priority registration can be demonstrated beyond this 64-credit threshold, an appeal process is available through the Registrar's Office.

The following student groups or cohorts are allowed priority registration prior to the regular registration timeframe:

- 1) Officially recognized University programs: Programs such as student-athletes, forensic students, theatre students, and music students. A 24-48 hour priority registration timeframe prior to the start of regular registration is granted for eligible students participating in university-sponsored programs.
- 2) Students registered with the Minnesota State Mankato Office of Disability Services: Students with documented disabilities which require special attention in the scheduling process obtain authorization from the Office of Disability Services. These students are allowed a one-week priority registration time frame prior to the start of regular registration.
- 3) Military members and veterans: Determination of students eligible for priority registration is made through the use of VA educational benefits, verified by the certifying official in the Office of the Registrar. Those students otherwise eligible under this category, but not currently using VA education benefits must self-identify to the certifying official and provide proof of current military membership or veteran status (this policy excludes dependents of veterans and military members). A 24-48 hour priority registration timeframe prior to the start of regular registration is granted for eligible military members and veterans.
- 4) Additional eligibility for priority registration: Other student groups or cohorts seeking priority registration status need to have the program advisor or administrator submit a request with the following information:
 1. Group or cohort designation
 2. Reason for request
 3. Evidence of need for priority registration

The following criteria will be used to determine eligibility for priority registration:

- 1) The student group must have a documented need for priority registration through participation in a university sponsored activity or program which would slow academic progress without registration flexibility.
- 2) Participation or membership in the student group must be clearly defined.
- 3) The student group must exhibit evidence that priority registration will have a positive impact on academic progress and help alleviate scheduling difficulties inherent to their membership in that student group.

Requests are submitted to the Assistant Vice President for Undergraduate Education, who then convenes a committee comprised of the Vice President of Student Affairs and Enrollment Management, the Director of Admissions, the Registrar, a Student Relations Coordinator, a Faculty Association appointed member, and a MSSA appointed member. The committee reviews requests from groups seeking priority registration and sets review eligibility timelines for these additional groups. Requests must be submitted by October 1 to be considered for the next academic year's registration. The committee makes recommendations to the Assistant Vice President who acts in coordination with the Registrar. Upon approval of priority registration:

- 1) Notification is sent from the Assistant Vice President to the Registrar.
- 2) The list of students eligible for priority registration is documented by the appropriate department or program administrator, and the list is supplied to the Registrar a minimum of one month prior to the start of the next term's registration period.
- 3) Students on this documented list are allowed to register during the designated period prior to the start of the regular pre-registration period.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

SATISFACTORY ACADEMIC PROGRESS FOR UNDERGRADUATE STUDENTS

(This policy is under review)

Satisfactory Academic Progress for undergraduate students is defined as both:

- achieving a (“local”) cumulative grade point average (GPA) of 2.0 or higher. Transfer credits are not included in calculating satisfactory GPA.

The Grade Point Average (GPA) is the total number of quality points earned by the student, divided by the total number of credit hours attempted on a regular grade basis. Please refer to the University Grading Policy for the quality point calculations. Courses in which a P or NC is earned are not included when calculating GPA.

- maintaining a Minnesota State University, Mankato cumulative satisfactory credit completion rate of at least 67%. Transfer credits are included in calculating satisfactory credit completion rate.

Credit Completion Rate (CCR) is defined as the total number of earned credit hours divided by the number of total attempted credit hours. Courses which have received grades of A (+/-), B (+/-), C (+/-), D (+/-), and P are considered attempted/ earned credits and courses assigned grades of F, NC, I, IP, W or Z are only considered attempted credits. Courses taken as Audit (AU) have no grade point value and are not considered attempted credits. Credits taken as Audit are excluded for calculation of the Credit Completion Rate.

The University Student Financial Aid Eligibility Satisfactory Academic Progress (SAP) Standards Policy maintains academic standards that are at least as strict as the standards established in this academic policy.

Academic Warning. After one semester (this includes summer session) of failing to meet the Satisfactory Academic Progress requirements, a student will receive an academic warning. The University will place a registration hold on students who receive an academic warning. Students must follow the process for students on warning in their respective colleges. Students who receive an academic warning should contact the Student Relations Coordinator/designated advisor in their college, or the Office of New Student & Family Programs

Academic Suspension. After two consecutive semesters (this includes summer session) of failing to meet the Satisfactory Academic Progress requirements, a student will be suspended from Minnesota State University, Mankato.

Academic suspension disqualifies a student from further enrollment. If a student has already registered for the next term, the classes will be dropped.

Academic Reinstatement Following Suspension. Reinstatement is the process involved to allow a suspended student to return to the University.

Regular Reinstatement: Normally, students who have been suspended will be reinstated after one year away from the University. No committee appeal is necessary for regular reinstatement. Here is the link to the application. <http://www.mnsu.edu/acadaf/appeals/applicationacademicreinstatement.pdf>

Early Reinstatement: A suspended student may apply for early reinstatement (after one semester away from the University) if he or she had extenuating circumstances and documented them in a successful appeal to the Academic Standing Committee during the semester following suspension. Here is the link to the application. <http://www.mnsu.edu/acadaf/appeals/applicationacademicreinstatement.pdf>

Immediate Reinstatement: A suspended student may receive immediate reinstatement and be allowed to continue his/her studies on probation in the term directly following suspension if one of the following conditions is achieved:

1. During the most recent term, the student achieved a term GPA of 2.5 and a term credit completion rate of 75%. Immediate

reinstatement will be automatic in this case.

2. The student had extenuating circumstances and documented them in a successful appeal to the Academic Standing Committee during the warning semester. Extenuating circumstances could include major health problems, family emergencies, or unforeseen, traumatic personal circumstances.

All reinstated students will be on academic probation.

Academic Probation. Students may continue on probation as long as they meet the probation term requirements which are a minimum local term GPA of 2.5 and a minimum term credit completion rate of 75%. Students on probation who fail to meet these requirements, will be suspended again. The University will place a registration hold on students who are probationary students. Students on probation must follow the process for students on probation in their respective academic college(s).

The official version of the entire policy is available on the University’s Policy website (<http://www.mnsu.edu/policies/>).

STUDENT COMPLAINTS AND GRIEVANCES

Minnesota State University, Mankato has a commitment to a respectful learning environment. Students have the right to seek a remedy for a dispute or disagreement when they believe a campus office/department or a Minnesota State employee treated them in an improper, unfair or arbitrary manner. Examples include, but are not limited to: bullying, condescension, inattentive planning, intimidation, particularistic treatment, poor customer service, rudeness and undefined course expectations. This policy does not apply to Minnesota State, Mankato or MnSCU System rules or regulations that include an existing appeal or grievance process, including policy or procedure change.

The official version of the entire policy is available on the University’s Policy website (<http://www.mnsu.edu/policies/>).

TRANSFER POLICIES

In accepting transfer work, Minnesota State Mankato uses all transferable grades A-D in calculating transfer earned hours and the grades A-F in the transfer GPA. Additionally, all transfer grades are used in calculating a student’s cumulative grade point average.

General Education Requirements. Baccalaureate Graduates. Students with an accepted Baccalaureate degree will have satisfied Minnesota State Mankato’s general education requirements for a Bachelor of Science degree. These same baccalaureate guide lines apply to the requirements for a Bachelor of Arts degree. However, if not previously completed, 8 semester credits of foreign language or 9 credits of American Sign Language are also required if completing a BA at Minnesota State Mankato.

General Education Requirements. 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 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 Minnesota State Mankato 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.

General Education Requirements. 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, using the distribution listed below.

Distribution: Transfer AS/AAS degrees must have 40 credits in Categories 1-10; a minimum of 1 course in each of Categories 3-10; and one course in each part of Category 1. Categories 2 and 11 are exempt. (See "Advising General Education and Diverse Cultures" section in this catalog).

Non-degree transfer students. Students without an associate or baccalaureate degree, or a completed Minnesota Transfer Curriculum, are obligated to follow and complete the Minnesota State Mankato general education requirements. (See "Advising, General Education and Diverse Cultures" section in this catalog).

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

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 Mankato standards. Original score reports are required for each of these examination programs.

Diverse Cultures Transfer Requirement. Students transferring to Minnesota State Mankato are required to meet the University's Diverse Cultures requirement before graduating. The requirement is prorated based on the number of credits transferred. Contact the Office of Academic Affairs for the specific requirements for your particular number of transfer credits and a list of acceptable Diverse Cultures courses. Students who have completed an A.A. degree or transfer with 60 semester hours will have fulfilled the Diverse Cultures requirement.

All transfer students who have taken between 30 and 59 credits and are fulfilling the Diverse Cultures requirement must take at least 1 Purple course. Transfer students needing to complete 6 or more of Diverse Cultures credit must take courses in at least two different departments. See the Diverse Cultures Graduation Requirement in the academic catalog for specifics.

TRANSFER OF CREDITS FROM TECHNICAL COLLEGES

The sum of all the semester technical credits taken in transfer from all regionally or appropriately accredited technical colleges or community and technical colleges will not exceed 16 semester credits. Credits approved for transfer will be treated as elective credits and will not apply to the major, minor, or to general education. However, students may petition a specific department/major for an evaluation of these technical credits if students believe they are to be applicable to the major. When supported by an articulation agreement between the University and the technical college, (or community and technical college), from which the credits originate, additional credits beyond 16 may be accepted into the major. The articulation agreement must be approved through Minnesota State Mankato's curricular process. Additional credits beyond 16 may be accepted as general education with the following requirements:

1. Minnesota Community and Technical Colleges. In addition to the 16 semester technical credits, general education credits taken as part of a vocational/technical degree may also be transferred if the courses are approved Minnesota Transfer Curriculum (MnTC) courses.
2. Other vocational/technical schools. For coursework to be considered applicable to the Minnesota State Mankato's general education requirements, the school transferred from would have to be regionally or appropriately accredited.

Some technical colleges have merged with community colleges but will accept unlimited community college credits. Minnesota State Mankato reserves the right to determine what a technical credit is and what a community college credit is. The official version of the entire policy, including the policy rationale, is available on the University's Academic Policy website.

International Credits. In order for any international university credits potentially to apply toward a degree program at Minnesota State Mankato, these credits must be evaluated by an external professional credit evaluation agency recognized by National Association of Credential Evaluation Services (NACES). The College of Science, Engineering and Technology specifically requires and allows only Educational Credential Evaluators (ECE).

UNIVERSITY SPONSORED EDUCATION ABROAD PROGRAMS

A Minnesota State University, Mankato sponsored education abroad program, defined as a program and course taught entirely or partially outside of the continental United States, is developed and administered by the University and awards Minnesota State Mankato credits. All travelers on Minnesota State Mankato sponsored programs, with the exception of the leader(s) and leaders' immediate family members, must be enrolled at the University and registered for a minimum of one credit. The program leaders' primary responsibility for the duration of the program is the educational experience, safety and health of students. Minnesota State Mankato's administration reserves the right to cancel a program at any time. Cancellations due to unforeseen circumstances will result in the refund tuition and fees subject to established University and/or vendor procedures, as applicable.

Minnesota State Mankato sponsored education abroad programs are subject to the same curricular processes as all other course offerings. Faculty members who wish to conduct a pilot program may have a one-time exception to this requirement, with the expectation that future courses and programs with similar content will be approved through the curriculum design system.

All program leaders must demonstrate access to on-site logistical support and are subject to MnSCU Board of Trustees Policies 1A.10 (Emergency Management), 5.19 (Travel Management) and related procedures. All travelers must carry health, accident and repatriation insurance. If required by the course curriculum, students must also carry student professional liability insurance. All programs must include, and all travelers must attend, a pre-departure health and safety orientation. Travelers under 18 years of age must receive written, parental consent and the parent or guardian must attend the pre-departure health and safety orientation. All travelers are subject to the Minnesota State Mankato's Statement of Student Responsibilities.

The official version of the entire policy is available on the University's Policy website (<http://www.mnsu.edu/policies/>).

OFFICIAL WITHDRAWAL FROM THE UNIVERSITY

Official Withdrawal is defined as terminating enrollment in all registered courses for an academic semester at Minnesota State University, Mankato.

Financial Considerations

- An Official Withdrawal Form, available at the Campus Hub, must be filed in order to receive a percentage refund/credit in accordance with the Official Withdrawal Charts below.
- If you received financial aid, all or a portion of the aid that was disbursed to you and/or your student account may be required to be repaid.
- If the student requesting withdrawal has signed a residence hall contract, an exit interview with the Office of Residential Life is necessary in order to establish financial liability for room and/or board charges for the academic semester up to the date of withdrawal. Credit amounts due to the withdrawing students are determined based on a pro-rated schedule applicable to the individual student's contract plan.
- Refunds/credits of tuition and fees for withdrawal are based on Minnesota State Colleges and Universities policies and procedures. Please refer to the Campus Hub website for details.

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 education in degrees not offered at Minnesota State 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-CHIROPRACTIC

College of Science, Engineering & Technology

Advisor: Jim Rife, Ph.D.

Required General Education (33 credits)

CMST 102	Public Speaking (3)
ENG 101	Composition (4)
MATH 112	College Algebra (4)*
MATH 113	Trigonometry (3)*
PSYC 101	Introduction to Psychological Science (4)

An additional 15 elective credits from Humanities or Social Sciences

Recommended Support Courses (3 credits)

HLTH 321	Medical Terminology (3)
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Required for Major (Core, 34-35 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)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4) OR
HP 348	Structural Kinesiology and Biomechanics (3)

Required Electives (16 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 prerequisites in mathematics to take the courses in chemistry and physics.

This program meets the requirements for admission to most chiropractic schools. Students in the pre-chiropractic program should regularly consult with the pre-chiropractic advisor, since admissions requirements are subject to change.

PRE-DENTAL

College of Science, Engineering & Technology

Advisory Team: M. Bentley, Ph.D., (for biology majors)
M. Pomije, Ph.D. (for chemistry)

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. Students are encouraged to keep themselves apprised of requirements for specific schools by consulting appropriate websites.

* The following list of courses is consistent with the courses required for admission to the University of Minnesota Dental School.

English. ENG 101, CMST 100 and an additional 4 credits of writing intensive course work in English. (Students are encouraged to take ENG 271W and PHIL 222W as electives)

Biology. BIOL 105, BIOL 106 - students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, BIOL 220, BIOL 270, BIOL 316, BIOL 320, BIOL 330, BIOL 435, BIOL 475

Physics. PHYS 211, PHYS 212 or PHYS 221, PHYS 222

Chemistry. CHEM 201, CHEM 202, CHEM 322, CHEM 324, CHEM 325, CHEM 360. (Students are encouraged to take CHEM 305 as an elective).

Mathematics. MATH 112 and MATH 113 or MATH 115

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 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. **Consult the website of the American Dental Education Association for more information on the DAT and the application process.**

PRE-ENGINEERING

College of Science, Engineering & Technology

Advisor: CSET Advising Center

(choose one of the following options)

Minnesota State Mankato OPTION

These course guidelines are intended for those students who are uncertain of a specific engineering major, but plan to enter one of the Minnesota State Mankato engineering programs after their first academic year.

CMST 102	Public Speaking (3)
CHEM 201	General Chemistry I (5)
ECON 201	Principles of Macroeconomics (3) OR
ECON 202	Principles of Microeconomics (3)
ENG 101	Composition (4)
MATH 121	Calculus I (4)
MATH 122	Calculus II (4)
PHYS 221	General Physics I (4)

Student should explore their primary engineering interests at Minnesota State Mankato by enrolling in an introductory engineering course, such as EE 106 (3), ME 101 (2), or CIVE 101 (2). In addition, they should discuss their interests with their Pre-Engineering advisor and department chairpersons.

TRANSFER OPTION

These course guidelines are intended for students who plan to begin at Minnesota State Mankato and later transfer to another college or university engineering program. Engineering fields and institutions differ in their requirements, and students should contact programs they wish to enter for guidance. Courses recommended below are “fairly” standard, but are not guaranteed to provide required preparation for any specific program. Students should discuss their plans with the CSET Advising Center AND particularly with the university (or universities) to which they plan to apply.

CHEM	201	General Chemistry I (5)
CMST	102	Public Speaking (3)
ENG	101	Composition (4)
ENG	271W	Technical Communications (4)
MATH	121	Calculus I (4)
MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
PHYS	221	General Physics I (4)
PHYS	222	General Physics II (4)

PRE-LAW

Advisor: Dr. Kevin Parsneau, 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 to increase the likelihood of a high GPA, and to allow them to specialize in a field of law that most interests them. Even though no particular pre-law major is best for all students, there must be substantial academic content in the pre-law education. 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 U.S. government, U.S. history, philosophy, economics, communication, accounting, statistics, corporate finance, constitutional law, jurisprudence, logic, political theory, and at least one course in English composition beyond the first year 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

Advisory Team: M. Bentley, Ph.D., G. Goellner, Ph.D., Marilyn Hart, Ph.D., R. Cohen, Ph.D.; D. Sharlin, Ph.D.; Toma, Ph.D. (for biology majors)
M. Pomije, Ph.D.(for chemistry and biochemistry majors)

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. Students are encouraged to keep themselves informed of requirements for specific schools by consulting appropriate websites. A typical set of requirements are:

General Biology - (8 credits minimum)

BIOL 105 and BIOL 106

Students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, BIOL 220, BIOL 270, BIOL 316, BIOL 320, BIOL 330, BIOL 435, BIOL 474

Chemistry with laboratory (general, inorganic and organic chemistry, 14 credits minimum)

General chemistry: CHEM 201, CHEM 202

Organic chemistry: CHEM 322 and CHEM 323 **OR**

CHEM 322 and CHEM 324

Biochemistry: CHEM 360 **OR** CHEM 460

Students are encouraged to take CHEM 305 as an elective.

Physics with laboratory (8 credits minimum)

PHYS 211 and PHYS 212 **OR**

PHYS 221 and PHYS 222

Mathematics (introductory course in calculus and upper level statistics)

MATH 121 and HLTH 475

English or literature (one year)

ENG 101, and an additional 4 credits of writing intensive coursework in English. Students are encouraged to take ENG 271W as an elective.

Social and Behavior Sciences and Humanities - (18 credits minimum)

Students are encouraged to include PSYC 101, SOC 101 and PHIL 222W 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 on various dates throughout the year. Contact the website of the **American Association of Medical Colleges** for specifics. If you have questions, please contact your pre-medicine advisor.

PRE-MORTUARY SCIENCE

College of Science, Engineering & Technology

Advisor: Marie Slotemaker

Required for Program

ACCT	200	Financial Accounting (3)
BIOL	220	Human Anatomy (4)
ENG	101	Composition (4)
BIOL	100	Our Natural World (4) OR
BIOL	105	General Biology I (4)

CHEM	100	Chemistry in Society (4) OR
CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5) OR
CHEM	201	General Chemistry I (5)

STAT	154	Elementary Statistics (3) OR
PSYC	201	Statistics for Psychology (4)

SOC	101	Introduction to Sociology (3) OR
SOC	101W	Introduction to Sociology (3)

CMST	100	Fundamentals of Communication (3) OR
CMST	101W	Interpersonal Communication (4)

Recommended for Program

HLTH	101	Health & the Environment (3)
HLTH	321	Medical Terminology (3)

Additional electives to meet the 60 credit transfer requirement.

This program has been designed to meet the transfer requirements of the University of Minnesota's Mortuary Science Program. Completion of the MN Transfer Curriculum or the Associate of Arts Degree is recommended before students enroll in the Mortuary Science B.S. program. The transfer program requires a total of 60 semester credits completed while maintaining a minimum GPA of 2.5 on a 4.0 scale. The courses listed above are specified by the University of Minnesota; additional courses should be selected with the help of an advisor.

The American Board of Funeral Service Education (ABFSE) accredits Mortuary Science Programs throughout the United States. Accredited programs are found on their Website: www.abfse.org. Students interested in Mortuary Science are strongly encouraged to consult the Website to locate programs in their geographic area of interest and then to consult with an advisor at that institution in their first year.

PRE-OCCUPATIONAL THERAPY

Advisor: Mary Visser, PhD
 mary.visser@mnsu.edu
 Phone: 507-389-2672

Student Relations Coordinator: Shirley Murray
 shirley.murray@mnsu.edu
 Phone: 507-389-5194

The Pre-Occupational Therapy curriculum is a natural and social science-oriented curriculum which meets the standard requirements for admission to most occupational therapy programs. The majority of schools require a Bachelor's degree prior to application for admission, although some still accept students following two or three years of college preparation. It is important that students check requirements for their professional school of choice as some require classes in addition to those contained in this concentration. Most programs also require that the student take the Graduate Record Examination and score at a certain level.

Pre-Occupational Therapy Concentration Courses at Minnesota State Mankato

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
STAT	154	Elementary Statistics (3)
CHEM	106	Chemistry of Life Process Part I (General) (3) OR
CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
PSYC	101	Introduction to Psychological Science (4)
PSYC	433	Child Psychology (4) AND
PSYC	436	Adolescent Psychology (4) OR
KSP	235	Human Development (3)
PSYC	455	Abnormal Psychology (4)
SOC	101	Introduction to Sociology (3)
HLTH	321	Medical Terminology (3)
HP	265	Orientation to Occupational and Physical Therapy (2)

TOTAL: 32-39 credits

AOTA Website for Accredited OT Programs: <http://www.aota.org/Educate/Schools/EntryLevelOT/38119.aspx>

*Be sure to check the specific pre-requisite courses of programs you plan to apply to and tailor the above list to meet those requirements.

Majors to Consider with Occupational Therapy Concentration:

Exercise Science
 Health Science: Community Health
 Psychology
 Child Development and Family Studies
 Biology

*Graduate programs generally do not specify what undergraduate major must be completed. They are concerned about your performance within the major (including GPA) and that you have successfully completed all pre-requisite coursework.

PRE-OPTOMETRY

College of Science, Engineering & Technology

Advisor: Mike Lusch, Ph.D.

The following courses satisfy requirements for admission to most colleges and schools of optometry. By the end of their first year at Minnesota State 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. Completion of a bachelor's degree may be needed to be admitted to optometry schools and colleges.

BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)
BIOL	330	Principles of Human Physiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	322	Organic Chemistry I (4)
CHEM	323	Supplemental Organic Functional Group Chemistry (1)
CHEM	360	Principles of Biochemistry (4)
ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	112	College Algebra (4) AND
MATH	113	Trigonometry (3) OR
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (3)

PRE-OSTEOPATHIC MEDICINE AND SURGERY

College of Science, Engineering & Technology

Advisor: Jim Rife, Ph.D.

Required General Education (12-15 credits)

ENG	101	Composition (4)
ENG	201W	Intermediate Writing (4)
MATH	112	College Algebra (4) AND
MATH	113	Trigonometry (3) OR
MATH	115	Pre-Calculus (4)
PSYC	101	Introduction to Psychological Science (4)
SOC	101	Introduction to Sociology (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	322	Organic Chemistry I (4)
CHEM	324	Organic Chemistry II (3)
CHEM	325	Organic Chemistry II Lab (1)
CHEM	360	Principles of Biochemistry (4) OR
CHEM	460	Biochemistry II (3)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Required Electives (40-43 credits)

Electives to yield a total of 90 semester credits are required.

Colleges of osteopathic medicine and surgery require a minimum of 90 semester hours for admission. Students admitted to a college of osteopathic medicine and surgery have completed undergraduate degrees. Students interested in osteopathic medicine will find that majoring in Biomedical Sciences (BS), or Biochemistry (BA or BS) will provide them with appropriate undergraduate training. The Medical College Admissions Test (MCAT) is required for all applicants to colleges of osteopathic medicine and surgery. Since admissions requirements vary, students should consult the advisor.

PRE-PHARMACY

College of Science, Engineering & Technology

Advising Team: T. Salerno, Ph.D. (for biochemistry majors)

M. Hadley, Ph.D., D. Quirk Dorr, Ph.D.; D. Swart, Ph.D.; T. Vorlicek, Ph.D.
(for chemistry majors)

The majority of students admitted to a college of pharmacy have completed an undergraduate degree. Students interested in pharmacy often major in Biomedical Sciences (BS), Biochemistry (BA or BS), or Chemistry (BA or BS) because these majors include many of the same courses that are required prerequisites to pharmacy programs. The pre-pharmacy curriculum is designed to meet the prerequisites for admission to many pre-pharmacy schools, however the curriculum is not all inclusive as prerequisites vary between colleges of pharmacy. Therefore, requirements for particular pharmacy schools still need to be taken into consideration before substitutions for these courses are made. The Pharmacy College Admission Test (PCAT) is required for all applicants to colleges of pharmacy.

Required for Program

BIOL	105	General Biology I (4)
BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)
BIOL	330	Principles of Human Physiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	360	Principles of Biochemistry (4) OR
BIOL	211	Genetics (4) OR
BIOL	320	Cell Biology (4) OR
BIOL	479	Molecular Biology (4)
CMST	102	Public Speaking (3) OR
CMST	101W	Interpersonal Communications (4)
ECON	202	Principles of Microeconomics (3)
ENG	201W	Intermediate Writing (4) OR
ENG	271W	Technical Communication (4) OR
ENG	301W	Advanced Writing (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4) OR
PHYS	211	Principles of Physics I (4) AND
PHYS	212	Principles of Physics II (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (3) OR
STAT	354	Concepts of Probability & Statistics (3) OR
MATH	354	Concepts of Probability & Statistics (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. Please contact a pre-pharmacy advisor.

PRE-PHYSICAL THERAPY

Advisor: Mary Visser, Ph.D.

Email: mary.visser@mnsu.edu

Phone: 507-389-2672

Student Relations Coordinator: Shirley Murray

Email: shirley.murray@mnsu.edu

Phone: 507-389-5194

The Pre-Physical Therapy curriculum is primarily a science-oriented curriculum which meets the standard requirements for admission to most physical therapy programs. The majority of schools require a Bachelor's degree prior to application for admission, although some still accept students following two or three years of college preparation. It is important that students check requirements for their professional school of choice as some require classes in addition to those contained in this concentration. Most programs also require that the student take the Graduate Record Examination and score at a certain level.

Pre-Physical Therapy Concentration Courses at Minnesota State Mankato

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)
MATH	112	College Algebra (4) AND
MATH	113	Trigonometry (3) OR
MATH	115	Precalculus Mathematics (4)
(Must meet PHYS 211 math requirement (4-8))		
STAT	154	Elementary Statistics (3)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
PSYC	101	Introduction to Psychological Science (4)
PSYC	433	Child Psychology AND
PSYC	436	Adolescent Psychology OR
KSP	235	Human Development (3)
PSYC	455	Abnormal Psychology (4)
SOC	101	Introduction to Sociology (3)
(Recommendation only; see graduate program requirements)		
HLTH	321	Medical Terminology (3)
(Recommendation only; see graduate program requirements)		
HP	265	Orientation to Occupational and Physical Therapy (2)

TOTAL: 53-68 credits

AOTA Website for Accredited Physical Therapy Programs:

<http://www.apta.org/ProspectiveStudents/>

*Be sure to check the specific pre-requisite courses of programs you plan to apply to and tailor the above list to meet those requirements.

Majors to Consider with Physical Therapy Concentration:

Exercise Science

Biology

Health Science: Community Health

*Graduate programs generally do not specify what undergraduate major must be completed. They are concerned about your performance within the major (including GPA) and that you have successfully completed all pre-requisite coursework.

PRE-PODIATRIC MEDICINE AND SURGERY

College of Science, Engineering & Technology

Advisor: Jim Rife, Ph.D.

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 Biomedical Sciences (BS), or Biochemistry (BA or BS) will provide them with appropriate 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 (78 credits)

ENG	101	Composition (4)
ENG	201W	Intermediate Writing (4)
PSYC	101	Introduction to Psychological Science (4)
SOC	101	Introduction to Sociology (3)

Recommended Support Courses (4-7 credits)*

MATH	112	College Algebra (4) AND
MATH	113	Trigonometry (3) OR
MATH	115	Precalculus Mathematics (4)

Required for Major (35 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	322	Organic Chemistry I (4)
CHEM	324	Organic Chemistry II (3)
CHEM	325	Organic Chemistry II Lab (1)
CHEM	360	Principles of Biochemistry (4) OR
CHEM	460	Biochemistry II (3)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Required Electives (40-43 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 prerequisites in math to take courses in chemistry and physics.

PRE-VETERINARY MEDICINE

College of Science, Engineering & Technology

Advisor: P. Knoblich D.V.M., Ph.D.

Specific course requirements for admission to veterinary schools vary somewhat. The following requirements are designed for application to the University of Minnesota Veterinary School. Students should use these requirements as a general guide and check specific requirements for other Veterinary Schools.

Required for Major (Core, 49-53 credits)

ENG	101	Composition (4)
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Plus: one additional course, such as speech, literature, advanced writing, technical writing, etc.

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)
BIOL	270	Microbiology (4)
CHEM	201	General Chemistry I (5)
CHEM	202	General Chemistry II (5)
CHEM	322	Organic Chemistry I (4)
CHEM	323	Supplemental Organic Functional Group Chemistry (1)
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) AND
MATH	113	Trigonometry (3)* OR
MATH	115	Precalculus Mathematics (4) OR
MATH	121	Calculus I (4)

*Although the University of Minnesota specifically requires only MATH 112, Minnesota State Mankato PHYS 111 requires either both MATH 112 and MATH 113, or MATH 115 or higher as prerequisites.

Required Electives (12-16 credits)

2 History and Social Sciences (6-8 credits)

2 Arts and Humanities (6-8 credits)

Organic chemistry: CHEM 322, plus CHEM 323

Recommended Electives

BIOL	220	Human Anatomy (4) AND
BIOL	330	Principles of Human Physiology (4) OR
BIOL	431	Comparative Animal Physiology (3)

Graduate Record Exam (GRE) must be taken.

Students are strongly encouraged to declare a major and work toward a Bachelor's degree while completing the pre-veterinary coursework. Because of the extensive overlap of required courses with major's courses, student commonly major in one of the biology or chemistry options.

ACADEMIC COLLEGES

COLLEGE OF ALLIED HEALTH AND NURSING

Dr. Kristine Retherford, Dean

124 Myers Field House

Phone: 507-389-6315

Fax: 507-389-6447

Dental Hygiene, Family Consumer Science, Health Science
Human Performance, Recreation, Parks and Leisure Services
Speech, Hearing and Rehabilitation Services, School of Nursing

COLLEGE OF ARTS AND HUMANITIES

Dr. Kimberly Contag, Interim Dean

226 Armstrong Hall

Phone: 507-389-1712

Fax: 507-389-5887

www.mnsu.edu/carts

Art, English, Communication Studies, Film & Media Studies
Humanities, Interdisciplinary Studies, Mass Media, Music,
Philosophy, Scandinavian Studies, Theatre and Dance
World Languages & Cultures

COLLEGE OF BUSINESS

Dr. Brenda Flannery, Dean

120 Morris Hall

Phone: 507-389-5420

Fax: 507-389-5497

Accounting and Business Law, Finance, Management
Marketing and International Business

COLLEGE OF EDUCATION

Dr. Jean Haar, Dean

118 Armstrong Hall

Phone: 507-389-5445

Fax: 507-389-2566

Aviation, Counseling and Student Personnel,
Educational Leadership, Elementary Education
K-12 and Secondary Programs
Military Science and Leadership (Army ROTC)
Special Education, The Children's House

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY

Dr. Brian Martensen, Dean

131 Trafton Science Center N

Phone: 507-389-5998

Fax: 507-389-1095

Automotive and Manufacturing Engineering Technology
Biological Sciences, Chemistry and Geology
Computer Information Science, Construction Management
Electrical and Computer Engineering and Technology
Integrated Engineering, Mathematics and Statistics
Mechanical and Civil Engineering
Physics and Astronomy

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Dr. Kimberly Greer, Dean

111 Armstrong Hall

Phone: 507-389-6307

Fax: 507-389-5569

Advising "U"

Phone: 507-389-6306

Aging Studies, American Indigenous Studies, Anthropology
Applied Organizational Studies, Corrections, Earth Science
Economics, Ethnic Studies, Gender and Women's Studies
Geography, History, International Relations, Law Enforcement
Nonprofit Leadership, Political Science, Psychology
Social Studies, Social Work, Sociology
Urban and Regional Studies

COLLEGE OF GRADUATE STUDIES AND RESEARCH

115 Alumni Foundation Center

Phone: 507-389-2321

Fax: 507-389-5974

Website: <http://grad.mnsu.edu>

**Dr. Barry Ries, Associate Vice President of Research
and Dean of Graduate Studies**

ADVISING GENERAL EDUCATION DIVERSE CULTURES WRITING INTENSIVE

GENERAL EDUCATION CURRICULUM GUIDELINES

Undergraduate students are required to complete 44 credits of General Education courses in 13 Goal Areas for graduation.

Procedures and Applications

Courses identified as General Education courses must meet the learning outcomes (competencies) for at least one of the Goal Areas. Departments submit course proposals through the Curriculum Design System (CDS) to request that courses be included in the General Education Curriculum. All proposals requesting General Education designation will be reviewed in a manner consistent with all other curricular proposals considered by the university.

Course proposals must clearly articulate how the course content achieves a majority of the learning outcomes for each of the General Education Goal Areas being requested. With the exception of Writing Intensive Courses, no consideration will be given to proposals that limit participation to specific sections of a course. Only courses, not specific sections of courses, are eligible for designation as General Education Courses.

Courses without specific content (e.g., independent study, individual study, directed readings, topics, internships, practicums, and field experience courses) will generally not be considered General Education courses. Exceptions may be made for specific cases if potential for achievement of the General Education outcomes for a particular goal area(s) can be clearly demonstrated prior to registration for the course in question.

All General Education courses will undergo systematic assessment as established by the university's curricular committees. All departments and programs with General Education courses are expected to fully participate in the General Education assessment process.

ACADEMIC ADVISING AND PROGRAM PLANNING

Academic planning should begin early in your first year at Minnesota State Mankato, and your academic advisor will be the individual to help you assess your individual needs and plan an academic program based on your interests and career goals. As you progress through your program, your academic advisor, in conjunction with other advising staff, can assist you in a variety of ways: selecting courses each semester; changing or choosing a major; satisfying general education requirements; exploring career interests and opportunities; identifying campus resources to assist you; referring you to opportunities for scholarships, internships, and undergraduate research; and assisting you with any academic difficulties you may encounter.

As a new student at Minnesota State Mankato you are assigned an academic advisor based on your major choice during orientation. If you are unsure about your major when you first enroll, you would be assigned to one of the academic advisors in New Student & Family Programs who work especially with students who have not decided on a major. We encourage you to work closely with an academic advisor throughout your Minnesota State Mankato career.

ADVISING RESOURCES

Major Advising. Once you have selected a major or general area of study you wish to pursue, your advising services will be provided by your major College. Each Minnesota State Mankato College has a Student Relations Coordinator (SRC) who serves as a primary resource and advising contact for those interested in any of the College majors or departments. The Student Relations Coordinators provide general academic and program assistance to prospective, current, and returning Minnesota State Mankato students. Some Colleges also offer "Advising Centers," which provide additional advising services and staff.

COLLEGE ADVISING RESOURCES

ALLIED HEALTH

Shirley Murray, SRC, 124 Myers Field House, 389-5194

ARTS & HUMANITIES

Gina Maahs-Zurbey, SRC, 226B Armstrong Hall, 389-1712

BUSINESS

Linda Meidl, SRC, College Advising Center, 151 Morris Hall, 389-2963

EDUCATION

Mymique Baxter, SRC, College Advising Center, 117 Armstrong Hall, 389-1215

NURSING

Kasi Johnson, Pre-Nursing Advisor, 319 Wissink Hall, 389-6810

SCIENCE, ENGINEERING AND TECHNOLOGY

Ken Adams, SRC, 131 Trafton Science Center N, 389-1521

SOCIAL AND BEHAVIORAL SCIENCE

Melissa Iverson, SRC, College of Social and Behavioral Sciences Advising "U", 114 Armstrong Hall, 389-1351

COORDINATOR FOR NEW STUDENT AND FAMILY PROGRAMS

Sara Granberg-Rademacker, SRC, New Student & Family Programs, 103 Preska Residence Community, 389-5498

If you have not yet selected a major, or are considering a variety of options, you may choose to be an Interdisciplinary Studies major. If this is your situation, your initial academic advisor will be assigned through the New Student & Family Programs Office.

OTHER ADVISING RESOURCES

CAP Program Advisors, Institutional Diversity, 389-6125

Career Development Center, 209 Wigley Administration Center, 389-6061

Center for Academic Success, 132 Memorial Library, 389-1791

Counseling Center, 245 Centennial Student Union, 389-1455

Disability Services, 132 Memorial Library, 389-2825

Multicultural Affairs, 22 Centennial Student Union, 389-6300

Student Support Services, 355 Wiecking Center, 389-2797

DECLARING VS. ADMISSION TO MAJOR

Students can **declare** a major at any point and ask to be assigned to an advisor in their major. Declaration is the simple process of having the student records system updated to indicate what major a student is interested in pursuing and assigning an advisor based upon that interest. Students interested in majors in:

- The colleges of Science Engineering, Technology; Business; and the School of Nursing should go to the Student Relations Coordinator or advising center for that college/program
- The colleges of Allied Health, Arts and Humanities & Social Behavioral Sciences should be referred to individual departments

Admission to Major. Involves gaining permission to take 300-400 level course work and pursue graduation from a major. Students will be admitted to a major based on requirements established by the major and monitored by a department. University minimum requirements for admission to a major are having earned 32 credits/hours and a "2.0" cumulative grade point average. Many departments have additional requirements which can be found in the Undergraduate Catalog in the department/major listing. 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; and other forms of evaluation or portfolios.

Required Advising. Many Minnesota State Mankato majors REQUIRE that a student meet with their assigned academic advisor before registering each semester. If your major requires advising, your advisor would need to provide you with a registration "access code" before you would be able to register for courses.

Course Designator and Numbering System

Each course is identified by a 2-4 alpha character code called a course designator that indicates the program or department housing the course. The listing of course designators used at Minnesota State Mankato are below.

A course designator is followed by a 3-digit numeric code indicating course level. Undergraduate courses are numbered 001-499. 001-299 indicate lower division courses and 300-499 indicate upper division courses. To be eligible to graduate with a bachelor's degree from Minnesota State Mankato a student must have completed at least 40 semester hours of upper division courses. Students must be admitted to their major first to be able to take 300-400 level classes.

Course Designators

ACCT	Accounting	GER	German
AIS	American Indian Studies	GERO	Aging Studies
ANTH	Anthropology	HLTH	Health Science
AOS	Applied Organizational Studies	HIST	History
ART	Art	HONR	Honors
AET	Automotive Engineering Technology	HP	Human Performance
AST	Astronomy	HUM	Humanities
AVIA	Aviation	IDST	Interdisciplinary Studies
BIOL	Biology	IT	Computer Information Technology
BLAW	Business Law	IBUS	International Business
BUS	College of Business	KSP	Secondary 5-12 & K-12 Professional Education
CAHN	College of Allied Health & Nursing	LAWE	Law Enforcement
CHEM	Chemistry	MGMT	Management
CIVE	Civil Engineering	MET	Manufacturing Engineering Technology
CDIS	Communication Disorders	MRKT	Marketing
CMST	Communication Studies	MASS	Mass Media
CS	Computer Science	MATH	Mathematics
CM	Construction Management	ME	Mechanical Engineering
CORR	Corrections	MEDT	Medical Technology
CSP	Counseling and Student Personnel	MSL	Military Science and Leadership
DAK	Dakota	MUS	Music
DANC	Dance	MUSE	Museum Studies (See Anthropology)
DHYG	Dental Hygiene	NPL	Nonprofit Leadership
ECON	Economics	NURS	Nursing
ED	Education	PHIL	Philosophy
EE	Electrical Engineering	PHYS	Physics
EEC	Elementary Education	POL	Political Science
EET	Electronic Engineering Technology	PSYC	Psychology
ENG	English	RPLS	Recreation, Parks & Leisure Services
ESL	English As A Second Language	REHB	Rehabilitation Counseling
ENGR	Integrated Engineering	SCAN	Scandinavian Studies
ENVR	Environmental Sciences	SOST	Social Studies
ETHN	Ethnic Studies	SOWK	Social Work
FCS	Family Consumer Science	SOC	Sociology
FILM	Film Studies	SPAN	Spanish
FINA	Finance	SPED	Special Education (Academic and Behavioral Strategist)
FYEX	First Year Experience	STAT	Statistics
FREN	French	THEA	Theatre Arts
GWS	Gender and Women's Studies	URBS	Urban & Regional Studies
GEOG	Geography	WLC	World Languages & Cultures (formally Modern Languages)
GEOL	Geology		

General Education courses that also satisfy the Diverse Cultures Graduation Requirement as either a Purple or Gold course are identified in the Goal Areas by a ^P for Purple and a ^G for Gold. (Example = ENG211W^P)

DARS

DARS is an acronym for Degree Audit Reporting System. It is a computer program that produces advising information illustrating a student's progress in fulfilling the graduation requirements of their chosen degree program for undergraduate students.

DARS accomplishes its task by using a student's degree program information (degree, major, minor, catalog year), on file in the student records system, to create a generic "template" of that degree program. DARS then feeds all of a student's courses through this template to fill in the blanks. When the process is complete a document (called an audit) is produced showing where the student's courses fit in, which requirements are completed, and which are left to be done. The audit can then be used to monitor a student's progress and give a detailed assessment of what University requirements are yet to be satisfied.

DARS is not a replacement for the advising process whereby students are in communication with their department and assigned advisor. DARS should also not be considered a replacement for the University catalog, although the DARS program is based very heavily upon that document. The DARS program is a tool to assist students and advisors. Though DARS produces an accurate report of a student's graduation progress, infrequently some items cannot be checked for or taken into account. For example, audits do display the results of nearly all departmental substitutions and waivers, but there are some situations that cannot be dealt with. Many of these items are handled via the advising process and are done manually within the graduation process.

Questions concerning DARS should be directed to
DARS-Questions@mnsu.edu

Ordering an Audit

There are three ways that students can obtain audits:

- order their own via the web (same way you log on to register)
- request an audit at the Campus Hub
- request an audit at their department or advising center

COURSE OFFERINGS

This catalog lists course offerings for the academic year beginning with fall semester 2015. This listing is as accurate as possible when the catalog is compiled. Students are advised, however, that all information regarding course offerings is subject to change, and it is recommended that students check the course schedules 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 (minimum) of class group activity under supervision.

Course Numbering System. Courses are identified by a 2 to 4 alphabetic character code indicating program or department, followed by a 3-digit numeric code indicating course level.

Writing Intensive "W" Designator. In certain cases, the 3-digit number may be followed by the letter "W", which indicates that the course satisfies the writing intensive graduation requirement, whereas the other course with the same designator (and no "W") does not. Credit will not be given for two courses with the same designator, regardless of GE writing intensive satisfaction.

Course Level. Undergraduate courses are numbered 001-499. 001-299 indicate lower division courses and 300-499 indicate upper division courses. Graduate courses are numbered 500-999 and are listed in the Graduate Bulletin. To be eligible to graduate with a bachelor's degree from Minnesota State Mankato, a student must have completed at least 40 semester hours of upper division courses. Students must be admitted to their major first to be able to take 300-400 level classes.

Sections. Individual course sections differentiated in the course schedules, but are not indicated in this catalog.

Number of Credits. The number of credits is listed in parentheses after the course number. If the course is offered for variable credits, e.g., (1-4), the student will need to work with an advisor to determine the appropriate number of credits for which a certain course should be taken, and should register for the course accordingly. Permission is required for variable credit courses.

Prerequisites. Students can be dropped from a course for which they are not found to have met the prerequisites. Some courses require prerequisites and/or co-requisite courses. These are listed at the end of the course descriptions in this catalog. In some cases, prerequisites are "enforced." If so, you would be unable to register without first verifying that you have completed the required prerequisite course. It is the student's responsibility to review prerequisite requirements, and register for the appropriate level course. Questions about prerequisite course requirements should be directed to your academic advisor, the College Advising Center, or the department offering the course.

General Education and Diverse Cultures Satisfaction. Courses approved as satisfying General Education requirements are symbolized after the course description. For example, a course satisfying Goal Area 4 will be denoted as GE-4. Similarly, courses approved as satisfying the Diverse Cultures Graduation Requirement will be denoted as Diverse Cultures-Purple and Diverse Cultures-Gold after the description. If a course satisfies both a General Education and a Purple course requirement, for example, in Goal Area 5, it will be denoted as Diverse Cultures-Purple and under this, GE-5. If a course satisfies both a General Education and a Gold course requirement in Goal Area 5, it will be denoted as Diverse Cultures-Gold, followed by GE-5.

GENERAL EDUCATION

GENERAL EDUCATION 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 Mankato's General Education requirement. Completion of goal areas within the Minnesota Transfer Curriculum will be accepted as completion of that same goal area at Minnesota State Mankato. Individual competencies will be evaluated and transferred on a course-by-course basis. Students transferring from Minnesota State Mankato to another Minnesota public institution of higher education will have fulfilled the Minnesota Transfer Curriculum if they have completed 40 credits of required courses in the following ten goal areas: 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. Goal areas 11-13 are part of the General Education curriculum at Minnesota State Mankato but not goal areas in the Minnesota Transfer Curriculum.

Why General Education?

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:

1. Skills needed for effective understanding and communication if 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.

GENERAL EDUCATION GUIDELINES

1. A total of 44 credits must be completed to satisfy the General Education program at Minnesota State Mankato.
2. Students transferring with the Minnesota Transfer Curriculum completed will be considered to have completed the Minnesota State Mankato General Education requirements.
3. While included in General Education at Minnesota State Mankato, goal areas 11, 12, and 13 are not part of the Minnesota Transfer Curriculum.
4. A single course may be placed in more than one goal area. Each credit in any of these courses, however, may be counted only once in meeting the 44 credits requirement.
5. The Critical Thinking Goal Area 2 may be satisfied either by taking a course or by the satisfactory completion of the other General Education goal areas.

6. In each goal area where two courses are required (i.e., 3, 5, and 6), students are required to take courses from different disciplines.
7. To count as General Education credit, students may take no more than two courses or eight (8) credits, whichever is greater, from the same discipline. The only exception to this policy is for English Composition (ENG 101, CMST 100, CMST 102).
8. For Bachelor of Science degrees in Electrical, Civil, Computer, General or Mechanical Engineering, and the Nursing degree, general education requirements differ. See the program requirements for a detailed explanation of general education coursework for these degree programs.
9. The General Education requirements of the Associate of Arts degree are the same as for the Bachelor's degree.
10. General Education courses that also satisfy the Diverse Cultures graduation requirement as either a Purple or Gold course are identified by a "P" for Purple and a "G" for Gold.
11. General Education courses that also satisfy the Writing Intensive graduation requirement are identified by a "W" for Writing Intensive.
12. Some general education courses may also be required courses for your major. Please consult your advisor for information about the general education courses you may need to take specifically for your major degree.

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

Course(s) which satisfy this goal area include:

Course #	Credits	Title/Goal Area(s)
CDIS 201	(3)	Observation of Human Communication (1B)
CMST 100	(3)	Fund of Communication (1B)
CMST 102	(3)	Public Speaking (1B)
CMST 212	(4)	Prof Communication & Interviewing (1B)
POL 234	(3)	Model United Nations (1B, 8)

GOAL AREA 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" (2.0). A grade of "C-" does not satisfy this goal area.

Goal: The goal is to provide students with

- a rich understanding of how writing works
- guided opportunities to apply this understanding in specific writing situations
- experience analyzing, researching, and writing for academic writing situations
- opportunities to reflect on the development of their writing knowledge and skills

Students will be able to:

- (a) draw upon strategies for idea generation, drafting, revision, design, and editing;
- (b) analyze and produce texts guided by basic rhetorical concepts;
- (c) practice critical reading skills, including the ability to identify genre conventions and evaluate the claims, evidence, and reasoning in a text;
- (d) demonstrate effective research processes, including the ability to gather academic and non-academic sources and assess their quality and suitability for the writing situation;
- (e) integrate sources in their writing to achieve specific aims, making appropriate use of summary, paraphrase, quotation, and citation conventions;
- (f) explain their writing choices, using concrete examples to support their claims;
- (g) employ syntax and usage appropriate to academic disciplines and the professional world.

Courses which satisfies this goal area are:

Course #	Credits	Title/Goal Area(s)
ENG 101	(4)	Composition 1A
ENG 104	(4)	Stretch Composition II 1A

Part B: Speech and Oral Reasoning

(Requires one course, 3 credits or more)

Goal: To develop skills necessary for reasoned communication. Courses in this goal area 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:

GOAL AREA 2: CRITICAL THINKING

(Requires completion of the rest of the General Education Program or one course)

Goal: To develop critical thinking, communication, and problem solving skills. Courses in this goal area 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 goal area 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:

- (a) gather and analyze information of various kinds, employing formal or informal tools to represent information in ways useful for solving problems;
- (b) weigh evidence for and against hypotheses;
- (c) recognize, construct, and evaluate arguments;
- (d) 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 goal area include:

AST 115	(2)	Life in the Universe 2, 3
CHEM 111-L	(5)	Chemistry of Life Processes 2, 3
CHEM 191	(3)	Chemistry for Engineers 2, 3
CHEM 201-L	(5)	General Chemistry I 2, 3
CMST 101W	(3)	Interpersonal Communication 2
CSP 110	(3)	Decision Making for Career and Life 2
ECON 103W ^P	(3)	Econ Women's Iss & Publ Pol 2, 5
ECON 207	(4)	Business Statistics 2, 4
ENG 201W	(4)	Intermediate Writing 2
ENG 271W	(4)	Technical Communication 2, 13
ENG 272W	(4)	Business Communication 2, 13
ENG 301W	(4)	Advanced Writing 2
GERO 200 ^G	(4)	Family Dynamics of Aging 2, 7
GERO 200W ^G	(4)	Family Dynamics of Aging 2, 7
GWS 230P	(4)	Gender, Race & Pop Culture 2, 6
HLTH 212	(3)	Consumer Health Issues 2
KSP 200 ^G	(3)	Critical Issues in Public Ed Today 2, 9
MATH 290	(4)	Foundations of Mathematics 2
MUS 321W	(3)	Music Literature and History I 2
MUS 322W	(3)	Music Literature History II 2
PHIL 110	(3)	Logic and Critical Thinking 2, 4
PHIL 112	(3)	Logic of Scientific Method 2, 4
PHIL 311	(3)	Symbolic Logic 2, 4
PHYS 211-L	(4)	Principles of Physics I 2, 3
PHYS 221-L	(5)	General Physics I 2, 3
POL 103W	(3)	Thinking About Politics 2
PSYC 103W	(3)	Psychology Today 2

GOAL AREA 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:

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

Course(s) which satisfy this goal area include: ("L" indicates a laboratory course)

Course #	Credits	Title/Goal Area(s)
ANTH 120	(3)	Forensic Science: An Anth Approach 3
ANTH 210-L	(4)	Intro to Archaeology 3, 10
ANTH 220-L	(4)	Human Origins 3
AST 101	(3)	Intro to Astronomy 3
AST 102	(3)	Intro to the Planets 3
AST 104-L	(2)	Intro to Experimental Astronomy 3
AST 115	(2)	Life in the Universe 2, 3
BIOL 100-L	(4)	Our Natural World 3
BIOL 102	(3)	Biology of Women 3
BIOL 103W-L	(3)	Intro to Biotechnology 3
BIOL 105-L	(4)	General Biology I 3
BIOL 105W-L	(4)	General Biology I 3
BIOL 270-L	(4)	Microbiology 3
CHEM 100-L	(4)	Chemistry in Society 3
CHEM 104	(3)	Intro to Chemistry 3
CHEM 106	(3)	Chemistry of Life Processes I 3
CHEM 111-L	(5)	Chemistry of Life Processes II 2, 3
CHEM 131	(3)	Forensic Science 3, 9
CHEM 134	(3)	Mind Altering Substances 3
CHEM 135	(3)	Science of Sport 3
CHEM 191	(3)	Chemistry for Engineers 2, 3
CHEM 201-L	(5)	General Chemistry I 2, 3
EET 112-L	(3)	Elementary Electronics 3
EET 118	(3)	Electricity...Usage & Green Alternatives 3, 8
FCS 140	(3)	Intro to Nutrition 3
GEOG 101	(3)	Introductory Physical Geography 3, 10
GEOL 100-L	(3-4)	Our Geologic Environment 3, 10
GEOL 108	(3)	Oceans of the World 3, 10
GEOL 121-L	(4)	Physical Geology 3, 10
GEOL 122-L	(4)	Earth History 3
PHYS 100-L	(3)	Cultural Physics 3
PHYS 101-L	(3)	Introductory Physics 3
PHYS 102	(3)	Physics in the World Around Us 3
PHYS 105	(3)	Time, Atomic Clocks, and Relativity 3
PHYS 211-L	(4)	Principles of Physics I 2, 3
PHYS 221-L	(4)	General Physics I 2, 3

GOAL AREA 4: MATHEMATICAL/LOGICAL REASONING

Requires one course, 3 credits or more, with a grade of at least "P" or "C", i.e. 2.0. A grade of "C-" does not satisfy this goal area.

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:

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

Course(s) which satisfy this goal area include:

Course #	Credits	Title/Goal Area(s)
ECON 207	(4)	Business Statistics 2, 4
MATH 110	(3)	Perspectives in Mathematics 4
MATH 112	(4)	College Algebra 4
MATH 113	(3)	Trigonometry 4
MATH 115	(4)	Precalculus Mathematics 4
MATH 121	(4)	Calculus I 4
MATH 130	(4)	Finite Math and Intro Calculus 4
MATH 180	(4)	Mathematics for Computer Science 4
MATH 181	(3)	Intuitive Calculus 4
MATH 201	(3)	Elements of Mathematics I 4
PHIL 110	(3)	Logic and Critical Thinking 2, 4
PHIL 112	(3)	Logic of Scientific Method 2, 4
PHIL 311	(3)	Symbolic Logic 2, 4
SOC 202	(3)	Introductory Social Statistics 4
STAT 154	(3)	Elementary Statistics 4

GOAL AREA 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 and 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:

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

Course(s) which satisfy this goal area include:

Course #	Credits	Title/Goal Area(s)
AIS 101 ^P	(3)	Intro to American Indigenous Studies 5, 7
AIS 102 ^P	(4)	American Indian Country to 1900 5, 7
AIS 103 ^P	(4)	American Indian 1900-Present 5, 7
AIS 210 ^P	(3)	Oral Traditions 5, 7
AIS 210W ^P	(3)	Oral Traditions 5, 7
AIS 220W ^P	(3)	Tribal Sovereignty 5, 7
AIS 230W ^P	(3)	American Indians of Minnesota 5, 7
AIS 240 ^P	(3)	American Indian Women 5, 7
AIS 240W ^P	(3)	American Indian Women 5, 7
ANTH 101 ^P	(4)	Intro to Anthropology 5, 8
ANTH 102	(4)	Ancient Peoples 5, 10
ANTH 240 ^G	(4)	Language and Culture 5, 8
ANTH 250W ^P	(4)	Portraits of Culture 5
ANTH 260 ^P	(3)	Vampires, Werewolves... Folklore/Fear 5, 8
ANTH 261 ^P	(3)	Taboos, Tattoos & T-shirts: Cult./ Body Art 5, 8
ANTH 269 ^P	(3)	Anthropology of Sex 5, 7
ANTH 340 ^P	(4)	Language & Power 5, 7

CORR	106 ^P	(3)	Intro to Criminal Justice Systems 5, 9
CORR	255	(3)	Juvenile Delinquency 5, 9
ECON	100	(3)	An Intro to the U.S. Economy 5
ECON	103W ^P	(3)	Econ Women's Iss & Publ Pol 2, 5
ECON	201	(3)	Principles of Macroeconomics 5
ECON	202	(3)	Principles of Microeconomics 5
ECON	314W	(3)	Current Economic Issues 5, 8
ETHN	100 ^P	(3)	American Racial Minorities 5, 7
ETHN	101 ^P	(3)	Intro to Multicultural & Ethnic Stds 5, 7
ETHN	201W ^P	(3)	Persp on African Amer 5, 7
ETHN	202W	(3)	Persp on American Indians 5, 7
ETHN	203W ^P	(3)	Persp on Asian Americans 5, 7
ETHN	204W ^P	(3)	Persp on Latinos/Hispanics 5, 7
ETHN	220W ^P	(3)	Civil Rights in the U.S. 5
ETHN	440	(3)	Asian American Studies 5
FCS	100	(3)	Personal & Family Living 5
GEOG	103 ^P	(3)	Introductory Cultural Geography 5, 8
GWS	110 ^P	(4)	Introduction to Gender 5, 7
GWS	110W ^P	(4)	Introduction to Gender 5, 7
GWS	225 ^G	(4)	Intro to Lesbian, Gay, Bisexual... 5, 7
GWS	225W ^G	(4)	Intro to Lesbian, Gay, Bisexual... 5, 7
HIST	155 ^P	(3)	History of the Family in America 5, 7
HIST	170	(4)	Ancient World Civilization to 1500 5, 8
HIST	170W	(4)	Ancient Civilization to 1500 5, 8
HIST	171 ^P	(4)	World Civilization, 1500-Present 5, 8
HIST	171W	(4)	World Civiliz. 1500-Present 5, 8
HIST	180	(4)	European History to 1648 5, 9
HIST	180W	(4)	European History to 1648 5, 9
HIST	181	(4)	European History: 1648 to the Present 5, 8
HIST	181W	(4)	European History: 1648-Present 5, 8
HIST	190 ^P	(4)	United States to 1877 5, 7
HIST	190W ^P	(4)	United States to 1877 5, 7
HIST	191 ^P	(4)	United States Since 1877 5, 7
HIST	191W ^P	(4)	United States Since 1877 5, 7
HIST	260 ^P	(4)	Intro to East Asian Civilization 5, 8
HIST	260W ^P	(4)	Intro to East Asian Civilization 5, 8
HLTH	240	(3)	Drug Education 5
KSP	235	(3)	Human Development 5
LAWE	132	(3)	Crime and Punishment 5
MSL	252	(3)	Evolution of American Warfare 5
MRKT	100	(3)	Global Business Concepts 5
MUSE	200W	(3)	Introduction to Museum Studies 5, 8
POL	100	(3)	Intro to Politics 5
POL	104	(3)	Understanding the U.S. Constitution 5
POL	111	(3)	United States Government 5, 9
PSYC	101	(4)	Psychology 5
PSYC	206	(4)	The Human Mind 5
SOC	101 ^P	(3)	Introduction to Sociology 5, 8
SOC	101W ^P	(3)	Introduction to Sociology 5, 8
SOC	150 ^P	(3)	Social Problems 5, 7
SOC	208 ^P	(3)	Courtship, Marriage & Family 5, 7
SOC	209 ^P	(3)	Sociology of Human Sexuality 5, 7
SOC	255	(3)	Juvenile Delinquency 5, 9
SOWK	180W	(4)	Social Welfare Services 5, 9
SOWK	255 ^P	(3)	Global Responses to Human Need 5, 8
URBS	100	(3)	Intro to the City 5, 8
URBS	150	(3)	Sustainable Communities 5, 10

GOAL AREA 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, and 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 goal area include:

Course #	Credits	Title/Goal Area(s)
ART	100	(3) Elements and Principles of Art 6
ART	160 ^P	(3) Intro to Visual Culture 6, 8
ART	231	(3) Mixed Media 6
ART	260 ^P	(3) Art History Survey I 6, 8
ART	261	(3) Art History Survey II 6, 8
ART	265W	(3) Art as Politics 6, 8
ART	275	(3) Photography 6
CMST	310	(4) Performance of Literature 6, 11
CS	201W	(4) Artificial Intelligence & Sci Fictn 6,9
DANC	120	(3) Intro to Dance 6, 8
DANC	120W	(3) Intro to Dance 6, 8
EET	125 ^P	(3) Perspective on Technology 6, 8
ENG	110	(4) Intro to Literature 6
ENG	112W	(4) Intro to Poetry and Drama 6
ENG	113W	(4) Intro to Prose Literature 6
ENG	118 ^P	(4) Diverse Culture in Lit and Film 6, 7
ENG	125 ^P	(4) International Children's Literature 6, 8
ENG	146	(4) Introduction to Shakespeare 6, 8
ENG	211W ^P	(4) Lit, Film, Human Diversity 6, 7
ENG	212W	(4) World Literature 6, 8
ENG	213W	(4) Ethics & Civic Resp. in Lit/Film 6, 9
ENG	215	(2-4) Topics in Literature 6
FILM	110	(4) Film Appreciation 6
FILM	114	(4) Introduction to Film 6
FILM	210W	(4) Film Genres 6
FILM	214	(4) Topics in Film 6
FILM	216W	(4) Writing About Film 6
FILM	217	(4) Introduction to Film Production 6, 11
FILM	334W ^P	(4) International Cinema 6, 8
GER	150W ^P	(4) The German-Speaking Countries... 6, 8
GWS	230 ^P	(4) Gender, Race & Pop Culture 2, 6
GWS	251 ^P	(4) Coming of Age: Gender & Culture 6, 7
GWS	251W ^P	(4) Coming of Age: Gender & Culture 6, 7
HUM	101W	(4) Intro to the Humanities 6, 8
HUM	150	(4) Western Hum. I: Beg to Renaissance 6
HUM	151	(4) Western Hum. II: Renaissance- Present 6
HUM	155	(4) Global Humanities I 6, 8
HUM	156 ^P	(4) Global Humanities II 6, 8
HUM	250	(2-4) Perspectives in Humanities 6
HUM	250W	(4) Perspectives in Humanities 6
HUM	280	(2-4) Human Traditions 6
HUM	280W	(4) Humanities Traditions 6
HUM	281W ^P	(4) Human Div/Humanities Trad 6, 7
HUM	282W ^P	(4) Global Persp & Hum Trad 6, 8
KSP	251	(3) Coming of Age: Gender & Culture 6, 7
MASS	260 ^P	(4) Principles of Visual Mass Media 6, 7
MUS	120	(3) Intro to Music 6
MUS	125 ^P	(3) Pop USA: Jazz-Country-Blues 6, 7
MUS	26 ^P	(3) Pop Music USA: R & B to MTV 6, 7

MUS	127	(3)	Music Money and Success 6
MUS	328 ^G	(3)	Music of the World 6, 8
PHIL	100W	(3)	Intro to Philosophy 6
PHIL	101W	(3)	The Mind-Body Problem 6
PHIL	115W	(3)	Phil of Race, Class & Gender 6, 7
PHIL	120W	(3)	Intro to Ethics 6, 9
PHIL	205W	(3)	Culture, Identity & Diversity 6, 8
PHIL	222W	(3)	Medical Ethics 6, 9
PHIL	224W	(3)	Business Ethics 6, 9
PHIL	240W	(3)	Law, Justice & Society 6, 9
PHIL	321W	(3)	Social and Political Philosophy 6, 9
PHIL	322W	(3)	Ethical Theory 6, 9
PHIL	323W	(3)	Philosophy of Economics 6, 9
PHIL	334W	(3)	History of Phil: Classical Phil 6
PHIL	336W	(3)	Hist. of Phil: Renaissance... 6
PHIL	337	(3)	19th Century Philosophy 6
PHIL	358W ^P	(3)	Eastern Philosophy 6, 8
SCAN	150W ^P	(4)	The Nordic Countries... 6, 8
SCAN	251W ^P	(4)	Scandinavian Culture 6, 8
THEA	100	(3)	Intro to Theatre 6
THEA	101	(3)	Acting for Everyone 6
THEA	115	(3)	Experiencing Theatre 6, 11
THEA	285W ^P	(3)	Theatre of Diversity 6, 7
URBS	110	(3)	The City: Design and Architecture 6

GOAL AREA 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 United States' history and cultures;
- demonstrate an awareness of the individual and institutional 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 goal area include:

Course #	Credits	Title/Goal Area(s)
AIS	101 ^P	(3) Intro to American Indigenous Studies 5, 7
AIS	102 ^P	(4) American Indian Country to 1900 5, 7
AIS	103 ^P	(4) American Indian 1900-Present 5, 7
AIS	210 ^P	(3) Oral Traditions 7
AIS	210W ^P	(3) Oral Traditions 7
AIS	220W ^P	(3) Tribal Sovereignty 5, 7
AIS	230W ^P	(3) American Indians of Minnesota 5, 7
AIS	240 ^P	(3) American Indian Women 5, 7
AIS	240W ^P	(3) American Indian Women 5, 7
ANTH	245 ^P	(3) Social Life of Swearing 7, 9
ANTH	269 ^P	(3) Anthropology of Sex 5, 7
ANTH	280 ^G	(3) Engaged Anthropology 7, 11
ANTH	340 ^P	(4) Language & Power 5, 7
CDIS	290 ^P	(3) Intro to Communication Disorders 7
CMST	203 ^P	(3) Intercultural Communication 7, 8
EEC	222W ^G	(3) Human Rel in Multi Society 7, 11
ENG	118 ^P	(4) Diverse Cult in Lit & Film 6, 7
ENG	211W ^P	(4) Lit., Film, Hum Diversity 6, 7

ETHN	100 ^P	(3)	American Racial Minorities 5, 7
ETHN	101 ^P	(3)	Intro to Multicultural & Ethnic Stds 5, 7
ETHN	150 ^G	(3)	Multicultural/Ethnic Experience 7
ETHN	200	(3)	Interracial/Interethnic Dating/Marriage 7
ETHN	201W ^P	(3)	Persp on African Amer 5, 7
ETHN	202W	(3)	Persp on American Indians 5, 7
ETHN	203W ^P	(3)	Persp on Asian Americans 5, 7
ETHN	204W ^P	(3)	Persp on Latinos/Hispanics 5, 7
GERO	200 ^G	(4)	Family Dynamics of Aging 2, 7
GERO	200W ^G	(4)	Family Dynamics of Aging 2, 7
GWS	110 ^P	(4)	Introduction to Gender 5, 7
GWS	110W ^P	(4)	Introduction to Gender 5, 7
GWS	225 ^G	(4)	Intro to Lesbian, Gay, Bisexual... 5, 7
GWS	225W ^G	(4)	Intro to Lesbian, Gay, Bisexual 5, 7
GWS	251 ^P	(4)	Coming of Age: Gender & Culture 6, 7
GWS	251W ^P	(4)	Coming of Age: Gender & Culture 6, 7
HIST	155 ^P	(3)	History of the Family in America 5, 7
HIST	190 ^P	(4)	United States to 1877 5, 7
HIST	190W ^P	(4)	United States to 1877 5, 7
HIST	191 ^P	(4)	United States Since 1877 5, 7
HIST	191W ^P	(4)	United States Since 1877 5, 7
HLTH	211 ^G	(3)	Human Sexuality in World...7
HUM	281W ^P	(4)	Human Div/Humanities Trad 6, 7
KSP	220W ^G	(3)	Human Rel Multicult Society 7, 11
KSP	251	(3)	Coming of Age: Gender and Culture 6, 7
KSP	260 ^G	(3)	Crtg Glob Awareness Study Abroad 7, 8
MASS	260 ^P	(4)	Principles of Visual Mass Media 6, 7
MUS	125 ^P	(3)	Pop USA: Jazz -Country -Blues 6, 7
MUS	126 ^P	(3)	Pop Music USA: R & B to MTV 6, 7
PHIL	115W	(3)	Phil. of Race, Class & Gender 6, 7
REHB	110W ^G	(3)	Sensitivity to Disability 7
SOC	150 ^P	(3)	Social Problems 5, 7
SOC	208 ^P	(3)	Courtship, Marriage & Family 5, 7
SOC	209 ^P	(3)	Sociology of Human Sexuality 5, 7
THEA	285W ^P	(3)	Theatre of Diversity 6, 7

GOAL AREA 8: GLOBAL PERSPECTIVES

(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 goal area include:

Course #	Credits	Title/Goal Area(s)
ANTH	101 ^P	(4) Intro to Anthropology 5, 8
ANTH	230 ^G	(4) People & Cultures of the World 8
ANTH	240 ^G	(4) Language and Culture 5, 8
ANTH	260 ^P	(3) Vampires, Werewolves... Folklore Fear 5, 8
ANTH	261 ^P	(3) Taboos, Tattoos & Tshirts: Cult./ Body Art 5, 8
ART	160 ^P	(3) Intro to Visual Culture 6, 8
ART	260 ^P	(3) Art History Survey I 6, 8
ART	261	(3) Art History Survey II 6, 8
ART	265W	(3) Art as Politics 6, 8
CDIS	206	(3) Intermediate Signing 8
CDIS	207	(3) Advanced Sign Language I 8
CMST	203 ^P	(3) Intercultural Communication 7, 8
DAK	101	(4) Elementary Dakota I 8

DAK	102	(4)	Elementary Dakota II 8
DANC	120	(3)	Intro to Dance 6, 8
DANC	120W	(3)	Intro to Dance 6, 8
DANC	225 ^P	(3)	World Dance in Cultural Persp 8, 11
ECON	314W	(3)	Current Economic Issues 5, 8
EET	118	(3)	Electricity...Usage & Green Alternatives 3, 8
EET	125 ^P	(3)	Perspective on Technology 6, 8
ENG	125V	(4)	International Children's Literature 6, 8
ENG	146	(4)	Introduction to Shakespeare 6, 8
ENG	212W	(4)	World Literature 6, 8
ENVR	101	(4)	Persp in Environmental Science 8, 10
FILM	334W ^P	(4)	International Cinema 6, 8
FREN	101	(5)	Elementary French I 8
FREN	102	(5)	Elementary French II 8
FREN	201	(4)	Intermediate French I 8
FREN	202	(4)	Intermediate French II 8
GEOG	100 ^P	(3)	Elements of Geography 8, 10
GEOG	103 ^P	(3)	Introductory Cultural Geography 5, 8
GER	101	(4)	Elementary German I 8
GER	102	(4)	Elementary German II 8
GER	150W ^P	(4)	The German-Speaking Countries... 6, 8
GER	201	(4)	Intermediate German I 8
GER	202	(4)	Intermediate German II 8
GWS	220 ^P	(4)	Global Persp on Women & Change 8, 9
GWS	220W ^P	(4)	Global Persp on Women & Change 8, 9
HIST	170	(4)	Ancient World Civilization to 1500 5, 8
HIST	170W	(4)	Ancient Wrld Civiliz to 1500 5, 8
HIST	171P	(4)	World Civilization, 1500-Present 5, 8
HIST	171W	(4)	World Civiliz 1500-Present 5, 8
HIST	181	(4)	European History: 1648 to the Present 5, 8
HIST	181W	(4)	European History: 1648-Present 5, 8
HIST	260 ^P	(4)	Intro to East Asian Civilization 5, 8
HIST	260W ^P	(4)	Intro to East Asian Civilization 5, 8
HUM	101W	(4)	Intro to the Humanities 6, 8
HUM	155	(4)	Global Humanities I 6, 8
HUM	156 ^P	(4)	Global Humanities II 6, 8
HUM	282W ^P	(4)	Global Persp. & Hum Trad 6, 8
KSP	260 ^G	(3)	Crtg Glob Awareness thr Study Abroad 7, 8
MUS	328 ^G	(3)	Music of the World 6, 8
MUSE	200W	(3)	Introduction to Museum Studies 5, 8
PHIL	205W	(3)	Culture, Identity, & Diversity 6, 8
PHIL	358W ^P	(3)	Eastern Philosophy 6, 8
POL	106	(3)	Politics in the World Community 8
POL	234	(3)	Model United Nations 1B, 8
SCAN	101	(4)	Elementary Norwegian I 8
SCAN	102	(4)	Elementary Norwegian II 8
SCAN	111	(4)	Elementary Swedish I 8
SCAN	112	(4)	Elementary Swedish II 8
SCAN	150W ^P	(4)	The Nordic Countries... 6, 8
SCAN	251W ^P	(4)	Scandinavian Culture: The Sami 6, 8
SOC	101 ^P	(3)	Introduction to Sociology 5, 8
SOC	101W ^P	(3)	Introduction to Sociology 5, 8
SOWK	255 ^P	(3)	Global Responses to Human Need 5, 8
SPAN	101	(4)	Elementary Spanish I 8
SPAN	102	(4)	Elementary Spanish II 8
SPAN	201	(4)	Intermediate Spanish I 8
SPAN	202	(4)	Intermediate Spanish II 8
SPAN	210W	(4)	Composition and Conversation 8
URBS	100	(3)	Intro to the City 5, 8

GOAL AREA 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:

- (a) examine, articulate, and apply their own ethical views;
- (b) 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 goal area include:

Course #	Credits	Title/Goal Area(s)
ANTH 245 ^P	(3)	Social Life of Swearing 7, 9
BLAW 131	(3)	Consumer Law & Ethics 9
CHEM 131	(3)	Forensic Science 3, 9
CMST 300	(4)	Ethics and Free Speech 9
CORR 106 ^P	(3)	Intro to Criminal Justice Systems 5, 9
CORR 255	(3)	Juvenile Delinquency 5, 9
CS 201W	(4)	Artificial Intelligence & Sci. Fiction 6, 9
ENG 213W	(4)	Ethics & Civic Resp. in Lit/Film 6, 9
GWS 120 ^P	(4)	Violence and Gender 9
GWS 120W ^P	(4)	Violence and Gender 9
GWS 220 ^P	(4)	Global Persp on Women & Change 8, 9
GWS 220W ^P	(4)	Global Persp on Women & Change 8, 9
HIST 180	(4)	European History to 1648 5, 9
HIST 180W	(4)	European History to 1648 5, 9
IT 100	(4)	Intro to Computing & Applications 9, 13
IT 202W	(4)	Computers in Society 9, 13
KSP 101	(3)	Exploring and Applying Values 9
KSP 200 ^G	(3)	Critical Issues in Public Ed Today 2, 9
KSP 250	(3)	Social Justice in School and Community 9
MASS 110 ^P	(4)	Intro to Mass Media 9
NPL 273	(3)	Introduction to the Nonprofit Sector 9
PHIL 120W	(3)	Intro to Ethics 6, 9
PHIL 222W	(3)	Medical Ethics 6, 9
PHIL 224W	(3)	Business Ethics 6, 9
PHIL 226W	(3)	Environmental Ethics 9, 10
PHIL 240W	(3)	Law, Justice & Society 6, 9
PHIL 321W	(3)	Social & Political Philosophy 6, 9
PHIL 322W	(3)	Ethical Theory 6, 9
PHIL 323W	(3)	Philosophy of Economics 6, 9
POL 101	(3)	Intro to Public Life 9, 11
POL 111	(3)	United States Government 5, 9
SOC 255	(3)	Juvenile Delinquency 5, 9
SOWK 180W	(4)	Social Welfare Services 5, 9
URBS 230	(3)	Community Leadership 9, 11
URBS 230W	(3)	Community Leadership 9, 11

GOAL AREA 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:

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

Course(s) which satisfy this goal area include:

Course #	Credits	Title/Goal Area(s)
AIS 360 ^P	(3)	Indigenous People & Environ Struggles 10
ANTH 102	(4)	Ancient Peoples 5, 10
ANTH 210-L	(4)	Intro to Archaeology 3, 10
EEC 205	(3)	Service Learning: Soc and the Envr 10
ENVR 101	(4)	Persp in Environmental Science 8, 10
GEOG 100 ^P	(3)	Elements of Geography 8, 10
GEOG 101	(3)	Introductory Physical Geography 3, 10
GEOG 210W	(3)	Landscapes and Places 10
GEOL 100-L	(3-4)	Our Geologic Environment 3, 10
GEOL 108	(3)	Oceans of the World 3, 10
GEOL 121-L	(4)	Physical Geology 3, 10
HLTH 101	(3)	Health and the Environment 10
PHIL 226W	(3)	Environmental Ethics 9, 10
RPLS 282	(3)	Wildlife as a Recreational Resource 10
SOC 360 ^P	(3)	Indigenous Peoples & Env Struggles 10
URBS 150	(3)	Sustainable Communities 5, 10

NOTE: Goal areas 11-13 are part of the General Education curriculum at Minnesota State Mankato but not goal areas in the Minnesota Transfer Curriculum.

GOAL AREA 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:

- participate effectively in a variety of artistic, education, political, recreational, health and public service, or social service settings;
- interact with others of another culture in its indigenous setting through a structured experience;
- participate cooperatively in group athletic activity or artistic performance.

Course(s) which satisfy this goal area include:

ANTH 280G	(3)	Engaged Anthropology 7, 11
CDIS 205	(3)	Beginning Signing 11
CMST 220	(1-4)	Forensics 11
CMST 310	(4)	Performance of Literature 6, 11
DANC 123	(2)	Beginning Jazz Dance 11
DANC 125	(2)	Afro-Caribbean Dance Forms 11
DANC 126	(2)	Beginning Ballet 11
DANC 127	(2)	Beginning Tap Dance 11
DANC 128	(2)	Beginning Modern Dance 11
DANC 223	(2)	Intermediate Jazz Dance 11
DANC 225P	(3)	World Dance in Cultural Persp 8, 11
DANC 226	(2)	Intermediate Ballet 11
DANC 227	(2)	Intermediate Tap Dance 11
DANC 228	(2)	Intermediate Modern Dance 11
DANC 229	(1)	Kinetic Learning in the Classroom 11
DANC 328	(2)	Adv. Modern Dance 11
EEC 222WG	(3)	Hum Rel. in a Multi Society 7,11
ENG 242W	(4)	Intro to Creative Writing 11
EXED 202	(3)	Introduction to Experiential Education 11
FILM 217	(4)	Introduction to Film Production 6, 11
HLTH 210	(3)	First Aid & CPR 11
HP 101	(1)	Developmental/Adapted Exercise 11
HP 102	(1)	Individualized Exercise 11
HP 103	(1)	Fitness for Living 11
HP 104	(1)	Adult Fitness 11
HP 105	(1)	Beginner & Adv. Beginner Swimming 11
HP 114	(1)	Billiards and Bowling 11
HP 117	(1)	Aerobic Conditioning 11
HP 130	(1)	Self-Defense for Women 11
HP 138	(1)	Beginning Horsemanship 11
HP 139	(1)	Winter Survival 11
HP 143	(1)	Aqua Exercise 11
HP 145	(1)	Aquatic Conditioning and Water Polo 11
HP 146	(1)	Intercollegiate Bowling 11
HP 147	(1)	Intercollegiate Cross Country 11
HP 148	(1)	Intercollegiate Softball 11
HP 149	(1)	Intercollegiate Volleyball 11
HP 150	(1)	Intercollegiate Wrestling 11
HP 152	(1)	Intercollegiate Track and Field 11
HP 153	(1)	Intercollegiate Swimming 11
HP 154	(1)	Intercollegiate Football 11
HP 155	(1)	Intercollegiate Basketball 11
HP 156	(1)	Intercollegiate Baseball 11
HP 157	(1)	Intercollegiate Golf 11
HP 158	(1)	Intercollegiate Tennis 11
HP 159	(1)	Intercollegiate Hockey 11
HP 161	(1)	Intercollegiate Soccer 11
HP 166	(1)	Team Game Skills 11
HP 174	(1)	Individual Dual Activities 11
HP 175	(1)	Fitness Activities 11
HP 176	(1)	Lifetime Act I 11
HP 177	(1)	Lifetime Act II 11
HP 178	(1)	Social, Folk and Square Dance 11
HP 179	(1)	Winter Activities 11
HP 180	(1)	Introduction to Handball 11
HP 181	(1)	Advanced Handball 11

HP	182	(1)	Aquatic Skills 11
HP	190	(1)	Sport Activities 11
HP	241	(1)	Sailing 11
HP	242	(1)	Canoeing 11
HP	245	(1)	Intermediate Swimming 11
HP	248	(1)	Stroke Analysis 11
HP	250	(2)	Lifeguard Training 11
HP	252	(2)	Officiating Theory 11
HP	257	(2)	Water Safety Instructor (WSI) 11
HP	291	(2)	Concepts of Fitness 11
KSP	220WG	(3)	Hum Rel. in a Multi Society 7,11
MSL	210	(1)	Army Physical Fitness 11
MUS	101	(1)	Concert Choir 11
MUS	102	(1)	Women's Chorale 11
MUS	103	(1)	Chamber Singers 11
MUS	104	(1-2)	Opera 11
MUS	106	(1)	Vocal Jazz Ensemble 11
MUS	111	(1)	Wind Ensemble 11
MUS	112	(1)	Symphonic Band 11
MUS	113	(1)	Pep Band I 11
MUS	114	(1)	Drum Corps 11
MUS	115	(1)	Jazz Ensemble 11
MUS	116	(1)	University Orchestra 11
MUS	117	(1)	Theatre Orchestra 11
MUS	118	(1)	Jazz Combo 11
MUS	119	(1-3)	Ensemble 11
NURS	101W	(3)	Courage/Caring/Team Building 11
POL	101	(3)	Intro to Public Life 9, 11
RPLS	278	(3)	Leisure and Lifestyle 11
THEA	102	(1-2)	Theatre Activity: Acting 11
THEA	103	(1-2)	Theatre Activity: Management 11
THEA	105	(1-2)	Theatre Activity: Stagecraft 11
THEA	107	(1-2)	Theatre Activity: Costume 11
THEA	108	(1-2)	Theatre Activity: Lighting 11
THEA	109	(1-2)	Theatre Activity: Sound 11
THEA	115	(3)	Experiencing Theatre 6, 11
URBS	230	(3)	Community Leadership 9, 11
URBS	230W	(3)	Community Leadership 9, 11

GOAL AREA 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:

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

Course(s) which satisfy this goal area include:

CIVE	100	(1)	Explorations in Engineering 12
EE	100	(1)	Exploration in Engineering 12
FYEX	100	(1)	First Year Seminar 12
ME	100	(1)	Exploration in Engineering 12

GOAL AREA 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:

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

Course(s) which satisfy this goal area include:

EET	115	(3)	Understanding Computers 13
EET	116	(3)	Communications-Past, Present & Future 13
ENG	271W	(4)	Technical Communication 2, 13
ENG	272W	(4)	Business Communication 2, 13
IT	100	(4)	Intro to Computing & Applications 9, 13
IT	202W	(4)	Computers in Society 9, 13

DIVERSE CULTURES GRADUATION REQUIREMENT (DCGR)

Note. Students graduating under the 2015-2016 catalog will satisfy DCGR by taking 1 Purple and 1 Gold course or 2 Purple courses.

Goals and Outcomes. Minnesota State Mankato has adopted the following policy on the role of diversity in education:

Diversity at Minnesota State Mankato is a commitment to create an understanding and appreciation of diverse peoples and diverse perspectives; a commitment to create an academic, cultural, and workplace environment and community that develops mutual respect for all and celebrates our differences.

In keeping with the spirit of this commitment, all Minnesota State Mankato undergraduate students must satisfy the DCGR for graduation. For purposes of further clarifying the DCGR, diversity is defined in comprehensive terms as the many faceted ways in which human beings differ from one another. Often overlapping, these differences can include: age, gender, national origin, sexual orientation, mental/physical ability, race/ethnicity.

GRADUATION RULES:

Diverse Cultures Graduation Requirement – Purple and Gold Courses

1. Students pursuing a baccalaureate degree must take either:
 - a. at least one (1) course for a minimum of 3 credits from the list of courses designated as Purple (Content) and at least one (1) course for a minimum of 3 credits from the list of courses designated as Gold (Experiential and Reflective), OR
 - b. at least two (2) courses for a minimum of 6 credits from the list of courses designated as Purple (Content).
2. One Purple course for a minimum of 3 credits satisfies the Diverse Cultures requirement for the AA or AS degree issued by Minnesota State Mankato.
3. Transfer students who have taken between 30 and 59 credits will be granted 3 credits toward the Purple course requirement.
4. Transfer students who have taken 60 or more credits or have already received an AA degree will be granted 3 Purple course credits and 3 Gold course credits, thus satisfying their entire Diverse Cultures Graduation Requirement.
5. Students must take courses from at least two different disciplines to satisfy the Diverse Cultures Graduation Requirement.
6. Students are encouraged to complete the Purple course requirement prior to completion of the Gold course requirement.

DIVERSE CULTURES - PURPLE (Content-Based)

To prepare students with course content and the analytical and reflective skills to better understand diversity in the United States and in other societies across the world.

Learning Outcomes

Students will be able to:

1. Master an understanding of diversity as defined by Minnesota State Mankato.
2. Acquire a substantive knowledge base to identify the impact of oppression for individuals from diverse populations.
3. Obtain the analytical skills necessary to make links between historical practices and contemporary U.S. societal issues of diversity.
4. Apply the same method for interpreting diversity issues in the United States to understanding issues of diversity in other societies across the world.
5. Develop an understanding of historical and contemporary social relations in specific societies across the world.

Satisfying Purple Courses

1. Purple courses are primarily aimed at helping students learn content.
2. Purple courses allow students to explore basic concepts such as oppression, prejudice, discrimination, racism and ethnocentrism and responses to each; civil liberties in the context of economic, political, social, religious and educational issues of race, gender, sexual orientation, age, class and disabilities in a pluralistic society.
3. Although Purple courses may focus primarily on one diverse group of people, the course content should relate the basic concepts and issues discussed to a variety of groups.
4. Courses must meet Purple learning outcome 1 and at least two of the other Purple learning outcomes.
5. Purple courses may have experiential and reflective components, but the primary focus is on content.

DIVERSE CULTURES - PURPLE COURSES

AIS 101	AIS 102	AIS 110	AIS 111
AIS 210	AIS 210W	AIS 220W	AIS 230W
AIS 240	AIS 240W	AIS 340	AIS 360
AIS 380	ANTH 101	ANTH 230	ANTH 245
ANTH 250W	ANTH 260	ANTH 261	ANTH 269
ANTH 332	ANTH 340	ANTH 421W	ANTH 436W
ANTH 443W	ART 160	ART 260	ART 416
ART 467	ART 469	CDIS 290	CMST 203
CMST 403	CORR 106	CORR 444	DANC 225
ECON 103W	ECON 320W	EET 125	ENG 118
ENG 125	ENG 211W	ENG 318	ENG 402
ENG 433	ENG 436	ENG 438	ENG 448
ETHN 100	ETHN 101	ETHN 201W	ETHN 203W
ETHN 204W	ETHN 220W	ETHN 403	ETHN 410
ETHN 460	ETHN 470	ETHN 486	FCS 120
FCS 400	FILM 334W	GEOG 100	GEOG 103
GEOG 341	GER 150W	GWS 110	GWS 110W
GWS 120	GWS 120W	GWS 220	GWS 220W
GWS 230	GWS 251	GWS 251W	HLTH 410
HLTH 466	HIST 155	HIST 171	HIST 190
HIST 190W	HIST 191	HIST 191W	HIST 2 6 0
HIST 260W	HIST 435	HIST 437	HIST 438
HIST 454	HIST 455	HIST 458	HIST 459
HIST 462	HIST 466	HIST 470	HIST 471
HIST 476	HIST 478	HUM 156	HUM 281W
HUM 282W	MASS 110	MASS 260	MUS 125
MUS 126	MUS 329	PHIL 358W	PSYC 460W
RPLS 274	SCAN 150W	SCAN 251W	SCAN 451
SOC 101	SOC 101W	SOC 150	SOC 208
SOC 209	SOC 360	SOC 404	SOC 430
SOC 446	SOC 460	SOC 461	SOC 463
SOWK 255	THEA 285W		

DIVERSE CULTURES - GOLD

(Experiential & Reflective)

To give students learning opportunities to experience diversity with reflection supervised by a faculty member; to assist them in recognizing and responding to conditions of marginalized populations. Marginalized populations refer to specific groups of peoples or individuals that are relegated to the outer edges of society or social standing, both in this country and abroad. Such people are often denied access to resources and privileges available to mainstream society.

Learning Outcomes

Students will be able to:

1. Interact with individuals from diverse populations outside the classroom and to have the opportunity to reflect on such interactions.
2. Demonstrate an acquisition of the basic knowledge and understanding of diversity related concepts so that the student's experience will have meaning and context.
3. Integrate classroom knowledge with experiential learning in analyzing and responding to conditions of marginalized populations.

Students will explore basic concepts such as oppression, prejudice, discrimination, racism and ethnocentrism and responses to each; civil liberties in the context of economic, political, social, religious and educational issues of race, gender, sexual orientation, age, class and disabilities in a pluralistic society.

Satisfying Gold Courses

1. Gold courses require students have experiential encounters with diverse cultures and reflect on those experiences as part of the course requirements.
2. Gold courses must contain sufficient content regarding interactions with diverse populations to establish a context and conceptual base for the student to effectively reflect on the experiences.
3. Gold courses should present content that allows students to explore basic concepts such as oppression, prejudice, discrimination, racism and ethnocentrism and responses to each; civil liberties in the context of economic, political, social, religious and educational issues of race, gender, sexual orientation, age, class and disabilities in a pluralistic society.
4. Courses must meet all three Gold learning outcomes.

DIVERSE CULTURES - GOLD COURSES

AIS 455	AIS 460	AIS 497	ANTH 240
ANTH 280	DHYG 336	DHYG 447	EEC 222W
ENG 485	ETHN 150	ETHN 401	ETHN 402W
FCS 230	GERO 200	GERO 200W	GWS 225
GWS 225W	HLTH 211	KSP 150	KSP 200
KSP 200	KSP 220W	KSP 260	MRKT 494
MUS 328	PSYC 230	REHB 110W	SOC 420
SPAN 396	SPED 409		

Curricular Procedures. The Diverse Cultures Graduation Requirement was made effective beginning with the 2009-2010 academic year. Courses that met the university's previous Cultural Diversity requirement will not automatically be included in the list of Purple and Gold courses that meet the new requirement.

Departments will need to submit course proposals through the Curriculum Design System (CDS) to include these courses in the new requirement all course submissions for consideration as either Purple or Gold courses will be reviewed in a manner consistent with all other curricular proposals.

An individual course may be either a Purple course or a Gold course, but not both. Any 100-400 level undergraduate course that meets the relevant goals and outcomes may be included among the Purple and Gold courses. No consideration will be given to proposals that limit participation to specific sections of a course.

Only courses in their entirety, not specific sections of courses, are eligible for designation as Purple or Gold courses.

Courses without specific content (e.g., independent study, individual studies, directed readings, topics, internships, practicums, and field experience courses) will generally not be considered Purple or Gold courses. Exceptions may be made for specific cases if potential for achievement of the Purple or Gold course outcomes can be clearly demonstrated prior to registration for the course in question.

All Purple and Gold courses will undergo systematic assessment as established by the university's curricular committees all departments and programs with Purple or Gold courses are expected to fully participate in the DCGR assessment process.

WRITING INTENSIVE

Minnesota State Mankato has adopted the following policy on the role of writing in education

Goals and Outcomes. Writing at Minnesota State Mankato is a commitment to all undergraduate students that they are given ample opportunity to develop sound writing skills that enable them to succeed in their respective professions. Students will continue to develop skills taught in Composition, applying them in the context of a particular discipline.

Students will be able to:

- (a) Engage in effective writing processes, including the ability to generate ideas, draft, revise, format, and edit their work.
- (b) Use writing to grapple with course content and reflect on their learning.
- (c) Produce texts appropriate for an intended audience, purpose, and context.
- (d) Display strong technical skills in areas such as grammar, mechanics, and source documentation.

In addition to demonstrating these competencies, students enrolled in upper-division writing-intensive courses will be able to:

- (e) Write in academic, professional, or public genres related to the discipline, displaying an understanding of the genres' communicative functions and contexts.
- (f) Locate, evaluate, analyze, and use source material or data in their writing.

In keeping with the spirit of this commitment, all Minnesota State Mankato undergraduate students must satisfy the Writing Intensive graduation requirement for graduation. For purposes of further clarifying the Writing Intensive graduation requirement, 'writing intensive' is defined as 20 pages (250 words per page) of evaluated written work, spread across a course. The 20 pages of writing assigned in a Writing Intensive course might include a combination of informal, exploratory writing and formal, polished writing.

- (a) Informal writing assignments allow students to grapple with course content and clarify their understanding and/or opinions of course material. This writing might include learning logs, response journals, lab notebooks, discussion boards and the like.
- (b) Formal writing assignments require students to use writing as a means to communicate in more formal writing situations. Such assignments might ask students to write for real or imagined academic, professional, or public audiences and to write in genres/for communicative purposes appropriate to the discipline.

At least 10 of the 20 pages must receive written feedback from instructors. Faculty are encouraged to solicit a draft or other preliminary work, provide written feedback on this writing-- supplemented, whenever possible, with feedback from other students - and allow students time for revision and editing.

A portion of class time should be dedicated to writing instruction, and writing should play a significant role in the course grade.

Graduation Rules:

Writing Intensive graduation requirements

1. Students pursuing a baccalaureate degree must take two (2) courses from different disciplines for a minimum of six (6) credits from the list of courses designated as writing intensive.
2. One (1) writing intensive course for a minimum of three (3) credits satisfies the Writing Intensive requirement for the AA degree issued by Minnesota State Mankato.
3. Transfer students who have taken thirty (30) or more credits or have already received an AA degree will be granted a minimum of three (3) Writing Intensive credits.

Course(s) which satisfy this goal area include:

AET 488W	AET 489W	AIS 210W ^P	AIS 220W ^P
AIS 230W ^P	AIS 240W ^P	AIS 300W	ANTH 250W ^P
ANTH 421W ^P	ANTH 425W	ANTH 436W ^P	ANTH 438W
ANTH 443W ^P	ART 265W	BIOL 103W	BIOL 105W
CAHN 101W	CHEM 381W	CHEM 466W	CIVE 370W
CMST 101W	CMST 485W	CORR 447W	CS 201W
CS 490W	CS 498W	DANC 120W	DANC 484W
DHYG 425W	ECON 103W ^P	ECON 314W	ECON 320W
ECON 482W	ECON 485W	EE 467W	EE 477W
EEC 222W ^G	ENG 112W	ENG 113W	ENG 201W
ENG 211W ^P	ENG 212W	ENG 213W	ENG 242W
ENG 271W	ENG 272W	ENG 275W	ENG 301W
ENG 474W	ENG 477W	ENGR 311W	ENGR 312W
ENGR 411W	ENGR 412W	ETHN 201W ^P	ETHN 202W
ETHN 203W ^P	ETHN 204W ^P	ETHN 220W ^P	ETHN 300W
ETHN 402W ^G	FCS 414W	FILM 210W	FILM 216W
FILM 334W ^P	FREN 302W	GEOG 210W	GEOG 320W
GER 150W ^P	GERO 200W ^G	GWS 110W ^P	GWS 120W ^P
GWS 220W ^P	GWS 225W ^G	GWS 251W ^P	GWS 330W
HIST 170W	HIST 171W	HIST 180W	HIST 181W
HIST 190W ^P	HIST 191W ^P	HIST 260W	HLTH 380W
HLTH 420W	HP 403W	HP 466W ^P	HUM 101W
HUM 250W	HUM 280W	HUM 281W ^P	HUM 282W ^P
HUM 450W	IT 202W	KSP 220W	LAWE 332W
LAWE 337W	LAWE 343W	MASS 221W	MASS 325W
MASS 330W	MASS 436W	MASS 431W	MASS 434W
MATH 492W	ME 436W	ME 438W	ME 466W
MET 488W	MET 489W	MUS 321W	MUS 322W
MUSE 200W	NURS 101W	PHIL 100W	PHIL 101W
PHIL 115W	PHIL 120W	PHIL 205W	PHIL 222W
PHIL 224W	PHIL 226W	PHIL 240W	PHIL 321W
PHIL 322W	PHIL 323W	PHIL 334W	PHIL 336W
PHIL 358W ^P	PHYS 475W	POL 103W	PSYC 103W
PSYC 211W	PSYC 425W	PSYC 460W ^P	REHB 110W ^G
RPLS 447W	RPLS 471W	SCAN 150W ^P	SCAN 251W ^P
SOC 101W ^P	SOWK 180W	SPAN 210W	SPAN 311W
SPED 448W	THEA 285W ^P	THEA 381W	THEA 417W
THEA 485W	THEA 487W	URBS 230W	

Curricular Procedures. The Writing Intensive (WI) graduation requirement was made effective with the 2012-2013 academic year. Courses that met the University's previous Writing Intensive requirement will automatically be included in the list of Writing Intensive courses that meet the new requirement. Departments will need to submit course proposals through the Curriculum Design System (CDS) to include any new courses in the new requirement. All course submissions for consideration as Writing Intensive will be reviewed in a manner consistent with all other curricular proposals.

An individual course may be considered Writing Intensive. Any 100-400 level undergraduate course that meets the relevant goals and outcomes may be included as a Writing Intensive course. No consideration will be given to proposals that limit participation to specific sections of a course. Only courses in their entirety, not specific sections of courses, are eligible for designation as Writing Intensive courses.

Courses without specific content (e.g., independent study, individual studies, directed readings, topics, internships, practicums, and field experience courses) will generally not be considered Writing Intensive courses. Exceptions may be made for specific cases if potential for achievement of the Writing Intensive outcomes can be clearly demonstrated prior to registration for the course in question.

All Writing Intensive courses will undergo systematic assessment as established by the university's curricular committees. All departments and programs with Writing Intensive courses are expected to fully participate in the Writing Intensive assessment process.

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Minnesota State University, Mankato 2015-2016 Bachelor of Arts (BA)/Bachelor of Science (BS)

CREDIT EVALUATION FORM

Name _____ Tech ID _____ Adm Term _____ Degree _____ Major(s) _____ Minor(s) _____
 Address _____

GOAL AREA 1	COMMUNICATION	GOAL AREA 6	HUMANITIES & ARTS
MSU EQ transfer course _____	Satisfied _____	(min. of 2 courses from diff. depts/6 credits)	Satisfied _____
PART A Eng Comp (min of 1 course/3 credits – min grade of C or P)	credit grade _____	MSU EQ transfer course _____	credit grade _____
_____	_____	_____	_____
PART B Speech & Oral Reasoning (min of 1 course/3 credits)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
GOAL AREA 2	CRITICAL THINKING	GOAL AREA 7	HUMAN DIVERSITY
(min. of 1 course or completion of the rest of Gen Ed)	Satisfied _____	(min. of 1 course/3 credits)	Satisfied _____
MSU EQ transfer course _____	credit grade _____	MSU EQ transfer course _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
GOAL AREA 3	NATURAL SCIENCES	GOAL AREA 8	GLOBAL PERSPECTIVE
(min. of 2 courses from diff. depts with at least one lab/6 credits)	Satisfied _____	(min. of 1 course/3 credits)	Satisfied _____
MSU EQ transfer course _____	credit grade _____	MSU EQ transfer course _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
GOAL AREA 4	MATHEMATICAL/LOGICAL REASONING	GOAL AREA 9	ETHICAL & CIVIC RESPONSIBILITY
(min. of 1 course/3 credits – min. grade of C or P)	Satisfied _____	(min. of 1 course/3 credits)	Satisfied _____
MSU EQ transfer course _____	credit grade _____	MSU EQ transfer course _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
GOAL AREA 5	HISTORY & SOCIAL & BEHAVIORAL SCIENCES	GOAL AREA 10	PEOPLE & THE ENVIRONMENT
(min. of 2 courses from diff. depts/6 credits)	Satisfied _____	(min. of 1 course/3 credits)	Satisfied _____
MSU EQ transfer course _____	credit grade _____	MSU EQ transfer course _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
GOAL AREA 12	FIRST YEAR EXPERIENCE	GOAL AREA 13	INFORMATION TECHNOLOGY
(0-1 credits)	Satisfied _____	(0-2 credits)	Satisfied _____
MSU EQ transfer course(s) _____	credit grade _____	MSU EQ transfer course(s) _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
FOREIGN LANG	BA STUDENTS ONLY	FOREIGN LANG	BA STUDENTS ONLY
(1 year required/max. of 8 credits)	(1 year required/max. of 8 credits)	(1 year required/max. of 8 credits)	(1 year required/max. of 8 credits)
MSU EQ transfer course(s) _____	credit grade _____	MSU EQ transfer course(s) _____	credit grade _____
_____	_____	_____	_____
_____	_____	_____	_____
GENERAL EDUCATION			
The goal areas on this page form Minnesota State Mankato's General Education requirement (GE) . Satisfaction of GE requires a minimum of 44 credits and completion of goal areas 1-11. BA degrees also require a year of a single foreign language; the language courses may double count for GE if they are approved for GE credit. Detailed information about GE and degree requirements can be found in the Undergraduate Catalog.			
Transfer AS/AAS degrees must have: 40 credits in goal areas 1-10; a min of 1 course in each goal area 3-10; and one course in each part of goal area 1. Goal areas 2 and 11 are exempt.			
de-degree _____	instituition _____	TRANSFER DEGREES	accepted _____
_____	_____	_____	GE credits needed _____
_____	_____	_____	_____
GENERAL EDUCATION SATISFIED			
(_____)			

Accounting

College of Business

Department of Accounting & Business Law

150 Morris Hall • 507-389-2965

Chair: W. C. Brown

E. Ahrens; J. Baird; P. Brennan; A. Habib; S. Johnson; O. Kim; B. Pike; K. Rosacker; J. Estall; F. Siagian; R. Zelin

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.

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's junior year. The student may choose to pursue a degree in one or more of the following COB majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Accounting Major in the College of Business

1. Cumulative (Including Transfer) Grade Point Average: minimum 2.7
2. Credits and Courses: 33 completed credits of the 44 general education requirements
3. Completion of the following courses: IT 101, MATH 130, ACCT 200, ACCT 210, BLAW 200, MGMT 200, BUS 295, ECON 201, ECON 202, ECON 207. Complete one of the following courses PHIL 120W, PHIL 205W, PHIL 222W, PHIL 224W, PHIL 226W, PHIL 240W

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Advising Center. When a student applies to the College of Business, he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four-year degree may take up to 24 credits in the College of Business.

Students must be admitted to a College of Business major to be granted a Bachelor of Science degree in any College of Business major.

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

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA to meet graduation requirements.

To begin taking 300 level courses for the Accounting minor, students must have a cumulative GPA of 2.7 or higher.

Accounting majors or minors must earn a grade of "C" or better in required accounting and business law classes.

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.

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

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 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.

ACCOUNTING BS

Degree completion = 120 credits

Required General Education

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
MATH 130	Finite Mathematics and Introductory Calculus (4)
(choose 3 credits)	
PHIL 120W	Introduction to Ethics (3)
PHIL 205W	Culture, Identity, and Diversity (3)
PHIL 222W	Medical Ethics (3)
PHIL 224W	Business Ethics (3)
PHIL 226W	Environmental Ethics (3)
PHIL 240W	Law, Justice & Society (3)

Pre-requisites to the Major

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
BLAW 200	Legal, Political, and Regulatory Environment of Business (3)
BUS 295	Professional Preparation for Business Careers (2)
ECON 207	Business Statistics (4)
IT 101	Introduction to Information Systems (3)
MGMT 200	Introduction to MIS (3)

Major Common Core

FINA 362	Business Finance (3)
IBUS 380	Principles of International Business (3)
MGMT 330	Principles of Management (3)
MGMT 346	Production & Operations Management (3)
MGMT 481	Business Policy & Strategy (3)
MRKT 310	Principles of Marketing (3)

Required for all Accounting Majors ("C" or better required)

ACCT 220	Accounting Cycle Applications (1)
ACCT 300	Intermediate Financial Accounting I (3)
ACCT 301	Intermediate Financial Accounting II (3)
ACCT 310	Management Accounting I (3)
ACCT 320	Accounting Information Systems (3)
ACCT 330	Individual Income Tax (3)
ACCT 400	Advanced Financial Accounting (3)
ACCT 410	Business Income Tax (3)
ACCT 421	Assurance Services I (3)
BLAW 450	Contracts, Sales, and Professional Responsibility (3)

Major Unrestricted Electives

BUS 397	IBE Practicum (3)
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Required Minor: None

ACCOUNTING MINOR**Minor Common Core**

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

Minor Required Electives (choose 9 credits from the following)

ACCT	301	Intermediate Financial Accounting II (3)
ACCT	311	Management Accounting II (3)
ACCT	320	Accounting Information Systems (3)
ACCT	330	Individual Income Tax (3)
ACCT	400	Advanced Financial Accounting (3)
ACCT	410	Business Income Tax (3)
ACCT	420	Operational Auditing (3)
ACCT	421	Assurance Services I (3)
ACCT	423	Fraud Examination (3)
ACCT	470	Advanced Topics (3)
ACCT	477	International Accounting (3)

COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers

This course prepares students for success by exposing them to the requirements, expectations, resources and opportunities of the COB. Students will have business experiences and will develop professional skills.

Variable

BUS 295 (2) Professional Preparation for Business Careers

This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of COB majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.

Fall, Spring

BUS 397 (3) IBE Practicum

BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students.

Pre: Must be admitted to the College of Business

Coreq: FINA 362, MGMT 330, MRKT 310

Fall, Spring

ACCT 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: IT 101, MATH 112 or MATH 130

Fall, Spring

ACCT 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

Fall, Spring

ACCT 217 (4) Survey of Financial and Managerial Accounting

This is an introductory course in financial and managerial accounting. It focuses on how to present, analyze, and interpret financial and managerial accounting information in order to make effective decisions in the business world.

Fall, Spring, Summer

Pre: IT 101, MATH 112

ACCT 218 (1) The Accounting Process

This course emphasizes the procedural aspects of financial accounting. Students will study the Accounting Cycle and receive hands-on practice journalizing business transactions, calculating and journalizing adjusting entries, and preparing financial statements.

Fall, Spring, Summer

Pre: ACCT 217

Coreq: ACCT 217

ACCT 220 (1) Accounting Cycle Applications

This course provides extensive hands-on practice applying all steps in the accounting cycle. Emphasis will be placed on completion of journal entries, adjusting entries, closing entries, and preparation of financial statements.

Fall, Spring

Pre: ACCT 200

ACCT 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 200, ACCT 210. Grade of B- or better in prerequisite courses.

Fall, Spring

ACCT 301 (3) Intermediate Financial Accounting II

A continuation of ACCT 300. An in-depth analysis of long-term liabilities, stockholders' equity, leases, pensions, deferred taxes and the statement of cash flows.

Pre: ACCT 300

Fall, Spring

ACCT 310 (3) Management Accounting I

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 200 or ACCT 210

Fall, Spring

ACCT 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

Variable

ACCT 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

Fall, Spring

ACCT 330 (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.

Pre: ACCT 200, ACCT 210

Fall, Spring

ACCT 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

ACCOUNTING CONTINUED

ACCT 400 (3) Advanced Financial Accounting

A study of accounting principles and concepts for mergers, acquisitions, consolidated statements, foreign currency translation, partnerships, and governmental/not-for-profit.

Pre: ACCT 301

Fall, Spring

ACCT 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, corporations, partnerships and tax-exempt entities. The course also covers tax research procedures.

Pre: ACCT 300, ACCT 330

Fall, Spring

ACCT 420 (3) Operational Auditing

An introduction to general auditing concepts and operational auditing, and a foundation in computer assisted audit techniques. Topics include internal control reviews, operational audits, human resource issues in auditing, sampling, evidence, computer system audits, computer assisted audit techniques and fraud audits.

Pre: ACCT 320 (or concurrent registration)

Fall, Spring

ACCT 421 (3) Assurance Services I

An overview of the external audit process, the issues facing the auditing profession today, and assurance services. Includes detailed coverage of the AICPA Code of Conduct, audit planning, substantive testing, auditors' responsibilities for detecting fraud, and audit reports.

Pre: ACCT 320

Fall, Spring

ACCT 423 (3) Fraud Examination

Students will learn what occupational fraud is, how and why it is committed, how fraudulent activities can be deterred and appropriate procedures for investigating and resolving allegations of fraud. Students will utilize professional software in fraud detection.

Pre: ACCT 320

Variable

ACCT 424 (3) Assurance Services II

Designed for students interested in financial statement auditing. Topics include substantive audit testing, auditing governmental/not-for-profit entities, accounting and review services, and other advanced auditing topics.

Pre: ACCT 421

Variable

ACCT 470 (3) Advanced Topics in Accounting

This course will utilize case analysis to examine current issues in accounting and business. Cases will involve an integration of management accounting, accounting information systems, financial accounting, tax and auditing issues.

Pre: ACCT 301, ACCT 310, ACCT 421, ACCT 410 or ACCT 411

Fall, Spring

ACCT 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 301

Variable

ACCT 491 (1-6) In-Service

Variable

ACCT 492 (1-3) Study Tour

Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.

Variable

ACCT 493 (1-4) Honors Reading in Accounting

Variable

ACCT 497 (1-6) Internship

Supervised experience in public, industrial or governmental accounting. Students must meet standards established by the employer and the Department of Accounting.

Variable

ACCT 499 (1-4) Individual Study of Accounting

Variable

AGING STUDIES

Aging Studies (Previously Gerontology)

College of Social & Behavioral Sciences

Aging Studies Program

113 Armstrong Hall • 507-389-1561

Website: sbs.mnsu.edu/agingstudies

Donald Ebel, Director

Faculty: Michael Bentley (Biological Sciences); Kofi Danso (Social Work), Donald Ebel (Sociology); Kathryn Elliott (Anthropology); Jeffrey Buchanan (Psychology); Norma Krumwiede (Nursing); Andrea Lassiter (Psychology); Judith Luebke (Health Science); Mary Frances Visser (Human Performance); Mark Windschitl (Health Science); Jim Wise (Recreation, Parks and Leisure Services); Diane Witt (Nursing), Catarina Fritz (Sociology); Keith Luebke (Nonprofit Leadership)

The study of aging has from its founding included the biological, psychological and social perspectives. The Minor in Aging Studies provides undergraduate students with the opportunity to explore these varied perspectives while gaining foundational knowledge of aging. Within the next two decades, elders over the age of 65 will make up 25% of the population in the United States. Understanding aging processes and issues will support work in any discipline which makes the

Minor in Aging Studies an appropriate addition to any major. The University is a member of the Association for Gerontology in Higher Education.

POLICIES/INFORMATION

All Aging Studies students **must** register with the Aging Studies Program director at the beginning of their program.

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

P/N Grading Policy. All coursework for the minor, with the exception of the internship and the practicum, must be taken for a letter grade.

AGING STUDIES MINOR

Core (choose 3 credits)

GERO 200 Family Dynamics of Aging (3)

GERO 200W Family Dynamics of Aging (3)

Health Core (choose 3 credits)

ANTH 421W Health, Culture and Disease (3)

BIOL 417 Biology of Aging and Chronic Diseases (3)

HLTH 455 Health and Aging (3)

Social and Behavioral Science Core (choose 6 credits)

ANTH 436W	Anthropology of Aging (3)
PSYC 466	Psychology of Aging (4)
SOC 404	Sociology of Aging (3)
SOC 405	Sociology of Death (3)
SOWK 419	Social Work and Aging (3)

Required Internship (choose 3 credits)

GERO 497	Internship (1-6)
GERO 498	Practicum: Nursing Home Administration (1-6)

Elective

Please note that students may not take both SOC 405: Sociology of Death and HLTH 441: Death Education for credit toward this Minor.

Elective Credits (choose 6 credits)

FCS 474	Community Resources and Family Support (3)
GERO 450	Innovations in Aging Policy (3)
GERO 480	Nursing Home Administration (3)
GERO 485	Topics in Gerontology (1-3)
GERO 499	Individual Study in Gerontology (1-4)
HLTH 441	Death Education (3)
RPLS 482	Leisure and Older Adults (3)

**UNDERGRADUATE CERTIFICATION IN
LONG-TERM ADMINISTRATION**

The Undergraduate Certificate in Long-Term Care Administration provides multidisciplinary perspectives and coursework which culminates in a professional practicum experience. Students engaging with this certificate typically expect to enter careers in long-term care administration in skilled nursing facilities, nursing homes or rehabilitation facilities. Most students will also take both the Minnesota and federal nursing home administrator license exams once all coursework is completed.

Major Common Core

ACCT 210	Managerial Accounting (3)
GERO 480	Nursing Home Administration (3)
GERO 498	Practicum: Nursing Home Administration (1-6)
HLTH 455	Health and Aging (3)
MGMT 200	Introduction to MIS (3)
MGMT 330	Principles of Management (3)
MGMT 340	Human Resource Management (3)

Major Restricted Electives**Gerontology Electives**

(choose 3-4 credits from one of the following)

GERO 200	Aging: Interdisciplinary Perspectives (3)
GERO 200W	Family Dynamics of Aging (3)
SOC 404	Sociology of Aging (3)

AGING STUDIES MINOR FOR NURSING STUDENTS

The Minor in Aging Studies for Nursing Students provides undergraduate nursing students with the opportunity to explore the biological, psychological and social perspectives on aging while enhancing their specific knowledge of nursing in relation to older persons. Within the next two decades elders over the age of 65 will comprise 25% of the population in the United States leading to a shortage of over one million nurses to serve the aging population, making this minor particularly beneficial in supporting this career choice for nursing students. The University is a member of the Association for Gerontology in Higher Education.

POLICIES/INFORMATION

All Aging Studies students must register with the Aging Studies Program director at the beginning of their program.

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

P/N Grading Policy. All coursework for the minor, with the exception of the internship and practicum, must be taken for a letter grade.

Note: These policies are related to the Aging Studies Program only. Students choosing to minor in Aging Studies must still adhere to any and all policies set forward by the School of Nursing. Students are advised to meet with their Nursing advisor prior to registering for the minor with the Aging Studies Program director.

Minor Core**Nursing Core**

NURS 334	Physiologic Integrity I (4)
NURS 335	Family and Societal Nursing Inquiry (3)
NURS 336	Assessment and Nursing Procedures (5)
NURS 366	Quality, Safety, and Informatics in Nursing Practice (3)
NURS 434	Physiologic Integrity III (4)
NURS 435	Nursing Care of Families in Transition II (3)

Required Core (choose 3 credits)

GERO 200	Aging: Interdisciplinary Perspectives (3)
GERO 200W	Family Dynamics of Aging (3)

Social and Behavioral Science Core (choose 6 credits)

ANTH 436	Anthropology of Aging (3)
PSYC 466	Psychology of Aging (3)
SOC 404	Sociology of Aging (3)
SOWK 419	Social Work and Aging (3)

Minnesota State Mankato's Nursing Home Administration Track for Licensure in the State of Minnesota. A license is required to administer a nursing home in each of the 50 states.

In order to complete all academic course work for licensure, students must complete one class from each subpart (of which there are eight) and a practicum. Program consists of 24-25 credits.

- Subpart 1 - Organizational Management: HLTH 659, Health Care Administration or MGMT 330, Principles of Management
- Subpart 2 - Managerial Accounting: ACCT 210, Managerial Accounting
- Subpart 3 - Gerontology: GERO 200, Aging: Interdisciplinary Perspectives or SOC 404 / SOC 504, Sociology of Aging
- Subpart 4 - Health Care and Medical Needs: HLTH 455 / HLTH 555, Health and Aging or NURS 340, Gerontological Nursing
- Subpart 5 - Nursing Facility Services, Programs and Issues, Subpart 7 - Regulatory Management: GERO 480 / GERO 580, Nursing Home Administration
- Subpart 6 - Human Resources: POL 463 / POL 563, Public Personnel Administration or MGMT 340, Human Resource Management or POL 662, Seminar: Human Resource Management
- Subpart 8 - Information Uses: MGMT 200, Introduction to MIS
- Practicum: GERO 498 / GERO 698, Practicum: Nursing Home Administration

COURSE DESCRIPTIONS**GERO 200 (3) Family Dynamics of Aging**

This course will answer the question "Why should I care about getting old when I am young?" through an exploration of the life course perspective, service learning opportunities, and written reflection and exploration.

Fall, Spring

GE-2, GE-7

Diverse Cultures - Gold

GERO 200W (3) Family Dynamics of Aging

This course will answer the question "Why should I care about getting old when I am young?" through an exploration of the life course perspective, service learning opportunities, and written reflection and exploration.

Fall, Spring

WI, GE-2, GE-7

Diverse Cultures - Gold

AGING STUDIES CONTINUED

GERO 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

GERO 450 (3) Innovations in Aging Policy

Engaging with the practice of policy development, understanding critical policies impacting the experience of aging, and learning how to become a policy entrepreneur will be the focus for this course. The course will also explore innovations in aging policy globally.

Spring

GERO 480 (3) Nursing Home Administration

Issues and trends, programs and services, funding mechanisms and regulations. Meets state educational requirements for specific content areas.

Spring

GERO 485 (1-3) Topics in Gerontology

Topics vary as announced in class schedule. May be retaken for credit if topic is different.

GERO 491 (1-6) In-Service

GERO 497 (1-6) Internship

Pre: Consent

Fall, Spring

GERO 498 (1-6) Practicum: Nursing Home Administration

For students following plan of study for nursing home administration licensure only.

Pre: by application and consent only

Fall, Spring

GERO 499 (1-4) Individual Study in Gerontology

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, industry and schools.

ALLIED HEALTH AND NURSING INTRO. COURSE

Allied Health and Nursing Intro. Course

124 Myers Field House • 507-389-6315

website: <http://ahn.mnsu.edu/>

Dean: Kristine Retherford

The college does not offer a degree entitled Allied Health and Nursing, but it does include six academic departments and one school: Dental Hygiene; Family Consumer Science; Health Science; Human Performance; Recreation, Parks and Leisure Services; Speech, Hearing and Rehabilitation Services; and the School of Nursing which offer a number of undergraduate academic majors and minors. These include: athletic coaching; alcohol and drug studies; child development and family studies; communication disorders; community health; consumer studies; corporate and community fitness/wellness; dental hygiene; developmental/adapted physical education; dietetics; exercise science; family consumer

science education; foods and nutrition; health and physical education; nursing, recreation, parks and leisure services; therapeutic recreation; leisure planning and management; resource management; sport management; sport medicine. Post-baccalaureate work, leading to a Master's degree is available in many of the programs, along with a collaborative doctoral program in the School of Nursing. In addition, the college coordinates Pre-Physical Therapy and Pre-Occupational Therapy pre-professional programs.

COURSE DESCRIPTION

CAHN 101W (3) The Health Care Professions

This interdisciplinary course is designed to introduce students to health careers and related professions. It is a writing intensive course preparing students to become effective communicators within the context of health care settings.

Fall, Spring, Summer

WI

AMERICAN INDIGENOUS STUDIES

American Indigenous Studies

Closest affiliation to the College of Social & Behavioral Sciences

American Indian Studies Program

335 Trafton Science Center N 335 • 507-389-3224

Email: rhonda.dass@mnsu.edu

Director: Rhonda Dass

Faculty: Rhonda Dass, Chelsea Mead

American Indigenous Studies (AIS) provides an interdisciplinary and broad understanding of Indigenous Americans, especially the Dakota, and their respective ways of life in the past, present, and future. AIS welcomes all students - Native and non-native - to pursue knowledge of Indigenous American cultures, knowledge, languages, histories, politics, media, and other topics. The AIS program will prepare students to pursue graduate studies and careers located in tribal communities or in ethnically diverse settings. Incorporating Indigenous perspectives into the curriculum, AIS facilitates a space whereby Indigenous American worldviews will be an enduring and integral part of the diverse intellectual atmosphere of the University.

POLICIES/INFORMATION

Admission to Major is granted by the American Indian Studies Program. American Indian Studies adheres to the minimum University admission requirements: 1) a minimum of 32 earned semester credit hours and 2) a minimum cumulative GPA of 2.00 ("C").

AMERICAN INDIGENOUS STUDIES BA

Degree completion = 120 credits

Prerequisites for Major

AIS	101	Introductions to American Indigenous Studies (3)
AIS	102	The Story of American Indian Country to 1900 (4)
AIS	103	The Story of American Indian Country 1900 to Present (3)

Major Common Core

AIS	220W	Introduction to Tribal Sovereignty (3)
AIS	230W	American Indians of Minnesota (3)
AIS	460	Behaving Like Relatives (3)
(choose 3 credits - one version of the course)		
AIS	210	Oral Traditions (3)
AIS	210W	Oral Traditions (3)

Major Restricted Electives

AIS	110	Dakota Culture I (4)
AIS	111	Dakota Culture II (4)

Major Unrestricted Electives

Program Electives

(choose 12 credits - 4 courses for a minimum of 12 credits)

AIS	240	American Indian Women (3)
AIS	240W	American Indian Women (3)
AIS	275	Selected Topics (3)
AIS	300W	American Indian Leaders (3)
AIS	340	American Indians in Film (3)
AIS	360	Indigenous Peoples and Environmental Struggles (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	455	Museum Science and Representation (3)
AIS	475	Selected Topics (3)
AIS	497	Internship (1-12)
AIS	499	Individual Study (1-6)

Outside Electives (choose 9 credits)

ANTH	331	Environmental Anthropology (3)
ANTH	334	Native American Cultures of North America (3)
ANTH	410	Archaeology of Minnesota (3)
ANTH	411	Archaeology of Native North America (3)
ANTH	412	Archaeology of Latin America (3)
ENG	318	Multicultural Literature (2-4)
ENG	436	Native American Literature (2-4)
LAW	234	Policing in a Diverse Society (3)
PHIL	115W	Philosophy of Race, Class and Gender (3)
POL	426	Racial and Ethnic Politics (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

AMERICAN INDIAN STUDIES BS

Prerequisites for Major

AIS	101	Introduction to American Indigenous Studies (3)
AIS	102	The Story of American Indian Country to 1900 (4)
AIS	103	The Story of American Indian Country 1900 to Present (3)

Major Common Core

AIS	220W	Introduction to Tribal Sovereignty (3)
AIS	230W	American Indians of Minnesota (3)
AIS	460	Behaving Like Relatives (3)

(choose one course below - 3 credits)

AIS	210	Oral Traditions (3)
AIS	210W	Oral Traditions (3)

Major Unrestricted Electives

Program Electives

(choose 12 credits - 4 courses for a minimum of 12 credits)

AIS	240	American Indian Women (3)
AIS	240W	American Indian Women (3)
AIS	275	Selected Topics (3)
AIS	300W	American Indian Leaders (3)
AIS	340	American Indians in Film (3)
AIS	355	Museum Science and American Indians (3)
AIS	360	Indigenous Peoples and Environmental Struggles (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	475	Selected Topics (3)
AIS	497	Internship (1-12)
AIS	499	Individual Study (1-6)

Outside Electives (choose 9 credits)

ANTH	331	Environmental Anthropology (3)
ANTH	334	Native American Cultures of North America (3)

ANTH	410	Archaeology of Minnesota (3)
ANTH	411	Archaeology of Native North America (3)
ENG	318	Multicultural Literature (2-4)
ENG	436	Native American Literature (2-4)
LAW	234	Policing in a Diverse Society (3)
PHIL	115W	Philosophy of Race, Class and Gender (3)
POL	426	Racial and Ethnic Politics (3)

Required Minor: Yes. Any.

AMERICAN INDIGENOUS STUDIES MINOR

Minor Core

AIS	210W	Oral Traditions (3)
AIS	220W	Introduction to Tribal Sovereignty (3)
AIS	230W	American Indians of Minnesota (3)
AIS	460	Behaving Like Relatives (3)

Minor Electives (choose 9 credits)

AIS	210W	Oral Traditions (3)
AIS	240	American Indian Women (3)
AIS	275	Selected Topics (3)
AIS	300W	American Indian Leaders (3)
AIS	340	American Indians in Film (3)
AIS	360	Indigenous People and Environmental Struggles (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	455	Museum Science and Representation (3)
AIS	475	Selected Topics (3)
AIS	497	Internship (1-12)
AIS	499	Individual Study (1-6)

AMERICAN INDIGENOUS STUDIES CERTIFICATE

Students obtain an understanding of the Indigenous American experience in the United States. Students begin to comprehend the vast history of native cultures and the scope of contemporary issues facing Indigenous Americans today. The certificate is designed to enhance any major.

Major Restricted Electives

Foundation Courses (choose 6 credits)

AIS	101	Introduction to American Indigenous Studies (3)
AIS	210W	Oral Traditions (3)
AIS	220W	Introduction to Tribal Sovereignty (3)
AIS	230W	American Indians of Minnesota (3)
AIS	240W	American Indian Women (3)
AIS	275	Selected Topics (3)

Major Unrestricted Electives

Expanded courses (choose 9 credits)

AIS	340	American Indians in Film (3)
AIS	380	The Sacred Landscape (3)
AIS	410	American Indian Folklife (3)
AIS	455	Museum Science and Representation (3)
AIS	460	Behaving Like Relatives (3)
AIS	475	Selected Topics (3)
ANTH	410	Archaeology of Minnesota (3)
ANTH	411	Archaeology of Native North America (3)
ANTH	440	Native American Cultures of North America (3)
ENG	318	Multicultural Literature (2-4)
ENG	436	Native American Literature (2-4)
SOC	360	Indigenous Peoples and Environmental Struggles (3)

COURSE DESCRIPTIONS

AIS 101 (3) Introduction to American Indigenous Studies

Class introduces students to history of the discipline and surveys both historic and contemporary topics of importance to American Indian Studies including gender roles, education, sovereignty, treaties, and oral tradition.

GE-5, GE-7

Diverse Cultures - Purple

AIS 102 (4) The Story of American Indian Country to 1900

The story of American Indian Country has often been told from the perspective of others instead of from the community. This class re-examines the narrative and shifts the perspective of the story. Topics of cross-cultural interactions, policy formations, cultural evolution, survival and negotiation are examined.

Variable

GE-5, GE-7

Diverse Cultures - Purple

AIS 103 (3) The Story of American Indian Country 1900 to Present

The story of American Indian Country has often been told from the perspective of others instead of from the community. The class re-examines the narrative and shifts the perspective of the story. Topics of cross-cultural interactions, policy formations, cultural evolution, survival and negotiation are examined.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

GE-5, GE-7

AIS 110 (4) Dakota Culture I

This course provides the first steps in understanding the Dakota culture through the language of the Oyate or Dakota people. Students will be introduced to culture and concepts through the Dakota language and learn to understand the words from a Dakota worldview.

Pre: AIS 101

Variable

Diverse Cultures - Purple

AIS 111 (4) Dakota Culture II

This course provides the second step in understanding the Dakota culture through the language of the Oyate or Dakota people. Students will continue to explore an understanding of culture and concepts through the Dakota language and learn to understand the words from a Dakota worldview.

Pre: AIS 101, AIS 110

Variable

Diverse Cultures - Purple

AIS 210 (3) Oral Traditions

Oral traditions are at the base of all American Indian cultures. This class will provide students with the necessary tools for a better understanding of traditional knowledge and its importance within diverse traditional cultures.

Variable

GE-5, GE-7

Diverse Cultures - Purple

AIS 210W (3) Oral Traditions

Oral traditions are at the base of all American Indian cultures. This class will provide students with the necessary tools for a better understanding of traditional knowledge and its importance within diverse traditional cultures.

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

AIS 220W (3) Introduction to Tribal Sovereignty

Course introduces students to the legal side of being American Indian. Politics and policies will be examined to show how a contemporary native experience is shaped through American courts, Presidential chambers, and Native activist movements.

Pre: AIS 101

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

AIS 230W (3) American Indians of Minnesota

This course will provide an overview of Minnesota Indian nations and their relations to each other and the effects of European incursion. Subsequent relations will focus on the US-Dakota war and its aftermath.

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

AIS 240 (3) American Indian Women

Being American Indian and being a woman creates a unique situation for women who have been directly influenced by the differences of gender roles from intersecting cultures. This course will focus on how those differences have affected American Indian Women.

Variable

GE-5, GE-7

Diverse Cultures - Purple

AIS 240W (3) American Indian Women

Being American Indian and being woman creates a unique situation for women who have been directly influenced by the differences of gender roles from two intersecting cultures. This course will focus on how those differences have affected American Indian Women.

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

AIS 275 (3) Selected Topics: Varies

The course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing basis.

Variable

AIS 300W (3) American Indian Leaders

Examines leadership prior to European colonization, the overlap of Indian and colonial leadership, contemporary governmental leadership, and contemporary tribal leadership. Defines what is and is not leadership and examine characteristics of individuals deserving the title of leader among American Indians.

Variable

WI

AIS 340 (3) American Indians in Film

This course examines American Indian identity as it relates to Hollywood film industry history. Underlying issues of contemporary Indians are also addressed through an introduction to Native Cinema and the effects of current technologies and globalization.

Variable

Diverse Cultures - Purple

AIS 360 (3) Indigenous Peoples and Environmental Struggles

Introduces students to the differences between indigenous and Western views of the environment. Analyzes the impact of invasion and encroachment on indigenous societies' interactions with nature. Compares historical and contemporary environmental issues in indigenous societies.

Variable

GE-10

Diverse Cultures - Purple

AIS 380 (3) The Sacred Landscape

Course introduces students to the various ways that land is used by American Indians. We will explore traditional land use, contemporary land use, and land issues that impact American Indians and cultural activities that are tied to the land.

Variable

Diverse Cultures - Purple

AIS 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

AIS 410 (3) American Indian Folklife

This course will provide students with a greater understanding of the social structure of American Indian nations through the production, reproduction and revival of traditions. This will include looking at oral, musical, kinetic, ideational, and material traditions.

Variable

AIS 455 (3) Museum Science and Representation

Introduces students to museum science and how historic constructs, practices, and contemporary issues of the museum as an institution relates to the representation of American Indians. Focus will be on translating Western practices to an Indigenous aesthetic.

Variable

Diverse Cultures - Gold

AIS 460 (3) Behaving Like Relatives

Students gain practical knowledge of fieldwork techniques and experience through experiential learning. Students learn to approach elders appropriately with regards to age, social status, and gender, in order to build a cross-cultural kinship relationship i.e., to behave like relatives.

Pre: AIS 101 or AIS 102

Variable

Diverse Cultures - Gold

AIS 475 (3) Selected Topics: Varies

This course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing basis.

Variable

AIS 497 (1-12) Internship

Field experience in a setting appropriate to the discipline of American Indian Studies. Requires advanced standing in American Indian Studies and consent of supervising faculty.

Diverse Cultures - Gold

AIS 499 (1-6) Individual Study

Allows for an advanced level pursuit of special projects of research on an independent basis. Requires coordination with a faculty member.

On-Demand

ANTHROPOLOGY

Anthropology

College of Social & Behavioral Sciences

Department of Anthropology

358 Trafton Science Center N • 507-389-6318

Chair: Susan L. Schalge

J. Heath Anderson, Kathleen Blue, Rhonda Dass, Kathryn Elliott, Chelsea Mead, Susan Schalge, Ronald Schirmer

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.

POLICIES/INFORMATION

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.

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 Advising "U", 111 Armstrong Hall, telephone 507-389-6306, or by the department chair.

ANTHROPOLOGY BA

Degree completion = 120 credits

Prerequisites to the Major

ANTH 101 Introduction to Anthropology (4)

Major Common Core

ANTH 210 Introduction to Archaeology (4)

- ANTH 220 Human Origins (4)
- ANTH 230 Peoples and Cultures of the World (4)
- ANTH 240 Language and Culture (4)
- ANTH 300 Introduction of Anthropology Methods (3)
- ANTH 438W Anthropological Theory (4)
- ANTH 475 Senior Thesis (3)

ANTH 300 must be taken prior to ANTH 475. ANTH 475 Senior Thesis must be taken under the guidance of the student's advisor.

Major Restricted Electives

(Choose 9 credits from range of courses listed below with exclusion of courses listed in Major Common Core)

ANTH 102 - ANTH 499

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

ANTHROPOLOGY BS

Degree completion = 120 credits

Prerequisites to the Major

ANTH 101 Introduction to Anthropology (4)

Major Common Core

- ANTH 210 Introduction to Archaeology (4)
- ANTH 220 Human Origins (4)
- ANTH 230 Peoples and Cultures of the World (4)
- ANTH 240 Language and Culture (4)
- ANTH 300 Introduction to Anthropology Methods (3)
- ANTH 438W Anthropological Theory (4)
- ANTH 475 Senior Thesis (3)

ANTH 300 must be taken prior to ANTH 475. ANTH 475 Senior Thesis must be taken under the guidance of the student's advisor.

Major Restricted Electives

(Choose 9 credits from range of courses listed below with exclusion of courses listed in Major Common Core)

ANTH 102 - ANTH 499

Required Minor: Yes. Any.

ANTHROPOLOGY MINOR

Required for Minor

ANTH 101 Introduction to Anthropology (4)

ANTHROPOLOGY CONTINUED

Required Core

(Choose a minimum of 8 credits from the following)

ANTH 210	Introduction to Archaeology (4)
ANTH 220	Human Origins (4)
ANTH 230	Peoples and Cultures of the World (4)
ANTH 240	Language and Culture (4)
ANTH 300	Introduction to Anthropology Methods (3)
ANTH 438W	Anthropological Theory (4)

Required Electives for Minor

(Choose 6-10 credits from range of courses listed below with exclusion of courses taken in Required Core)

ANTH 102 - ANTH 499

MUSEUM STUDIES CERTIFICATE

The aim of this program is to provide a perspective on the theory and practice of museums in an expanding global environment of technological, social and political change for current and future museum professionals. It emphasizes the role of technology as a pervasive aspect in today's museum, examines new models of education, exhibition, and business strategies, and explores the role of the museum as an agent of social change.

We welcome students interested in all types of museums including history, technology, science, art, special topic or themed museums, historic sites, national parks, and zoos, and those interested in exhibitions for corporations, government agencies, and private organizations.

Required for Certificate

ART 265W	Art As Politics (3)
MUSE 200W	Introduction to Museum Studies (3)
NPL 273	Introduction to the Nonprofit Sector (3)

Major Restricted Electives (choose 6 credits)

AIS 455	Museum Science and Representation (3)
ANTH 414	Museology (3)
ANTH 415	Cultural Resource Management (3)
ART 434	Arts Administration (3)
ART 464	Art Museum and Exhibition Studies (3)
MUSE 497	Internship (1-6)
MUSE 499	Individual Study (1-6)
NPL 473	Advanced Workshop in Nonprofit Leadership (3)
PHIL 460	Philosophy of the Arts (3)
RPLS 465	Event Management (3)
URBS 453	Grants Administration (3)

COURSE DESCRIPTIONS

ANTH 101 (4) 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?"
Fall, Spring
GE-5, GE-8
Diverse Cultures - Purple

ANTH 102 (4) 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.
GE-5, GE-10

ANTH 120 (3) Forensic Science: An Anthropological Approach

This anthropology course explores the areas of anatomical forensic science. Students will learn the techniques and methodology involved in collection, preservation, and analysis of evidence pertaining to human remains. The course will include such subjects as analysis of skeletal trauma, victim identification, bite-mark analysis, and crime scene recovery methods. Ethics and standards in medico-legal investigations will also be stressed.
GE-3

ANTH 210 (4) Introduction to Archaeology

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. Lab included.
GE-3, GE-10,
Variable

ANTH 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, and the fossil record of human evolution. Lab included.
Fall
GE-3

ANTH 230 (4) People and Cultures of the World

This introduction to cultural anthropology covers cultural diversity and organization by examining several examples in detail. Both anthropological methodology and theory will be important parts of this course.
Fall, Spring
GE-8
Diverse Cultures - Purple

ANTH 240 (4) Language and Culture

Language provides not only communication but identification of oneself and one's group. Humans are extremely sensitive to language, dialect, jargon, and slang. An understanding of language and its relationship to culture is basic to any understanding of human beings.
Spring
GE-5, GE-8
Diverse Cultures - Gold

ANTH 245 (3) The Social Life of Swearing

What qualifies a word as "bad"? How does profanity, cursing, and swearing evolve across time and vary across cultures? Where does the power of these "bad" words come from? What relationship do these words have to issues of gender, race, and class? This course examines the historical evolution and modern usage of obscenities to answer these questions.
GE-7, GE-9
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)
Diverse Cultures - Purple

ANTH 250W (4) Portraits of Culture

Survey of human cultures through a variety of classic and contemporary anthropological writing and film. Students write weekly reflections. Written work is shared, discussed, and revised.
Spring, Summer
WI, GE-5
Diverse Cultures - Purple

ANTH 260 (3) Vampires, Werewolves, and Zombies: Folklore of Fear

Fear and how we depict it in popular culture. Course examines folklore traditions and how they translate in contemporary storytelling formats.
Variable
GE-5, GE-8
Diverse Cultures - Purple

ANTH 261 (3) Taboos, Tattoos, and Tshirts: Culture and Body Art

People all around the world use tattoos, piercing, makeup and dress codes as symbolic tools to represent their ideas of self, or as a means of gender, ethnicity, and class control and domination. This course looks at how people express connection to and disconnection from culture through body art practices.
Alt-Fall
GE 5, GE-8
Diverse Cultures - Purple

ANTH 269 (3) Anthropology of Sex

Sex and our relationship with it. This course examines the topics of sex, sexuality, and gender by exploring the diverse range of sexual cultures of the world in the past and the present. Attention is given to the role of language, biology, culture, and the archeological record of societies' fascination with sex.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

GE-5, GE-7

Diverse Cultures - Purple

ANTH 280 (3) Engaged Anthropology

Engaged Anthropology is a multidimensional service-learning course designed to facilitate real-world learning experiences for students on broad social issues; practice a variety of anthropological concepts, theories, and methods; and provide service to the local community.

Pre: ANTH 101, ANTH 230, or instructor Permission.

GE-7, GE-11

Diverse Cultures - Gold

ANTH 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.

Variable

ANTH 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 first year-sophomore level rather than the more advanced level of the ANTH 499 individual study.

Pre: Consent

Variable

ANTH 300 (3) Introduction to Anthropology Methods

This course examines the methodologies of all four fields of Anthropology. Students will gain practical experience in various methods that professionals utilize on a regular basis within the discipline. Discussions of the issues surrounding various anthropological methods will be part of this course.

Pre: ANTH 101

Fall

ANTH 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.

Variable

ANTH 323 (3) Primate Behavior

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

Pre: ANTH 101 or ANTH 220 or consent

Variable

ANTH 331 (3) Environmental Anthropology

This course focuses on studying the diversity of human societies using environmental approaches such as evolutionary/ecological perspectives and systems modeling. Case studies will be drawn from Native American cultures.

ANTH 332 (3) Anthropology of Religion

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

Fall

Diverse Cultures - Purple

ANTH 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.

Variable

ANTH 340 (4) Language and Power

Language is powerful. What we say, how we say it, where we say it, and to whom we say it matters. This course explores the connection between power, language, performance, and identity. The relationships between language, gender, sexuality, race, ethnicity, and socioeconomic class are explored by investigating historical and present day sources of language practices and events.

GE-5, GE-7

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

Diverse Cultures - Purple

ANTH 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

ANTH 410 (3) Archaeology of Minnesota

A detailed study of Minnesota archaeology from ca. 12,000 years ago to ca. 1900, with a focus on diverse and changing Native American populations.

ANTH 411 (3) Archaeology of Native North America

A survey of current knowledge about the prehistoric Native American inhabitants of North America from ca. 15,000 years ago until ca. 1900. Topics will focus on the processes of cultural development, change, and disruption by Euro-American influences.

ANTH 412 (3) Archaeology of Latin America

A detailed study of Latin American archaeology from ca. 12,000 years ago to ca. 1900, with a focus on diverse and changing Native American populations.

ANTH 414 (3) Museology

A review of the history and philosophy of museums, the legal and ethical issues impacting museums, the nature and treatment of collections, creation, exhibition and exhibit design, the role of museums in education, museum personnel and financial management, and museums in the technological/electronic age.

Pre: ANTH 101, ANTH 210, or consent

Variable

ANTH 415 (3) Cultural Resource Management

Review of how cultural resources are being preserved and managed under current laws and regulations. Emphasis on examination of conservation, preservation and rescue methods in modern archaeology, and problems and issues in historic preservation and resource management.

Pre: ANTH 101, ANTH 210 or consent

Variable

ANTH 416 (3) Archeological Methods

An intensive exploration of how to identify, catalogue, and curate archeological materials in a laboratory setting. Topics will include lithics, pottery, faunal, floral, metal, and other materials as well as data structure and recordation.

Fall (On-Demand)

ANTH 420 (3) Human Osteology

An advanced examination of the human skeletal system and the application of this information in the fields of bioarchaeology, paleoanthropology, and forensic anthropology. This course features hands-on identification and analysis of human skeletal material, with an emphasis on laboratory techniques.

ANTH 421W (3) Health, Culture, and Disease

Cross-cultural examination of the healing traditions, health beliefs and the impact of social, economic and political factors on the health of peoples in different cultures around the world and among diverse ethnic groups within culturally plural societies, including the United States.

Variable

WI

Diverse Cultures - Purple

ANTH 422 (3) Forensic Anthropology

This course will acquaint students with the application of human osteological techniques in civil and criminal investigations, including assessment of the recovery scene, determination of identity, and analysis of evidence relating to cause and manner of death.

Pre: ANTH 420

ANTH 423 (3) Evolution and Behavior

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

Pre: ANTH 101 or ANTH 220 or consent

Variable

ANTH 424 (3) Bioarchaeology

Bioarchaeology focuses on the diet, health, and occupations of past populations through the analysis of their skeletal remains. Readings and lab work will promote a practical understanding of the methods used in the discipline.

Variable

ANTH 425W (3) Anthropology of Death

The biological and cultural aspects of death, as seen anthropologically, are the focus of this course. Mortuary behavior, ritual, and treatment of the human body will be addressed both temporally and cross-culturally.

Variable

WI

ANTH 430 (3) Peoples and Cultures 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, ANTH 230, or consent

Spring

ANTH 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, ANTH 230, or consent; ETHN 100, ETHN 101, or ETHN 150 or consent.

Variable

ANTH 432 (3) Kinship, Marriage and Family

Kinship is the most basic principle of organization for all human societies. The course analyzes the main theories and methods of studying social organization, and explores cross-cultural variations in kinship, marriage and family systems.

ANTH 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, ANTH 230, or consent

Spring

ANTH 435 (3) The Rise of City-States and Nations

A pivotal moment in cultural development is when city-states and nations arrive to change the structure of a cultural group. This course has varying topics to present each cultural area in its unique context. May be repeated with different topic.

Pre: ANTH 101, ANTH 230, or consent

Variable

ANTH 436W (3) Anthropology of Aging

An cross-cultural examination of the aging process, status, and treatment of elders around the world.

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

Variable

WI

Diverse Cultures - Purple

ANTH 437 (3) Applied Anthropology

Examines the practical applications of anthropological knowledge to problem-oriented research and the problems of directed sociocultural change among contemporary populations. Selected projects and case studies are used to illustrate the complexity of applied sociocultural change.

Pre: ANTH 101, ANTH 230 or consent

Variable

ANTH 438W (4) Anthropological Theory

Examination of the intellectual history of anthropology from its nineteenth century roots to today's current theoretical trends. Students will learn about the major schools of thought in anthropological theory and practice critical examination of their applications.

Fall

WI

ANTH 439 (3) Qualitative Research Methods

The aim of this course is to make students methodologically literate. Students will learn how to develop research designs that rely on qualitative research methods such as participant observation. They will learn how to apply these methods by participating in small scale studies of human behavior. Some quantitative methods will also be discussed. Students will learn critical examination of published data and conclusions.

Pre: ANTH 101, ANTH 220 or consent

Variable

ANTH 440 (3) Native American Cultures of North America

American Indians adapted to environmental systems in North America with cultures ranging from small groups of foragers 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.

Variable

ANTH 443W (3) People and Cultures of East Asia

Survey of East Asian cultural region. Cultural diversity, change, and continuity examined in China, Japan and Korea through institutions and cultural settings. Focus includes how modern East Asian societies face internal social changes and their changing international status.

Variable

WI

Diverse Cultures - Purple

ANTH 470 (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 491 or ANTH 492 or ANTH 493 or ANTH 494

Fall, Spring

ANTH 475 (3) Senior Thesis

A faculty-supervised, student-designed capstone project for the major. Students will take ANTH 475 after completing ANTH 300. The nature of the student's thesis will be determined jointly by the student and their advisor. The capstone project is a written thesis involving writing, laboratory work, fieldwork or various combinations. Students must present completed thesis in a public forum.

Pre: ANTH 300

Fall Spring

ANTH 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, ANTH 102, or ANTH 220

Variable

ANTH 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.

Variable

ANTH 486 (1-3) Workshop

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
Variable

ANTH 491 (1-3) Archaeology Laboratory

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

Variable

ANTH 492 (1-3) Biological Anthropology Lab

Guided advanced laboratory work in biological/physical anthropology

Pre: Consent
Variable

ANTH 493 (1-3) Ethnology Lab

Individual projects are done in close coordination with faculty member.

Pre: Consent
Variable

ANTH 494 (1-3) Linguistic Lab

Individual projects are done in close coordination with faculty member.

Variable

ANTH 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
Variable

ANTH 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
Fall, Spring

ANTH 498 (1-3) Internship: Teaching Anthropology

Students will work with faculty in the preparation and delivery of course materials in lower division undergraduate courses. Lecture/lab prep, delivery, use of multimedia, leading discussions and exercises. Open to senior majors and minors in good standing.

On Demand

ANTH 499 (1-6) Individual Study

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

Pre: Consent
Fall, Spring

MUSE 200W (3) Introduction to Museum Studies

Introduces history of museums and philosophical nature of museums, covering types and definitions of museums, discusses contemporary practice in museums, and examines current issues in the profession as we face the future of museums in the twenty-first century.

Variable
WI, GE-5, GE-8

MUSE 497 (1-6) Internship

Arranged internship allows students to have a hands on experience applying theories and methodology from course work in the field to area of interest. Requires coordination with a faculty member.

On-Demand

MUSE 499 (1-6) Individual Study

This course allows pursuit of individual avenues of study that may not be offered in the curriculum and for advanced level pursuit of special projects of research on an independent basis. Requires coordination with a faculty member.

On-Demand

APPLIED ORGANIZATIONAL STUDIES

Applied Organizational Studies

College of Social and Behavioral Sciences

113 Armstrong Hall

Phone: 507-389-5215

Website: www.mnsu.edu/programs/aos.html

Director: Keith Luebke

The B.S. in Applied Organizational (AOS) Studies is a degree completion program designed primarily for working adults that will provide them the qualifications needed to advance in their careers or to change professions. It provides students with education in communication, in critical analysis, and in organizational leadership. These are skills that have been repeatedly identified as highly important in contemporary society and a shifting economy. This degree is designed for individuals who want to develop knowledge and skills that will allow them to serve and contribute to transforming the organizations of which they are a part, be it their community, church, work, nonprofit or voluntary organization, city, or state. The program's design assumes that students have completed Minnesota's general education Transfer Curriculum and at least 60 credits of coursework. It also assumes that students will meet Minnesota State Mankato's undergraduate graduation requirements.

POLICIES/INFORMATION

Completion of Minnesota Transfer Curriculum and completion of AOS 301.

APPLIED ORGANIZATIONAL STUDIES BS

Degree completion = 120 credits

Major Common Core

AOS 301 Introduction to Applied Organizational Studies
AOS 488 Portfolio in Professional Leadership

Major Unrestricted Electives

Communications in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student's advisory committee.

Critical Thinking and Decision-Making in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student's advisory committee.

Leadership in Organizations (choose 12 credits)
Any discipline 300-499 Specific courses arranged with student's advisory committee.

Major Emphasis

Area of Concentration (choose 7-8 credits)
Any discipline 300-499 Specific courses are in a single discipline arranged with the student's advisory committee.

Required Minor: None.

APPLIED ORGANIZATIONAL STUDIES CONTINUED

COURSE DESCRIPTIONS

AOS 301 (3) Introduction to Applied Organizational Studies

Topics include world economics and their implications for the labor force, critical and creative thinking, leadership, and portfolio assessment. Required for admission to the Applied Organizational Studies program.
Variable

AOS 320 (3) Workshop 1 - Applied Organizational Studies

The focus in this course is on communication within organizations (including virtual environments), workplace engagement in virtual teamwork and the application of critical and creative thinking resulting in organizational innovation. The course also engages students in an exploration of the role of social organizing and the impact of networking on organizational growth and sustainability.
Fall, Spring

AOS 380 (3) Workshop 2 - Applied Organizational Studies

The focus in this course is on critical thinking, decision-making, and leadership in contemporary organizational environments. The course also explores the

concept of followership and power distribution, and organizational adaptation due to technological and global economic change. Students will also participate in an applied quantitative research project in an approved organization of choice.
Fall, Spring, Summer (On-Demand)

AOS 420 (1-3) Advanced Workshop - Applied Organizational Studies

The course focuses on contemporary organizational issues and the concept of change in organizational design and development. Subject matter includes the use of causal thinking and econometric measurement, effectuation and entrepreneurial thinking, and the role of mission and vision. Students will complete a project-based exploration of the financial and resource aspects of return on investment comparing the effectual and causal perspectives on an organizational change.
Fall

AOS 488 (1-2) Professional Studies Portfolio

Capstone project in which the student creates a portfolio that demonstrates the student's achievement in the core competencies of the program. Portfolio to be presented to a committee.

Pre: AOS 301

Variable

ART

Art

College of Arts & Humanities

Department of Art

136 Nelson Hall • 507-389-6412

Website: mnsu.edu/artdept/

Chair: Brian Frink

Bradley Coulter, Alisa Eimen, Curt Germundson, James B. Johnson, Mika Laidlaw, Liz Miller, David Morano, David Rogers, Ellen Schofield, Todd Shanafelt, Gina Wenger, Matt Willemssen, Joshua Winkler

Accreditation-Art-The National Association of Schools of Art and Design (NASAD)
The National Council for Accreditation of Teacher Education (NCATE)

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.

POLICIES/INFORMATION

A program planning guide for each major is available in the Department of Art 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 first year.

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 art and art education majors must complete the following:

- ART 101 (3) (Preferred) or ART 100 (3)
- ART 260 or ART 261

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

Contact the department for application procedures.

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 university 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 cumulative 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 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 or ART 101.

The total number of transfer credits accepted for each major/minor is as follows: BFA (24), BS (18), BA (15), and Minor (6).

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 schedule of classes. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required Professional Education courses. The Bachelor of Science in Art Education major must pass all content area coursework with a grade of "C" or higher.

ART BA

Degree completion = 120 credits

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 General Education

ART	260	Art History Survey I (3)
ART	261	Art History Survey II (3)

Major Common Core

ART	103	Three Dimensional Design (3)
ART	110	Drawing Foundations (3)
ART	466	Realism to Postmodernism (3)
ART	495	Senior Exhibit (0-1)

Design Foundations (choose 3 credits)

ART	100	Elements and Principles of Art (3)
ART	101	Design Foundations (3)

Major Restricted Electives

Advanced Art History (choose 3 credits)

ART	413	Scandinavian Art (3)
ART	416	Art of Africa, the Americas, and the South Pacific (3)
ART	417	Medieval Art and Architecture (3)
ART	419	Gender in Art (3)
ART	460	Ancient Art (3)
ART	462	Renaissance Art (3)
ART	463	Mannerism to Romanticism (3)
ART	467	Art of the Islamic World (3)
ART	468	Design: History and Theory (3)
ART	469	Asian Art (3)
ART	492	Art History Seminar (1-6)
ART	494	Topics (3)

Intermediate/Advanced Studio (choose 9 credits)

Select 300-400 level courses with the advisor

ART	302	Interactive Design Survey (3)
ART	304	Typography I (3)
ART	320	Graphic Design II (3)
ART	340	Painting (3)
ART	345	Watercolor (3)
ART	350	Intermediate Ceramics (3)
ART	370	Printmaking: Intermediate Studio (3)
ART	372	Digital Printmaking (3)
ART	375	Black and White Photography (3)
ART	377	Digital Photography (3)
ART	380	Sculpture (3)
ART	402	Motion Graphics (3)
ART	404	Typography II (3)
ART	406	Web Design (3)
ART	410	Drawing Workshop (3-6)
ART	412	Life Drawing (3)
ART	420	Graphic Design III (3-6)
ART	440	Painting (3-6)
ART	445	Watercolor (3-6)
ART	450	Advanced Ceramics (3-6)
ART	470	Printmaking: Advanced Studio (3-6)
ART	475	Photography (3-6)
ART	480	Sculpture (3-6)

Studio Electives: Students must complete six 200-level studio courses from five different areas.

Graphic Design

ART	202	Introduction to Digital Media (3)
ART	220	Graphic Design I (3)

Drawing

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

Mixed Media

ART	231	Mixed Media (3)
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Painting

ART	240	Painting (3)
ART	245	Watercolor (3)

Ceramics

ART	250	Ceramics: Beginning Wheel (3)
ART	251	Ceramics: Beginning Handbuilding (3)

Printmaking

ART	270	Printmaking: Beginning Silkscreen and Lithography (3)
ART	271	Printmaking: Beginning Intaglio/Relief (3)

Photography

ART	275	Photography (3)
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Sculpture

ART	280	Sculpture (3)
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Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

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.

ART BFA - CERAMICS

Degree completion = 120 credits

Required General Education

ART	260	Art History Survey I (3)
ART	261	Art History Survey II (3)

Major Common Core

ART	103	Three Dimensional Design (3)
ART	110	Drawing Foundations (3)
ART	391	Portfolio Review (0)
ART	466	Realism to Postmodernism (3)
ART	495	Senior Exhibit (0-1)

Intermediate Ceramics

(ART 350 must be taken twice before moving to 400 level)

ART	350	Intermediate Ceramics (3)
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Advanced Ceramics (choose 18 credits)

Course may be repeated

ART	450	Advanced Ceramics (3-6)
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Major Restricted Electives

Design Foundations (choose 3 credits)

ART	100	Elements and Principles of Art (3)
ART	101	Design Foundations (3)

Beginning Ceramics (choose 3-6 credits)

ART	250	Ceramics: Beginning Wheel (3)
ART	251	Ceramics: Beginning Handbuilding (3)

Drawing (choose 3 credits from courses not taken)

ART	210	Drawing (3)
ART	212	Life Drawing (3)
ART	310	Drawing (3)
ART	410	Drawing Workshop (3-6)
ART	412	Life Drawing (3)

Advanced Art History (choose 3 credits)

ART	417	Medieval Art and Architecture (3)
ART	467	Art of the Islamic World (3)

Advanced Art History (choose 3 credits from courses not taken)

ART	413	Scandinavian Art (3)
ART	416	Art of Africa, the Americas, and the South Pacific (3)

ART CONTINUED

- ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)
Advanced Art History/Drawing (choose 3 credits from courses not taken)
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Approved Elective (choose 3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Ceramics. Course used to satisfy credit requirements elsewhere may not be counted here.

- ART 202 Introduction to Digital Media (3)
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 220 Graphic Design I (3)
ART 231 Mixed Media (3)
ART 240 Painting (3)
ART 245 Watercolor (3)
ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)
ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)
ART 275 Photography (3)
ART 280 Sculpture (3)
ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 310 Drawing (3)
ART 320 Graphic Design II (3)
ART 340 Painting (3)
ART 345 Watercolor (3)
ART 350 Intermediate Ceramics (3)
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)
ART 380 Sculpture (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 440 Painting (3-6)
ART 445 Watercolor (3-6)
ART 450 Advanced Ceramics (3-6)
ART 470 Printmaking: Advanced Studio (3-6)
ART 475 Photography (3-6)
ART 480 Sculpture (3-6)

Studio Electives

Students must complete five 200-level studio courses from five different areas. (choose five courses from those not taken)

Graphic Design

- ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

- ART 231 Mixed Media (3)

Painting

- ART 240 Painting (3)
ART 245 Watercolor (3)

Ceramics

- ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

- ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

- ART 275 Photography (3)

Sculpture

- ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)

Graphic Design

- ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 320 Graphic Design II (3)

Drawing (ART 310 may be taken twice)

- ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)

Painting (ART 340 may be taken twice)

- ART 340 Painting (3)
ART 345 Watercolor (3)

Printmaking (ART 370 may be taken twice)

- ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)

Photography

- ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)

Sculpture (Art 380 must be taken twice to produce six credits)

- ART 380 Sculpture (3)

Required Minor: None.

ART BFA - DRAWING

Degree completion = 120 credits

Required General Education

- ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Major Common Core

- ART 103 Three Dimensional Design (3)
ART 110 Drawing Foundations (3)
ART 391 Portfolio Review (0)
ART 466 Realism to Postmodernism (3)
ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Design Foundations (choose 3 credits)

- ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)

Drawing (choose 6 credits)

- ART 210 Drawing (3)

ART 212 Life Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
Intermediate Drawing (choose 6 credits)
 (ART 310 must be taken twice before moving to 400 level)
 ART 310 Drawing (3)
Advanced Drawing (choose 18 credits) Courses may be repeated.
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
Advanced Art History (choose 3 credits)
 ART 417 Medieval Art and Architecture (3)
 ART 467 Art of the Islamic World (3)
Advanced Art History (choose 3 credit from courses not taken)
 ART 413 Scandinavian Art (3)
 ART 416 Art of Africa, the Americas, and the South Pacific (3)
 ART 417 Medieval Art and Architecture (3)
 ART 419 Gender in Art (3)
 ART 460 Ancient Art (3)
 ART 462 Renaissance Art (3)
 ART 463 Mannerism to Romanticism (3)
 ART 467 Art of the Islamic World (3)
 ART 468 Design: History and Theory (3)
 ART 469 Asian Art (3)
 ART 492 Art History Seminar (1-6)
 ART 494 Topics (3)
Advanced Art History/Drawing (choose 3 credit from courses not taken)
 ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 413 Scandinavian Art (3)
 ART 416 Art of Africa, the Americas, and the South Pacific (3)
 ART 417 Medieval Art and Architecture (3)
 ART 419 Gender in Art (3)
 ART 460 Ancient Art (3)
 ART 462 Renaissance Art (3)
 ART 463 Mannerism to Romanticism (3)
 ART 467 Art of the Islamic World (3)
 ART 468 Design: History and Theory (3)
 ART 469 Asian Art (3)
 ART 492 Art History Seminar (1-6)
 ART 494 Topics (3)

Approved Elective (choose 3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Drawing. Courses used to satisfy credit requirements elsewhere may not be counted here.

ART 202 Introduction to Digital Media (3)
 ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 220 Graphic Design I (3)
 ART 231 Mixed Media (3)
 ART 240 Painting (3)
 ART 245 Watercolor (3)
 ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)
 ART 270 Printmaking: Beginning Relief/Silkscreen (3)
 ART 271 Printmaking: Beginning Intaglio/Lithography (3)
 ART 275 Photography (3)
 ART 280 Sculpture (3)
 ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 310 Drawing (3)
 ART 320 Graphic Design II (3)
 ART 340 Painting (3)
 ART 345 Watercolor (3)
 ART 350 Intermediate Ceramics (3)
 ART 370 Printmaking: Intermediate Studio (3)

ART 372 Digital Printmaking (3)
 ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)
 ART 380 Sculpture (3)
 ART 402 Motion Graphics (3)
 ART 404 Typography II (3)
 ART 406 Web Design (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 420 Graphic Design III (3-6)
 ART 440 Painting (3-6)
 ART 445 Watercolor (3-6)
 ART 450 Advanced Ceramics (3-6)
 ART 470 Printmaking: Advanced Studio (3-6)
 ART 475 Photography (3-6)
 ART 480 Sculpture (3-6)

Studio Electives

Students must complete five 200-level studio courses from five different areas. Choose five courses from those not taken.

Graphic Design

ART 202 Introduction to Digital Media (3)
 ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

ART 231 Mixed Media (3)

Painting

ART 240 Painting (3)
 ART 245 Watercolor (3)

Ceramics

ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

ART 270 Printmaking: Beginning Relief/Silkscreen (3)
 ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

ART 275 Photography (3)

Sculpture

ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)Graphic Design

ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 320 Graphic Design II (3)

Painting (ART 340 may be taken twice)

ART 340 Painting (3)
 ART 345 Watercolor (3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

ART 350 Intermediate Ceramics (3)

Printmaking (ART 370 may be taken twice)

ART 370 Printmaking: Intermediate Studio (3)
 ART 372 Digital Printmaking (3)

Photography

ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)

Sculpture (ART 380 must be taken twice to produce six credits)

ART 380 Sculpture (3)

Required Minor: None.**ART BFA -GRAPHIC DESIGN**

Degree completion = 120 credits

Required General Education

ART 260 Art History Survey I (3)
 ART 261 Art History Survey II (3)

ART CONTINUED

Major Common Core

- ART 103 Three Dimensional Design (3)
- ART 110 Drawing Foundations (3)
- ART 202 Introduction to Digital Media (3)
- ART 220 Graphic Design I (3)
- ART 302 Interactive Design Survey (3)
- ART 304 Typography I (3)
- ART 320 Graphic Design II (3)
- ART 391 Portfolio Review (0)
- ART 402 Motion Graphics (3)
- ART 404 Typography II (3)
- ART 406 Web Design (3)
- ART 420 Graphic Design III (3)
- ART 466 Realism to Postmodernism (3)
- ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Design Foundations (choose 3 credits)

- ART 100 Elements and Principles (3)
- ART 101 Design Foundations (3)

Advanced Art History (choose 3 credits)

- ART 417 Medieval Art and Architecture (3)
- ART 467 Art of the Islamic World (3)

Graphic Design (choose 3 credits)

- ART 420 Graphic Design III (3-6)
- ART 497 Internship (1-6)
- ART 499 Individual Study (1-6)

Drawing (choose 3 credits from courses not taken)

- ART 210 Drawing (3)
- ART 212 Life Drawing (3)
- ART 310 Drawing (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)

Advanced Art History (choose 3 credits from courses not taken)

- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 460 Ancient Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 467 Art of the Islamic World (3)
- ART 468 Design: History and Theory (3)
- ART 469 Asian Art (3)
- ART 492 Art History Seminar (1-6)
- ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credit from courses not taken)

- ART 210 Drawing (3)
- ART 212 Life Drawing (3)
- ART 310 Drawing (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)
- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 460 Ancient Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 467 Art of the Islamic World (3)
- ART 468 Design: History and Theory (3)
- ART 469 Asian Art (3)
- ART 492 Art History Seminar (1-6)
- ART 494 Topics (3)

Studio Electives

Students must complete four courses from four different areas.

Drawing

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

Mixed Media

- ART 231 Mixed Media (3)

Painting

- ART 240 Painting (3)
- ART 245 Watercolor (3)

Ceramics

- ART 250 Ceramics: Beginning Wheel (3)
- ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

- ART 270 Printmaking: Beginning Relief/Silkscreen (3)
- ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

- ART 275 Photography (3)

Sculpture

- ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)

Drawing

- ART 310 Drawing (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)

Painting (ART 340 may be taken twice)

- ART 340 Painting (3)
- ART 345 Watercolor (3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

- ART 350 Intermediate Ceramics (3)
- Printmaking (ART 370 may be taken twice)
- ART 370 Printmaking: Intermediate Studio (3)
- ART 372 Digital Printmaking (3)

Photography

- ART 375 Black and White Photography (3)
- ART 377 Digital Photography (3)

Sculpture (ART 380 must be taken twice to produce six credits)

- ART 380 Sculpture (3)

Required Minor: None.

ART BFA - INSTALLATION

Degree completion = 120 credits

Required General Education

- ART 260 Art History Survey I (3)
- ART 261 Art History Survey II (3)

Major Common Core

- ART 103 Three-Dimensional Design (3)
- ART 110 Drawing Foundations (3)
- ART 391 Portfolio Review (0)
- ART 466 Realism to Postmodernism (3)
- ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Courses must be taken in each of the following areas to produce a total of 66 credits: Design Foundations, Studio Electives, Advanced Art History, Advanced Art History/Drawing, Intermediate Studio - Concentration I, Intermediate Studio - Concentration II, and Advanced Studio.

Design Foundations (choose 3 credits)

- ART 100 Elements and Principles of Art (3)
- ART 101 Design Foundations (3)

Advanced Art History (choose 6 credits)

3 of the credits selected must be either ART 417 or ART 467.

- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 460 Ancient Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 467 Art of the Islamic World (3)

ART 468 Design: History and Theory (3)
 ART 469 Asian Art (3)
 ART 492 Art History Seminar (1-6)
 ART 494 Topics (3)

Advanced Art History/Drawing (choose 6 credits)

Courses used to satisfy other requirements may not be used to fulfill this requirement.

ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 413 Scandinavian Art (3)
 ART 416 Art of Africa, the Americas, and the South Pacific (3)
 ART 417 Medieval Art and Architecture (3)
 ART 419 Gender in Art (3)
 ART 460 Ancient Art (3)
 ART 462 Renaissance Art (3)

Intermediate Studio: Concentration I (choose 6 credits)

ART 385 must be taken twice to produce 6 credits.

ART 385 Intermediate Installation (3)

Advanced Studio (choose 21 credits)

18 of the credits must be in primary concentration--ART 485 must be repeated to produce the necessary credits. 3 of the credits may be an elective approved by advisor. Courses used to satisfy other requirements may not be used to fulfill this requirement.

ART 202 Introduction to Digital Media (3)
 ART 204 Digital Imaging (3)
 ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 220 Graphic Design I (3)
 ART 231 Mixed Media (3)
 ART 240 Painting (3)
 ART 245 Watercolor (3)
 ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)
 ART 270 Printmaking: Beginning Silkscreen and Lithography (3)
 ART 271 Printmaking: Beginning Intaglio/Relief (3)
 ART 275 Photography (3)
 ART 280 Sculpture (3)
 ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 320 Graphic Design II (3)
 ART 340 Painting (3)
 ART 345 Watercolor (3)
 ART 350 Intermediate Ceramics (3)
 ART 370 Printmaking: Intermediate Studio (3)
 ART 372 Digital Printmaking (3)
 ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)
 ART 380 Sculpture (3)
 ART 402 Motion Graphics (3)
 ART 404 Typography II (3)
 ART 406 Web Design (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 420 Graphic Design III (3-6)
 ART 440 Painting (3-6)
 ART 445 Watercolor (3-6)
 ART 450 Advanced Ceramics (3-6)
 ART 470 Printmaking: Advanced Studio (3-6)
 ART 480 Sculpture (3-6)
 ART 485 Advanced Installation (3-6)

Studio Electives. Students must complete (6) 200-level courses from 5 different areas. Courses used to satisfy other requirements may not be used to fulfill this requirement.

Area 1 - Graphic Design

ART 202 Introduction to Digital Media (3)
 ART 220 Graphic Design I (3)

Area 2 - Drawing

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

Area 3 - Mixed Media

ART 231 Mixed Media (3)

Area 4 - Painting

ART 240 Painting (3)
 ART 245 Watercolor (3)

Area 5 - Ceramics

ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)

Area 6 - Printmaking

ART 270 Printmaking: Beginning Silkscreen and Lithography (3)
 ART 271 Printmaking: Beginning Intaglio/Relief (3)

Area 7 - Photography

ART 275 Photography (3)

Area 8 - Sculpture

ART 280 Sculpture (3)

Area 9 - Installation

ART 285 Introduction to Installation (3)

Intermediate Studio - Concentration II

(Select 6 credits from one area that is not your first concentration)

Graphic Design

ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 320 Graphic Design II (3)

Drawing

(Students who select this area must take ART 310 twice to produce 6 credits)

ART 310 Drawing (3)

Painting

ART 340 Painting (3)
 ART 345 Watercolor (3)

Printmaking

ART 370 Printmaking: Intermediate Studio (3)
 ART 372 Digital Printmaking (3)

Photography

ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)

Sculpture

(Students who select this area must take ART 380 twice to produce 6 credits)

ART 380 Sculpture (3)

ART BFA - PAINTING

Degree completion = 120 credits

Required General Education

ART 260 Art History Survey I (3)
 ART 261 Art History Survey II (3)

Major Common Core

ART 103 Three Dimensional Design (3)
 ART 110 Drawing Foundations (3)
 ART 391 Portfolio Review (0)
 ART 466 Realism to Postmodernism (3)
 ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Design Foundations (choose 3 credits)

ART 100 Elements and Principles of Art (3)
 ART 101 Design Foundations (3)

Drawing (choose 3 credits from courses not taken)

ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)

ART CONTINUED

Painting (choose 3 credits)

- ART 240 Painting (3)
- ART 245 Watercolor (3)

Intermediate Painting (choose 6 credits) ART 340 may be taken twice.

- ART 340 Painting (3)
- ART 345 Watercolor (3)

Advanced Painting (choose 18 credits) Courses may be repeated.

- ART 440 Painting (3-6)
- ART 445 Watercolor (3-6)

Advanced Art History (choose 3 credits)

- ART 417 Medieval Art and Architecture (3)
- ART 467 Art of the Islamic World (3)

Advanced Art History (choose 3 credit from courses not taken)

- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 460 Ancient Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 467 Art of the Islamic World (3)
- ART 468 Design: History and Theory (3)
- ART 469 Asian Art (3)
- ART 492 Art History Seminar (1-6)
- ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credit)

Choose courses not counted for other requirements.

- ART 210 Drawing (3)
- ART 212 Life Drawing (3)
- ART 310 Drawing (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)
- ART 413 Scandinavian Art (3)
- ART 416 Art of Africa, the Americas, and the South Pacific (3)
- ART 417 Medieval Art and Architecture (3)
- ART 419 Gender in Art (3)
- ART 460 Ancient Art (3)
- ART 462 Renaissance Art (3)
- ART 463 Mannerism to Romanticism (3)
- ART 467 Art of the Islamic World (3)
- ART 468 Design: History and Theory (3)
- ART 469 Asian Art (3)
- ART 492 Art History Seminar (1-6)
- ART 494 Topics (3)

Approved Elective (choose 3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Painting. Courses used to satisfy credit requirements elsewhere may not be counted here.

- ART 202 Introduction to Digital Media (3)
- ART 210 Drawing (3)
- ART 212 Life Drawing (3)
- ART 220 Graphic Design I (3)
- ART 231 Mixed Media (3)
- ART 240 Painting (3)
- ART 245 Watercolor (3)
- ART 250 Ceramics: Beginning Wheel (3)
- ART 251 Ceramics: Beginning Handbuilding (3)
- ART 270 Printmaking: Beginning Relief/Silkscreen (3)
- ART 271 Printmaking: Beginning Intaglio/Lithography (3)
- ART 275 Photography (3)
- ART 280 Sculpture (3)
- ART 302 Interactive Design Survey (3)
- ART 304 Typography I (3)
- ART 310 Drawing (3)
- ART 320 Graphic Design II (3)
- ART 340 Painting (3)
- ART 345 Watercolor (3)
- ART 350 Intermediate Ceramics (3)
- ART 370 Printmaking: Intermediate Studio (3)

- ART 372 Digital Printmaking (3)
- ART 375 Black and White Photography (3)
- ART 377 Digital Photography (3)
- ART 380 Sculpture (3)
- ART 402 Motion Graphics (3)
- ART 404 Typography II (3)
- ART 406 Web Design (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)
- ART 420 Graphic Design III (3-6)
- ART 440 Painting (3-6)
- ART 445 Watercolor (3-6)
- ART 450 Advanced Ceramics (3-6)
- ART 470 Printmaking: Advanced Studio (3-6)
- ART 475 Photography (3-6)
- ART 480 Sculpture (3-6)

Studio Electives

Students must complete five 200-level studio courses from five different areas. Choose five courses from those not taken.

Graphic Design

- ART 202 Introduction to Digital Media (3)
- ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

- ART 231 Mixed Media (3)

Painting

- ART 240 Painting (3)
- ART 245 Watercolor (3)

Ceramics

- ART 250 Ceramics: Beginning Wheel (3)
- ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

- ART 270 Printmaking: Beginning Relief/Silkscreen (3)
- ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

- ART 275 Photography (3)

Sculpture

- ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)

Graphic Design

- ART 302 Interactive Design Survey (3)
- ART 304 Typography I (3)
- ART 320 Graphic Design II (3)

Drawing (ART 310 may be taken twice)

- ART 310 Drawing (3)
- ART 410 Drawing Workshop (3-6)
- ART 412 Life Drawing (3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

- ART 350 Intermediate Ceramics (3)
- Printmaking (ART 370 may be taken twice)
- ART 370 Printmaking: Intermediate Studio (3)
- ART 372 Digital Printmaking (3)

Photography

- ART 375 Black and White Photography (3)
- ART 377 Digital Photography (3)

Sculpture (ART 380 must be taken twice to produce six credits)

- ART 380 Sculpture (3)

Required Minor: None.

ART BFA - PHOTOGRAPHY

Degree completion = 120 credits

Required General Education

- ART 260 Art History Survey I (3)
- ART 261 Art History Survey II (3)

Major Common Core

- ART 103 Three Dimensional Design (3)
 ART 110 Drawing Foundations (3)
 ART 275 Photography (3)
 ART 391 Portfolio Review (0)
 ART 466 Realism to Postmodernism (3)
 ART 495 Senior Exhibit (0-1)

Major Restricted ElectivesDesign Foundations (choose 3 credits)

- ART 100 Elements and Principles of Art (3)
 ART 101 Design Foundations (3)

Drawing (choose 3 credits from courses not taken)

- ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)

Intermediate Photography (choose 6 credits)

- ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)

Advanced Photography (choose 18 credits) Course may be repeated.

- ART 475 Photography (3-6)

Advanced Art History (choose 3 credits)

- ART 417 Medieval Art and Architecture (3)
 ART 467 Art of the Islamic World (3)

Advanced Art History (choose 3 credit from courses not taken)

- ART 413 Scandinavian Art (3)
 ART 416 Art of Africa, the Americas, and the South Pacific (3)
 ART 417 Medieval Art and Architecture (3)
 ART 419 Gender in Art (3)
 ART 460 Ancient Art (3)
 ART 462 Renaissance Art (3)
 ART 463 Mannerism to Romanticism (3)
 ART 467 Art of the Islamic World (3)
 ART 468 Design: History and Theory (3)
 ART 469 Asian Art (3)
 ART 492 Art History Seminar (1-6)
 ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credits)

(choose courses not counted for other requirements)

- ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 413 Scandinavian Art (3)
 ART 416 Art of Africa, the Americas, and the South Pacific (3)
 ART 417 Medieval Art and Architecture (3)
 ART 419 Gender in Art (3)
 ART 460 Ancient Art (3)
 ART 462 Renaissance Art (3)
 ART 463 Mannerism to Romanticism (3)
 ART 467 Art of the Islamic World (3)
 ART 468 Design: History and Theory (3)
 ART 469 Asian Art (3)
 ART 492 Art History Seminar (1-6)
 ART 494 Topics (3)

Approved Elective (choose 3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Photography. Courses used to satisfy credit requirements elsewhere may not be counted here.

- ART 202 Introduction to Digital Media (3)
 ART 210 Drawing (3)
 ART 212 Life Drawing (3)
 ART 220 Graphic Design I (3)
 ART 231 Mixed Media (3)
 ART 240 Painting (3)

- ART 245 Watercolor (3)
 ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)
 ART 270 Printmaking: Beginning Relief/Silkscreen (3)
 ART 271 Printmaking: Beginning Intaglio/Lithography (3)
 ART 275 Photography (3)
 ART 280 Sculpture (3)
 ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 310 Drawing (3)
 ART 320 Graphic Design II (3)
 ART 340 Painting (3)
 ART 345 Watercolor (3)
 ART 350 Intermediate Ceramics (3)
 ART 370 Printmaking: Intermediate Studio (3)
 ART 372 Digital Printmaking (3)
 ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)
 ART 380 Sculpture (3)
 ART 402 Motion Graphics (3)
 ART 404 Typography II (3)
 ART 406 Web Design (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 420 Graphic Design III (3-6)
 ART 440 Painting (3-6)
 ART 445 Watercolor (3-6)
 ART 450 Advanced Ceramics (3-6)
 ART 470 Printmaking: Advanced Studio (3-6)
 ART 475 Photography (3-6)
 ART 480 Sculpture (3-6)

Studio Electives

Students must complete five 200-level studio courses from five different areas. (choose five courses from those not taken)

Graphic Design

- ART 202 Introduction to Digital Media (3)
 ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

- ART 231 Mixed Media (3)

Painting

- ART 240 Painting (3)
 ART 245 Watercolor (3)

Ceramics

- ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

- ART 270 Printmaking: Beginning Relief/Silkscreen (3)
 ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Sculpture

- ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)Graphic Design

- ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 320 Graphic Design II (3)

Drawing (ART 310 may be taken twice)

- ART 310 Drawing (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)

Painting (ART 340 may be taken twice)

- ART 340 Painting (3)
 ART 345 Watercolor(3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

- ART 350 Intermediate Ceramics (3)

ART CONTINUED

Printmaking (ART 370 may be taken twice)
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
Sculpture (ART 380 must be taken twice to produce six credits)
ART 380 Sculpture (3)

Required Minor: None.

ART BFA - PRINTMAKING

Degree completion = 120 credits

Required General Education

ART 260 Art History Survey I (3)
ART 261 Art History Survey II (3)

Major Common Core

ART 103 Three Dimensional Design (3)
ART 110 Drawing Foundations (3)
ART 391 Portfolio Review (0)
ART 466 Realism to Postmodernism (3)
ART 495 Senior Exhibit (0-1)

Major Restricted Electives

Design Foundations (choose 3 credits)

ART 100 Elements and Principles of Art (3)
ART 101 Design Foundations (3)

Drawing (choose 3 credits from courses not taken)

ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)

Printmaking (choose 3 credits)

ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Intermediate Printmaking (choose 6 credits) (ART 370 may be taken twice)

ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)

Advanced Printmaking (choose 18 credits) Course may be repeated.

ART 470 Printmaking: Advanced Studio (3-6)

Advanced Art History (choose 3 credits)

ART 417 Medieval Art and Architecture (3)
ART 467 Art of the Islamic World (3)

Advanced Art History (choose 3 credits from courses not taken)

ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)
ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credits)

Choose courses not counted for other requirements.

ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 310 Drawing (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 413 Scandinavian Art (3)
ART 416 Art of Africa, the Americas, and the South Pacific (3)
ART 417 Medieval Art and Architecture (3)
ART 419 Gender in Art (3)
ART 460 Ancient Art (3)
ART 462 Renaissance Art (3)

ART 463 Mannerism to Romanticism (3)
ART 467 Art of the Islamic World (3)
ART 468 Design: History and Theory (3)
ART 469 Asian Art (3)
ART 492 Art History Seminar (1-6)
ART 494 Topics (3)

Approved Elective (choose 3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Printmaking. Courses used to satisfy credit requirements elsewhere may not be counted here.

ART 202 Introduction to Digital Media (3)
ART 210 Drawing (3)
ART 212 Life Drawing (3)
ART 220 Graphic Design I (3)
ART 231 Mixed Media (3)
ART 240 Painting (3)
ART 245 Watercolor (3)
ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)
ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)
ART 275 Photography (3)
ART 280 Sculpture (3)
ART 302 Interactive Design Survey (3)
ART 304 Typography I (3)
ART 310 Drawing (3)
ART 320 Graphic Design II (3)
ART 340 Painting (3)
ART 345 Watercolor (3)
ART 350 Intermediate Ceramics (3)
ART 370 Printmaking: Intermediate Studio (3)
ART 372 Digital Printmaking (3)
ART 375 Black and White Photography (3)
ART 377 Digital Photography (3)
ART 380 Sculpture (3)
ART 402 Motion Graphics (3)
ART 404 Typography II (3)
ART 406 Web Design (3)
ART 410 Drawing Workshop (3-6)
ART 412 Life Drawing (3)
ART 420 Graphic Design III (3-6)
ART 440 Painting (3-6)
ART 445 Watercolor (3-6)
ART 450 Advanced Ceramics (3-6)
ART 470 Printmaking: Advanced Studio (3-6)
ART 475 Photography (3-6)
ART 480 Sculpture (3-6)

Studio Electives

Students must complete five 200-level studio courses from five different areas. (choose five courses from those not taken)

Graphic Design

ART 202 Introduction to Digital Media (3)
ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

ART 231 Mixed Media (3)

Painting

ART 240 Painting (3)
ART 245 Watercolor (3)

Ceramics

ART 250 Ceramics: Beginning Wheel (3)
ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

ART 270 Printmaking: Beginning Relief/Silkscreen (3)
ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

ART 275 Photography (3)

Sculpture

ART 280 Sculpture (3)

Second Concentration (choose six credits from one area)Graphic Design

ART 302 Interactive Design Survey (3)

ART 304 Typography I (3)

ART 320 Graphic Design II (3)

Drawing (ART 310 may be taken twice)

ART 310 Drawing (3)

ART 410 Drawing Workshop (3-6)

ART 412 Life Drawing (3)

Painting (ART 340 may be taken twice)

ART 340 Painting (3)

ART 345 Watercolor(3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

ART 350 Intermediate Ceramics (3)

Photography

ART 375 Black and White Photography (3)

ART 377 Digital Photograph (3)

Sculpture (ART 380 must be taken twice to produce six credits)

ART 380 Sculpture (3)

Required Minor: None.**ART BFA -SCULPTURE**

Degree completion = 120 credits

Required General Education

ART 260 Art History Survey I (3)

ART 261 Art History Survey II (3)

Major Common Core

ART 103 Three Dimensional Design (3)

ART 110 Drawing Foundations (3)

ART 280 Sculpture (3)

ART 391 Portfolio Review (0)

ART 466 Realism to Postmodernism (3)

ART 495 Senior Exhibit (0-1)

Intermediate Sculpture (choose 6 credits)

(Course must be taken twice before moving to 400 level.)

ART 380 Sculpture (3)

Advanced Sculpture (choose 18 credits) Course may be repeated.

ART 480 Sculpture (3-6)

Major Restricted ElectivesDesign Foundations (choose 3 credits)

ART 100 Elements and Principles of Art (3)

ART 101 Design Foundations (3)

Drawing (choose 3 credits from courses not taken)

ART 210 Drawing (3)

ART 212 Life Drawing (3)

ART 310 Drawing (3)

ART 410 Drawing Workshop (3-6)

ART 412 Life Drawing (3)

Advanced Art History (choose 3 credits)

ART 417 Medieval Art and Architecture (3)

ART 467 Art of the Islamic World (3)

Advanced Art History (choose 3 credit from courses not taken)

ART 413 Scandinavian Art (3)

ART 416 Art of Africa, the Americas, and the South Pacific (3)

ART 417 Medieval Art and Architecture (3)

ART 419 Gender in Art (3)

ART 460 Ancient Art (3)

ART 462 Renaissance Art (3)

ART 463 Mannerism to Romanticism (3)

ART 467 Art of the Islamic World (3)

ART 468 Design: History and Theory (3)

ART 469 Asian Art (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

Advanced Art History/Drawing (choose 3 credit from courses not taken)

ART 210 Drawing (3)

ART 212 Life Drawing (3)

ART 310 Drawing (3)

ART 410 Drawing Workshop (3-6)

ART 412 Life Drawing (3)

ART 413 Scandinavian Art (3)

ART 416 Art of Africa, the Americas, and the South Pacific (3)

ART 417 Medieval Art and Architecture (3)

ART 419 Gender in Art (3)

ART 460 Ancient Art (3)

ART 462 Renaissance Art (3)

ART 463 Mannerism to Romanticism (3)

ART 467 Art of the Islamic World (3)

ART 468 Design: History and Theory (3)

ART 469 Asian Art (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

Approved Elective (choose 0-3 credits)

One course from this list may be used to complete 21 credit requirement for Advanced Sculpture. Courses used to satisfy credit requirements elsewhere may not be counted here.

ART 202 Introduction to Digital Media (3)

ART 210 Drawing (3)

ART 212 Life Drawing (3)

ART 220 Graphic Design I (3)

ART 231 Mixed Media (3)

ART 240 Painting (3)

ART 245 Watercolor (3)

ART 250 Ceramics: Beginning Wheel (3)

ART 251 Ceramics: Beginning Handbuilding (3)

ART 270 Printmaking: Beginning Relief/Silkscreen (3)

ART 271 Printmaking: Beginning Intaglio/Lithography (3)

ART 275 Photography (3)

ART 302 Interactive Design Survey (3)

ART 304 Typography I (3)

ART 310 Drawing (3)

ART 320 Graphic Design II (3)

ART 340 Painting (3)

ART 345 Watercolor (3)

ART 350 Intermediate Ceramics (3)

ART 370 Printmaking: Intermediate Studio (3)

ART 372 Digital Printmaking (3)

ART 375 Black and White Photography (3)

ART 377 Digital Photography (3)

ART 402 Motion Graphics (3)

ART 404 Typography II (3)

ART 406 Web Design (3)

ART 410 Drawing Workshop (3-6)

ART 412 Life Drawing (3)

ART 420 Graphic Design III (3-6)

ART 440 Painting (3-6)

ART 445 Watercolor (3-6)

ART 450 Advanced Ceramics (3-6)

ART 470 Printmaking: Advanced Studio (3-6)

ART 475 Photography (3-6)

ART 480 Sculpture (3-6)

Studio Electives

(choose five courses from at least four different areas)

Graphic Design

ART 202 Introduction to Digital Media (3)

ART 220 Graphic Design I (3)

Drawing

ART 210 Drawing (3)

ART 212 Life Drawing (3)

ART CONTINUED

Mixed Media

ART 231 Mixed Media (3)

Painting

ART 240 Painting (3)

ART 245 Watercolor (3)

Ceramics

ART 250 Ceramics: Beginning Wheel (3)

ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

ART 270 Printmaking: Beginning Relief/Silkscreen (3)

ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

ART 275 Photography (3)

Second Concentration (choose six credits from one area)

Graphic Design

ART 302 Interactive Design Survey (3)

ART 304 Typography I (3)

ART 320 Graphic Design II (3)

Drawing (ART 310 may be taken twice)

ART 310 Drawing (3)

ART 410 Drawing Workshop (3-6)

ART 412 Life Drawing (3)

Painting (ART 340 may be taken twice)

ART 340 Painting (3)

ART 345 Watercolor (3)

Ceramics (ART 350 must be taken twice to produce 6 credits)

ART 350 Intermediate Ceramics (3)

Printmaking (ART 370 may be taken twice)

ART 370 Printmaking: Intermediate Studio (3)

ART 372 Digital Printmaking (3)

Photography

ART 375 Black and White Photography (3)

ART 377 Digital Photography (3)

Required Minor: None.

ART STUDIO MINOR

Required for Minor

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 BA

Degree completion = 120 credits

The Bachelor of Arts degree in Art History is a thorough liberal arts degree that provides students with a general knowledge of major artists, styles, and monuments of both Western and non-Western art. Writing and reading assignments within the courses and the Art History Senior Thesis will further critical thinking, analysis, and knowledge of theory and methods. Knowledge of at least one foreign language will enable students to use primary source materials in their further career. The core requirements in studio will give students insights into the creative process.

Required General Education

ART 260 Art History Survey I (3)

ART 261 Art History Survey II (3)

Major Common Core

ART 391 Portfolio Review (0)

ART 417 Medieval Art and Architecture (3)

ART 460 Ancient Art (3)

ART 466 Realism to Postmodernism (3)

ART 496 Art History Senior Thesis (1)

Renaissance and Baroque (choose 3 credits)

ART 462 Renaissance Art (3)

ART 463 Mannerism to Romanticism (3)

Non-Western (choose 3 credits)

ART 416 Art of Africa, the Americas, and the South Pacific (3)

ART 467 Art of the Islamic World (3)

ART 469 Asian Art (3)

Design/Drawing Requirement (choose 3 credits) (ART 101 preferred)

ART 101 Design Foundations (preferred) (3)

ART 100 Elements and Principles of Art (3)

Major Restricted Electives (choose 9 credits)

Choose 3 courses from the Major Common Core not previously taken and/or from the following:

ART 413 Scandinavian Art (3)

ART 419 Gender in Art (3)

ART 468 Design: History and Theory (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

Major Unrestricted Electives

Studio Electives (choose 6 credits)

(choose 2 courses from the following)

ART 103 Three Dimensional Design (3)

ART 110 Drawing Foundations (3)

ART 202 Introduction to Digital Media (3)

ART 210 Drawing (3)

ART 212 Life Drawing (3)

ART 220 Graphic Design I (3)

ART 231 Mixed Media (3)

ART 240 Painting (3)

ART 245 Watercolor (3)

ART 250 Ceramics: Beginning Wheel (3)

ART 251 Ceramics: Beginning Handbuilding (3)

ART 270 Printmaking: Beginning Silkscreen and Lithography (3)

ART 271 Printmaking: Beginning Intaglio/Relief (3)

ART 275 Photography (3)

ART 280 Sculpture (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes, Any.

ART HISTORY MINOR

NOTE: Students who declare a major in art may choose to minor in art history; however only 50% of the art history courses selected to count toward the major in art may also count toward the minor in art history.

Required for Minor

ART 260 Art History Survey I (3)

ART 261 Art History Survey II (3)

Required Minor Electives

(choose 4 courses from the following)

ART 413 Scandinavian Art (3)

ART 416 Art of Africa, the Americas, and the South Pacific (3)

ART 419 Gender in Art (3)

ART 460 Ancient Art (3)

ART 462 Renaissance Art (3)

ART 463 Mannerism to Romanticism (3)

ART 466 Realism to Postmodernism (3)

ART 468 Design: History and Theory (3)

ART 469 Asian Art (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

ART BS, TEACHING

Degree completion = 120 credits

The Bachelor of Science degree in Art Education prepares students for careers as art educators teaching at the elementary and secondary levels.

Required General Education

ART 260 Art History Survey I (3)
 ART 261 Art History Survey II (3)
 KSP 220W Human Relations in a Multicultural Society (3)

Major Common Core

ART 103 Three-Dimensional Design (3)
 ART 110 Drawing Foundations (3)
 ART 421 Art Methods Elementary School (2)
 ART 426 Art Methods Secondary School (3)
 ART 429 Art Education Seminar (1)
 ART 466 Realism to Postmodernism (3)
 ART 495 Senior Exhibit (0-1)
 KSP 475 The Social Context of Learning (1)
 KSP 476 K-12 Student Teaching (11)

Design Foundations (choose 3 credits)

ART 100 Elements and Principles of Art (3)
 ART 101 Design Foundations (3)

Art Education (choose 3 credits)

ART 424 Art Education for the Exceptional Child (3)
 ART 428 Teaching Art: Historical and Contemporary Topics (3)

Major Restricted Electives**STUDIO CONCENTRATION** (choose 12 credits)

Select a minimum of 12 studio credits in your specialization area at the 300/400 level in consultation with the art advisor. Certain 300-level courses need to be taken twice before proceeding to the 400-level. Consult your advisor.

ART 302 Interactive Design Survey (3)
 ART 304 Typography I (3)
 ART 310 Drawing (3)
 ART 320 Graphic Design II (3)
 ART 340 Painting (3)
 ART 345 Watercolor (3)
 ART 350 Intermediate Ceramics (3)
 ART 370 Printmaking: Intermediate Studio (3)
 ART 372 Digital Printmaking (3)
 ART 375 Black and White Photography (3)
 ART 377 Digital Photography (3)
 ART 380 Sculpture (3)
 ART 402 Motion Graphics (3)
 ART 404 Typography II (3)
 ART 406 Web Design (3)
 ART 410 Drawing Workshop (3-6)
 ART 412 Life Drawing (3)
 ART 420 Graphic Design III (3-6)
 ART 440 Painting (3-6)
 ART 445 Watercolor (3-6)
 ART 450 Advanced Ceramics (3-6)
 ART 470 Printmaking: Advanced Studio (3-6)
 ART 475 Photography (3-6)
 ART 480 Sculpture (3-6)

Studio Electives: Students must complete six 200-level studio courses from five different areas.

Graphic Design

ART 202 Introduction to Digital Media (3)
 ART 220 Graphic Design I (3)

Drawing

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

Mixed Media

ART 231 Mixed Media (3)

Painting

ART 240 Painting (3)
 ART 245 Watercolor (3)

Ceramics

ART 250 Ceramics: Beginning Wheel (3)
 ART 251 Ceramics: Beginning Handbuilding (3)

Printmaking

ART 270 Printmaking: Beginning Relief/Silkscreen (3)
 ART 271 Printmaking: Beginning Intaglio/Lithography (3)

Photography

ART 275 Photography (3)

Sculpture

ART 280 Sculpture (3)

Required Minor: None.

COURSE DESCRIPTIONS

ART 100 (3) Elements and Principles of Art

2-D visual problem solving and art-making strategies using the elements and principles of design. For elementary education majors and general education. Fall, Spring
 GE-6

ART 101 (3) Design Foundations

For art, art history and art education majors. Fall, Spring

ART 103 (3) Three-Dimensional Design

An introduction to concepts and processes related to the visual and physical organization of three-dimensional form and space. Fall, Spring

ART 110 (3) Drawing Foundations

Introduction to traditional drawing techniques and concepts. Fall, Spring

ART 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. Fall, Spring
 GE-6, GE-8
 Diverse Cultures - Purple

ART 202 (3) Introduction to Digital Media

This graphic design course is an introduction to digital media technology as a creative tool for the development of visual expression. The course is taught using the Mac OS and explores vector and bitmap image making. Pre: ART 100 or ART 101, ART 110

ART 210 (3) Drawing

Continued exploration of drawing techniques and concepts. Pre: ART 110
 Fall, Spring

ART 212 (3) Life Drawing

Experience in drawing from the human figure. Pre: ART 110
 Fall, Spring

ART 220 (3) Graphic Design I

This course explores the basic principles of graphic design. Emphasis is placed on developing an awareness and effective use of type, image, and symbol. Students focus on the design process as a way to develop and refine design solutions. Pre: ART 103, ART 202
 Fall, Spring

ART 231 (3) Mixed Media

Multimedia art exploration is a problem-solving art studio experience involving the use of a variety of traditional and non-traditional art materials.

Fall, Spring
GE-6

ART 240 (3) Painting

Beginning experience with oil and/or acrylic paint. Emphasis upon technical and conceptual development.

Pre: ART 100 or ART 101, ART 110 or consent
Fall, Spring

ART 245 (3) Watercolor

Introduction to basic techniques in watercolor.

Pre: ART 100 or ART 101, ART 110 or consent
Fall, Spring

ART 250 (3) Ceramics: Beginning Wheel

An introduction to basic wheel throwing techniques exploring the potential of clay as a creative and expressive material.

Pre: ART 100 or ART 101, ART 103 or consent
Fall, Spring

ART 251 (3) Ceramics: Beginning Handbuilding

An introduction to basic sculptural hand building techniques exploring the nature of clay as a creative-expressive medium.

Pre: ART 100 or ART 101, ART 103 or consent
Fall, Spring

ART 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).

Fall
GE-6, GE-8
Diverse Cultures - Purple

ART 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.

Spring
GE-6, GE-8

ART 265W (3) Art As Politics

This course analyzes relationships between art and politics from ancient times through today, exploring uses of art from persuasion to overt propaganda in visual arts and architecture. It will deal with diverse cultures, covering material from a global perspective.

Summer
WI, GE-6, GE-8

ART 270 (3) Printmaking: Beginning Silkscreen and Lithography

Introduction to silkscreen and lithography printmaking processes including silkscreen, monotype, and plate lithography.

Pre: ART 101, ART 110 or consent
Fall

ART 271 (3) Printmaking: Beginning Intaglio/Relief

Introduction to intaglio and relief printmaking processes including collagraph, etching, relief carving, and engraving.

Pre: ART 101, ART 110 or consent
Spring

ART 275 (3) Photography

Introduction to the techniques and expressive potential of B/W photography.

Fall, Spring
GE-6

ART 280 (3) Sculpture

Exploration of the visual and physical organization of three-dimensional form and space through problems employing various media and processes.

Pre: ART 103 or consent
Fall, Spring

ART 285 (3) Introduction to Installation

This studio course familiarizes students with the basic concerns of installation art, including relationship to site and audience. A variety of materials and approaches will be explored. Environmental impact, health, and safety will be addressed. In addition to studio work, historical and contemporary examples will be discussed to provide context and encourage awareness of the discipline's past and present potential.

Fall, Spring
Pre: ART 103 or consent

ART 302 (3) Interactive Design Survey

This course explores the foundations of screen-based design. The course emphasizes the application of design sensibilities to both motion and web design production.

Pre: ART 103, ART 202

ART 304 (3) Typography I

This course investigates the use of letterforms in the message making process. Topics include historical overview of letter development, type terminology, type and image relationships, and technical and aesthetic applications of type.

Pre: ART 103, ART 202

ART 310 (3) Drawing

This course encourages experimental approaches that build on drawing skills developed in ART 110 and ART 210. Formal and conceptual issues will be addressed as students pursue individualized subject matter. Course may be repeated.

Pre: ART 210

ART 320 (3) Graphic Design II

This course expands upon the beginning and intermediate design experience. Emphasis is placed on concept development and the exploration of meaningful solutions applied across a variety of media. The technical skills of preparing work for production will be strengthened.

Pre: ART 220, ART 302, ART 304

ART 324 (3) Concept and Image

This course strengthens students' conceptual skills within the context of graphic design. The course emphasizes various techniques for generating imagery to more effectively communicate ideas.

Pre: ART 220, ART 302, ART 304
Spring

ART 340 (3) Painting

Intermediate painting. Emphasizing individual creative development. Must be taken twice before advancing to ART 440.

Pre: ART 240 or consent
Fall, Spring

ART 345 (3) Watercolor

Experience in advanced watercolor techniques and concepts. Must be taken twice before advancing to ART 445.

Pre: ART 245 or consent
Fall, Spring

ART 350 (3) Intermediate 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 ART 450.

Pre: ART 250 or ART 251
Fall, Spring

ART 370 (3) Printmaking: Intermediate Studio

Continued exploration of intaglio, lithographic, relief and silk-screen processes. Must be taken twice before advancing to ART 470.
Pre: ART 270 or ART 271
Fall, Spring

ART 372 (3) Digital Printmaking

This is an intermediate course focusing exclusively on materials, technique, process, equipment, and safety in contemporary digital printmaking processes.
Pre: ART 202, ART 271

ART 375 (3) Black and White Photography

Intermediate level material on camera work, processing, and calibration. In rotation with ART 377.
Pre: ART 275
Variable

ART 376 (3) Color Photography

Processing, color theory, color correction, and other considerations in color photography.
Pre: ART 275
Variable

ART 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.
Pre: ART 275
Variable

ART 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 ART 480.
Pre: ART 280
Fall, Spring

ART 385 (3) Intermediate Installation

This studio course explores a wide range of material and conceptual strategies to site-specific work. Personal approaches will be stressed as students develop and implement their own installations. Environmental impact, health, and safety will be addressed. In addition to studio work, the course will cover a variety of installation artists and related readings. Must be taken twice before advancing to ART 485.
Pre: ART 285 or consent
Fall, Spring

ART 391 (0) Portfolio Review

Required of all B.F.A. majors before taking 4XX advanced studio specialization sequence to continue in program.
Fall, Spring

ART 400 (3-6) Graphic Design Special Topics

This advanced course investigates design related topics in greater depth.
Pre: ART 302 and ART 320

ART 402 (3) Motion Graphics

This course is an advanced study of motion design. The study and exploration of digital narrative and non-linear storytelling are key components. Students build on existing motion design skills to create conceptually and technically advanced time-based solutions. This course is repeatable.
Pre: ART 220, ART 302, ART 304

ART 404 (3) Typography II

This course is an advanced study of typography. Students build on existing type sensibilities while exploring traditional and non-traditional applications of type.
Pre: ART 220, ART 302, ART 304

ART 406 (3) Web Design

This course is an advanced study of front-end web design that focuses on current web standards and aesthetic trends.
Pre: ART 220, ART 302, ART 304

ART 410 (3-6) Drawing Workshop

Continued in-depth exploration of drawing techniques and concepts. May be repeated.
Pre: ART 310
Fall, Spring

ART 412 (3) Life Drawing

Advanced experience in drawing from the human figure. May be repeated.
Pre: ART 212 or ART 310
Fall, Spring

ART 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 260, ART 261 or consent
Variable

ART 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.
Variable
Diverse Cultures - Purple

ART 417 (3) Medieval Art and Architecture

Introduction to art and architecture of Western Europe, the Byzantine Empire, and the Islamic world, from the second to the fifteenth centuries. Examination of representative works of art and major styles of Christian, Jewish, and Islamic cultures, including the Romanesque and Gothic periods.
Spring
Pre: ART 260 or consent

ART 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
Variable

ART 420 (3-6) Graphic Design III

This course is split between engagement in advanced design problems and preparation for entry into the graphic design field. This course is repeatable.
Pre: ART 320 ART 324, ART 404, ART 406

ART 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 ART 101, Jr. status or consent
Fall, Spring

ART 424 (3) Art Education for the Exceptional Child

Current theory and practice of teaching art to students with physical, emotional, and developmental exceptionalities. Includes experiences in elementary classrooms.
Pre: ART 421
Variable

ART 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).
Pre: ART 421
Fall

ART 428 (3) Teaching Art: Historical and Contemporary Topics

Application of instruction in art history as well as contemporary art to elementary and secondary schools. Includes experiences in elementary classrooms.

Pre: ART 260, ART 261, ART 421 or consent

Variable

ART 429 (1) Art Education Seminar

Capstone experience for students preparing to teach art. Explores and emphasizes information and skills appropriate for teaching art.

Variable

ART 434 (3) Arts Administration

Theoretical and practical aspects of administering arts organizations. Examines the management, budgeting, marketing and administration of arts programs and organizations in the postmodern era.

Fall, Spring

ART 436 (3) Web Design II

This course continues students' advanced study of front-end web design. Emphasis is placed on designing for multiple screen devices.

Pre: ART 320, ART 324, ART 404, ART 406

Fall, Spring

ART 440 (3-6) Painting

Advanced painting. Continued development of a focused individual expression. May be repeated.

Pre: ART 340

Fall, Spring

ART 444 (3) Typography III

This course continues students' advanced study of typography. Emphasis is placed on designing complex typographic systems, multiple page publications, and expressive type-based solutions.

Pre: ART 320, ART 324, ART 404, ART 406

Fall, Spring

ART 445 (3-6) Watercolor

Advanced experience in watercolor. May be repeated.

Pre: ART 345

Fall, Spring

ART 450 (3-6) Advanced Ceramics

An advanced course which emphasizes individual research in technical, aesthetic and conceptual considerations. May be repeated.

Pre: ART 350

Fall, Spring

ART 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

Variable

ART 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-Spring

ART 463 (3) Mannerism to Romanticism

Historical survey of art, architecture and urban planning in Europe and America from the late sixteenth to mid-nineteenth century: Mannerism, Baroque, Rococo, Neoclassicism and Romanticism.

Pre: ART 261 or consent

ALT-Spring

ART 464 (3) Art Museum and Exhibition Studies

The study of art museum history, theory and practice, including ethics, collecting, and display. Alongside these studies, students will conceive and realize an exhibition in order to further develop knowledge of and experience in the field.

Pre: ART 260, ART 261

Alt-Spring

ART 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 Post-modern issues and trends.

Pre: ART 261 or consent

Fall

ART 467 (3) Art of the Islamic World

Historical survey of art and architectural developments from Islam's origins through the twentieth century. Course focuses on contextualizing monuments, paintings, and other arts from various regions around the world.

Spring

Diverse Cultures - Purple

ART 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.

Variable

ART 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, ART 261 or consent

Variable

Diverse Cultures - Purple

ART 470 (3-6) Printmaking: Advanced Studio

Continued investigation of advanced print making techniques and concepts. May be repeated.

Pre: ART 370

Fall, Spring

ART 475 (3-6) Photography

Expanding technical knowledge and visual awareness while building a portfolio in selected areas. May be repeated.

Pre: ART 375, ART 376 or consent

Fall, Spring

ART 480 (3-6) Sculpture

Continuing development of a strongly personal means of aesthetic expression in three dimensions. May be repeated.

Pre: ART 380

Fall, Spring

ART 485 (3-6) Advanced Installation

This studio course focuses on the planning and implementation of site-specific work. Students' personal interests will be paramount in the development of works that address site and audience. Professional practices necessary to carry out installations will be emphasized, including proposal development, project planning, and documentation. Environmental impact, health, and safety will be addressed. The course will cover a variety of installation artists and related readings. May be repeated.

Pre: ART 385 or consent

Fall, Spring

ART 490 (1-6) Workshop**ART 491 (1-4) In-Service**

ART 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

Variable

ART 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. Variable

ART 495 (0-1) Senior Exhibit

A required course in all art major degree programs. Students plan and present art work in an exhibition. Can not be taken same semester as student teaching.

Pre: Consent

Fall, Spring

ART 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 and art history major. A less expansive project is required for the art history minor.

Pre: Consent of advisor

Fall, Spring

ART 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.

Fall, Spring

ART 499 (1-6) Individual Study

Advanced level pursuit of special projects of research on an independent basis. Requires contractual agreement in art office for registration.

Pre: Consent

Fall, Spring

ASTRONOMY

Astronomy

College of Science, Engineering and Technology

Department of Physics and Astronomy

141 Trafton Science Center N • 507-389-5743

Website: cset.mnsu.edu/pa/

Chair: Youwen Xu

Paul Eskridge, Steven Kipp

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 minors cover a variety of topics in modern astronomy and astrophysics and require significant preparations in mathematics and physics. Paired with a major in physics, the astronomy minor serves as the first step towards a career in teaching or research in astronomy.

POLICIES/INFORMATION

GPA Policy. Astronomy 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 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.

The astronomers operate two observatories on the southern edge of the campus. Standeford Observatory contains a 14-inch Schmidt-Cassegrain telescope, used for visual observations by general education students and other observatory visitors. Several other 10- 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.

ASTRONOMY MINOR**Core for Minor**

AST 125 Observational Astronomy (3)

AST 201 Spherical Astronomy (2)

AST	215	Astronomy and Astrophysics I (4)
AST	225	Astronomy and Astrophysics II (4)
AST	351	Telescope Operations (2)
PHYS	223	General Physics III (3)

COURSE DESCRIPTIONS**AST 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.

Fall, Spring

GE-3

AST 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.

Fall, Spring

GE-3

AST 104 (2) Introduction to Experimental Astronomy

Experiments in astronomy; astronomical observations; measurement, interpretation, and analysis of various types of astronomical data. Lab included.

Pre or Co-req: AST 101 or AST 102

Variable

GE-3

AST 115 (2) Life in the Universe

The probability of extraterrestrial intelligent life; the chemical basis of life; planetary environments; habitable zones; the Drake equation; UFOs; space travel; interstellar communication; limits on technical civilizations.

Fall, Spring

GE-2, GE-3

AST 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 or consent

Fall

AST 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.

Spring

ASTRONOMY CONTINUED

AST 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

Fall

AST 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

Spring

AST 294 (1-6) Workshop

A short course devoted to a specific astronomical topic. May be repeated for credit on each new topic.

Variable

AST 351 (2) Telescope Operations

Operating the 0.5 meter telescope; operating the BRC 250 astrograph; learning to install and operate ancillary equipment for both telescopes.

Pre: AST 201 and AST 215, Consent

Variable

AST 353 (2) Photometry I

Photometric systems; observational techniques of point-source photometry; methods of data reduction; interpretation of data.

Pre: AST 215

ALT-Fall

AST 354 (2) Photometry II

Observations of extended sources; photometric calibration of extended sources; use of secondary standard stars.

Pre: AST 353

ALT-Spring

AST 355 (2) Astrometry

Reduction of digital images to determine positions, proper motions, and parallaxes of stars; analysis of errors.

Pre: AST 201 and AST 215

ALT-Spring

AST 357 (2) Spectroscopy

Line identification; radial velocity determinations; spectral classification.

Pre: AST 225

ALT-Fall

AST 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 223

ALT-Fall

AST 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-Spring

AST 430 (3) Galactic Structure

Structure, kinematics, and dynamics of our galaxy.

Pre: AST 225, PHYS 222, MATH 223

ALT-Fall

AST 431 (3) Extragalactic Astronomy

Normal galaxies; groups and clusters of galaxies; galaxy interactions and mergers; active galactic nuclei; large-scale structure; galaxy formation and evolution; cosmology.

Pre: AST 430

ALT-Spring

AST 488 (1-4) Seminar

May be repeated for credit on each new topic.

Pre: Consent

Variable

AST 491 (1-6) In-Service

A course designed to upgrade the qualifications of persons on-the-job.

Variable

AST 493 (1-6) Undergraduate Research

Students will conduct supervised research in astronomy.

Pre: Consent

Variable

AST 494 (1-6) Workshop

A short course devoted to a specific astronomical topic. May be repeated for credit on each new topic.

Variable

AST 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

Variable

AST 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

Variable

AST 499 (1-8) Individual Study

Individual study under the guidance of an astronomy faculty member.

Pre: Consent

Fall, Spring

ATHLETIC COACHING

Athletic Coaching

College of Allied Health & Nursing

Department of Human Performance

1400 Highland Center • 507-389-6313

Chair: Robert Pettitt

This minor prepares students for coaching positions in Minnesota and other states. For further information, contact the Department of Human Performance.

POLICIES/INFORMATION

Student must apply for practicum and athletic coaching minor.

GPA Policy. A 2.0 GPA is required.

P/N Grading Policy. All courses in the minor must be taken "grade only" except HP 482 which is P/N.

ATHLETIC COACHING MINOR**Required for Minor**

HP	340	Prevention and Care (2)
HP	372	Exercise Science for Coaches (3)
HP	451	Principles of Coaching (3)
HP	462	Sports Administration (3)
HP	470	Psychology of Coaching (3)
HP	482	Coaching Practicum (1)
HLTH	210	First Aid and CPR (3)

Required Electives - Choose two of the following courses (2 credits)

HP	301	Swimming Theory (1)
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HP	302	Wrestling Theory (1)
HP	303	Volleyball Theory (1)
HP	304	Track & Field Theory (1)
HP	305	Baseball Theory (1)
HP	306	Football Theory (1)
HP	308	Hockey Coaching Theory (1)
HP	309	Basketball Coaching theory (1)
HP	310	Softball Theory (1)
HP	311	Cross Country Theory (1)
HP	316	Tennis Theory (1)
HP	317	Golf Coaching Theory (1)
HP	318	Soccer Theory (1)

AUTOMOTIVE ENGINEERING TECHNOLOGY**Automotive Engineering Technology**

College of Science, Engineering & Technology

Department of Automotive & Manufacturing

Engineering Technology

205 Trafton Science Center E

Phone: 507-389-6383

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Website: www.cset.mnsu.edu/aet

Chair: Dr. Bruce E. Jones, Ph.D.

Kuldeep Agarwal, Ph.D., Craig Evers, Ph.D., P.E., David Guerra-Zubiaga, Ph.D., Gary Mead, Ph.D., Harry Petersen, Ph.D., P.E., Winston Sealy, Ph.D.

Accreditation. The Automotive Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org

The mission of the Automotive Engineering Technology (AET) degree program at Minnesota State Mankato, is to provide a broad-based education for graduates to enter globally competitive automotive careers to serve the citizens of Minnesota and the world by:

- providing the highest quality education to prepare application-oriented graduates for a broad range of career opportunities in product research, design, development, and technical sales environments;
- encouraging and supporting faculty and students to engage in scholarly research and activities through partnerships with government, industry, and other constituencies that support effective and ethical transfer of technology;
- providing access to state of the art equipment, facilities, and methodologies, along with faculty expertise to benefit (AET) students; and
- broadening access to the program for diverse populations and support of K-12 pipeline development.

Program Description. The Automotive Engineering Technology (AET) degree program awards a Bachelor of Science degree (BS) to successful students through a four-year curriculum.

Engineering technology has been defined as the part of the technological field which requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities; it lies in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer. Engineering technology is oriented less toward theory and more toward practical applications. - American Society of Engineering Education (ASEE).

The Automotive Engineering Technology degree program prepares graduates for careers in product research, design and development, manufacturing, and technical sales in the original equipment and aftermarket industries. Fields include passenger cars, trucks, motorcycles, recreational vehicles, vehicle emissions,

safety, fuels and lubricants, construction, industrial, and agricultural equipment. Graduates from the program are currently working for original equipment manufacturers (OEMs), such as General Motors, Polaris, John Deere, AGCO, and Ford along with aftermarket companies such as Competition Cams, OTC, and S&S Cycle. A more complete reference to companies employing (AET) graduates may be obtained from the Department Chair.

The Society of Automotive Engineers (sae.org) and National Institute of Automotive Service Excellence (ase.com) are the lead professional societies used in developing program criteria, guiding program relevance, and making continuous improvement.

The primary goal of the (AET) program is to provide all graduates with the solid technical foundation necessary to insure their success in a wide variety of employment opportunities. To accomplish this goal, program outcomes and objectives are defined and assessed for continuous improvement. They are as follows:

Program Outcomes. Students at the time of graduation are prepared to:

1. apply knowledge of science, math, statistics, and engineering technology to solve problems encountered in a professional career in the automotive industry.
2. design, analyze and build virtual and real models, and conduct testing in product development environments through applied computer technologies.
3. define and communicate a set of requirements for a system, component or process and develop solutions to satisfy given criteria in an optimal fashion using creativity in design.
4. function effectively as a manager, leader, or member of a team.
5. understand and practice professional, ethical, environmental, and global responsibilities.
6. communicate effectively across all design and management interface levels of an organization.
7. recognize the need for, and then develop, the skills for life-long learning.
8. understand and engage in behavior which respects diversity and global cultures
9. practice timeliness and quality with regard to work requirements

Program Objectives. AET graduates two to three years into their careers should have the foundation to:

1. deliver products, services, and support to both internal and external organizations by applying technical knowledge, problem solving techniques and hands-on skills in traditional and emerging technologies.
2. actively participate in on-going professional development, professional growth, and increasing professional responsibility.
3. effectively communicate ideas to technical and non-technical people.
4. perform in or manage cross-functional teams.
5. work within the accepted standards of professional integrity and conduct.
6. design, analyze, build, and test virtual or real models in product development and continuous improvement environments.
7. implement, and continuously improve cost, quality, time, and goals using world class management methodologies.

AUTOMOTIVE ENGINEERING TECHNOLOGY CONTINUED

POLICIES/INFORMATION

Admission to the AET. major is granted by the AMET Department. Admission to the major is required to register for 300-level courses. Minimum requirements for acceptance into the AET major include a cumulative GPA of 2.0 or higher and the completion of the following courses with a grade of "C" (2.0) or higher: AET 102, AET 160, AET 261, AET 262, CMST 100 or CMST 102, EET 113, ENG 101, MET 142, MET 144, MET 177, MATH 121, PHYS 211.

GPA Policy. A GPA of 2.5 or higher in courses required for the major or minor in Automotive Engineering Technology in order to proceed in the program sequence and graduate. This GPA calculation is based on the following areas: Required Communications; Required Basic Science and Mathematics; Required Major and Required Elective Courses. Refer to the College of Science Engineering and Technology Student Advising Center regarding required advising for students on academic probation.

Department Grade Policy. All courses in the AET major, and the required Communications, Basic Science and Mathematics courses must be completed with a grade of "C" or better except for AET 387, AET 488, and AET 489.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/N, except those courses offered P/N only.

Residency. A minimum of 50 percent of the credits for a major or minor in Automotive Engineering Technology must be taken at Minnesota State Mankato.

Prerequisites and co-requisites must be observed unless written permission is obtained from the instructor and the Department of AMET. A flow chart of prerequisites is available at the Department Office.

The scheduling of all department courses is done bi-annually, based on enrollment and staffing. To obtain a current class schedule, contact the Department.

AUTOMOTIVE ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

Required General Education

CHEM	104	Introduction to Chemistry (3)
ENG	271W	Technical Communication (4)
MATH	115	Precalculus Mathematics (4)
STAT	154	Elementary Statistics (3)

Prerequisites for Major

AET	102	Introduction to Automotive Engineering Technology (1)
AET	160	Automotive Technology & Systems (4)
AET	261	Automotive Driveability & Diagnosis (4)
AET	262	Automotive Computers and Electronics (4)
EET	113	DC Circuits (3)
ENG	101	Composition (4)
MATH	121	Calculus I (4)
MET	142	Introduction to Parametric Modeling (3)
MET	144	Product Development & Design (3)
MET	177	Materials Processing and Metallurgy (4)
PHYS	211	Principles of Physics I (4)

Communication Studies (choose 3 credits)

CMST	100	Fundamentals of Speech Communication (3)
CMST	102	Public Speaking (3)

Major Common Core

AET	334	Fluid Power (3)
AET	364	Chassis Design and Performance Testing (4)
AET	366	Automotive Thermodynamics and Engine Design (3)
AET	378	Composite Materials (3)
AET	387	Junior Design Project (1)
AET	465	Automotive Laboratory Experience (2)
AET	468	Automotive Research Methods (4)

AET	488W	Senior Design Project I (3)
AET	489W	Senior Design Project II (3)
MATH	122	Calculus II (4)
MET	323	Statics (3)
MET	324	Strength of Materials and Dynamics (4)
MET	341	Advanced Parametric Modeling (3)
MET	424	Industrial Safety (2)
PHYS	212	Principles of Physics II (4)

Major Restricted Electives

Programming (choose 3 credits)

CS	271	Introduction to Graphical Programming (3)
EET	315	Programmable Instrumentation (3)

Required Minor: None

AUTOMOTIVE ENGINEERING TECHNOLOGY MINOR

Required for Minor

AET	102	Introduction to Automotive Engineering Technology (1)
AET	160	Automotive Technology & Systems (4)
AET	261	Automotive Driveability and Diagnosis (4)
AET	262	Automotive Computers and Electronics (4)

Electives (choose 3 additional credits of AET/MET courses)

COURSE DESCRIPTIONS

AET 102 (1) Introduction to Automotive Engineering Technology

An overview of careers, technology and requirements of the Automotive Engineering Technology program. Careers in engineering technology are examined along with professional organizations and ethics.

Fall

AET 160 (4) Automotive Technology & Systems

This course is centered on the theory, operation and service of the systems found in modern automobiles. Lectures and demonstrations cover the course topics and open lab sessions allow students to practice procedures on their own vehicles in the completion of course assignments.

Fall, Spring

AET 261 (4) Automotive Driveability and Diagnosis

This course focuses on the engine's mechanical, ignition, fuel, and emission system using a systems approach to diagnose problems. Test equipment used in the course includes: fuel and fuel system; emission system; ignition oscilloscopes; valve refurbishing and mechanical diagnostic equipment.

Fall, Spring

AET 262 (4) Automotive Computers and Electronics

This course is centered on the theory, components, and diagnostic procedures related to modern automobile electrical and electronic systems. The major emphasis of the course involves the computer, sensors, and actuators as used in vehicles to control the ignition, fuel, emission, ABS, and chassis systems.

Pre: AET 160, AET 261, EET 113

Fall, Spring

AET 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.

Fall, Spring

Pre: MATH 121, PHYS 211

AET 364 (4) Chassis Design and Performance Testing

This course is an exploration of the theory and design of chassis systems, in addition to evaluation of these designs. Research tools include software design simulators, chassis geometry gauges, and dynamometers.

Pre: MATH 121, PHYS 211
Fall, Spring

AET 366 (3) Automotive Thermodynamics and Engine Design

This course focuses on the study of thermodynamics as it relates to internal combustion engines and their design. Static and dynamic engine measurements are thoroughly covered along with an introduction to fuel cell and hybrid applications. Thermochemistry topics are covered including fuel characteristics, mixture ratios and emission characteristics.

Pre: CHEM 104, MATH 121, PHYS 211
Fall, Spring

AET 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.

Pre: MET 177, MET 324, CHEM 104
Fall, Spring

AET 387 (1) Junior Design Project

An examination of automotive design and research along with a review of topics such as ethics, professionalism, measurement, statistics, and career development/ placement. This course prepares the student for AET 488, Senior Design Project I, where the design proposal, design project and final report are completed.

Pre: ENG 271W, MET 144, STAT 154
Spring

AET 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: AET 102. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

AET 435 (1-4) Automotive Design and Construction

Focuses on the design and construction of prototype vehicles. Topics include: vehicle design decisions, rules, budgets, chassis design, body and aerodynamics, drivetrain choices, construction techniques, and test procedures. An experimental vehicle will be built in the course. May be repeated.

Pre: Permission Required
Fall, Spring

AET 436 (3) Hybrid and Electric Vehicles

This course covers advanced vehicle propulsion systems within the electric and hybrid electric category. Fundamentals of the operation of electric motors, controllers, inverters, and batteries utilized in electric and hybrid platforms will be covered. In addition a significant focus will be placed on the application, modeling, integration, testing, and optimization of the systems in electric and hybrid electric vehicles.

Pre: AET 366, MATH 122, PHYS 212
Variable

AET 465 (2) Automotive Laboratory Experience

This course designed to provide experience in management, organization, supervision, and maintenance in a laboratory environment. Enrollment is limited. Sign up at least two semesters ahead.

Pre: AET 364, Permission required
Fall, Spring

AET 468 (4) Automotive Research Methods

Automotive research techniques and equipment form the basis for this course. Environmental measurement, air flow testing, dynamometer testing, emission measurement and fuel efficiency testing is covered. Emphasis is placed on research procedures, data acquisition and interpretation.

Pre: AET 366, PHYS 211, STAT 154
Fall, Spring

AET 488 (3) Senior Design Project I

The first of a two-course sequence where students carry out their capstone design project. Weekly meetings are scheduled where the design team carries out the tasks required for completion. Formal design presentations and research papers are presented at the end of the course.

Pre: AET 364, AET 387, MET 324, MET 341
Coreq: AET 468
Fall

AET 488W (3) Senior Design Project I

The first of a two-course sequence where students carry out their capstone design project. Weekly meetings are scheduled where the design team carries out the tasks required for completion. Formal design presentations and research papers are presented at the end of the course.

Pre: AET 364, AET 387, MET 324, MET 341
Coreq: AET 468
Fall

AET 489 (3) Senior Design Project II

The second of a two course sequence where students build upon the first semester's work. The course culminates with the completion of the capstone project with a formal technical paper following SAE format that would be ready to be submitted for publication.

Pre: AET 468, AET 488
Spring

AET 489W (3) Senior Design Project II

The second of a two course sequence where students build upon the first semester's work. The course culminates with the completion of the capstone project with a formal technical paper following SAE format that would be ready to be submitted for publication.

Pre: AET 468, AET 488
Spring

AET 492 (1-4) Automotive Seminar

Selected automotive topics.
Pre: Permission required
On-Demand

AET 497 (1-10) Internship: Automotive

Automotive work experience in an area pertinent to the student's career objectives. Consent of internship coordinator required prior to the beginning of employment and registration. Typically done between the junior and senior year.

Pre: 40 earned credits in AET/MET
Fall, Spring, Summer

AET 499 (1-4) Individual Study

Pre: Permission required

Aviation

College of Education

Department of Aviation

328 Armstrong Hall • 507-389-6116

Chair: Thomas Peterson

Nihad Daidzic, Joel Patrick McKinzie, Jeff Peterson, Thomas Peterson

Aviation Program Mission Statement. The mission of Minnesota State University, Mankato's aviation program is to educate students today who will become professionals responsible for the safe and efficient design, management, and operation of the aviation system tomorrow. The program combines all elements of a substantive university education with aviation, flight, and management components to graduate well prepared aviation professionals. Acquisition of airman-ship knowledge, skills, and ability while in college develops professionalism, responsibility, self-reliance and marketable skills for early career progression, and provides important experiences which ensure a level of understanding and competency essential to becoming an effective leader in an aviation profession.

Advising. Aviation students will be assigned a faculty advisor following an initial or transfer orientation session. Faculty advising appointments may be scheduled directly with your faculty advisor. College of Education Student Relations Coordinator, is available for general education advisement. Students may make appointments with the College of Education Academic Advising Office in 117 Armstrong Hall, phone # 507-389-1215.

POLICIES/INFORMATION

Admission to Major. Coordinator for Admission to Major, Mymique Baxter, 117 Armstrong Hall.

All students must submit an unofficial transcript or DARS report (available at the Campus Hub).

Students must meet the following requirements:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.50.

Students may enroll in 100 and 200 aviation coursework prior to admission to major.

Flight Lab. Flight costs are determined on an hourly basis for aircraft and flight instruction. To obtain FAA certifications requires FAA exams which may require a fee.

Transfer of college credit and credit for certificates and/or ratings. The Minnesota State Mankato Department of Aviation bases its flight education philosophy on a four-year university degree. Consequently, students who have obtained flight certificates/ratings without earned college credit may not have satisfied the academic and flight requirements for the aviation major. Students must demonstrate that they have received the full breadth and depth of knowl- edge, skills, abilities, and attitudes consistent with an education received at Minnesota State Mankato. Once enrolled at Minnesota State Mankato, students are expected to complete all subsequent flight training within Minnesota State Mankato's aviation program.

Transfer credits. To satisfy aviation curriculum requirements, students with pilot certificates and ratings earned with college credit through an Aviation Ac- creditation Board International (AABI) accredited university may transfer those credits without demonstration of proficiency. College credits obtained through a non AABI accredited institution will be reviewed by the Department of Aviation to ensure the issuing institution follows policies and practices consistent with AABI accreditation standards. In the event credits do not transfer, students may be required to follow Credit for Experience procedures.

Prior Experience. Students entering Minnesota State Mankato with completed

FAA certificates must register for and complete the requirements for the applicable ground school and flight lab courses. Prior flight experience will be evaluated by the faculty and may result in advanced standing in flight labs. Students are responsible for aircraft rental required for the evaluation.

GPA Policy. Admission to College of Education, 2.0 cumulative GPA.

P/N Grading Policy. Only elective and general education courses may be taken P/N, unless offered P/N only.

AVIATION BS

Degree completion = 120 credits

Major Common Core

AVIA	101	World of Aviation (3)
AVIA	150	Private Pilot (4)
AVIA	334	Aviation Management (4)
AVIA	437	Aviation Safety (4)
AVIA	445	Aviation Human Factors (3)

Major Emphasis: Professional Flight Concentration

AVIA	151	Private Pilot Flight Lab (2)
AVIA	153	Private Pilot Flight Lab II (1)
AVIA	240	Instrument Pilot (3)
AVIA	241	Instrument Pilot Flight Lab (2)
AVIA	243	Instrument Pilot Flight Lab II (1)
AVIA	250	Commercial Pilot (3)
AVIA	251	Commercial Pilot Flight Lab (2)
AVIA	253	Commercial Pilot Flight Lab II (2)
AVIA	338	Advanced Aircraft Systems (3)
AVIA	340	Flight Operations (3)
AVIA	360	Flight Instructor (3)
AVIA	361	Initial CFI-Airplane-Multiengine Flight Lab (1)
AVIA	362	Add-on CFI-A Single Engine Flight Lab (1)
AVIA	363	CFI-Instrument Airplane (CF-I) Flight Lab (1)
AVIA	432	Aviation Law-General (3)
AVIA	436	Flight Operations & Procedures (3)
AVIA	450	Professional Pilot Theory (3)
AVIA	451	Professional Pilot Course (3)
AVIA	455	Aircraft Performance (3)

Restricted Electives (choose 9 credits)

AVIA	102	Aviation Terminology (3)
AVIA	171	Multi-Engine Flight Lab (1)
AVIA	201	Theory of Flight (3)
AVIA	202	Principles of Air Navigation (3)
AVIA	333	Airline Operations (3)
AVIA	336	Basic Aircraft Systems (3)
AVIA	337	Avionics (3)
AVIA	339	Aerospace Propulsion (3)
AVIA	343	Airport Management (3)
AVIA	435	Aviation Law-Transactions (3)
AVIA	442	Fundamentals of Air Traffic Control (3)
AVIA	458	Aeromedical Factors (3)
AVIA	490	Aviation Workshop (1-10)
AVIA	497	Aviation Internship (1-12)
AVIA	499	Individual Study in Aviation (1-6)

Major Emphasis: Aviation Management Concentration

ACCT	200	Financial Accounting (3)
AVIA	343	Airport Management (3)
AVIA	432	Aviation Law-General (3)
AVIA	435	Aviation Law-Transactions (3)
BLAW	200	Legal, Political, and Regulatory Environment of Business (3)
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
FINA	362	Business Finance (3)
MGMT	200	Introduction to MIS (3)
MGMT	330	Principles of Management (3)
MRKT	310	Principles of Marketing (3)

Restricted Electives (choose 15 credits)

AVIA 102	Aviation Terminology (3)
AVIA 151	Private Pilot Flight Lab (2)
AVIA 153	Private Pilot Flight Lab II (1)
AVIA 171	Multi-Engine Flight Lab (1)
AVIA 201	Theory of Flight (3)
AVIA 202	Principles of Air Navigation (3)
AVIA 240	Instrument Pilot (3)
AVIA 241	Instrument Pilot Flight Lab (2)
AVIA 243	Instrument Pilot Flight Lab II (1)
AVIA 250	Commercial Pilot (3)
AVIA 251	Commercial Pilot Flight Lab (2)
AVIA 253	Commercial Pilot Flight Lab II (2)
AVIA 333	Airline Operations (3)
AVIA 336	Basic Aircraft Systems (3)
AVIA 340	Flight Operations (3)
AVIA 360	Flight Instructor (3)
AVIA 436	Flight Operations & Procedures (3)
AVIA 442	Fundamentals of Air Traffic Control (3)
AVIA 443	Airline Dispatch (3)
AVIA 490	Aviation Workshop (1-10)
AVIA 497	Aviation Internship (1-12)
AVIA 499	Individual Study in Aviation (1-6)

Major Emphasis: Aeronautics Concentration

A plan of study must be completed and approved by the Aviation Department for this emphasis. (choose 48 credits)

AVIA 101	World of Aviation (3)
AVIA 102	Aviation Terminology (3)
AVIA 150	Private Pilot (4)
AVIA 151	Private Pilot Flight Lab (2)
AVIA 153	Private Pilot Flight Lab II (1)
AVIA 171	Multi-Engine Flight Lab (1)
AVIA 201	Theory of Flight (3)
AVIA 202	Principles of Air Navigation (3)
AVIA 240	Instrument Pilot (3)
AVIA 241	Instrument Pilot Flight Lab (2)
AVIA 243	Instrument Pilot Flight Lab II (1)
AVIA 250	Commercial Pilot (3)
AVIA 251	Commercial Pilot Flight Lab (2)
AVIA 253	Commercial Pilot Flight Lab II (2)
AVIA 333	Airline Operations (3)
AVIA 334	Aviation Management (4)
AVIA 336	Basic Aircraft Systems (3)
AVIA 337	Avionics (3)
AVIA 338	Advanced Aircraft Systems (3)
AVIA 339	Aerospace Propulsion (3)
AVIA 340	Flight Operations (3)
AVIA 343	Airport Management (3)
AVIA 360	Flight Instructor (3)
AVIA 361	Initial CFI-Airplane-Multiengine Flt Lab (1)
AVIA 362	Add-on CFI-A Single Engine Flt Lab (1)
AVIA 363	CFI-Instrument Airplane (CF-I) Flight Lab (1)
AVIA 383	Flight Instructor Helicopter Flight Lab (1)
AVIA 392	Instrument Instructor Helicopter Flight Lab (1)
AVIA 432	Aviation Law - General (3)
AVIA 435	Aviation Law - Transactions (3)
AVIA 436	Flight Operations and Procedures (3)
AVIA 437	Aviation Safety (4)
AVIA 442	Fundamentals of Air Traffic Control (3)
AVIA 443	Airline Dispatch (3)
AVIA 445	Aviation Human Factors (3)
AVIA 450	Professional Pilot Theory (3)
AVIA 451	Professional Flight Course (3)
AVIA 452	Professional Aviator Course (3)
AVIA 455	Aircraft Performance (3)
AVIA 458	Aeromedical Factors (3)
AVIA 490	Aviation Workshop (1-10)
AVIA 497	Aviation Internship (1-12)
AVIA 499	Individual Study in Aviation (1-6)

Required Minor: None.

AERONAUTICS MINOR

An Aeronautics minor in Aviation is obtained after completing 16 required aviation core courses and 10 aviation electives. The minor provides fundamentals of the Aeronautical and Aviation sciences that may result in the candidate obtaining pilot certificates provided the required flight training is completed and all practical tests passed.

Minor Core

AVIA 101	World of Aviation (3)
AVIA 150	Private Pilot (4)
AVIA 437	Aviation Safety (4)

Electives

A plan of study must be completed and approved by the Aviation Department.

Restricted Electives (choose 9 credits)

AVIA 151	Private Pilot Flight Lab (2)
AVIA 153	Private Pilot Flight Lab II (1)
AVIA 240	Instrument Pilot (3)
AVIA 241	Instrument Pilot Flight Lab (2)
AVIA 243	Instrument Pilot Flight Lab II (1)
AVIA 250	Commercial Pilot (3)
AVIA 251	Commercial Pilot Flight Lab (2)
AVIA 253	Commercial Pilot Flight Lab II (2)
AVIA 333	Airline Operations (3)
AVIA 337	Avionics (3)
AVIA 343	Airport Management (3)
AVIA 432	Aviation Law I (3)
AVIA 435	Aviation Law II (3)
AVIA 436	Advanced Flight Operations (3)
AVIA 442	Fundamentals of Air Traffic Control (3)
AVIA 443	Airline Dispatch (3)
AVIA 445	Aviation Human Factors (3)

PRIVATE FLIGHT MINOR

Minor Core

AVIA 101	World of Aviation (3)
AVIA 150	Private Pilot (4)
AVIA 437	Aviation Safety (4)

Restricted Electives (choose 9 credits)

AVIA 151	Private Pilot Flight Lab (2)
AVIA 153	Private Pilot Flight Lab II (1)
AVIA 171	Multi-Engine Flight Lab (1)
AVIA 240	Instrument Pilot (3)
AVIA 241	Instrument Pilot Flight Lab (2)
AVIA 243	Instrument Pilot Flight Lab II (1)
AVIA 250	Commercial Pilot (3)
AVIA 251	Commercial Pilot Flight Lab (2)
AVIA 253	Commercial Pilot Flight Lab II (2)

PROFESSIONAL FLIGHT MINOR

Minor Core

AVIA 101	World of Aviation (3)
AVIA 150	Private Pilot (4)
AVIA 437	Aviation Safety (4)

Required Elective

AVIA 151	Private Pilot Flight Lab (2)
AVIA 153	Private Pilot Flight Lab II (1)
AVIA 171	Multi-Engine Flight Lab (1)
AVIA 240	Instrument Pilot (3)
AVIA 241	Instrument Pilot Flight Lab (2)
AVIA 243	Instrument Pilot Flight Lab II (1)
AVIA 250	Commercial Pilot (3)
AVIA 251	Commercial Pilot Flight Lab (2)
AVIA 253	Commercial Pilot Flight Lab II (2)
AVIA 340	Flight Operations (3)
AVIA 436	Flight Operations and Procedures (3)

PROFESSIONAL PILOT CERTIFICATE (CERT)

Note: This certificate program is not currently accepting students.

Certificate Core

AVIA	150	Private Pilot (4)
AVIA	201	Theory of Flight (3)
AVIA	202	Principles of Air Navigation (3)
AVIA	240	Instrument Pilot (3)
AVIA	250	Commercial Pilot (3)
GEOG	217	Weather (4)
GEOG	218	Weather Laboratory (1)

Certificate Restricted Electives

Helicopter or Airplane

Select one group, either the helicopter option (12 credits) or the airplane option (10 credits).

Helicopter

AVIA	152	Private Pilot Helicopter Flight Lab (3)
AVIA	242	Instrumental Pilot Helicopter Flight Lab (3)
AVIA	252	Commercial Pilot Helicopter Flight Lab (3)
AVIA	270	Helicopter Pilot (3)

Airplane

AVIA	151	Private Pilot Flight Lab (2)
AVIA	251	Commercial Pilot Flight Lab (2)
AVIA	261	Instrument Pilot Flight Lab (3)
AVIA	371	Multi-Engine Flight Lab (1)

Domestic or International Students

Pick one option. The first is intended for domestic students, the second offers courses in English for Aviation for non-native English speakers. Advisor approval is necessary for your selection.

AVIA	101	World of Aviation (3)
ENG	207	Special Topics in ESL (1-4)

COURSE DESCRIPTIONS

AVIA 101 (3) World of Aviation

Provides an expanded study of the changing and shrinking world brought on by the introduction of technology using the medium of aviation, especially the fixed-wing airplane, throughout the course of history. Students will analyze the significant impact and rapid changes aviation has had on cultures, commerce, wars, economics, and transportation. The effect the introduction and expansion aviation technology has had throughout the world created many of the same effects the expansion of the internet has had over the last 20 years.
Fall, Spring

AVIA 102 (3) Aviation Terminology

Aviation Terminology teaches international students the terms and meanings of airports, aircraft, and aviation in general. The course will also include instruction in proper pilot and air traffic control radio procedures and methods when in flight and on the ground. The course should reduce future difficulties in follow-on aviation management or professional flight courses.
Fall

AVIA 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.
Fall, Spring

AVIA 151 (2) Private Pilot Flight Lab

Provides beginning flight student with the in-flight requirements needed to obtain the FAA Private Pilot's Certificate.
Fall, Spring

AVIA 152 (3) Private Pilot Helicopter Flight Lab

Provides initial flight student with the in-flight training requirements needed to obtain the FAA private Pilot Helicopter Certificate.
On-Demand

AVIA 153 (1) Private Pilot Flight Lab II

Continues the flight lab progression in the MSU aviation program to the second stage of the Private Pilot flight lab. The course reviews and expands the classroom knowledge received in the Private Pilot Ground Course as well as the skills developed in AVIA 151. The training flights continue the building block approach to training with student pilots gradually obtaining the skills to safely fly an aircraft and pass an FAA administered practical examination.

Pre: AVIA 151
Fall, Spring, Summer

AVIA 171 (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
Fall, Spring

AVIA 201 (3) Theory of Flight

A study of physics and aerodynamic principals of flight and propulsion systems. The nature of aerodynamic forces are explained. Flight principals of lighter-than-air, airplane, glider, rotocraft and powered lift are covered in detail.

Pre: AVIA 101, AVIA 150
Fall, Spring

AVIA 202 (3) Principles of Air Navigation

A study of fundamental air navigation principles and how it is applied to flight, pilotage and dead reckoning, great circle navigation, charts and conformal projects, and celestial navigation systems and their operations and use.

Pre: AVIA 150
Spring

AVIA 240 (3) 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
Fall, Spring

AVIA 241 (2) 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
Fall, Spring

AVIA 242 (3) Instrument Pilot Helicopter Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Pilot Helicopter rating.

Pre: AVIA 152
On-Demand

AVIA 243 (1) Instrument Pilot Flight Lab II

Continues the flight lab progression in the MSU aviation program to the second stage of the Instrument Pilot flight lab. The FAA requires each pilot to obtain their Instrument Pilot flight certificate to fly in instrument weather conditions. The course reviews and expands the classroom knowledge received in the Instrument Pilot Ground Course as well as the skills developed in AVIA 241. The training flights continue the building block approach to training with student pilots gradually obtaining the skills to fly in all instrument conditions and to pass an FAA administered practical examination.

Pre: AVIA 241
Fall, Spring, Summer

AVIA 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 151, AVIA 240
Fall, Spring

AVIA 251 (2) 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

Fall, Spring

AVIA 252 (3) Commercial Pilot Helicopter Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Commercial Pilot Helicopter Certificate.

Pre: AVIA 152, AVIA 242

On-Demand

AVIA 253 (2) Commercial Pilot Flight Lab II

Continues the flight lab progression in the MSU aviation program. The FAA requires each pilot to obtain their Commercial Pilot flight certificate to be compensated for work as a pilot. This stage two course of the Commercial Pilot flight lab reviews and expands required classroom knowledge received in the Commercial Pilot Ground Course. The training flights use a building block approach to training with student pilots gradually obtaining the skills to fly the more difficult maneuvers and to pass an FAA administered practical examination.

Pre: AVIA 251

Fall, Spring, Summer

AVIA 270 (3) Helicopter Pilot

Study of Helicopter theory to meet FAA part 141 certification requirements for helicopter.

Pre: AVIA 150, AVIA 250, AVIA 260

On-Demand

AVIA 275 (3) Helicopter Flight Theory

This course covers all the knowledge areas required for the FAA helicopter private, instrument and commercial pilot certification at a deeper and more academic level.

Variable

AVIA 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.

Fall, Spring

AVIA 334 (4) Aviation Management

Provides an understanding of management and financial techniques related to aviation businesses. Generally accepted and proven business techniques are applied to the aviation setting.

Fall, Spring

AVIA 336 (3) Basic Aircraft Systems

Aircraft systems for light and medium category general aviation aircraft, includes the study of structure, control, electrical, fuel, environmental, landing gear, and engine systems. Examples of general aircraft category aircraft systems will be discussed from the pilot's perspective.

Fall

AVIA 337 (3) Avionics

Principles of Avionics is an expanded course on the theory and Applications of Aviation Electronics for future pilots and students of aviation and aeronautics. The course highlights modern synthetic displays, navigation, automatic flight control, FMS, and other essential aircraft equipment.

Variable

AVIA 338 (3) Advanced Aircraft Systems

Hydraulic, pneumatic, electrical, pressurization, environmental, and other systems for large-transport category aircraft are covered. Also turbine engines, primary and secondary flight controls, and miscellaneous important systems are examined. Examples of systems in large transport-category jets will be discussed from the pilot operational perspective.

AVIA 339 (3) Aerospace Propulsion

The course provides basic principles of operation and components description of the traditional and modern propulsion systems used in atmospheric and space transportation vehicles. Reciprocating engines with propellers, turbine jet engines, and chemical rockets are covered.

Spring

AVIA 340 (3) Flight Operations

Introduces students to airline training, regulations, and flight management systems (FMS). Students will develop an understanding of airline operations as they experience an FAA Part 121 style basic indoctrination. Students will be trained on procedures, requirements, and limitations for airline operations through all phases of flight and ground in a simulated Advanced Qualifications Program (AQP) style course. Students will also develop technical and procedural knowledge of FMS.

Fall, Spring

AVIA 343 (3) Airport Management

Course provides students with an overview of airport management. Studies include the day-to-day operations of air carrier and general aviation airports as well as planning, design, construction, finance and public relations associated with airport management. Students are exposed to many career opportunities in this area. The course includes a case study of the Minneapolis/St. Paul metropolitan area airport system and several site visits.

Spring

AVIA 360 (3) 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, AVIA 240, AVIA 241, AVIA 250

Fall, Spring

AVIA 361 (1) Initial CFI-Airplane-Multiengine 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 AVIA 241, or equivalent

Fall, Spring

AVIA 362 (1) Add-on CFI-A-Single Engine 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 AVIA 241, or equivalent

Fall, Spring

AVIA 363 (1) CFI-Instrument Airplane (CFI-I) Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Flight Instructor's Certificate.

Pre: AVIA 251 and AVIA 241, or equivalent

Fall, Spring

AVIA 383 (1) Flight Instructor Helicopter Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Certified Flight Instructor Helicopter Certificate.

Pre: AVIA 252

On-Demand

AVIA 392 (1) Instrument Instructor Helicopter Flight Lab

Prepares advanced flight students with the in-flight requirements needed to obtain the FAA Instrument Helicopter Flight Instructor Certificate.

Pre: AVIA 242, AVIA 252

On-Demand

AVIA 432 (3) Aviation Law - General

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.

Fall

AVIATION CONTINUED

AVIA 435 (3) Aviation Law - Transactions

This course will take an in-depth look at several legal topics that touch the aviation industry. The course will use the case study method to look at several aviation-related cases, including commercial airline accidents, pilot certificate actions, airline security violation cases, international aviation law, and several other current legal matters that involve the airline industry.

Pre: AVIA 432

Spring

AVIA 436 (3) Flight Operations & Procedures

Introduces advanced professional flight students to FAR Part 121 style standardized flight training in a regional jet. Course will include aircraft systems, procedures training, and techniques used in high performance turbine aircraft. Emphasis on standard operating procedures (SOP), crew resource management (CRM), and line oriented flight training (LOFT).

Pre: AVIA 340

AVIA 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.

Fall, Spring

AVIA 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.

Fall

AVIA 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.

Spring

AVIA 445 (3) Aviation Human Factors

A study of various techniques designed to enhance management and leadership methods. Emphasizes decision-making and judgment skills as well as methods to improve effective communication and skills to develop a productive work environment for flight crew and other airline personnel.

Fall, Spring

AVIA 450 (3) Professional Pilot Theory

This course is designed to develop students technical understanding of information and knowledge required for Air Transport Pilots. Students will participate in a capstone research project and present their findings in a research paper and oral presentation. Course completion requirements will include preparation for the FAAATP written exam.

Pre: AVIA 251, AVIA 340, AVIA 436

Coreq: AVIA 340, AVIA 436, AVIA 451

Fall, Spring

AVIA 451 (3) Professional Flight Course

Prepares students who desire careers as professional pilots. Emphasizes complete ground tutoring and flight instruction relating to instrument maneuvers, SOP's, regulation interpretation, pilot discipline, and professional procedures. Crew resource management, LOFT, and turbine-transition flights in an advanced jet flight simulator are used. This course is taken in conjunction in the same semester as AVIA 450.

Pre: AVIA 251

Coreq: AVIA 450

Fall, Spring

AVIA 452 (3) Professional Aviator Course

This is a stand-alone course designed for the person who is not an MSU aviation major. The course offers a complete jet aircraft transition training program.

Summer

AVIA 455 (3) Aircraft Performance

The fundamental principles and calculation of the performance in various phases of flight: takeoff and land, climb and descent performance, maximum-range and maximum-endurance cruise, single-engine performance in multi-engine aircraft, standard atmosphere and basic subsonic and supersonic aerodynamics is covered.

Pre: AVIA 201

Variable

AVIA 458 (3) Aeromedical Factors

Covers aeromedical factors that are essential for high-altitude flying aircraft. Hypoxia, hyperventilation, dysbarism, basic gas laws. Armstrong line, vision in flight, day and night. Pressurization systems, pressurized suits, danger of loss of cabin pressure, future HSCT and LEO commercial flights.

Variable

AVIA 490 (1-10) Aviation Workshop

Coreq: ANTH 491 or ANTH 492 or ANTH 493 or ANTH 494

Variable

AVIA 497 (1-12) Aviation Internship

Supervised experience in business, industry, state or federal institutions.

Fall, Spring

AVIA 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.

Fall, Spring

BIOCHEMISTRY

Biochemistry

College of Science, Engineering and Technology

Department of Chemistry & Geology

241 Ford Hall • 507-389-1963

Chair: Mary Hadley

Brian Groh, Michael J. Lusch, Rebecca Moen, Marie K. Pomije, Jeffrey R. Pribyl, Danaé Quirk Dorr, James Rife, Theresa Salerno, Lyudmyla Stackpool, Daniel Swart, John D. Thoenke, Trent Vorlicek

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 a biochemistry advisor for specific information regarding the program. This major is appropriate for students in pre-professional programs such as pre-dental, pre-medical, and pre-pharmacy programs.

POLICIES/INFORMATION

The first year of coursework for biochemistry majors should include two semesters of chemistry (CHEM 201, CHEM 202), MATH and at least one semester of Biology (BIOL 105). Organic Chemistry should be taken during the second year.

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 BIOL 106 as well as CHEM 201 and CHEM 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.

GPA Policy. Students obtaining a major in biochemistry must maintain an overall GPA of 2.2 in all courses required for their selected program with no more than 4 credits of "D" work in chemistry or biochemistry courses.

Students must meet a residency requirement. This means that all students who wish to receive either the Biochemistry BA or the Biochemistry BS from Minnesota State Mankato must complete the biochemistry sequence which consists of CHEM 460, CHEM 461, CHEM 465 and CHEM 466 at Minnesota State Mankato. It is important that this sequence be taken during the third (junior) year for all majors.

Students who complete the requirements for the Biochemistry BS must submit a comprehensive research report in conjunction with completion of CHEM 498. Students are encouraged to contact Professors Rife, Salerno and Moen for details regarding the research report prior to enrolling in CHEM 498.

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 BS (Chemistry) major that is approved by that organization. The BS Biochemistry program follows the ASBMB recommended curriculum for a biochemistry and molecular biology undergraduate major. Anyone considering a biochemistry major should choose a biochemist as an advisor and consult that advisor often throughout the course of study.

BIOCHEMISTRY BA

Degree completion = 120 credits

Required General Education

BIOL 105 General Biology I (4)
CHEM 201 General Chemistry I (5)

Major Common Core

BIOL 106 General Biology II (4)
BIOL 211 Genetics (4)
BIOL 270 Microbiology (4)
BIOL 479 Molecular Biology (4)
CHEM 202 General Chemistry II (5)
CHEM 305 Analytical Chemistry (4)
CHEM 322 Organic Chemistry I (4)
CHEM 324 Organic Chemistry II (3)
CHEM 325 Organic Chemistry II Lab (1)
CHEM 340 Quantitative Skills for Chemistry and Biochemistry 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)

Capstone

(choose 1 credit from either CHEM 494 or CHEM 495)
CHEM 494 Biochemistry Capstone Experience (1)
CHEM 495 Senior Seminar (1)

Major Restricted Electives

Upper Division Electives
Choose a minimum of 9 credits of upper division electives from either BIOL or

CHEM courses. These electives must be approved by the Biochemistry Advisor. Courses used in the core cannot count as electives.

BIOL 300 - BIOL 499
CHEM 300 - CHEM 499

Other Graduation Requirements

Choose at least 2 additional upper division credits to meet graduation requirements.

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: None.

BIOCHEMISTRY BS

Required General Education

BIOL 105 General Biology I (4)
CHEM 201 General Chemistry I (5)

MATH courses (choose 7-8 credits)

Choose 2 of the following courses. Note that GE-4 requires 1 course so the remaining credits may be considered restricted elective credits.

MATH 121 Calculus I (4)
MATH 122 Calculus II (4)
STAT 154 Elementary Statistics (3)

Major Common Core

BIOL 106 General Biology II (4)
BIOL 211 Genetics (4)
BIOL 270 Microbiology (4)
BIOL 479 Molecular Biology (4)
CHEM 202 General Chemistry II (5)
CHEM 305 Analytical Chemistry (4)
CHEM 322 Organic Chemistry I (4)
CHEM 324 Organic Chemistry II (3)
CHEM 325 Organic Chemistry II Laboratory (1)
CHEM 340 Quantitative Skills for Chemistry and Biochemistry I (1)
CHEM 341 Quantitative Skills for Chemistry and Biochemistry II (1)
CHEM 440 Physical Chemistry I (3)
CHEM 450 Physical Chemistry Laboratory 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 494 Biochemistry Capstone Experience (1)
(2 credits of CHEM 498 are required for the major core)
CHEM 498 Undergraduate Research (1-6)

Major Restricted Electives

Upper Division Electives
Choose a minimum of 7 credits from upper division Biology and Chemistry courses with approval from a Biochemistry advisor. Courses used in the core cannot count as electives.

BIOL 300 - BIOL 499
CHEM 300 - BIOL 499

PHYS

(choose 8 credits from either the Principles of Physics sequence or the General Physics courses noted below)

PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)
PHYS 221 General Physics I (4)
PHYS 223 General Physics III (3)
PHYS 233 General Physics III Laboratory (1)

Required Minor: None.

Biology

College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-2786
Website: www.cset.mnsu.edu/biology/

Chair: Penny Knoblich, DVM, Ph.D.

Lois Anderson, M.S.; Michael Bentley, Ph.D.; Rachel Cohen, Ph.D.; Bradley Cook, Ph.D.; Shannon Fisher, Ph.D.; Geoff Goellner, Ph.D.; Marilyn Hart, Ph.D.; John D. Krenz, Ph.D.; Bethann Lavoie, Ph.D.; Alison Mahoney, Ph.D.; Gregg Marg, Ph.D.; Steven Mercurio, Ph.D.; Beth Proctor, Ph.D.; Christopher Ruhland, Ph.D.; Timothy Secott, Ph.D.; David Sharlin, Ph.D.; Robert Sorensen, Ph.D.; Daniel Toma, Ph.D.; Dorothy Wrigley, Ph.D.; Brittany Ziegler, 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-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, cytotechnology, ecology, biomedical sciences, microbiology, plant science, toxicology, or zoology. Programs in biotechnology, environmental sciences, food science technology and science teaching are also offered.

POLICIES/INFORMATION

Admission to Major is granted by the department. Admission requirements are 32 earned semester hours including BIOL 105, BIOL 106, BIOL 211, and CHEM 201 with a grade of "C" or better; completed General Education Goal Area 4 (Mathematics); completed General Education Goal Area 1, Part A (English Composition); and a minimum cumulative GPA of 2.2, with a cumulative GPA in Biology courses of 2.0.

Residency requirement for the Major. At least 50% of courses 300 level and up that are required for the major must be taken at Minnesota State University, Mankato.

Graduation with a Biology Major requires a minimum cumulative GPA of 2.0; and a minimum cumulative GPA in Biology courses of 2.0.

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 first year students and currently enrolled Minnesota State Mankato 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 catalog.

BIOLOGY BS

Degree completion = 120 credits

Students may elect to complete the general non-specialized biology major or select one of the alternative specialized options or emphases.

Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
ENG	271W	Technical Communication (4)

Major Common Core

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)

Major Emphasis: General, Non-Specialized

Students may elect to complete the general, non-specialized biology major or select one of the alternative specialized emphases. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Math Requirement (choose 3-4 credits)

MATH	113	Trigonometry (3)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)

Physics Requirement (choose 3-4 credits)

PHYS	101	Introductory Physics (3)
PHYS	211	Principles of Physics I (4)
PHYS	221	General Physics I (4)

Statistics Requirement (choose 3 credits)

HLTH	475	Biostatistics (3)
STAT	154	Elementary Statistics (3)

Emphasis Common Core (choose 20 credits)

BIOL	215	General Ecology (4)
BIOL	301	Evolution (2)
BIOL	320	Cell Biology (4)
CHEM	202	General Chemistry II (5)
CHEM	322	Organic Chemistry I (4)
CHEM	323	Supplemental Organic Functional Group Chemistry (1)

Physiology Requirement—Choose ONLY ONE of the four following pairs of courses (6 to 9 credits total). Emphasis Restricted Electives plus Emphasis Unrestricted Electives must total at least 18 credits to fulfill the 40-credit major requirement.

Human

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)

Plant

BIOL	217	Plant Science (4)
BIOL	441	Plant Physiology (4)

Microbiology

BIOL	270	Microbiology (4)
BIOL	476	Microbial Physiology and Genetics (5)

Animal

BIOL	316	Animal Diversity (3)
BIOL	431	Comparative Animal Physiology (3)

Emphasis Unrestricted Electives (choose 9 - 12 credits)

(choose additional upper-division courses so you have a total of 40 credits in Biology. At least 7 of these elective credits must be from courses with a laboratory component.)

BIOL 300 - BIOL 499

Recommended Support Courses (choose 0-8 credits)

CHEM	360	Principles of Biochemistry (4)
CHEM	460	Biochemistry I (3)
CHEM	465	Biochemical Techniques I (1)

Required Minor: None

Major Emphasis: Biomedical Sciences

The purpose of this option is to prepare the student for a career in biomedicine. The emphasis fulfills the science course requirements for most medical, osteopathic, dental, and chiropractic schools as well as the science course requirements for graduate education in biomedicine. If you are interested in applying for a specific medical school, please contact that school for their specific requirements. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Emphasis Required General Education (4 credits)

PHYS	211	Principles of Physics I (4)
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Math Requirement (choose 3-4 credits)

MATH	113	Trigonometry (3)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)

Emphasis Common Core (choose 37 credits)

BIOL 220	Human Anatomy (4)
BIOL 270	Microbiology (4)
BIOL 320	Cell Biology (4)
BIOL 330	Principles of Human Physiology (4)
BIOL 424	Developmental Biology (3)
CHEM 202	General Chemistry II (5)
CHEM 305	Analytical Chemistry (4)
CHEM 322	Organic Chemistry I (4)
CHEM 323	Supplemental Organic Functional Group Chemistry (1)
PHYS 212	Principles of Physics II (4)

Emphasis Restricted ElectivesBiochemistry (choose 4 credits)

CHEM 360	Principles of Biochemistry (4)
CHEM 460	Biochemistry I (3)
CHEM 465	Biochemical Techniques I (1)

Additional Math/Stats Requirement (choose 3-4 credits)

MATH 121 cannot be counted in this category if previously counted in the Math Requirement.

HLTH 475	Biostatistics (3)
MATH 121	Calculus I (4)
STAT 354	Concepts of Probability & Statistics (3)

Emphasis Unrestricted Electives (choose 9 credits)

At least one course must have a laboratory component. Choose a maximum of 4 credits from BIOL 497 or BIOL 499.

BIOL 324	Neurobiology (3)
BIOL 410	Global Change Biology (3)
BIOL 417	Biology of Aging and Chronic Diseases (3)
BIOL 420	Diagnostic Parasitology (3)
BIOL 430	Hematology/Introduction to Immunology (4)
BIOL 433	Cardiovascular Physiology (3)
BIOL 435	Histology (4)
BIOL 438	General Endocrinology (3)
BIOL 452	Biological Instrumentation (3)
BIOL 460	Introduction to Toxicology (3)
BIOL 466	Principles of Pharmacology (3)
BIOL 474	Immunology (4)
BIOL 475	Medical Microbiology (4)
BIOL 479	Molecular Biology (4)
BIOL 497	Internship I (1-12)
BIOL 499	Individual Study (1-4)

Required Minor: None.**Major Emphasis: Biology Cytotechnology**

A cytotechnologist is an allied health professional and is involved in the microscopic study of cells for evidence of disease and cancer. Cytotechnologists are trained to accurately identify precancerous, malignant, and infectious conditions using cytological techniques. The "Pap test" (an evaluation of cells from the uterine cervix) is the best known test in this field. The four-year curriculum consists of three years spent at the university completing the required courses and the fourth year is a 32 credit internship spent in professional education. Agencies participating in the cytotechnology program include, but are not limited to: Mayo School of Health Sciences in Rochester, MN. Admission into the fourth year hospital clinical internship is competitive. Therefore, admission to the program does not ensure placement into the fourth year internship. The BS degree is awarded by the university after successful completion of the internship year. Graduates are then eligible to take the certifying examination. Cytotechnologists are employed in hospital laboratories, universities, and private laboratories. Adjunct faculty at the clinical sites include: Kara Hansing, CT (ASCP). Students accepted into the clinical internship will be responsible for: Proof of Medical / Hospitalization / Health Insurance; Health Physical Exam; Tuberculosis (TB) testing; and Proof of Immunization which may include the following: Hepatitis B, Measles, Mumps, Rubella, Tetanus, Chickenpox (Varicella), and Influenza. Students may also be required to submit to Drug Screen Testing. Internship sites are required by law to do Background Checks on all students admitted to their cytotechnology programs. All emphases require BIOL 105, 106, 211, CHEM 201, and ENG 271W.

Emphasis Required General Education (choose 4 credits)

MATH 112	College Algebra (4)
MATH 113	Trigonometry (3)
MATH 115	Precalculus Mathematics (4)
MATH 121	Calculus I (4)

Emphasis Required Support Courses (choose 13 credits)

Choose from the following to total at least 13 additional credits in Chemistry.

CHEM 202	General Chemistry II (5)
CHEM 305	Analytical Chemistry (4)
CHEM 322	Organic Chemistry I (4)
CHEM 323	Supplemental Organic Functional Group Chemistry (1)
CHEM 360	Principles of Biochemistry (4)

Emphasis Core Courses (choose 16 credits)

BIOL 220	Human Anatomy (4)
BIOL 270	Microbiology (4)
BIOL 320	Cell Biology (4)
BIOL 330	Principles of Human Physiology (4)

Emphasis Restricted Electives (choose 3-4 credits)

BIOL 424	Developmental Biology (3)
BIOL 430	Hematology/Introduction to Immunology (4)
BIOL 435	Histology (4)
BIOL 479	Molecular Biology (4)

Professional Education (choose 32 credits)

BIOL 493	Cytotechnology Clinical Internship I (1-12)
BIOL 494	Cytotechnology Clinical Internship II (1-12)
BIOL 495	Cytotechnology Clinical Internship III (1-12)
BIOL 496	Cytotechnology Clinical Internship IV (1-12)

Major Emphasis: Ecology

Ecology is the study of relationships between organisms and their environment. The emphasis consists of fundamental courses in biology and related sciences, mid-level study in genetics, evolution, and statistics, and an array of upper-division electives that emphasize fieldwork, data analysis, and writing. Many students collaborate with faculty in their research or conduct independent research projects. Career titles available with this emphasis include ecologist, naturalist, wildlife biologist, natural resource manager, fish biologist, marine biologist, conservational training or graduate school. For more information about the emphasis and the ecology faculty, select "ecology" at the department page (see www.mnsu.edu/dept/biology). All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Emphasis Common Core (choose 17 credits)

BIOL 215	General Ecology (4)
BIOL 301	Evolution (2)
BIOL 408	Vertebrate Ecology (4)
BIOL 443	Plant Ecology (4)
HLTH 475	Biostatistics (3)
<u>Chemistry Requirement</u> (choose 5 credits)	
CHEM 111	Chemistry of Life Processes (5)
CHEM 202	General Chemistry II (5)

Emphasis Required General Education Courses

<u>Physics</u>	
PHYS 211	Principles of Physics I (4)

Math

(choose 3-4 credits)	
MATH 113	Trigonometry (3)
MATH 115	Precalculus Mathematics (4)

Emphasis Restricted Electives: Physiology Requirement

(COMPLETE ONE GROUP)

Animal Physiology

BIOL 316	Animal Diversity (3)
BIOL 431	Comparative Animal Physiology (3)

Microbial Physiology

BIOL 270	Microbiology (4)
BIOL 476	Microbial Physiology and Genetics (5)

BIOLOGY CONTINUED

Plant Physiology

- BIOL 217 Plant Science (4)
BIOL 441 Plant Physiology (4)

Emphasis Unrestricted Electives

Choose courses to total 40 credits in biology. Courses other than those listed are allowed with consent of your advisor. A limit of 4 total credits is allowed from BIOL 492, BIOL 497, and BIOL 499 combined.

- BIOL 320 Cell Biology (4)
BIOL 404 Wetlands (4)
BIOL 405 Fisheries Biology (3)
BIOL 409 Advanced Field Ecology (4)
BIOL 410 Global Change Biology (3)
BIOL 412 Soil Ecology (4)
BIOL 431 Comparative Animal Physiology (3)
BIOL 432 Lake Ecology (4)
BIOL 436 Animal Behavior (4)
BIOL 441 Plant Physiology (4)
BIOL 442 Flora of Minnesota (4)
BIOL 460 Introduction to Toxicology (3)
BIOL 472 Microbial Ecology and Bioremediation (4)
BIOL 479 Molecular Biology (4)
BIOL 492 Honors Research (1-3)
BIOL 497 Internship I (1-12)
BIOL 499 Individual Study (1-4)

Required Minor: None

Major Emphasis: Microbiology

Microorganisms impact every area of life. The emphasis exposes students to a variety of topics in microbiology and teaches numerous skills needed to work with microorganisms. Training in microbiology prepares students for employment in industry (ex. quality assurance, vaccine production) and government (ex. laboratory technicians). Currently, employment opportunities abound in applied areas of microbiology such as biological products/pharmaceuticals, food processing, environmental assessment. It also prepares a student for continuing education in microbiology, immunology, and cell and molecular biology. Students may elect to work on research projects with faculty who work in the areas of food microbiology, immunology, microbial genetics, and molecular biology. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Math Requirement (choose 3-4 credits)

- MATH 112 College Algebra (4)
MATH 113 Trigonometry (3)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)

Emphasis Common Core (choose 18 credits)

- BIOL 270 Microbiology (4)
CHEM 202 General Chemistry II (5)
CHEM 305 Analytical Chemistry (4)
CHEM 322 Organic Chemistry I (4)
CHEM 323 Supplemental Organic Functional Group Chemistry (1)

Emphasis Restricted Electives (choose 4-5 credits)

- BIOL 476 Microbial Physiology and Genetics (5)
CHEM 360 Principles of Biochemistry (4)
CHEM 460 Biochemistry I (3)
CHEM 465 Biochemical Techniques I (1)

Emphasis Unrestricted Electives (choose 25 credits)

BIOL 476, CHEM 360, CHEM 460, and CHEM 465 can satisfy this category IF they are not used in the Emphasis Restricted Electives.

- BIOL 420 Diagnostic Parasitology (3)
BIOL 452 Biological Instrumentation (3)
BIOL 472 Microbial Ecology and Bioremediation (4)
BIOL 474 Immunology (4)

- BIOL 475 Medical Microbiology (4)
BIOL 476 Microbial Physiology and Genetics (5)
BIOL 478 Food Microbiology and Sanitation (4)
BIOL 479 Molecular Biology (4)
BIOL 497 Internship I (1-12)
BIOL 499 Individual Study (1-4)

Recommended General Electives (choose 0-7 credits)

- HLTH 475 Biostatistics (3)
MATH 121 Calculus I (4)

Required Minor: None.

Major Emphasis: Plant Science

The Plant Science emphasis includes the study of cells, genetics, anatomy, physiology, taxonomy, and ecology of terrestrial and aquatic vascular plants, mosses, algae and fungi. The courses emphasize plant structure and function, diversity, evolutionary and anatomical adaptations and interactions between plants and their environment. An emphasis in plant sciences prepares undergraduate students for careers in education, biotechnology, field biology, pharmaceutical companies and government agencies. In addition, the emphasis prepares students for Master's and Doctoral degrees in Plant Science. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Physics Requirement (choose 4 credits)

- PHYS 211 Principles of Physics I (4)

Math Requirement (choose 3-4 credits)

- MATH 113 Trigonometry (3)
MATH 115 Precalculus Mathematics (4)

Emphasis Common Core (choose 20 credits)

- BIOL 215 General Ecology (4)
BIOL 217 Plant Science (4)
BIOL 441 Plant Physiology (4)
BIOL 442 Flora of Minnesota (4)
BIOL 443 Plant Ecology (4)

Emphasis Restricted Electives

Chemistry Requirement (choose one course)

- CHEM 111 Chemistry of Life Processes (5)
CHEM 202 General Chemistry II (5)

Statistics Requirement (choose one course)

- HLTH 475 Biostatistics (3)
STAT 154 Elementary Statistics (3)

Emphasis Unrestricted Electives

(choose at least 12 credits from the following list of electives)

At least two of the courses must have laboratory components. A MAXIMUM of 4 credits may be selected from BIOL 492, BIOL 497, and BIOL 499 combined.

- BIOL 301 Evolution (2)
BIOL 320 Cell Biology (4)
BIOL 404 Wetlands (4)
BIOL 409 Advanced Field Ecology (4)
BIOL 410 Global Change Biology (3)
BIOL 412 Soil Ecology (4)
BIOL 432 Lake Ecology (4)
BIOL 451 Plant Biotechnology (4)
BIOL 460 Introduction to Toxicology (3)
BIOL 479 Molecular Biology (4)
BIOL 492 Honors Research (1-3)
BIOL 497 Internship I (1-12)
BIOL 499 Individual Study (1-4)

Recommended Support Courses

- IT 100 Introduction to Computing and Applications (4)
MATH 121 Calculus I (4)

Required Minor: None.

Major Emphasis: Toxicology

Toxicology is the study of the harmful effects of chemicals, radiation, and other stressors on biological systems. This is a wide-ranging course of study, allowing students to connect their background on chemistry, biology, physics, mathematics, etc. to understand all aspects of how an exposure may or may not yield a toxic result. Then students can do elementary risk assessment and environmental or medical analyses. The purpose of this emphasis is to train students in the theory and hands-on research techniques of an interdisciplinary biological science at the undergraduate level in a field where there are few programs in the United States. Since toxins can be antibiotics, antiviral, or other chemotherapeutic medications, antidotes, agricultural chemicals, industrial chemicals, radiation, or just stressors such as poor ergonomics, graduates can and have proceeded into research and testing of pharmaceuticals, pesticides, and environmental toxicology in industry, government, or academic institutions. Additionally, training in risk assessments leads to additional opportunities for statistical modeling, which is employed in the areas mentioned above and industrial hygiene. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Emphasis Required General Education

MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)

Emphasis Common Core

BIOL	215	General Ecology (4)
BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)
BIOL	330	Principles of Human Physiology (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)
CHEM	202	General Chemistry II (5)
CHEM	305	Analytical Chemistry (4)
CHEM	322	Organic Chemistry I (4)
CHEM	324	Organic Chemistry II (3)
CHEM	460	Biochemistry I (3)
CHEM	461	Biochemistry II (3)
CHEM	465	Biochemical Techniques I (1)
CHEM	466	Biochemical Techniques II (2)
HLTH	475	Biostatistics (3)

Required Minor: None**Major Emphasis: Zoology**

Zoology is a major branch of the biological sciences that involves the study of animals. Study in this area focuses on organismal diversity, animal structures and the functions, genetics, development, evolution, behavior, and ecological interactions. Occupations that may be available to graduate include: Animal Husbandry, Museum/Zoo Guide, Animal Laboratory Technician, Animal Trainer, Pest Control Technician, Museum Curator, Entomologist, Environmental Consultant, Field Researcher, Science Writer, Physician, Veterinarian, Wildlife Rehabilitator, Zoo Keeper, and Zoologist. Advanced training in professional or graduate schools is required in many of these areas and acceptance for advanced training is competitive. Success in this career field typically requires: a thorough knowledge of general biology, the ability to work and relate with animals, proficiency in reading and writing and the ability to collect and analyze data, and an interest in problem solving and decision making. All emphases require BIOL 105, BIOL 106, BIOL 211, CHEM 201, and ENG 271W.

Emphasis Required General Education (choose 8 credits)

MATH	112	College Algebra (4)
MATH	113	Trigonometry (3)
MATH	115	Precalculus Mathematics (4)
PHYS	211	Principles of Physics I (4)

Emphasis Core Courses (choose 19 credits)

BIOL	215	General Ecology (4)
BIOL	301	Evolution (2)
BIOL	316	Animal Diversity (3)
BIOL	408	Vertebrate Ecology (4)
BIOL	424	Developmental Biology (3)
BIOL	431	Comparative Animal Physiology (3)

Emphasis Restricted Electives (choose 6-7 credits)

BIOL	420	Diagnostic Parasitology (3)
BIOL	421	Entomology (3)
BIOL	436	Animal Behavior (4)
BIOL	438	General Endocrinology (3)

Emphasis Unrestricted Electives (choose 6 credits)

Other courses may apply with advisor's consent. A MAXIMUM of four credits may be used from BIOL 492, BIOL 497, and BIOL 499 combined.

BIOL	320	Cell Biology (4)
BIOL	324	Neurobiology (3)
BIOL	403	Conservation Biology (3)
BIOL	409	Advanced Field Ecology (4)
BIOL	410	Global Change Biology (3)
BIOL	412	Soil Ecology (4)
BIOL	420	Diagnostic Parasitology (3)
BIOL	435	Histology (4)
BIOL	438	General Endocrinology (3)
BIOL	460	Introduction to Toxicology (3)
BIOL	472	Microbial Ecology and Bioremediation (4)
BIOL	479	Molecular Biology (4)
BIOL	492	Honors Research (1-3)
BIOL	497	Internship I (1-12)
BIOL	499	Individual Study (1-4)

Emphasis Required Support Courses**Chemistry (choose one)**

CHEM	111	Chemistry of Life Processes (5)
CHEM	202	General Chemistry II (5)

Statistics (choose one)

HLTH	475	Biostatistics (3)
STAT	154	Elementary Statistics (3)

Recommended Support Courses

IT	100	Introduction to Computing and Applications (4)
MATH	121	Calculus I (4)

Required Minor: None**LIFE SCIENCE TEACHING BS**

See the SCIENCE TEACHING section of this catalog.

BIOLOGY MINOR**Minor Core**

BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)
(choose 4 credits)		
BIOL	105	General Biology I (4)
BIOL	105W	General Biology I (4)

Minor Elective

In addition to the course chosen from the list below add any 200-level or above biology course to total 17 credits in the minor.

(choose one course from the following)

BIOL	215	General Ecology (4)
BIOL	217	Plant Science (4)
BIOL	220	Human Anatomy (4)
BIOL	270	Microbiology (4)

COURSE DESCRIPTIONS

BIOL 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.

Fall, Spring
GE-3

BIOL 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.

Fall, Spring

BIOL 102 (3) Biology of Women

An introduction to biological topics of special interest to women with emphasis on anatomic and physiologic changes over the course of a woman's lifetime. Designed for students not majoring in science. Presents fundamental biologic concepts within this specialized context and provides opportunity to collect, evaluate, and analyze data.

Fall, Spring
GE-3

BIOL 103W (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.

Fall
WI, GE-3

BIOL 105 (4) General Biology I

Study of biological processes at the suborganismal level including cell chemistry, metabolism, reproduction, genetics, and complex tissue physiology. Laboratory and discussion sessions stress problem solving and experimental design.

Fall, Spring
GE-3

BIOL 105W (4) General Biology I

Study of biological processes at the suborganismal level including cell chemistry, metabolism, reproduction, genetics, and complex tissue physiology. Laboratory and discussion sessions stress problem solving and experimental design.

Fall, Spring
WI, GE-3

BIOL 106 (4) General Biology II

Study of biological processes at the organismal level including a survey of life forms (viruses, bacteria, protists, fungi, plants, and animals), their evolution, and ecology. Laboratory and discussion sessions stress problem solving and experimental design.

Pre: BIOL 105
Fall, Spring

BIOL 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.

Spring

BIOL 211 (4) Genetics

Introduction to genetic analysis. Topics covered include those both classical and modern genetics: population genetics, molecular genetics, genetic manipulation of organisms and selection. Central to this course will be the primacy of the trait as the object of genetics and the development/refinement of the concept of the gene. Lab included.

Pre: BIOL 105, BIOL 106, and MATH 112
Fall, Spring, Summer

BIOL 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, training in data collection and analysis, use of equipment, and report writing. Lab included.

Pre: BIOL 105 and BIOL 106 or consent
Fall

BIOL 217 (4) Plant Science

Biology of plants including unique features of plant cells, life histories, metabolism, anatomy, physiology, and ecology. The course emphasizes 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 BIOL 106 or consent
Spring

BIOL 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.

Fall, Spring

BIOL 270 (4) Microbiology

An introduction to the general principles and methods used in the study of microorganisms. Lab included.

Pre: One BIOL course and one semester of chemistry from among CHEM 104, CHEM 106, CHEM 111, or CHEM 201
Fall, Spring, Summer
GE-3

BIOL 283 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. NOTE: Credit does not apply to any major.

Pre: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

BIOL 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, BIOL 106, BIOL 211
Spring

BIOL 310 (4) Basics of Human Physiology

Principles of functions of human cells, organs, and systems with an emphasis on organ/system interactions. Designed for majors that do not require a strong medical and research emphasis. Includes an active learning laboratory to facilitate learning the complex lecture material.

Pre: BIOL 220, CHEM 104 or CHEM 106 or CHEM 111 or CHEM 201
Fall, Spring, Summer

BIOL 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 BIOL 106
Fall

BIOL 320 (4) Cell Biology

An examination of eukaryotic cellular structure, organization and physiology. Lab included.

Pre: BIOL 105 and BIOL 106, BIOL 211
Fall

BIOL 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

Fall

BIOL 330 (4) Principles of Human Physiology

Principles of functions of human cells, organs, and systems with an emphasis on organ/system interactions. This course is designed for students majoring in biology, chemistry, or related sciences, and medically-related areas. Includes a laboratory with a research and medical emphasis.

Pre: BIOL 220, CHEM 104 or CHEM 106 or CHEM 111 or CHEM 201

Fall, Spring, Summer

BIOL 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.

Spring

BIOL 402 (4) Stream Ecology

The structure and function of stream ecosystems are presented with emphasis on adaptations of organisms to stream life and connections between stream organisms, the aquatic environment, and the surrounding watershed. Includes lab, field work, and team projects.

Pre: BIOL 105, BIOL 106, BIOL 215 or consent

Summer

BIOL 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, genetic diversity, population viability, and extinction.

Pre: BIOL 215 or consent

Spring

BIOL 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, BIOL 106, BIOL 215, or consent

Spring

BIOL 405 (3) Fisheries Biology

An introduction to fish biology and fisheries management, diversity, form and function in the aquatic environment, functional physiology, evolution and speciation, identification and use of keys, ecology, and management topics.

Pre: BIOL 105, BIOL 106, BIOL 215, or consent of instructor

ALT-Fall

BIOL 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 adoption, origins, energetics, mating systems, morphology, geographical distributions, and population-level phenomena. Lecture and Laboratory.

Pre: BIOL 105, BIOL 106, BIOL 215 or consent

Fall

BIOL 409 (4) Advanced Field Ecology

A field course focused on the function and dynamics of various North American ecosystems. Emphases will be on natural history, critical thought, and experimental design. Students will be trained in a variety of soil, plant, and animal sampling techniques. Depending on enrollment, there may be additional costs (e.g., camping fees) for the course.

Pre: BIOL 105, BIOL 106, BIOL 215 or consent

Summer (On-Demand)

BIOL 410 (3) Global Change Biology

This class examines the effects of natural and human-induced changes in climate on terrestrial and marine ecosystems. The course focuses on the science behind global change issues that have biological, social, and economic implications.

Pre: BIOL 105, BIOL 106, BIOL 215 or consent

Fall

BIOL 412 (4) Soil Ecology

Soil ecology will focus on the genesis and classification of soils, the physical properties of soil 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, BIOL 106, BIOL 215, or consent

Spring

BIOL 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 BIOL 105

Fall, Spring

BIOL 419 (2-3) Special Topics in Instrumentation

Instruction in specialized biological instrumentation.

Pre: BIOL 105 and BIOL 106

Fall

BIOL 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 BIOL 105, BIOL 106 recommended

Spring

BIOL 421 (3) Entomology

Morphological, physiological, medical, and economic significance of insects.

Pre: BIOL 105 and BIOL 106 or consent

ALT-Fall

BIOL 424 (3) Developmental Biology

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 BIOL 105

Fall

BIOL 425 (1) Development Biology Lab

Biology 425 is an optional 1-credit laboratory in addition to Developmental Biology, Biology 424. In the laboratory component, students will be exposed to modern techniques used to examine developmental processes in several key model systems. Laboratory exercises consist of experiments designed to demonstrate fundamental concepts in development and to familiarize students with experimental approaches utilized in studying developmental biology and embryology.

Fall

Pre: BIOL 211

Coreq: BIOL 424

BIOL 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.

Spring

BIOL 431 (3) Comparative Animal Physiology

A comparison of adaptation mechanisms, from cell to organ-system, used by animals in response to "changes in" environmental conditions such as oxygen, carbon dioxide, food availability, temperature, water, solutes, pressure and buoyancy.

Pre: BIOL 105, BIOL 106 or consent

Fall

BIOL 432 (4) Lake Ecology

This course is an introduction to the physical, chemical, and biological characteristics and interactions of inland freshwater lakes. Labs will emphasize field work, including data collection from five local lakes, analysis, and discussion.
ALT-Fall

BIOL 433 (3) Cardiovascular Physiology

This course is a functional study of the heart and circulatory system.
Fall

BIOL 435 (4) Histology

Study of types, arrangements and special adaptations of human tissues. Lab included.
Pre: BIOL 220
Spring

BIOL 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. Lab included.
Pre: BIOL 105, BIOL 106, BIOL 215
Spring

BIOL 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 BIOL 105
Spring

BIOL 441 (4) Plant Physiology

Plant functions such as water relations, mineral nutrition, translocation, metabolism, photosynthesis, photorespiration, fat and protein metabolisms, respiration, growth and development, phytohormones, reproduction and environmental physiology. Lab included.
Pre: BIOL 105, BIOL 106, BIOL 217, one semester organic chemistry recommended.
Spring

BIOL 442 (4) Flora of Minnesota

Field identification of plants with emphasis on local flora. History systematic, techniques, plant biogeography, methods of plant collection, preservation, preparation of herbarium specimens are covered. Lab and field trips included.

BIOL 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, BIOL 106, BIOL 215 or consent. BIOL 217 strongly recommended.
Fall

BIOL 451 (4) Plant Biotechnology

Lecture/laboratory course that presents an integrated view of plant biology, crop science, and current issues in biotechnology. Course focuses on issues of global concern such as sustainable food production, biofuels, genetically modified crops, molecular pharming, and tissue culture.
Pre: BIOL 105, BIOL 106
Fall

BIOL 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, BIOL 106, or consent

BIOL 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, taken concurrently with BIOL 456.
Fall

BIOL 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, taken currently with BIOL 457
Spring

BIOL 456 (3) 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: Concurrent enrollment in BIOL 453
Fall

BIOL 457 (3) Biotechnology Project/Laboratory 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
Spring

BIOL 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, BIOL 106, and 1 year of General Chemistry
ALT-Fall

BIOL 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-Spring

BIOL 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, BIOL 106, and General Chemistry
ALT-Fall

BIOL 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, BIOL 106, and General Chemistry
ALT-Fall

BIOL 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

BIOL 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, BIOL 106, and 1 year of General Chemistry
ALT-Spring

BIOL 467 (3) Industrial Hygiene

A lecture course that examines Minnesota State 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, BIOL 106, and 1 year of General Chemistry
ALT-Fall

BIOL 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, BIOL 106, and BIOL 270
ALT-Spring

BIOL 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, BIOL 106, and BIOL 270
Fall

BIOL 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

BIOL 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, BIOL 106, BIOL 270
Spring

BIOL 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, BIOL 106 and BIOL 270
Spring

BIOL 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, BIOL 106, BIOL 211
Spring

BIOL 480 (3) 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.

Fall, Spring

BIOL 481 (1) Lab Supervision and Maintenance

Experience in maintaining and supervising laboratories. For individuals desiring additional experience with students in laboratory situations.

Fall, Spring

BIOL 483 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate

in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester.

Pre: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

BIOL 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
Fall

BIOL 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-Spring

BIOL 490 (1-4) 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.

Fall, Spring

BIOL 491 (1-4) In-Service

Fall, Spring

BIOL 492 (1-3) Honors Research

Fall, Spring

BIOL 493 (1-12) Cytotechnology Clinical Internship I

The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor permission required.

Fall, Spring

BIOL 494 (1-12) Cytotechnology Clinical Internship II

Continuation of Cytotechnology Clinical Internship I. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

BIOL 495 (1-12) Cytotechnology Clinical Internship III

Continuation of Cytotechnology Clinical Internship II. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

BIOL 496 (1-12) Cytotechnology Clinical Internship IV

Continuation of Cytotechnology Clinical Internship III. The clinical internship and training includes lectures, demonstrations, laboratory sessions, and clinical practicum in the area of cytotechnology. Instructor Permission required.

Fall, Spring

BIOL 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
Fall, Spring

BIOL 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
Fall, Spring

BIOL 499 (1-4) Individual Study

Biotechnology

College of Science, Engineering & Technology
 Department of Biological Sciences
 242 Trafton Science Center S • 507-389-5731
 Website: www.cset.mnsu.edu/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.

POLICIES/INFORMATION

Admission to Major is granted by the department. Admission requirements are 32 earned semester credit hours including BIOL 105 and BIOL 106, with a grade of a "C" or better in both BIOL 105 and BIOL 106; and a minimum cumulative GPA of 2.0.

BIOTECHNOLOGY BS

Degree completion = 120 credits

Required General Education

CHEM	201	General Chemistry I (5)
MATH	121	Calculus I (4)
PHYS	211	Principles of Physics I (4)

Prerequisites to the Major

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)
BIOL	211	Genetics (4)

Major Common Core

BIOL	270	Microbiology (4)
BIOL	320	Cell Biology (4)
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)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	360	Principles of Biochemistry (4)
PHYS	212	Principles of Physics II (4)

Major Restricted Electives

For those students planning on graduate or professional school, CHEM 305 Analytical Chemistry and MATH 122 Calculus II are strongly recommended. BIOL 451 Plant Biotechnology is strongly recommended for a student who plans to work in the agricultural biotechnology.

Additional Math/Statistics (choose 3-4 credits)

HLTH	475	Biostatistics (3)
MATH	122	Calculus II (4)
STAT	154	Elementary Statistics (3)

Capstone Experience (choose 6 credits from the following)

Choose in consultation with your advisor.

BIOL	456	Biotechnology Project/Laboratory I (3)
BIOL	457	Biotechnology Project/Laboratory II (3)
BIOL	497	Internship I (1-12)
BIOL	498	Internship II (1-12)
BIOL	499	Individual Study (1-4)

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 first year students and currently enrolled Minnesota State Mankato students who meet the requirements.

The Department of Biological Sciences offers a well-balanced summer school program. For details concerning the courses being offered consult the summer catalog.

BUSINESS ADMINISTRATION

Business Administration

College of Business
 150 Morris Hall • 507-389-2966

Coordinator: Myles Smayling

POLICIES/INFORMATION

Minors in the College of Business include Business Administration, Business Law, Accounting, Financial Planning, International Business, Human Resource Management, and Marketing.

Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. However, prerequisites are enforced.

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

Residency. Transfer students pursuing a minor in the College of Business must complete at least 50% (one-half) of their minor coursework at Minnesota State Mankato.

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.

BUSINESS ADMINISTRATION MINOR

Required for Minor

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)
ECON 207	Business Statistics (4)
FINA 362	Business Finance (3)
MGMT 200	Introduction to MIS (3)
MGMT 330	Principles of Management (3)
MRKT 310	Principles of Marketing (3)

BUSINESS EDUCATION

Business Education

College of Education
313 Armstrong Hall • 507-389-5210

Carrie Chapman, Ph.D.

Students should contact the Office of the Dean of this College for additional information.

BUSINESS EDUCATION BS

The Business Education BS Teaching degree is a cooperative degree program. The majority of the business education courses are taught at Winona State University. The required general business core courses are taught at Minnesota State Mankato.

The Professional Education courses required for Business Education degree and licensure are listed under the Educational Studies: K-12 & Secondary Programs department in the College of Education.

BUSINESS LAW

Business Law

College of Business
Department of Accounting and Business Law
150 Morris Hall • 507-389-2965

Chair: W.C. Brown

P. Herickhoff, G. Holmes, V. Luoma, K. Wallerich

POLICIES/INFORMATION

Minors in the College of Business include Business Administration, Business Law, Accounting, Financial Planning, International Business, Human Resource Management and Marketing.

Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business.

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.

Residency. Transfer students pursuing a minor in the College of Business must complete at least 50% (one-half) of their minor coursework at Minnesota State Mankato.

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.

BUSINESS LAW MINOR

Required for Minor

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (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)
IT 101	Introduction to Information Systems (3)

Required Electives (6 credits) (choose two of the following)

BLAW 371	Computer and Technology Law (3)
BLAW 453	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)

COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers

This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills.
Variable

BUS 295 (2) Professional Preparation for Business Careers

This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of the College of Business majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.
Fall, Spring

BUS 397 (3) IBE Practicum

BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students.
Pre: Must be admitted to the College of Business
Coreq: FINA 362, MGMT 330, MRKT 310
Fall, Spring

BLAW 131 (3) Consumer Law & 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.
Fall, Spring
GE-9

BLAW 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, IT 101

Fall, Spring

BLAW 371 (3) Computer and Technology Law

An examination of major legal issues created by the invention of the personal computer and the internet. Intellectual property (copyrights, trademarks, patents); jurisdiction of courts over nonresident websites and computer users; freedom of speech; obscenity; defamation; privacy; computer crimes; encryption; emerging issues.

Fall

BLAW 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: BLAW 200. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

BLAW 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.

Pre: BLAW 200

Fall, Spring

BLAW 452 (3) Employment and Labor Law

Federal employment discrimination laws; sexual harassment; first amendment rights; employee safety; workers' compensation; privacy; wrongful termination; federal laws governing the right to organize and bargain collectively; emerging issues.

Pre: BLAW 200

Spring

BLAW 453 (3) 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

Variable

BLAW 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

Variable

BLAW 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

Variable

BLAW 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

Fall, Spring

BLAW 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

Variable

BLAW 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, immigration 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.

Variable

BLAW 497 (1-8) Internship

Variable

BLAW 498 (1-3) Internship

Variable

BLAW 499 (1-4) Individual Study

Variable

CHEMISTRY

Chemistry

College of Science, Engineering and Technology

Department of Chemistry & Geology

241 Ford Hall • 507-389-1963

Chair: Mary Hadley

Brian Groh, Michael J. Lusch, Rebecca Moen, Marie K. Pomije, Jeffrey R. Pribyl, Danaé Quirk Dorr, James Rife, Theresa Salerno, Lyudmyla Stackpool, Daniel Swart, John D. Thoenke, Trent Vorlicek

Accreditation. American Chemical Society (ACS).

The department is recognized by the American Chemical Society (ACS) and offers a BS major that is approved by that organization. Anyone considering a chemistry major or chemistry minor should choose a departmental faculty member as an advisor and consult that advisor often throughout the course of study.

POLICIES/INFORMATION

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 CHEM 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 College Student Advising Center, 125 Trafton Science Center.

GPA Policy. Students obtaining a major or minor in chemistry must maintain an overall GPA of 2.2 in all courses required for their selected program with no more than 4 credits of "D" (1.0) 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.

For students who choose to obtain a BS in Chemistry or a BA in Chemistry, CHEM 495 must be taken at Minnesota State Mankato. This course will not be substituted. This policy does not apply to students who chose to obtain a BS in Chemistry Teaching.

The first year of coursework for all chemistry majors should include two semesters of chemistry (CHEM 201, CHEM 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 and analytical chemistry. For BS chemistry majors, it is important 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 senior 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 minor in these areas. For this reason it is often desirable and convenient to choose a joint major or minor with physics or mathematics.

Transfer students who are considering the Chemistry BS should note that before taking physical chemistry in the third (junior) year, students must successfully complete with a grade of "C" (2.0) or higher an analytical chemistry course in addition to appropriate mathematics and physics courses either here at Minnesota State Mankato or transferable to Minnesota State Mankato. Completion of an Associate's degree may not meet the physical chemistry prerequisites and may add up to one year to the program of study.

CHEMISTRY BA

Degree completion = 120 credits

Required General Education

MATH 121 Calculus I (4)
Physics (choose 4 credits - choose 1 from the following)
 PHYS 211 Principles of Physics I (4)
 PHYS 221 General Physics I (4)

Major Common Core

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 322 Organic Chemistry I (4)
 CHEM 324 Organic Chemistry II (3)
 CHEM 325 Organic Chemistry II Laboratory (1)
 CHEM 340 Quantitative Skills for Chemistry and Biochemistry I (1)
 CHEM 341 Quantitative Skills for Chemistry and Biochemistry II (1)
 CHEM 381W Introduction to Research (2)
 CHEM 440 Physical Chemistry I (3)
 CHEM 495 Senior Seminar (1)

Major Restricted Electives

Physics (choose 4 credits)
 (choose either PHYS 212 or PHYS 223 and PHYS 233)
 PHYS 212 Principles of Physics II (4)
 PHYS 223 General Physics III (3)
 PHYS 233 General Physics III Laboratory (1)

Biochemistry Foundation (choose 3-4 credits)

(choose 1 course from the following)
 CHEM 360 Principles of Biochemistry (4)
 CHEM 460 Biochemistry I (3)

Inorganic Foundation (choose 3 credits)

(choose 1 course from the following)
 CHEM 316 Descriptive Inorganic Main Group Chemistry (3)
 CHEM 317 Transition Metal Chemistry (3)

Major Unrestricted Electives

Choose a minimum of 6 credits and at least 2 different courses from the 300-400 level CHEM courses other than CHEM 323, CHEM 479, and CHEM 482. No CHEM courses can be double-counted in the degree.

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any but Chemistry.

CHEMISTRY BS

Degree completion = 120 credits

Required General Education

MATH 121 Calculus I (4)
Physics (choose 4 credits from one of the following)
 PHYS 211 Principles of Physics I (4)
 PHYS 221 General Physics I (4)

Major Common Core

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 322 Organic Chemistry I (4)
 CHEM 324 Organic Chemistry II (3)
 CHEM 325 Organic Chemistry II Laboratory (1)
 CHEM 340 Quantitative Skills for Chemistry and Biochemistry I (1)
 CHEM 341 Quantitative Skills for Chemistry and Biochemistry II (1)
 CHEM 381W Introduction to Research (2)
 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)
 MATH 122 Calculus II (4)

Biochemistry Foundation (choose from the 3-4 credits) (choose 1 course)

CHEM 360 Principles of Biochemistry (4)
 CHEM 460 Biochemistry I (3)

Inorganic Foundation (choose 3 credits) (choose 1 course)

CHEM 316 Descriptive Main Group Chemistry (3)
 CHEM 317 Transition Metal Chemistry (3)

Major Restricted Electives

Math Electives (choose 4 credits) (choose 1 course)
 MATH 223 Calculus III (4)
 MATH 247 Linear Algebra I (4)
 MATH 321 Ordinary Differential Equations (4)

Physics (choose 4 credits)

(choose either PHYS 212 or PHYS 223 and PHYS 233)
 PHYS 212 Principles of Physics II (4)
 PHYS 223 General Physics III (3)
 PHYS 233 General Physics III Laboratory (1)

Major Unrestricted Electives

Choose 12 credits and at least 3 different courses from the 300-400 level CHEM courses other than CHEM 323, CHEM 479 and CHEM 482. No CHEM courses can be double-counted in the degree.

Required Minor: None.

CHEMISTRY MINOR

Minor Core

CHEM 201 General Chemistry I (5)
 CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 322 Organic Chemistry I (4)
 CHEM 324 Organic Chemistry II (3)

Minor Electives

Choose a minimum of 4 credits from the 300-400 level CHEM courses except CHEM 323, CHEM 479, CHEM 482, or CHEM 495. Core courses cannot count as electives. A minimum of 4 credits of chemistry courses must be taken at Minnesota State University Mankato for the minor.

CHEMISTRY TEACHING BS

Requirements for the Chemistry Teaching BS can be found in the SCIENCE TEACHING section of the catalog. For information, consult the chemistry education advisor, Jeffrey Pribyl.

COURSE DESCRIPTIONS

CHEM 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 CHEM 201. Credit will not be given to students who have previously taken a chemistry course at or above CHEM 111 and received a passing grade.

Fall, Spring
GE-3

CHEM 104 (3) Introduction to Chemistry

This course is an introduction to general chemistry. It is a non-laboratory class designed to prepare students for CHEM 201 or to be utilized as a general education course. This course will address more mathematical relationships than CHEM 106. Credit will not be given to students who have previously taken a chemistry course at or above CHEM 111 and received a passing grade.

GE-3

CHEM 106 (3) Chemistry of Life Process Part I (General)

This course covers fundamental concepts required to understand the general chemistry in living organisms. This is a non-laboratory class. This chemistry course will not prepare students for any Chemistry course at or above the 200 level.

Pre: MATH 098. Students seeking enrolling in CHEM 106 must demonstrate readiness to succeed in the course through one of the following means: 1. ACT mathematics sub-score of 19 or higher, or 2. ACCUPLACER Elementary Algebra Test score of 75.5 or higher AND ACCUPLACER College-Level Math Test score of 49.50 or higher.

GE-3

CHEM 111 (5) Chemistry of Life Process Part II (Organic & Biochemistry)

This course is an introduction to organic chemistry and biological chemistry. The laboratory will reinforce lecture.

Pre: CHEM 106 or high school chemistry

Fall, Spring
GE-2, GE-3

CHEM 131 (3) Forensic Science

This chemistry course explores the scientific methods used in criminal investigations. Course topics will include discussions of different kinds of evidence, how to select and analyze samples, and especially how to interpret results of scientific tests. Specific topics will include the analysis of DNA, drugs, accelerants and explosives, and other organic and inorganic compounds. Case studies will be used as examples throughout the course. There will also be discussions concerning the ethics analysis, and uses of forensic data.

Variable

GE-3, GE-9

CHEM 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.

Variable

GE-3

CHEM 135 (3) Science of Sport

An online course introducing the science related to sports issues including nutrition, movement, equipment selection, and healthy exercising/training.

Variable

GE-3

CHEM 191 (3) Chemistry Applications

From an engineering perspective, concepts of general chemistry will be investigated. Topics include atomic structure, stoichiometry, gas laws, periodic trends

chemical bonds, thermodynamics, kinetics and organic chemistry.

Pre: high school chemistry or "C" (2.0) or higher in CHEM 104, placement into MATH 115 or MATH 121

Fall

GE-2, GE-3

CHEM 200 (1) GC1 Laboratory Component

General chemistry lab for students who have completed CHEM 191 and need to fulfill the laboratory pre-requisite for CHEM 202 due to a change in academic major. This course requires special permission.

Pre: CHEM 191

Variable

CHEM 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: "C" (2.0) or higher in MATH 112 or the equivalent; high school chemistry or "C" (2.0) or higher in CHEM 104.

Fall, Spring

GE-2, GE-3

CHEM 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: "C" (2.0) or higher in CHEM 201

Fall, Spring

CHEM 299 (1-6) Individual Study**CHEM 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: "C" (2.0) or higher in CHEM 202

Fall, Spring

CHEM 316 (3) Descriptive Inorganic Main Group Chemistry

This course is designed to survey descriptive main group chemistry and augment General Chemistry's introduction to solid state and nuclear chemistry.

Pre: CHEM 202

Alt-Fall

CHEM 317 (3) Transition Metal Chemistry

This course is designed to address transition metal chemistry, introduce bonding theory, nomenclature, reactivity and mechanisms for transition metal compounds. It will also address and use examples from bioinorganic chemistry and catalysis.

Pre: CHEM 202

Alt-Fall

CHEM 322 (4) Organic Chemistry I

Introduction to organic nomenclature, structure, bonding, chemical reactivity, organic acid-base reactions, mechanisms and stereochemistry. IR, MS, and NMR spectroscopy will be introduced. The chemistry of alkanes, alkyl halides, alkenes, alkynes, and alcohols will be covered. Laboratory illustrates synthetic techniques and the preparation and reactions of functional groups discussed during lecture.

Pre: CHEM 202, "C" (2.0) or higher in CHEM 202.

Fall

CHEM 323 (1) Supplemental Organic Functional Group Chemistry

This course is a supplement to CHEM 322 and includes a brief coverage of functional groups and their chemistry not previously covered that are important in biochemistry. This course is intended only for students taking or who have taken only one semester of organic chemistry who plan to take CHEM 360 or CHEM 460.

Pre: CHEM 322

Coreq: CHEM 322

Fall

CHEM 324 (3) Organic Chemistry II

This course is a continuation CHEM 322 and includes organic nomenclature, structure, bonding, chemical reactivity, organic acid-base reactions, and reaction mechanisms; the chemistry of ethers, aromatic and heterocyclic compounds, polyenes, ketones, aldehydes, amines, carboxylic acids and their derivatives, and alpha carbonyl compounds and synthetic transformations is covered.

Pre: CHEM 322, "C" (2.0) or higher.

Spring

CHEM 325 (1) Organic Chemistry II Lab

Laboratory will highlight common techniques including recrystallization, melting point determination, simple and fractional distillation, extraction, gas and thin layer chromatography, and chemical and spectroscopic qualitative analysis. Single and multi-step syntheses illustrating aromatic and carbonyl chemistry will be performed.

Pre: CHEM 324

Coreq: CHEM 324

Spring

CHEM 340 (1) Quantitative Skills for Chemistry and Biochemistry I

Students will use chemical and biochemical experimental case studies to learn how to analyze, interpret, and critically evaluate experimental data. Software tools will be used to perform linear least squares and other fitting procedures. Intended to be taken prior to, or concurrent with CHEM 341.

Pre: CHEM 202, MATH 121 ("C" (2.0) or higher in CHEM 202, MATH 121)

Spring

CHEM 341 (1) Quantitative Skills for Chemistry and Biochemistry II

Application of differential and integral calculus to chemical and biochemical problem-solving. Use of software tools to implement numerical methods for integration and approximation. Intended to be taken following completion of, or concurrent with CHEM 340.

Pre: CHEM 202, MATH 121, PHYS 211 or PHYS 221 ("C" (2.0) or higher in CHEM 202, MATH 121, PHYS 211 or PHYS 221) previously or concurrently.

Spring

CHEM 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, chemistry and pre-professional health majors. The laboratory teaches basic biochemical techniques.

Pre: Either CHEM 322 and CHEM 324 or CHEM 322 and CHEM 323. "C" (2.0) or higher in all prerequisites

Spring

CHEM 381W (2) Introduction to Research

Introduction to the use of chemical literature (in print and electronic media), current departmental faculty research interests, safe and ethical conduct of laboratory research, and proper recording of research results in laboratory notebooks. Students perform a literature search and write a proposal for an undergraduate research project.

Pre: CHEM 322. "C" (2.0) or higher

Fall

WI

CHEM 407 (3) Environmental Chemistry

The sources of various elements and chemical reactions between them in the atmosphere and hydrosphere are treated. Current research topics relevant to the field of environmental chemistry will also be addressed. Laboratory exercises will emphasize proper sampling technique and various analytical methods for quantifying environmentally important components.

Pre: "C" (2.0) or higher in CHEM 305

Variable

CHEM 419 (2) Physical Inorganic Chemistry Foundations

This course is designed to emphasize the theoretical foundations of physical inorganic chemistry. Course topics include: bonding theory, quantum mechanics and periodic trends, symmetry and group theory.

Pre: CHEM 322, MATH 121

Alt-Spring

CHEM 423 (4) Spectroscopic Determination of Structure

Spectroscopic techniques including nuclear magnetic resonance, infrared, and mass spectrometry for determining structural features of molecules will be covered. 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 324, CHEM 325. "C" (2.0) or higher in all prerequisites

Spring

CHEM 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 324. "C" (2.0) or higher

Spring-EVEN

CHEM 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 324. "C" (2.0) or higher

Spring-ODD

CHEM 437 (4) Food Chemistry

This lecture laboratory course will cover the fundamental principles of food chemistry. Chemical and physical properties of major and minor food components will be discussed. The laboratory will involve both traditional wet chemical methods and more sophisticated instrumental analyses.

Pre: CHEM 305, CHEM 322 "C" (2.0) or higher in all prerequisites

Variable

CHEM 440 (3) Physical Chemistry I

Detailed treatment of thermodynamics and chemical kinetics. Topics include equations of state, laws of thermodynamics, statistical thermodynamics, phase and reaction equilibrium, thermodynamics of solutions and electrochemistry, transport properties, and reaction kinetics.

Pre: CHEM 305, CHEM 340, CHEM 341, MATH 121 and PHYS 211 or PHYS 221. "C" (2.0) or higher in all prerequisites

Fall

CHEM 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: Must have a "C" (2.0) or higher in CHEM 440, MATH 122, PHYS 223

Spring

CHEM 450 (1) Physical Chemistry Laboratory I

Laboratory to accompany CHEM 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

Fall

CHEM 451 (1) Physical Chemistry Laboratory II

Laboratory to accompany CHEM 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: "C" (2.0) or higher in CHEM 440

Pre or Coreq: CHEM 441

Spring

CHEM 460 (3) Biochemistry I

Detailed analysis of the structures, properties, and functions of proteins, carbohydrates, and lipids; introduction to carbohydrate metabolism; theory for the purification and analysis of proteins. Concurrent enrollment in CHEM 465 is recommended.

Pre: BIOL 106, CHEM 324. BIOL 106 or permission "C" (2.0) or higher in all prerequisites.

Fall

CHEMISTRY CONTINUED

CHEM 461 (3) Biochemistry II

Detailed analysis of the reactions involved in intermediary metabolism, translation, transcription, and replication.

Pre: CHEM 460

Spring

CHEM 465 (1) Biochemical Techniques I

A lecture/laboratory course, which presents methodology and instrumentation used to purify and analyze biomolecules. Techniques include chromatography, radioisotope techniques, polyacrylamide gel electrophoresis, spectrophotometry, and PCR analysis.

Pre: CHEM 340 CHEM 460, "C" (2.0) or higher in CHEM 340 or instructor's consent, CHEM 460 previously or concurrently. CHEM 305 is highly recommended. Fall

CHEM 466W (2) Biochemical Techniques II

Students work in teams to solve biochemical research problems by analyzing data from experiments which they design.

Pre: CHEM 460 and CHEM 465

Spring

WI

CHEM 474 (2) Chromatography

Theory and applications of thin layer, paper, liquid, gas and supercritical fluid chromatography and capillary electrophoresis.

Pre: CHEM 322. "C" (2.0) or higher

Fall-EVEN

CHEM 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: "C" (2.0) or higher in CHEM 305; PHYS 212 or PHYS 222 is recommended Spring

CHEM 479 (4) Teaching Physical Science

Methods and materials for teaching physical sciences in middle school through high school. Clinical experiences are required for the course.

Pre: Consent

Spring

CHEM 482 (1-3) Problems in Teaching Science

Variable

CHEM 490 (1-6) Workshop

CHEM 494 (1) Biochemistry Capstone Experience

This course is designed for the BS Biochemistry major or the BA Biochemistry major who chooses to do research. Requirements include submission of an undergraduate research grant, and after completion of the research, presentation of the results in poster format at a research conference such as the URC and as an oral presentation to peers. This capstone experience will also include the submission of a formal research paper. Students are required to attend capstone experience seminars for at least two semesters. Students should enroll for this course in their final semester.

Pre: CHEM 466, by permission only

CHEM 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: (Select 1 Course) CHEM 440 or CHEM 460

Spring

CHEM 496 (1-6) Senior Thesis

CHEM 497 (1-16) Internship

CHEM 498 (1-6) Undergraduate Research

CHEM 499 (1-6) Individual Study

CHINESE

Chinese (Mandarin)

College of Arts & Humanities

Department of World Languages & Cultures

227 Armstrong Hall • 507-389-2116

Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Although Minnesota State Mankato does not offer a degree in Chinese, students may register for Chinese courses by contacting the Department of World Languages & Cultures.

Please go to World Languages and Cultures to see course descriptions.

WLC 106 Elementary Mandarin I (5)

WLC 107 Elementary Mandarin II (5)

CIVIL ENGINEERING

Civil Engineering

College of Science, Engineering and Technology

Department of Mechanical and Civil Engineering

205 Trafton Science Center E • 507-389-6383

Fax 507-389-5002

Website: ce.mnsu.edu

Chair: Patrick Tebbe, Ph.D., P.E.

Aaron S. Budge, Ph.D., P.E.; Shaobiao Cai, Ph.D.; Stephen J. Druschel, Ph.D., P.E.; Charles W. Johnson, Ph.D., P.E.; Sungwon Kim, Ph.D.; Saeed Moaveni, Ph.D., P.E.; Vojin Nikolic, Ph.D.; Deborah K. Nykanen, Ph.D., P.E.; Jin Park, Ph.D.; Farhad Reza, Ph.D., P.E.; Patrick A. Tebbe, Ph.D., P.E.; W. James Wilde, Ph.D., P.E.

Adjunct Faculty: Dan Flatgard; David Hanson

Accreditation. The Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.ABET.org

Civil Engineering, as defined by the American Society of Civil Engineers, is a profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the progressive well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humanity.

Civil engineers design and supervise the construction of roads, buildings, airports, tunnels, dams, bridges, water supply, water and wastewater treatment, and many other systems. Major specialties within civil engineering include: structural, geotechnical, water resources, transportation, environmental, and construction engineering.

Program Objectives. The Mission of the Civil Engineering Program at Minnesota State Mankato is to provide a broad-based education that will enable graduates to enter practice in the civil engineering profession, serving the needs of the State of Minnesota and the Nation.

Within 3-6 years of graduation, graduates of the civil engineering program at Minnesota State University, Mankato are expected to contribute to the profession and to society as a whole by achieving a combination of the following milestones.

1. Based on their strong technical foundation in civil engineering, they have advanced professionally to increased levels of responsibility have successfully transitioned into business or management, or have successfully completed an advanced degree.
2. They have become a registered professional engineer.
3. They have demonstrated an ability to communicate technical information through technical reports and/or proposals, development of plans and specifications, presentations to the public, published papers and articles, and/or conference presentations.
4. They have participated in continuing education or pursued additional industry certification.
5. They have participated in, or served as an officer of, a local, regional, or national professional engineering society, standards committee, or state/local board.

Program objectives are monitored by the constituencies (civil engineering profession through the program's Industrial Advisory Board and employers, alumni, and students of the program).

Other important features of a civil engineering education at Minnesota State Mankato include:

- Senior students work together as a design team in a full academic year course incorporating multiple civil engineering disciplines in a comprehensive design project.
- Students work closely with engineers from design firms and government agencies, and with faculty and students from other engineering courses in the senior design project.
- Students take the Fundamentals of Engineering exam in their senior year – the first step towards professional registration.
- The faculty maintains ties to industry, thereby keeping current with new technologies, design methodologies, and the world of civil engineering practice – a valuable resource for students.

Preparation. Recommended high school preparation is one year each of precalculus, physics and chemistry. Computer skills such as word processing, spreadsheets, and presentations are also recommended. Without this background it may take longer than four years to earn the degree.

POLICIES/INFORMATION

Program Admission. Admission to the Civil Engineering Program is granted by the department, and is necessary before enrolling in 300- and 400-level courses. Near the end of the sophomore year, students 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 or downloaded from the department homepage.

Before being admitted to upper-division civil engineering courses, a student must complete a minimum of 48 credits, for grade, including the following core courses, applicable to the degree: calculus-based physics, 8 credits; calculus and differential equations, 16 credits; introduction to engineering, 2 credits; computer graphics, 2 credits; introduction to problem solving and civil engineering design, 2 credits; engineering mechanics (statics, dynamics, and mechanics of materials), 9 credits; chemistry with lab, 5 credits; and English composition, 4 credits.

To be admitted to the civil engineering program, a student must earn a grade of "C" (2.00) or better and a cumulative GPA of 2.50 in the courses listed above. All core course grades (including those for repeated courses) will be considered in the computation of the GPA for admission to the program. Provisional admission to the program for one semester may be granted in limited cases.

All admitted students are required to take a department-administered diagnostic test early in their junior year.

Transfer Students. 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. Generally, no transfer credits are allowed for upper division civil engineering courses. Transfer students must complete a minimum of 12 credits at Minnesota State Mankato prior to being considered for full admission to the program.

Satisfactory Progress. Once admitted to the civil engineering program, a student must demonstrate satisfactory progress by maintaining a cumulative GPA of at least 2.30 in all upper-division engineering courses (including repeated courses).

P/N Grading Policy. P/N credit is not allowed for any course used to meet civil engineering degree requirements.

Probation Policy. An admitted student who does not maintain satisfactory progress as defined above will be placed on program probationary status for a maximum of one semester. During the probationary period, the student must complete at least 8 credits, approved by the department, of upper division engineering courses for grade from the prescribed Civil Engineering curriculum. Students may not receive a degree without first conforming to the satisfactory progress criteria. A student who fails to meet satisfactory progress for a second semester (consecutive or non-consecutive) will not be allowed to continue in the program.

Appeals. A student may appeal any departmental decision in writing. The department will consider such appeals individually.

CIVIL ENGINEERING BSCE

Degree completion = 128 credits

Required General Education

Required Special General Education (23 credits)

The Bachelor of Science in Civil Engineering degree does not adhere to the standard general education program required by other majors. Rather, it requires a special distribution of communication, humanities, and social science courses. Courses may be chosen to satisfy the university cultural diversity requirement concurrently.

The courses selected must provide both breadth and depth and should not be limited to a selection of unrelated introductory courses. Each student should discuss with his/her academic advisor on the selection of courses to meet this requirement early in their academic career. A current list of acceptable courses is posted in the department office and on the department website. Specifically, the minimum requirements consist of at least 6 credits in the humanities area, and at least 6 credits in the social sciences area in addition to the Required General Education courses.

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 either the humanities or the social sciences requirement. At least one upper division course must follow a course in the same subject area as a course at the 100 or 200 level.

- ENG 101 Composition (4)
- ENG 271W Technical Communication (4)
- (choose 3 credits)
- ECON 201 Principles of Macroeconomics (3)
- ECON 202 Principles of Microeconomics (3)

Prerequisites to the Major

- CHEM 201 General Chemistry I (5)
- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)
- MATH 223 Calculus III (4)
- MATH 321 Ordinary Differential Equations (4)
- PHYS 221 General Physics I (4)

CHOOSE 1 CLUSTER

- Physics II
- PHYS 222 General Physics II (3)
- PHYS 232 General Physics II Laboratory (1)

CIVIL ENGINEERING CONTINUED

Physics III

PHYS 223	General Physics III (3)
PHYS 233	General Physics III Laboratory (1)

Major Common Core

CIVE 101	Introduction to Engineering - Civil (2)
CIVE 145	CAD for Civil Engineering (2)
CIVE 201	Introduction to Problem Solving and Civil Engineering Design (2)
CIVE 235	Properties of Civil Engineering Materials (3)
CIVE 271	Civil Engineering Measurements (2)
CIVE 321	Fluid Mechanics (3)
CIVE 340	Structural Analysis (3)
CIVE 350	Hydraulics and Hydrology (4)
CIVE 360	Geotechnical Engineering (4)
CIVE 370W	Transportation Engineering (4)
CIVE 380	Environmental Engineering (3)
CIVE 401	Civil Engineering Design I (2)
CIVE 402	Civil Engineering Design II (3)
CIVE 435	Civil Engineering Experimentation I (2)
CIVE 436	Civil Engineering Experimentation II (2)
ME 212	Statics (3)
ME 214	Dynamics (3)
ME 223	Mechanics of Materials (3)
ME 291	Engineering Analysis (3)
(choose 2-3 credits)	
ME 241	Thermodynamics (3)
ME 299	Thermal Analysis (2)
(choose 3 credits)	
CIVE 446	Reinforced Concrete Design (3)
CIVE 448	Steel Design (3)

Major Restricted Electives

Civil, Science and Technical Electives

Choose a minimum of 18 credits in civil (minimum 9), science (4) and technical (minimum 2) electives. The science and technical electives are recommended to be taken after identifying an area of interest and in consultation with an academic advisor. Science and technical electives must be selected from the list below.

Civil Engineering Electives (choose 9-12 credits)

CIVE 432	Properties of Concrete (3)
CIVE 446	Reinforced Concrete Design (3)
CIVE 447	Prestressed Concrete Design (3)
CIVE 448	Steel Design (3)
CIVE 450	Finite Element Method (3)
CIVE 452	Open Channel Flow (3)
CIVE 454	Hydraulic Structures (3)
CIVE 458	Stormwater Management (3)
CIVE 461	Fundamentals of Pavement Design (3)
CIVE 465	Foundation Design (3)
CIVE 467	Earth Structures (3)
CIVE 470	Traffic Engineering (3)
CIVE 471	Highway Planning and Design (3)
CIVE 476	Planning and Design of Airports (3)
CIVE 481	Water & Wastewater Treatment, Collection & Distribution (3)
CIVE 482	Utility Pipeline Inspection, Repair and Rehabilitation (3)
CIVE 484	Landfill Design and Hazardous Waste (3)

Technical Electives (choose 2-5 credits)

BIOL 270	Microbiology (4)
BLAW 450	Contracts, Sales, and Professional Responsibility (3)
BLAW 453	International Legal Environment of Business (3)
BLAW 474	Environmental Regulation and Land Use (3)
BLAW 476	Construction and Design Law (3)
CHEM 202	General Chemistry II (5)
CHEM 305	Analytical Chemistry (4)
CHEM 407	Environmental Chemistry (3)
CIVE 300 - CIVE 489	Except Required Courses
CM 310	Estimating I (3)
CM 330	Planning and Scheduling (3)

CM 340	Construction Project Management (3)
EE 300 - EE 489	
EE 230	Circuit Analysis I (3)
ENVR 440	Environmental Regulations (3)
ENVR 450	Environmental Pollution & Control (3)
ENVR 460	Analysis of Pollutants (4)
GEOG 315	Geomorphology (3)
GEOG 373	Introduction to Geography Information Systems (4)
GEOG 439	Transportation Modeling & GIS (4)
GEOL 330	Structural Geology (4)
GEOL 350	Environmental Geology (4)
GEOL 351	Engineering Geology (2)
GEOL 450	Hydrogeology (3)
ME 300 - ME 489	

Science Electives (choose 4 credits)

BIOL 105	General Biology I (4)
BIOL 105W	General Biology I (4)
ENVR 101	Perspectives in Environmental Science (4)
GEOL 121	Physical Geology (4)

Required Minor: None.

COURSE DESCRIPTIONS

CIVE 100 (1) Explorations in Engineering

This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program.

Fall
GE-12

CIVE 101 (2) Introduction to Engineering - Civil

To prepare the students for a career in engineering with some emphasis in civil; introduce the engineering fundamentals and the skills necessary to have a successful learning experience; and to prepare students for engineering education and profession through interactions with upper-class engineering students and practicing engineers.

Pre: MATH 113 or MATH 115 or MATH 121
Fall

CIVE 145 (2) CAD for Civil Engineering

Basic computer applications for drafting and designing civil engineering projects. Structure and use of standard CAD software. Basic orthographic construction and projections, and development of different types of drawings - sections, plan and profile, and construction details.

Fall, Spring

CIVE 201 (2) Introduction to Problem Solving and Civil Engineering Design

Introduction to the design concepts of civil engineering projects including presentations, codes and standards, construction drawings, and public hearing; problem solving skills for civil engineering analysis and design including the use of appropriate computational tools and programming logic. Includes laboratory component.

Pre: CIVE 101
Coreq: CIVE 145, MATH 121
Fall, Spring

CIVE 212 (3) Statics

Resultants of force systems, equilibrium, analysis of forces acting on structural elements, friction, second moments, virtual work.

Pre: PHYS 221
Fall, Spring

CIVE 214 (3) Dynamics

Kinematics and kinetics of particles, systems of particles and rigid bodies, work energy, linear and angular impulse momentum, vibrations.

Pre: CIVE 212 or ME 212
Fall, Spring

CIVE 223 (3) Mechanics of Materials

Load, deformation, stress, strain, stress-strain relationship, buckling, energy concepts, stress analysis of structural elements.

Pre: CIVE 212 or ME 212
Fall, Spring

CIVE 235 (3) Properties of Civil Engineering Materials

Mechanical behavior and properties of civil engineering materials. Micro-structure, response to stress, creep, fatigue, fracture and failure. Composition, application and construction of steel, concrete, asphalt, aggregates, steel, timber, composites and other materials. Includes laboratory component.

Coreq: ME 223

Spring

CIVE 271 (2) Civil Engineering Measurements

Basic civil engineering measurements as relates to construction layout, including distances, angles, bearings, elevations, mapping, and positioning. Includes laboratory component.

Coreq: MATH 121

Fall

CIVE 293 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements.

Pre: Recipient of a MAX scholarship or instructor consent.

Fall, Spring

CIVE 321 (3) Fluid Mechanics

Introduction to fluid properties, fluid statics, fluid flow, buoyancy, Bernoulli's equation, the integral and differential approach to basic flow equations, similitude and dimensional analysis, viscous internal and external flows, and pumps.

Pre: CIVE 214 or ME 214

Coreq: ME 241 or ME299

Fall

CIVE 340 (3) Structural Analysis

Minimum design loads for buildings using ASCE 7 guidelines and load distribution. Analysis of determinate structural systems including the case of moving loads. Analysis of indeterminate structures using the flexibility and moment distribution methods. Use of software to enhance the analysis.

Pre: CIVE 223 or ME 223

Fall

CIVE 350 (4) Hydraulics and Hydrology

Concept of hydraulics such as pipe flow and open channel flow. Hydrologic principles such as weather patterns; precipitation measurement and distribution, abstractions, and runoff; storm hydrograph and peak flow analysis. Design includes flood design, reservoir and channel routing. Includes significant design component.

Pre: CIVE 321 or ME 321, ME 291

Spring

CIVE 360 (4) Geotechnical Engineering

Study of soil behaviors and their classifications; index properties. Applications of mechanics principles to soils as an engineering material, consolidation theory, compaction theory, effective stresses, shear strength; earth pressure and slope stability. Elements of foundation designs. Includes significant design component.

Pre: CIVE 223 or ME 223

Coreq: CIVE 321 or ME 321

Spring

CIVE 370 (4) Transportation Engineering

Introduction to Transportation systems; land use and transportation interaction, planning, and traffic operations; transportation decision making using economic analysis. Introduction to design, construction, maintenance, and operation of various transportation modes. Includes significant design component.

Coreq: CIVE 271, ME 291

CIVE 370W (4) Transportation Engineering

Introduction to Transportation systems; land use and transportation interaction, planning, and traffic operations; transportation decision making using economic analysis. Introduction to design, construction, maintenance, and operation of various transportation modes. Includes significant design component.

Coreq: CIVE 271, ME 291

Fall

WI

CIVE 380 (3) Environmental Engineering

Introduction of the fundamental chemical, biological and physical principles of environmental engineering for water and wastewater treatment and distribution systems, solid waste management, air pollution control, and the analysis of air quality, surface water, and ground water. Includes significant design component.

Pre: CHEM 201, MATH 321

Coreq: CIVE 321 or ME 321

Fall

CIVE 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: CIVE 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

CIVE 401 (2) Civil Engineering Design I

Practical civil engineering design project with real world constraints. This course focuses on the planning and formulation of a project, and the presentation of preliminary findings to the public. Includes significant design component.

Pre: CIVE 340, CIVE 350, CIVE 360, CIVE 370

Coreq: CIVE 380

Fall

CIVE 402 (3) Civil Engineering Design II

Practical civil engineering design project with real world constraints. Focuses on the engineering analysis, design, and economic analysis of the project. Includes significant design component.

Pre: CIVE 401

Spring

CIVE 432 (3) Properties of Concrete

Selected studies in the properties and design of concrete mixtures, cement chemistry, concrete durability, specialty concrete, construction, admixtures, and quality control. Includes laboratory and significant design components.

Pre: ME 223

Variable

CIVE 435 (2) Civil Engineering Experimentation I

Provides students with hands-on experience in the testing of civil engineering materials including concrete, metals and structural systems. Includes laboratory component.

Pre: CIVE 340 & CIVE 370

Fall

CIVE 436 (2) Civil Engineering Experimentation II

Provides students with hands-on experience in the testing of civil engineering materials including soil and asphalt, fluid mechanics, hydraulics, and hydrology. Includes laboratory component.

Pre: CIVE 350, CIVE 360

Spring

CIVE 446 (3) Reinforced Concrete Design

Design of reinforced concrete beams, columns, slabs, and structural foundations according to ACI 318 Building Code requirements. Includes significant design component.

Pre: CIVE 340

Alt-Spring

CIVE 447 (3) Prestressed Concrete Design

Design of prestressed concrete structures. Basic materials and prestress loss mechanisms. Flexure, shear, and deflections of prestressed concrete beams. Load-moment interaction curves for columns. Prestressed concrete bridge girders. The use of software is expected. Includes significant design component.

Pre: CIVE 340

Spring

CIVE 448 (3) Steel Design

Behavior and properties of structural steel. Design of tension members, compression members, beams, and connections using the LRFD method. Use of the AISC Steel Construction Manual is required. Includes significant design component.

Pre: CIVE 340

Alt-Spring

CIVE 450 (3) Finite Element Method

Same as ME 450

CIVE 452 (3) Open Channel Flow

Analysis of open channel flow systems. Includes natural channels, designed channels, flow transitions, steady flow, unsteady flow, uniform flow, and non-uniform flow. Includes significant design component.

Pre: CIVE 350

Variable

CIVE 454 (3) Hydraulic Structures

Analysis and design of water regulating structures. Includes dams, spillways, gates, dikes, levees, stilling basins, water distribution systems, and various simpler structures. Environmental impacts of hydraulic structures are discussed throughout the course. Includes significant design component.

Pre: CIVE 350

Variable

CIVE 458 (3) Stormwater Management

Application of fluid mechanics and hydrology to the design of stormwater management facilities. Environmental impacts of stormwater management are discussed throughout the course. Includes significant design component.

Pre: CIVE 350

Variable

CIVE 461 (3) Fundamentals of Pavement Design

Performance and design of rigid, flexible, and composite pavement structures with emphasis on modern pavement design procedures. Principles of pavement maintenance, rehabilitation, and pavement management systems. Materials characterization, tests, quality control, and life cycle cost analysis. Includes significant design component.

Pre: CIVE 370, CIVE 223 or ME 223

Coreq: CIVE 360

Variable

CIVE 465 (3) Foundation Design

Classification of foundations; applications of fundamental soil mechanics to design and analysis of soil-structure systems; design and computer application of shallow and deep foundations, piles and caissons, retaining structures. Introduction to rock mechanics. Includes significant design component.

Pre: CIVE 360

Variable

CIVE 467 (3) Earth Structures

Design and construction of traditional embankments, including slope stability analysis; earth and rockfill dams, introduction to seepage analysis; excavations, earth retaining structures, and other geotechnical structures. Geotechnical software application in analysis and design. Includes significant design component.

Pre: CIVE 360

Variable

CIVE 470 (3) Traffic Engineering

Elements of traffic engineering including road use, vehicle and roadway systems; traffic flow theory; traffic studies and data collections; traffic control devices; principles of intersecting signalization; capacity and level of service; analysis of freeways, rural highways and intersections using computer software for traffic operations and management. Includes significant design component.

Pre: CIVE 370

Variable

CIVE 471 (3) Highway Planning and Design

Classification and design process of highways; development and use of design controls, criteria, and highway design elements; design of vertical and horizontal alignment, and establishment of sight distances; design of cross sections, intersections, and interchanges. Extensive use of CAD software. Includes significant design component.

Pre: CIVE 145 and CIVE 370

Variable

CIVE 476 (3) Planning and Design of Airports

Development and design of airport facilities and the integration of multiple disciplines including runway orientation and capacity, terminal facilities, forecasting, planning, noise, airspace utilization, parking, lighting, and construction. Includes significant design component.

Pre: CIVE 370

Variable

CIVE 481 (3) Water & Wastewater Treatment, Collection & Distribution

Overview of municipal water and wastewater treatment and distribution practices. Application of chemical, biological and physical principles to design and the operation of water and wastewater treatment and distribution systems. Includes significant design component.

Pre: CIVE 380

Variable

CIVE 482 (3) Utility Pipeline Inspection, Repair and Rehabilitation

Design and implementation of inspection plans, repairs and rehabilitation of sewer, storm drainage and drinking water supply pipelines. Consideration of performance, logistics and cost implications of all available methods. Includes significant design component.

Pre: CIVE 380

Variable

CIVE 484 (3) Landfill and Hazardous Waste Engineering

This course will be taught as a classroom based course with a combination of lecture, individual and group projects, reading, homework, discussion, review, and examinations. The goal of the course is to develop competency in the design and implementation of landfill design and hazardous waste remediation, with understanding of both performance and cost implications to all choices.

Pre: CIVE 380

Variable

CIVE 491 (1-4) In-Service

May be repeated for credit on each different topic.

Variable

CIVE 493 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements.

Pre: Recipient of a MAX scholarship or instructor consent.

Fall, Spring

CIVE 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

CIVE 497 (1-6) Internship

Variable

CIVE 499 (1-6) Individual Study

Cognitive Science

College of Arts and Humanities
Department of Philosophy
227 Armstrong Hall • 507-389-2012

Cognitive Science Program Director: Richard Liebendorfer.

Biology Concentration Advisor: Geoffrey Goellner
Computer Science Concentration Advisor: Rebecca Bates
Philosophy Concentration Advisor: Richard Liebendorfer
Psychology Concentration Advisor: Dawn Albertson
Cognitive Science Program Core Faculty: Dawn Albertson (Psychology) Rebecca Bates (Computer Science), Michael Bentley (Biology), Sun Yu (Philosophy), Richard Liebendorfer (Philosophy), Geoffrey Goellner (Biology), Daniel Toma (Biology), Karla Lassonde (Psychology), Moses Langley (Psychology), Guarionex Salivia (Cognitive Science).

Cognitive Science is an interdisciplinary inquiry concerned with understanding the nature and development of such intelligent capacities as perception, language, reasoning, learning and problem-solving, whether these capacities are realized in biological or artificial systems. Such inquiry is by its very nature interdisciplinary, integrating methodological, theoretical and practical foci of Biology, Computer Science, Philosophy and Psychology into a single course of study.

POLICIES/INFORMATION

The cognitive science major is a broad major and does not require that a student complete a minor in addition to the major. The major requires approximately 71-79 credits (depending on area of concentration) including prerequisites. As prerequisites for the major students must take CHEM 201, MATH 115 **OR** MATH 121, PSYC 201, **OR** STAT 354. Some of prerequisite requirements also fulfill General Education goal areas. Some of the concentrations have additional prerequisites (see course descriptions for more information). The program requirements below should be read carefully.

Each Cognitive Science major will concentrate in one of the four participating disciplines: Biology, Computer Science, Philosophy and Psychology. The concentration typically requires 24 credits of work. In addition to the concentration each student will take core courses from each of the other three participating disciplines. Each core will typically require 12 credits of course work, a total of 36 credits. A student need not do the core for her or his area of concentration since the core is already included in the concentration.

The structure of the major insures that students have a solid grounding in each of the four disciplines as well as a specific concentration in one area that draws on the interdisciplinary foundation. Graduates of the program will be prepared for a variety of post-baccalaureate options.

- They will be prepared for any of the careers open to graduates with degrees in one of the participating disciplines.
- They will be prepared for graduate study in traditional programs in Biology, Computer Science, Psychology or Philosophy.
- They will also be prepared for study in one of the many recently developed graduate Cognitive Science programs as well as graduate study in related programs such as cognition, brain, and behavior, cognitive neuroscience, biopsychology and human-computer interaction.

Those who choose to study the law, a path frequently chosen by philosophy majors, will be well suited for legal practice concerned with the variety of legal complexities associated with the development of new technology.

Admission to the major is granted by the Cognitive Science Program. Minimum admission requirements are:

- a minimum of 32 earned semester hours.
- a minimum cumulative GPA of 2.5

Contact the Cognitive Science Program Director or the Program Advisors in one of the four participating departments.

Grading Policy. All coursework applied towards the major must be taken for a letter grade except for courses offered only as P/N. A minimum grade of "C-" is required in all courses which are to be applied towards the major. In addition, a minimum grade of "C-" is required for all prerequisite courses where dictated by individual department policies. Grades of "D" are not accepted by the program for pre-requisites to the major, major common core and major restricted elective courses.

COGNITIVE SCIENCE BS

Degree completion = 120 credits

Required General Education

CHEM 201 General Chemistry I (5)
MATH 121 Calculus I (4)

Prerequisites to the Major (choose 3-4 credits)

PSYC 201 Statistics for Psychology (4)
STAT 354 Concepts of Probability & Statistics (3)

Major Common Core

(choose one emphasis and three core elective clusters)

Major Restricted Electives

(choose three of the core elective groups other than your major emphasis)

Core Elective: Biology (choose 11 credits)

BIOL 220 Human Anatomy (4)
BIOL 324 Neurobiology (3)
BIOL 330 Principles of Human Physiology (4)

Core Elective: Computer Science

(choose 3-4 credits)

CS 315 Introduction to Cryptographic Methods (4)
CS 330 Introduction to Neural Computation (4)
CS 430 Artificial Intelligence (3)
IT 482 Human Computer Interaction (4)

Required (choose 12 credits)

CS 110 Computer Science I (4)
CS 111 Computer Science II (4)
CS 230 Introduction to Intelligent Systems (4)

Core Elective: Philosophy

Required (choose 12 credits)

PHIL 101W Philosophical Problem: The Mind-Body Problem (3)

Electives (choose 9 credits)

PHIL 410 Philosophy of Language (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)

Core Elective: Psychology

Required (choose 12 credits)

PSYC 101 Introduction to Psychological Science (4)
PSYC 325 Introduction to Cognitive Psychology (4)

Electives (choose 4 credits)

PSYC 413 Sensation & Perception (4)
PSYC 415 Human Memory (4)
PSYC 421 Behavior Neuroscience (4)

Major Emphasis: Biology

BIOL 105 General Biology I (4)
BIOL 106 General Biology II (4)
BIOL 220 Human Anatomy (4)
BIOL 324 Neurobiology (3)
BIOL 330 Principles of Human Physiology (4)

(choose 6-8 credits)

BIOL 211 Genetics (4)
BIOL 424 Developmental Biology (3)
BIOL 436 Animal Behavior (4)
BIOL 438 General Endocrinology (3)

COGNITIVE SCIENCE CONTINUED

BIOL	460	Introduction to Toxicology (3)
BIOL	466	Principles of Pharmacology (3)

Major Emphasis: Computer Science

CS	110	Computer Science I (4)
CS	111	Computer Science II (4)
CS	230	Introduction to Intelligent Systems (4)
CS	305	Algorithmic Structures (4)
CS	498	Senior Thesis (4)
(choose 3-4 credits)		
CS	315	Introduction to Cryptographic Methods (4)
CS	330	Introduction to Neural Computation (4)
CS	430	Artificial Intelligence (3)

Major Emphasis: Philosophy

PHIL	101W	Philosophical Problem: The Mind-Body Problem (3)
PHIL	495	Senior Thesis I (2)
PHIL	496	Senior Thesis II (1)
(choose 9 credits)		
PHIL	311	Symbolic Logic (3)
PHIL	410	Philosophy of Language (3)
PHIL	474	Philosophy of the Mind (3)
PHIL	475	Philosophical Issues in Cognitive Science (3)
PHIL	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

Choose courses which have not already been chosen under the preceding requirement. (choose 9 credits)

PHIL	311	Symbolic Logic (3)
PHIL	334W	History of Philosophy: Classical Philosophy (3)
PHIL	336W	History of Philosophy: Renaissance and Modern Philosophy (3)

PHIL	410	Philosophy of Language (3)
PHIL	420	Epistemology (3)
PHIL	430	Metaphysics (3)
PHIL	437	Contemporary Philosophy (3)
PHIL	450	Special Topics (1-3)
PHIL	455	Existentialism & Phenomenology (3)
PHIL	474	Philosophy of the Mind (3)
PHIL	475	Philosophical Issues in Cognitive Science (3)
PHIL	480	Philosophy of Science (3)
PHIL	481	Philosophy of Biology (3)

Major Emphasis: Psychology

PSYC	101	Introduction to Psychological Science (4)
PSYC	325	Introduction to Cognitive Psychology (4)
(choose 16 credits)		
PSYC	206	The Human Mind (4)
PSYC	321	Brain and Behavior (4)
PSYC	405	Motivation (4)
PSYC	413	Sensation & Perception (4)
PSYC	415	Human Memory (4)
PSYC	420	Psychopharmacology (4)
PSYC	421	Behavior Neuroscience (4)
PSYC	423	Cognitive Neuroscience (4)
PSYC	430	Advanced Topics in Biological Psychology (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	458	Cultural Psychology (4)
PSYC	466	Psychology of Aging (4)

Required Minor: None.

COMMUNICATION DISORDERS

Communication Disorders

College of Allied Health & Nursing
Department of Speech, Hearing and Rehabilitation Services
103 Armstrong Hall • 507-389-1414
Website: <http://ahn.mnsu.edu/cd/>

Chair: Bonnie Berg

Hsinhuei Sheen Chiou, Linda Hallen, Jessica Jones, Megan Mahowald, Bruce Poburka, Renee Shellum

The Communication Disorders Program provides a curriculum 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.

The **minor** in Communication Disorders (16 credits) is designed to acquaint students with the nature of impaired human communication. One minor core course, one minor capstone course, and 12 credits of minor specialization are required. There is considerable flexibility in the “specialization” portion of the program. Therefore, students are required to meet with a Communication Disorders advisor to identify classes that are appropriate to their plan of study.

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.

Admission to Major is granted by the department upon completion of the courses of CDIS 312, CDIS 322, CDIS 392, and CDIS 394, with a 3.0 grade point average. Students should seek admission to the program during their sophomore year or fall semester of their junior year and should work with an advisor in the department to plan a course of study. Permission to enroll in 400 level courses requires a 3.0 average in the following courses: CDIS 312, CDIS 322, CDIS 392, CDIS 394. In addition to the grade point requirement of 3.0, students may earn a final grade of “C” in no more than one course among the four. Any courses with a final grade of “C” or lower must be repeated and a grade of “B” or better must be earned to fulfill requirements for the Communication Disorders major.

Students planning to major in an area of study in the College of Allied Health and Nursing have an advisor assigned to them. Questions and concerns pertaining to advising and the assignment of advisors can be answered by the student relations coordinator. Contact the Dean’s office for contact information.

GPA Policy. A minimum GPA of 3.0 is required to enroll in practicum (CDIS 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.

COMMUNICATION DISORDERS BA

Degree completion = 120 credits

General Education Courses

Students must take a total of 12 credits with at least one course in each of the following areas: Statistics, Biology, Physical Sciences (physics or chemistry), and Social/Behavioral Sciences.

Required for Major

- CDIS 201 Observation of Human Communication (3)
- CDIS 220 Basic Audiology (3)
- CDIS 290 Introduction to Communication Disorders (3)
- CDIS 312 Speech and Language Development (3)
- CDIS 322 Speech and Hearing Science (3)
- CDIS 392 Phonetics (3)
- CDIS 394 Applied Anatomy and Physiology (3)
- CDIS 402 Child Language Disorders (2)
- CDIS 403 Child Language Disorders Lab (1)
- CDIS 410 Neurological Bases of Speech (2)
- CDIS 416 Voice and Resonance Disorders (3)
- CDIS 421 Aural Rehabilitation (3)
- 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 - Foundation (1)
- CDIS 446 Grand Rounds - Presentation (2)
- CDIS 495 Clinical Practicum: Speech/Language Disorders (2)

Other Graduation Requirement

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: None

COMMUNICATION DISORDERS BS

Degree completion = 120 credits

General Education Courses

Students must take a total of 12 credits with at least one course in each of the following areas: Statistics, Biology, Physical Sciences (physics or chemistry), and Social/Behavioral Sciences.

Required for Major

- CDIS 201 Observation of Human Communication (3)
- CDIS 220 Basic Audiology (3)
- CDIS 290 Introduction to Communication Disorders (3)
- CDIS 312 Speech and Language Development (3)
- CDIS 322 Speech and Hearing Science (3)
- CDIS 392 Phonetics (3)
- CDIS 394 Applied Anatomy and Physiology (3)
- CDIS 402 Child Language Disorders (2)
- CDIS 403 Child Language Disorders Lab (1)
- CDIS 410 Neurological Bases of Speech (2)
- CDIS 416 Voice and Resonance Disorders (3)
- CDIS 421 Aural Rehabilitation (3)
- 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 - Foundation (1)
- CDIS 446 Grand Rounds - Presentation (2)
- CDIS 495 Clinical Practicum: Speech/Language Disorders (2)

COMMUNICATION DISORDERS MINOR

Students must complete both Minor Core and Minor Capstone courses and a minimum of 12 credits from Minor Specialization Courses.

Required for Minor

- CDIS 290 Introduction to Communication Disorders (3)

Minor Specialization Courses (Select 12 credits minimum)

- CDIS 201 Observation of Human Communication (3)
- CDIS 220 Basic Audiology (Note: prerequisite is CDIS 322) (3)
- CDIS 312 Speech and Language Development (3)
- CDIS 322 Speech and Hearing Science (3)
- CDIS 392 Phonetics (3)
- CDIS 394 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 444 Appraisal and Diagnosis (3)

Required for Minor Capstone Course

- CDIS 445 Grand Rounds – Foundation (1)

COURSE DESCRIPTIONS

CDIS 201 (3) Observation of Human Communication

Procedures for observing, describing, analyzing behaviors associated with human communication. Open to non-majors.

Fall, Spring
GE-1B

CDIS 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.

Variable
GE-11

CDIS 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
Variable
GE-8

CDIS 207 (3) Advanced Sign Language I

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
Variable
GE-8

CDIS 208 (3) Advanced Sign Language II

Continuation of Advanced Sign Language I: expanded study of Sign Language with emphasis on conversation skills and storytelling; continued expansion of knowledge of Deaf Culture and Deaf Community.

Pre: CDIS 207. Must have earned a grade of "A" or "B" in CDIS 207.

CDIS 220 (3) Basic Audiology

Functional anatomy of the ear, common pathologies, and measurement of hearing and sound.

Pre: CDIS 322
Spring

CDIS 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.

Variable

COMMUNICATION DISORDERS CONTINUED

CDIS 290 (3) Introduction to Communication Disorders

Classification and management of speech, language and hearing disorders and how their effects can marginalize a population.

Fall, Spring

GE-7

Diverse Cultures - Purple

CDIS 291 (1-3) Individual Study

Fall, Spring

CDIS 312 (3) Speech and Language Development

Acquisition and sequences of phonological, syntactical, morphological and semantic features of language across the lifespan. Theory and research.

Fall

CDIS 322 (3) Speech and Hearing Science

This course is designed to provide the students with a comprehensive knowledge base of the auditory and speech sciences as they relate to communication disorders. The major emphasis is on the characteristics of sound and sound transmission and the relationship to speech perception.

Fall

CDIS 392 (3) Phonetics

Using IPA to analyze and transcribe the sounds of English, emphasizing understanding the process involved to produce phonemes in normal, culturally different and disordered speech.

Fall

CDIS 394 (3) Applied Anatomy and Physiology

Anatomy and Physiology with specific focus on structure and function of speech, language, and hearing mechanisms. Specific systems include respiration, phonation, articulation, hearing, and neurology (peripheral and central).

Fall

CDIS 401 (3) Hearing Disorders

This course is designed to provide students with the knowledge base of various auditory and vestibular disorders. It will explore the effects of auditory dysfunction as it relates to communication, education and remediation.

Fall

CDIS 402 (2) Child Language Disorders

Types and characteristics of language disorders in children.

Fall

CDIS 403 (1) Child Language Disorders Lab

Lab associated with CDIS 402. Practice in applying course content to the language of children.

Fall

CDIS 404 (3) Dimensions of Deafness

This course is designed to provide students with a knowledge base of Deaf culture. The many facets of the deaf/hard of hearing person's life will be explored. The debate over cochlear implantation is discussed in great detail.

Spring

CDIS 408 (3) Seminar in Central Auditory Processing Disorders

Students will learn the definition of central auditory processing disorders (CAPD), as well as the controversies surrounding the diagnosis of the disorder. The neuroanatomy and physiology related to auditory processing will also be covered in order to understand the diversity involved in the diagnostic and management methods of CAPD. Students will learn the appropriate test batteries, the diagnostic team involved, the inclusion of a multidisciplinary team approach and treatment/management options for CAPD. This course would be beneficial to education majors, CDIS majors, and Educational Psychology.

Spring

CDIS 410 (2) Neurological Bases of Speech

An overview of neuroanatomy and neuroscience and relationships between neuroscience and speech, language, and hearing.

Fall

CDIS 416 (3) Voice and Resonance Disorders

Description, etiology, assessment and management of voice and resonance disorders.

Fall

CDIS 417 (3) Stuttering

Description, etiology, assessment and management of fluency disorders.

Spring

CDIS 421 (3) Aural Rehabilitation

Habilitative audiology and the instruction of the hearing-impaired, including hearing aids, speech reading and auditory training.

Spring

CDIS 431 (1) Orientation Lab

Supervised observation of the diagnostic and remedial management of speech and language disorders.

Pre: Concurrent enrollment in CDIS 434

Spring

CDIS 434 (2) Orientation to Clinical Practicum

Procedures and operation of the clinical program in communication disorders.

Pre: Consent, concurrent enrollment in CDIS 431

Spring

CDIS 438 (3) Speech Sound Disorders

Description, etiology, assessment and management of speech sound problems.

Fall

CDIS 444 (3) Appraisal and Diagnosis

Tests, measures, procedures and processes for the evaluation and diagnosis of speech and language.

Spring

CDIS 445 (1) Grand Rounds-Foundation

Observation of clinical case studies.

Variable

CDIS 446 (2) Grand Rounds-Presentation

Presentation of clinical case studies.

Variable

CDIS 490 (1-4) Independent Study

Fall, Spring, Summer

CDIS 491 (1-6) In-service

Study of a specific disorder or aspects of communication disorders that are not provided in the current curriculum.

CDIS 495 (2) Clinical Practicum: Speech/Language Disorders

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: CDIS 402, CDIS 416, CDIS 417, CDIS 438 (completion of or concurrent enrollment in CDIS 444). GPA of 2.8 in major courses.

Fall, Spring

Communication Studies

College of Arts & Humanities,
Department of Communication Studies
230 Armstrong Hall • 507-389-2213
Website: www.mnsu.edu/cmst

Chairs: David Engen

Christopher Brown, Daniel Cronn-Mills, Kristen Cvancara, James Dimock, Deepa Oommen, Sachi Sekimoto, Kristen Treinen, Leah White

Communication Studies is the exploration of how people generate shared meaning through the use of verbal and nonverbal symbols. Communication Studies 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).

POLICIES/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 2.0.

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.

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 catalog.

Communication Studies minors may apply no more than 4 credits of CMST 498 and 4 credits of CMST 499 to fulfillment of the minor. Additional credits may be applied for graduation requirements. Communication Studies majors may apply no more than 8 credits of CMST 498 and 4 credits of CMST 499 to fulfillment of the major. Additional credits may be applied for graduation requirements. CMST 100 does not count toward major or minor requirements.

Course Repeat Policy. Students with a major/minor in Communication Studies may repeat any course in the department in an effort to improve grades. A student may repeat a specific course only once. In exceptional circumstances, a student may appeal to the department chair for a second repeat of a course. The official grade for the course, listings on a student's transcript, and other matters related to course repeats will adhere to appropriate university policies.

COMMUNICATION STUDIES BA

Degree completion = 120 credits

Required General Education

- CMST 101W Interpersonal Communication (4)
- CMST 203 Intercultural Communication (4)

Major Common Core

- CMST 102 Public Speaking (3)
- CMST 150 Introduction to Argument (4)
- CMST 190 Introduction to Communication Studies (4)
- CMST 485 Senior Seminar (4)

Major Restricted Electives

Argument & Ethics (choose 4 credits)

- CMST 300 Ethics and Free Speech (4)
- CMST 321 Argumentation and Debate (4)

Presentation & Performance (choose 8 credits)

- CMST 310 Performance of Literature (4)
- CMST 333 Advanced Public Communication (4)
- CMST 409 Performance Studies (4)

Rhetoric (choose 8 credits)

- (CMST 415 may be repeated under different topics)
- CMST 415 Topics in Rhetoric and Culture (1-4)

Minor

A minor is required. Minor must be a language offered by the Department of Modern Languages (e.g., French, German, Spanish, Scandinavian Studies)

Required Minor: Yes. Language

COMMUNICATION STUDIES BS

Degree completion = 120 credits

Required General Education

- CMST 101W Interpersonal Communication (4)
- CMST 102 Public Speaking (3)
- CMST 203 Intercultural Communication (4)

Major Common Core

- CMST 150 Introduction to Argument (4)
- CMST 190 Introduction to Communication Studies (4)
- CMST 290 Communication Research (4)
- CMST 485 Senior Seminar (4)

Major Restricted Electives

Theory Block (choose 4 credits)

- CMST 440 only with approval of department chair
- CMST 305 Communication & Community (4)
- CMST 403 Gender and Communication (4)
- CMST 409 Performance Studies (4)
- CMST 412 Organizational Communication (4)
- CMST 415 Topics in Rhetoric and Culture (1-4)
- CMST 440 Special Topics (1-4)

Major Unrestricted Electives

Select 16 credits from Communication Studies (choose 16 credits)
12 of the 16 credits must be upper-level (300-400) courses
CMST 103 through CMST 499 (CMST 100 does not count toward the major.)

Required Minor: Yes. Any.

COMMUNICATION ARTS AND LITERATURE - EDUCATION BS

Required General Education

- CMST 102 Public Speaking (3)
- CMST 310 Performance of Literature (4)
- HLTH 240 Drug Education (3)
- KSP 220W Human Relations in a Multicultural Society (3)
- MASS 110 Introduction to Mass Media (4)

Literature, Humanities, Film (choose 4 credits)

Choose one course in literature, humanities, or film from the following list.

- ENG 110 Introduction to Literature (4)
- ENG 112W Introduction to Poetry and Drama (4)
- ENG 113W Introduction to Prose Literature (4)
- ENG 118 Diverse Cultures in Literature and Film (4)
- ENG 125 International Children's Literature (4)
- ENG 146 Introduction to Shakespeare (4)
- ENG 211W Perspectives in Literature and Human Diversity (4)
- ENG 212W Perspectives in World Literature (4)
- ENG 213W Perspectives: Ethics and Civic Responsibility in Literature (4)
- ENG 215 Topics in Literature (2-4)
- ENG 242W Introduction To Creative Writing (4)

Any 100-200 Film course. Any 100-200 Humanities course.

Major Common Core

Only two credits of CMST 201 are required. Total Major Common Core credits: 38. Total Major Restricted Elective credits: 9. Total credits in program: 47.

COMMUNICATION STUDIES CONTINUED

CMST 101W	Interpersonal Communication (4)
CMST 201	Small Group Communication (2-4)
CMST 215	Effective Listening (2)
CMST 420	Methods: Teaching Communication Arts (2)
CMST 425	Methods: Directing and Coaching Forensics (2)
ENG 275W	Introduction to Literary Studies (4)
ENG 285	Practical Grammar (2)
ENG 327	American Literature to 1865 (4)
ENG 328	American Literature: 1865 to the Present (4)
ENG 361	Teaching Literature, Grades 5-12 (4)
ENG 362	Teaching English, Writing, Grades 5-12 (4)
ENG 381	Introduction to English Linguistics (4)

Major Restricted Electives

British Literature (choose 4 credits)

ENG 320	British Literature to 1785 (4)
ENG 321	British Literature: 1785-Present (4)

World Literature (choose 2 credits)

Only two credits of world literature are required.

ENG 433	Selected Studies in World Literature (4)
ENG 435	The World Novel (2-4)
ENG 461	World Literature for Children and Young Adults (2-4)

Young Adult Literature (choose 3 credits)

Only three credits of young adult literature are required.

ENG 463	Adolescent Literature (3)
ENG 464	Teaching Literature in the Middle School (3)

Other Graduation Requirements

See the Secondary 5-12 & K-12 Professional Education section of the bulletin for admission requirements for professional education and for a list of required professional education courses. Students will take two credits of general electives to meet the 120-credit degree requirement.

COMMUNICATION STUDIES MINOR

Required for Minor

CMST 101W	Interpersonal Communication (4)
CMST 102	Public Speaking (3)
CMST 150	Introduction to Argument (4)

Required Electives for Minor (8 credits)

4 of the 8 elective credits must be in upper-level classes. CMST 100 does not count toward the minor.

CMST 103 through CMST 499 Communication Studies

INTERDISCIPLINARY MINOR IN COMMUNICATIONS (27 credits)

This interdisciplinary minor is for students who wish to enhance their communication skills for use in business and other professional settings. Students completing this minor will develop an understanding of contexts and rhetorical strategies for oral and written communication among professionals. Students will also develop their own ability to communicate through written texts, oral communication, and electronic formats. These skills are highly desirable by employers in a wide range of business, government, and nonprofit organizations. Students may major in any of the programs affiliated with this minor, but the courses taken for the minor will not count toward the major. Students must earn a "C" or better in English courses in order to apply them to the minor.

Minor Core

CMST 212	Professional Communication & Interviewing (4)
CMST 412	Organizational Communication (4)
ENG 271W	Technical Communication (4)
ENG 474	Research and Writing Technical Reports (4)

Minor Electives

Choose 11 credits from the following programs. At least one course must be at the 3/400 level.

CMST 225	Communicating With/Through Technology (4)
CMST 305	Communication & Community (4)
CMST 333	Advanced Public Communication (4)
CMST 445	Conflict Management (4)
ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)

ENG 301W	Advanced Writing (4)
ENG 454	Persuasive Writing on Public Issues (4)
ENG 455	Advanced Writing Workshop (4)
ENG 471	Visual Technical Communication (4)
ENG 473	Desktop Publishing (4)
ENG 474	Research and Writing Technical Reports (4)
ENG 475	Editing Technical Publications (4)
IT 100	Introduction to Computing and Applications (4)
RPLS 377	Public Relations (3)
RPLS 465	Event Management (3)
URBS 150	Sustainable Communities (3)
URBS 230	Community Leadership (3)
URBS 412	Public Information and Involvement (3)

COURSE DESCRIPTIONS

CMST 100 (3) Fundamentals of Communication

A course designed to improve a student's understanding in communication, including the areas of interpersonal, nonverbal, listening, small group and public speaking. GE-1B

CMST 101W (4) Interpersonal Communication

A course blending theory and practice to help individuals build effective relationships through improved communication. WI, GE-2

CMST 102 (3) Public Speaking

A course in communication principles to develop skills in the analysis and presentation of speeches. GE-1B

CMST 150 (4) Introduction to Argument

An introduction to the field of argument, addressing structure, types and critical analysis. Students will learn to identify types of reasoning, argument fallacies and pseudo-reasoning. Students will apply concepts in the construction and refutation of argument positions.

Fall, Spring

CMST 190 (4) Introduction to Communication Studies

Course is designed to provide the student with an understanding of the history, scholarly writing, and academic journals in the communication discipline, thus preparing the student for more advanced courses in the Department of Communications Studies.

CMST 201 (2-4) Small Group Communication

Development of communication skills for working with others in small group situations.

CMST 202 (4) 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.

CMST 203 (4) 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.

GE-7, GE-8

Diverse Cultures - Purple

CMST 212 (4) Professional Communication & Interviewing

Designed to help students improve oral communication skills in the workplace. The emphasis is on the preparation and presentation of public messages in formats commonly used in business and professional settings. Listening as an oral communication skill in the workplace will be explored, as will the role of intercultural communication in the workplace. Individual speeches, group presentations, and interviews are the major presentations.

GE-1B

CMST 215 (2) 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.

CMST 220 (1-4) Forensics

Activity course involving participation in intercollegiate speech tournaments. Course can be repeated for credit.
GE-11

CMST 225 (4) Communicating With/Through Technology

A course designed to help students learn effective communication using a variety of contemporary technologies. Students will be better equipped to use communication technologies to communicate personal, professional, and public messages.
Variable

CMST 240 (1-4) Special Topics

Special interest courses devoted to specific topics within the field of communication studies. Topics vary, and course may be retaken for credit under different topic headings.

CMST 290 (4) Communication Research

An introduction to the theory and practice of research in communication studies, including the critical evaluation of contemporary communication research.

CMST 300 (4) 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.
GE-9

CMST 305 (4) Communication and Community

Students examine everyday communication practices (rituals, stories, symbols) analyzing what discursive practices turn individuals into a community. Students explore the meaning of community through experiential learning by experiencing and reflecting upon the way communication creates, maintains, transforms, and repairs community.
Variable

CMST 310 (4) 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.
GE-6, GE-11

CMST 320 (1-4) Advanced Forensics

Activity course involving participation in intercollegiate forensics with primary emphasis on applying communication theories to forensic practice. Students may not enroll concurrently with CMST 220. Course may be repeated for an overall total of 4 credits.
Variable

CMST 321 (4) Argumentation and Debate

Development of skills in the analysis, application and evaluation of argumentative communication.

CMST 333 (4) Advanced Public Communication

This is an advanced course in public presentation focused on improving presentational skills of speech delivery and language choice.

CMST 340 (1-4) Special Topics

Special interest courses devoted to specific topics within the field of communication studies. Topics vary, and course may be retaken for credit under different topic headings.

CMST 403 (4) 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.
Diverse Cultures - Purple

CMST 409 (4) Performance Studies

This course is an overview of key performance studies concepts, including cultural performance, of everyday life, theories of play, social influence, and identity performance. Students will develop and present performances as a means to understand theoretical concepts.

CMST 410 (1-4) Topics in Relational Communication

Special interest courses devoted to specific topics within relationship communication. Topics vary, and course may be retaken for credit under different topic headings.
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

CMST 412 (4) Organizational Communication

This course is designed to develop an understanding of communication studies 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.

CMST 415 (1-4) Topics in Rhetoric and Culture

Special interest courses devoted to specific topics within the intersecting fields of rhetoric and culture. Topics vary, and course may be retaken for credit under different topic headings.

CMST 416 (1-4) Topics in American Public Address

Special interest courses devoted to specific topics within field of American Public Address. Topics vary, and course may be retaken for credit under different topic headings.

CMST 420 (2) Methods: Teaching Communication Arts

This course fulfills secondary licensure requirements for Communication Arts and Literature. This course covers teaching methods and materials needed to develop units for speech communication courses in grades 5-12.
Variable

CMST 425 (2) Methods: Directing and Coaching Forensics

This course fulfills secondary licensure requirements for Communication Arts and Literature. The course covers methods and techniques in the development of competitive speech programs in grades 5-12.
Variable

CMST 435 (4) Forensics Pedagogy

A course designed to give students a theoretical understanding of competitive speech and debate.
Fall

CMST 440 (1-4) Special Topics

A course designed for students who have a general interest in communication studies. Content of each special topics course will be different. May be retaken for credit.

CMST 445 (4) 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.

CMST 485W (4) Senior Seminar

This is a required capstone course of all Communication Studies majors and involves the completion and presentation of a senior level research project. Teaching majors are excluded from this requirement.
Pre: CMST 190
WI

CMST 490 (1-4) Workshop

Topics vary as announced in class schedules.

CMST 497 (1-12) Teaching Internship

First-hand experience in the classroom assisting a faculty member.

CMST 498 (1-12) Internship

Provides first-hand experience in applying communication theories in the workplace under the direction of an on-site supervisor.

CMST 499 (1-4) Individual Study

Independent study under the supervision of an instructor.

Computer Engineering

College of Science, Engineering & Technology

Department of Electrical and Computer Engineering and Technology

242 Trafton Science Center N • 507-389-5747

Website: www.cset.mnsu.edu/ecet

Chair: Vincent Winstead, P.E., Ph.D.

Program Coordinator: Vincent Winstead, P.E., Ph.D.

Gale Allen, Nannan He, Tom Hendrickson, Han-Way Huang, Harry Jones, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hameri, Vincent Winstead, Xuanhui Wu, Qun Zhang

Accreditation. The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.ABET.org

Computer Engineering (CE) encompasses the research, development, design and operation of computers and computerized systems and their components. This program leads to a Bachelor of Science in Computer Engineering. The primary objective of the Computer Engineering program is to educate engineering professionals who possess sound design and analytical background coupled with a strong laboratory experience supporting Computer Engineering concepts. This means that the department prepares its graduates 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.

The educational objectives for our Bachelor of Science in Computer Engineering degree are to prepare our graduates to:

1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in engineering and other diverse careers.
3. Succeed in full time graduate and professional studies.
4. Pursue continuing and life-long learning opportunities.
5. Pursue professional registration.
6. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:

1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Monitoring of the success of our graduates in graduate and professional programs.
4. Assessment of continuing and life-long learning by the graduate (and their employer as applicable.).
5. Reviewing the number and success of our students completing professional registration to advance their careers.

In support of these objectives, the program provides a curriculum including the following components that will prepare students for excellent careers in Computer Engineering:

1. A strong background in the physical sciences; mathematics, including discrete math; and engineering sciences, including extensive hands-on laboratory instruction.
2. An integrated design component including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the first year and concludes with a capstone design project.
3. A choice of sub-disciplines in the senior level electives.
4. Opportunities for students to develop sensitivity to the social and humanistic implications of technology and motivate them to make worthwhile contributions to the profession and society, while upholding the highest standards of professional ethics.
5. A course in engineering economics to promote awareness of the economic aspects of engineering.
6. Preparation for continuing study and professional development.

During the senior year, as allowed by the state, students will be required to take the Fundamentals of Engineering (FE) examination or its equivalent as described in GPA Policy below.

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.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

POLICIES/INFORMATION

Admission to Major. Admission to the college is necessary before enrolling in non-engineering 300- and 400-level courses. 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 the spring semester of the sophomore year, students should submit an application form for admission to the 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. 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 67 semester credits including the following:

- General Physics (calculus-based) (12 credits)
- Calculus, Differential Equations (16 credits)
- Electrical Engineering Circuit Analysis I and II (including lab.) (7 credits)
- Chemistry (3 credits)
- English Composition (4 credits)
- Computer Science (3 credits)
- Introduction to Electrical and Computer Engineering (6 credits)
- Discrete Math (4 credits)
- Technical Communications (4 credits)
- Microprocessor course lab (3 credit)
- Digital Systems and Test (including lab) (4 credits)

A cumulative GPA of 2.5 for all science and math courses must have been achieved for program admittance. Grades must be 1.65 ("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 CS courses at Minnesota State Mankato.
2. have a cumulative GPA of 2.25 on all upper division EE and CS courses, and
3. have completed their senior design sequence at Minnesota State Mankato.
4. have taken the Fundamentals of Engineering (FE) exam or its equivalent and achieved the desired competency level.

GPA. A cumulative grade-point average of 2.5 for all science, math and engineering courses must have been maintained. Grades must be 1.65 "C-" or better for

course to be accepted. Minnesota State Mankato students should complete the pre-engineering courses listed under the major.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering Technology.

P/N Grading Policy. A student who majors in CE must elect the grade option for all required courses including courses offered by another department.

COMPUTER ENGINEERING BSCE

Degree completion = 128 credits

Required General Education

CHEM	191	Chemistry Applications (3)
ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4)
<u>Economics</u> (choose 3 credits)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)

Prerequisites to the Major

CS	111	Computer Science II (4)
EE	106	Introduction to Electrical/Computer Engineering I (3)
EE	107	Introduction to Electrical/Computer Engineering II (3)
EE	230	Circuit Analysis I (3)
EE	231	Circuit Analysis II (3)
EE	234	Microprocessor Engineering I (3)
EE	235	Microprocessor Engineering Laboratory I (4)
EE	240	Evaluation of Circuits (1)
EE	281	Digital System Design with Testability (3)
EE	282	Digital System Design with Testability Lab (1)
MATH	122	Calculus II (4)
MATH	180	Mathematics for Computer Science (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
PHYS	222	General Physics II (3)
PHYS	223	General Physics III (3)
PHYS	232	General Physics II Laboratory (1)
PHYS	233	General Physics III Laboratory (1)

Major Common Core

CS	460	Operating Systems: Design and Implementation (3)
EE	332	Electronics I (3)
EE	333	Electronics II (3)
EE	334	Microprocessor Engineering II (3)
EE	336	Principles of Engineering Design I (1)
EE	337	Principles of Engineering Design II (1)
EE	341	Signals & Systems (3)
EE	342	Electronics Laboratory (1)
EE	344	Microprocessor II Laboratory (1)
EE	350	Engineering Electromagnetics (3)
EE	358	Control Systems (3)
EE	368	Control Systems Laboratory (1)
EE	395	Computer Hardware and Organization (3)
EE	450	Engineering Economics (3)
EE	467W	Principles of Engineering Design III (1)
EE	477W	Principles of Engineering Design IV (1)
ME	299	Thermal Analysis (2)

Major Restricted Electives (choose 6 credits)

CS	350	Network Architectures (3)
EE	453	Advanced Communications Systems Engineering (3)
EE	471	Advanced Control Systems (3)
EE	472	Digital Signal Processing (3)
EE	473	Electrical Power Systems Analysis and Design (3)
EE	474	Power Electronics (4)

EE	475	Integrated Circuit Engineering (3)
EE	476	Antennas, Propagation, & Microwave Engineering (3)
EE	479	Superconductive Devices (3)
EE	480	Integrated Circuit Fabrication Lab (1)
EE	481	VLSI Design Laboratory (1)
EE	484	VLSI Design (3)
EE	487	RF Systems Engineering (3)
EE	489	Real-time Embedded Systems (4)

Other Graduation Requirements

Choose a minimum of twelve (12) credits of Humanities (6 credits) and Social Sciences (6 credits). For a complete listing of approved Humanities and Social Science courses please consult the department website. In general, graduation credits toward the humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music or theatre that involve performance or practice of basic skills. At least three (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.

Analysis/Probability and Statistics (choose 3 credits)

MATH	354	Concepts of Probability & Statistics (3)
ME	291	Engineering Analysis (3)

Required Minor: None.

COURSE DESCRIPTIONS

Computer Science

CS 111 (4) Computer Science II

Continues the exploration of introductory Computer Science begun in CS 110. Focus is on developing basic knowledge of algorithms, programming skills and problem solving techniques. Topics include recursion, sorting, linked lists, stacks and queues. Pre: CS 110 or EE 107. MATH 113 or MATH 115 or MATH 121
Fall, Spring

CS 350 (3) Network Architectures

An introduction to data communications and networks. The field encompasses local area networks, wide area networks, and wireless communication. Topics include digital signals, transmission techniques, error detection and correction, OSI model, TCP/IP model, network topologies, network protocols, and communications hardware. Pre: CS 305 or EE 234
Spring

CS 460 (3) Operating Systems: Design & Implementation

This course studies historical and current concepts and implementations of computer operating systems. Basic operating systems topics include processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, scheduling, file systems, storage, devices, protection, security, and privacy. Pre: CS 210 and CS 320
Spring

Electrical Engineering Courses

EE 100 (1) Explorations in Engineering

This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program. Fall
GE-12

EE 106 (3) Introduction to Electrical/Computer Engineering I

This introductory course covers digital systems topics including binary numbers, logic gates, Boolean algebra, circuit simplification using Karnaugh maps, flip-flops, counters, shift registers and arithmetic circuits. Problem solving methods, study skills and professional development will be addressed throughout the course. Pre: MATH 112
Fall Spring

EE 107 (3) Introduction to Electrical/Computer Engineering II

The course presents algorithmic approaches to problem solving and computer program design using the C language. Student will explore Boolean expressions, implement programs using control structures, modular code and file input/output, and interface with external hardware using robots and sensors.

Pre: EE 106
Spring

EE 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. Natural and step response of RL, RC, and RLC circuits.

Pre: PHYS 222 or concurrent, MATH 321 or concurrent
Fall

EE 231 (3) Circuit Analysis II

Continuation of Circuit Analysis I to include special topics in circuit analysis.

Pre: EE 230 and EE 240, MATH 321, PHYS 222
Spring

EE 234 (3) Microprocessor Engineering I

A course that teaches how to write computer assembly language programs, make subroutine calls, perform I/O operations, handle interrupts and resets, interface with a wide variety of peripheral chips to meet the requirements of applications.

Pre: EE 106, EE 107
Coreq: EE 235
Fall

EE 235 (1) Microprocessor Engineering Laboratory I

Use of development boards and assembly language programming to handle interrupts, interface with parallel I/O ports, memory, and timers. Experiments will involve signal and frequency measurements, data conversions, and interface design.

Pre: EE 106, EE 107
Coreq: EE 234

EE 240 (1) Evaluation of Circuits

Laboratory support for EE 230. Use of laboratory instrumentation to measure currents and voltages associated with DC and AC circuits. Statistical analysis of measurement data. Measurements of series, parallel and series-parallel DC and AC circuits. Measurement of properties for circuits using operational amplifiers. Measurement of transient responses for R-L and R-C circuits. Simulation of DC and AC circuits using PSPICE. Concepts covered in EE 230 will be verified in the laboratory.

Pre: Must be taken concurrently with EE 230.
Fall

EE 244 (2) Introduction to Digital Systems

Simple coding schemes, Boolean algebra fundamentals, elements of digital building blocks such as gates, flip-flops, shift registers, memories, etc.; basic engineering aspects of computer architecture.

EE 253 (1) Logic Circuits Lab

Laboratory support to complement EE 244. Use of laboratory instrumentation to measure characteristics of various logic circuits and digital subsystems. Experimental evaluation of digital logic devices and circuits including logic gates, flip-flops, and sequential machines.

Pre: EE 230 and concurrent with EE 244.
Spring

EE 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.

Pre: EE 230, EE 240 and concurrently with EE 231 and EE 244
Spring

EE 281 (3) Digital System Design with Testability

Introduction to representing digital hardware using a hardware description language. Introduction to implementation technologies such as PAL's, PLA'S, FPGA's and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse mode, asynchronous and incompletely specified logic.

Pre: EE 106, EE 107
Variable

EE 282 (1) Digital System Design with Testability Lab

Laboratory support for EE 282 practical aspects of design and analysis of different types of sequential machines will be presented through laboratory experience.

Coreq: EE 281

EE 298 (1-4) Topics

Varied topics in Electrical and Computer Engineering. May be repeated as topics change.

Pre: to be determined by course topic

EE 303 (3) Introduction to Solid State Devices

Introduction to crystal structure, energy band theory, conduction and optical phenomenon in semiconductors, metals and insulators. Study of 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
Fall

EE 304 (1) Lab: Introduction to Solid State Devices

Laboratory support for EE 303. Experiments include resistivity and sheet resistance measurements of semiconductor material, probing material, probing of IC chips, PN-junction IV and CV measurements, BJT testing to extract its parameters, MOSFET testing and evaluating its parameters, cv-measurements of MOS structure, and familiarization with surface analysis tools.

Fall

EE 332 (3) Electronics I

Introduction to discrete and microelectronics circuits including analog and digital electronics. Device characteristics including diodes, BJT's, JFET's, and MOS-FET's will be studied. DC bias circuits, small and large signal SPICE modeling and analysis and amplifier design and analysis will be discussed.

Pre: EE 231

EE 333 (3) Electronics II

The second course of the electronics sequence presenting concepts of feedback, oscillators, filters, amplifiers, operational amplifiers, hysteresis, bi-stability, and non-linear functional circuits. MOS and bipolar digital electronic circuits, memory, electronic noise, and power switching devices will be studied.

Pre: EE 332
Spring

EE 334 (3) Microprocessor Engineering II

A more advanced study of microprocessors and microcontrollers in embedded system design. Use of C language in programming, interrupt interfaces such as SPI, I2C, and CAN. External memory design and on-chip program memory protection are also studied.

Fall

EE 336 (1) Principles of Engineering Design I

Electrical and computer engineering project and program management and evaluation techniques will be studied. Emphasis will be placed on the use of appropriate tools for planning, evaluation, and reporting on electrical and computer engineering projects.

Pre: Junior Standing
Fall

EE 337 (1) Principles of Engineering Design II

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: EE 336
Spring

EE 341 (3) Signals & Systems

Analysis of linear systems and signals in the time and frequency domain. Laplace and Fourier transforms. Z-transform and discrete Fourier transforms. Pre: EE 230, MATH 321 and PHYS 222
Fall

EE 342 (1) Electronics Laboratory

This lab is designed to accompany EE 332. The lab covers the experimental measurement and evaluation of diode, BJT, and MOS characteristics; various feedback topologies; oscillator and op-amp circuits; and rectifiers and filter circuitry. Pre: EE 231 and EE 332 taken concurrently.
Fall

EE 344 (1) Design & Evaluation of Microprocessors

Laboratory support for EE 334. Use of development boards and C Programming language to handle I/O devices, interrupts, and all peripheral functions. Multiple functions such as timers, A/D converters, I/O devices, interrupts, and serial modules will be used together to perform desired operations. Pre: Concurrent with EE 334
Fall

EE 350 (3) 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: EE 231, MATH 223, MATH 321 and PHYS 222
Spring

EE 353 (3) Communications 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 341, MATH 223
Spring

EE 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
Spring

EE 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
Spring

EE 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
Spring

EE 395 (3) Computer Hardware and Organization

High-level language constructs using a selected assembly language, design alternatives of computer processor datapath and control, memory hierarchy/management unit, use of HDL in describing and verifying combinational and sequential circuits. Design of computer processor and memory system. Pre: EE 234, EE 235, EE 281
Spring

EE 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information. Pre: EE 235. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

EE 450 (3) Engineering Economics

Overview of accounting and finance and their interactions with engineering. Lectures include the development and analysis of financial statements, time value of money, decision making tools, cost of capital, depreciation, project analysis and payback, replacement analysis, and other engineering decision making tools. Pre: Advanced standing in the program
Fall

EE 453 (3) Advanced Communications Systems Engineering

Behavior of analog systems and digital systems in the presence of noise, principles of digital data transmission, baseband digital modulation, baseband demodulation/detection, bandpass modulation and demodulation of digital signals. Channel coding, modulation and coding trade-offs, spread spectrum techniques, probability and information theory. Pre: EE 353 and EE 363
Fall

EE 463 (3) Advanced Digital System Design

Design of combinational and sequential systems and peripheral interfaces. Design techniques using MSI and LSI components in an algorithmic state machine; implementation will be stresses. Rigorous timing analysis transmission-line effects and metastability of digital systems will be studied. Pre: EE 244

EE 467W (1) Principles of Engineering Design III

The 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
Fall
WI

EE 471 (3) Advanced Control Systems

This course is a continuation of EE 358. Techniques for the analysis of continuous and discrete systems are developed. These techniques include pole placement, state estimation, and optimal control. Pre: EE 358 and EE 368
Fall

EE 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
Spring

EE 473 (3) Electrical Power Systems Analysis and Design

Power generation, transmission and consumption concepts, electrical grid modeling, transmission line modeling, electric network power flow and stability, fault tolerance and fault recovery, economic dispatch, synchronous machines, renewable energy sources and grid interfacing.

Pre: EE 231 or via permission from instructor
Variable

EE 474 (4) Power Electronics

This course is designed to provide students with knowledge of the design and analysis of static power conversion and control systems. The course will cover the electrical characteristics and properties of power semiconductor switching devices, converter power circuit topologies, and the control techniques used in the applications of power electronic systems. Laboratories consist of computer-based modeling and simulation exercises, as well as hands-on laboratory experiments on basic converter circuits and control schemes.

Pre: EE 333
Spring

EE 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.

Pre: EE 303 and EE 332
Fall

EE 476 (3) Antennas, Propagation, & 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
Variable

EE 477W (1) Principles of Engineering Design IV

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 and Senior Standing
Spring
WI

EE 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
Variable

EE 480 (1) Integrated Circuit Fabrication Lab

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.

Pre: Concurrent with EE 475
Fall

EE 481 (1) VLSI Design Laboratory

This laboratory accompanies EE 484. The laboratory covers the basics of layout rules, chip floor planning, the structure of standard cells and hierarchical design, parasitic elements, routing, and loading. Students will learn to design and layout standard cells as well as how to use these cells to produce complex circuits. The laboratory culminates with the individual design and layout of a circuit.

Pre: Concurrent with EE 484
Spring

EE 482 (3) Electromechanics

Electrical power and magnetic circuit concepts, switch-mode converters, mechanical electromechanical energy conversion, DC motor drives, feedback controllers, AC machines and space vectors, permanent magnet AC machines and drives, induction motors and speed control of induction motors, stepper motors.

Pre: EE 230
Fall

EE 484 (3) VLSI Design

The basics of digital VLSI technology. Bipolar and MOS modeling for digital circuits. Physical transistor layout structure and IC process flow and design rules. Custom CMOS/BICMOS static and dynamic logic styles, design and analysis. Clock generation, acquisition, and synchronization procedures. Special purpose digital structures including memory, Schmitt triggers, and oscillators. Individual design projects assigned.

Pre: EE 333
Spring

EE 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 EE 363
Variable

EE 489 (4) Real-time Embedded Systems

This course introduces students the recent advances in real-time embedded systems design. Topics cover real-time scheduling approaches such as clock-driven scheduling and static and dynamic priority driven scheduling, resource handling, timing analysis, inter-task communication and synchronization, real-time operating systems (RTOS), hard and soft real-time systems, distributed real-time systems, concepts and software tools involved in the modeling, design, analysis and verification of real-time systems.

Pre: EE 107, EE 334, EE 395
Variable

EE 491 (1-4) In-Service

EE 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

EE 497 (1-6) Internship

EE 498 (1-4) Topics

Varied topics in Electrical and Computer Engineering. May be repeated as topics change.

Pre: to be determined by course topic

EE 499 (1-6) Individual Study

Computer Engineering Technology

College of Science, Engineering & Technology
Department of Electrical and Computer Engineering and Technology
242 Trafton Science Center N • 507-389-5747
Website: www.cset.mnsu.edu/ecet

Chair: Vincent Winstead, P.E., Ph.D

Program Coordinator: Vincent Winstead, P.E., Ph.D

Gale Allen, Nannan He, Tom Hendrickson, Han-Way Huang, Harry Jones, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hamari, Vincent Winstead, Xuanhui Wu, Qun Zhang

Accreditation. The Computer Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org

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.

The Educational Objectives for our Bachelors Degree in Computer Engineering Technology program area:

1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in computer engineering technology and other diverse careers.
3. Pursue continuing and life-long learning opportunities.
4. Provide necessary skills to advance technically and/or managerially.
5. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:

1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
4. Ongoing contact with graduates to determine career paths and challenges confronted.

POLICIES/INFORMATION

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.

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. Grades must be 1.67 "C-" or better for courses taken at Minnesota State Mankato to be accepted. All students must complete a minimum of 12 semester credits of mathematics starting with Precalculus math and a minimum of 24 semester credits of math-

ematics and science courses.

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 at Minnesota State Mankato,
2. have a cumulative GPA of 2.0 or better on all upper division EET courses, and
3. have completed their senior design sequence (EET 461 and EET 462) at Minnesota State Mankato.
4. Grades must be 1.67 "C-" or better for courses taken at Minnesota State Mankato to be accepted.

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, 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 catalog for all students transferring to Minnesota State Mankato and to the following department policies:

1. All transfer students must take EET 221 if not proficient with current Minnesota State Mankato 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, EET 113, and EET 114. The student may also attempt to test out of EET 114, EET 222, EET 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.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering and Technology.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

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 Minnesota State Mankato or for any EET course above EET 223.

COMPUTER ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

Required General Education

CMST 102 Public Speaking (3)
ENG 101 Composition (4)

Pre-requisites to the Major

EET 113 DC Circuits (3)
EET 114 AC Circuits (3)
EET 141 Integrated Computer Technology I (4)
EET 142 Integrated Computer Technology II (4)
EET 143 Integrated Computer Technology III (4)
EET 221 Electronic CAD (3)
EET 222 Electronics I (4)
EET 223 Electronics II (4)
EET 254 Microprocessors I (4)
MATH 115 Precalculus Mathematics (4)
MATH 121 Calculus I (4)
MATH 127 Calculus II for Engineering Technology: Integration (2)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)

Major Common Core

Three (3) credits of EET 497 may be used to satisfy major common core requirements.

- CHEM 104 Introduction to Chemistry (3)
- EET 310 Programming Tools (4)
- EET 341 Electronics Shop Practices (2)
- EET 430 Computer Networking I (4)
- EET 441 Embedded Systems (4)
- EET 456 Analog Communications (4)
- EET 461 Industrial Automation I (4)
- EET 462 Industrial Automation II (4)
- EET 484 Microprocessors II (4)
- EET 497 Internship (3)
- MATH 180 Mathematics for Computer Science (4)
- MET 427 Quality Management Systems (3)

Major Restricted Electives

Choose a minimum of 6 credits from 300-level and 400-level courses with advisor's approval.

Major Unrestricted Electives

(choose one of the following courses)

- STAT 154 Elementary Statistics (3)
- STAT 354 Concepts of Probability and Statistics (3)

Required Minor: None.

COURSE DESCRIPTIONS

EET 112 (3) Elementary Electricity and Electronics

The basic elements of electricity and electronics are explored in an internet enabled, self-paced course. Laboratories make use of a Virtual Laboratory environment to provide experience with issues in wiring, power, circuits, and digital electronics.

Fall, Spring
GE-3

EET 113 (3) DC Circuits

A study of DC electrical circuits, Kirchhoff's laws, series and parallel circuits, inductors, capacitors, circuit response to RL, RC and RLC circuits. Thevenin's equivalent circuit theorem, and other network analysis theorems. Use of dependent sources in DC circuits.

Pre: MATH 115, or concurrent
Fall, Spring

EET 114 (3) AC Circuits

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems. Ohm's Laws and Kirchhoff's Laws for AC circuits. Use of dependent sources in AC circuits.

Pre: EET 113
Fall, Spring

EET 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, including issues such as the need for RAM, hard drive, memory, ROM, etc.

Fall, Spring
GE-13

EET 116 (3) Communications-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. 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.

Variable
GE-13

EET 117 (3) Introduction to Digital Electronics

Hands-on experiences in the use of digital integrated circuits and 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.

EET 118 (3) Electricity - Generation, Usage & Green Alternatives

This course covers the development and status of electrical power as a global resource. This includes usage, generation, and impact on societies through out the world. Finally, the course will exam the many renewable generation options.

Variable
GE-3, GE-8

EET 125 (3) Perspective on Technology

Historical, cultural, ethical, philosophical, developmental, and creative aspects of engineering and technology as a discipline are explored. The course also examines concepts and events leading to important innovations of recent times; microwave ovens, FAX machines, personal computers, traffic signals, and video games.

Fall
GE-6, GE-8
Diverse Cultures - Purple

EET 141 (4) Integrated Computer Technology I

Digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers binary arithmetic, clock distribution, timing, TTL, CMOS, logic gates, Boolean algebra, multiplexer, counter, adder, logic simulation, C language elements, C programming techniques and use of digital test equipment. Students design and build an Arithmetic Logic Unit (ALU) from small-scale logic components and simulate each block in C.

Coreq: EET 113
Fall

EET 142 (4) Integrated Computer Technology II

Continues building digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers comparators, decoding, encoding, multiplexers, flip-flops, Schmitt Trigger, C functions, arrays, variables, recursive functions, structures, and strings. Students design, build and test a microprocessor using TTL gates and simulate each block in C.

Pre: EET 141
Spring

EET 143 (4) Integrated Computer Technology III

Sequential circuits, logic timing, clock distribution, counter, LED display, shift register, transceiver, 555 timer, 555 oscillator, D/A converter, RAM, ROM, mass memory, synchronous logic, asynchronous logic, microprocessor-interfacing, testability, and simulation.

Pre: EET 142
Fall

EET 221 (3) Electronic CAD

Drafting Principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation of data, and printed circuit board layout and construction.

Pre: EET 113
Fall

EET 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 113

EET 223 (4) Electronics II

An introduction to differential amplifier, linear and nonlinear operational amplifiers, power amplifiers, linear digital ICs, oscillators, power supplies, D/A, A/D conversion, four layered devices and their applications.

Pre: EET 222
Coreq: EET 114
Spring

EET 254 (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 methods, synchronous serial I/O methods, A/D conversion, and timer applications.
Pre: EET 113

Spring

EET 298 (1-4) Topics

Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.

Pre: to be determined by course topic

EET 310 (4) Programming Tools

Several programming tools and their use in creating electronic hardware systems are covered in this course. Creating special-purpose hardware using numerical analysis programs written in C. Creating hardware utilizing Visual applications written in C. Use of scripting languages in hardware applications. Using Excel for input-output functions.

Pre: EET 143, EET 222 and EET 254

EET 315 (3) Programmable Instrumentation

Instrumentation system design and integration with sensors, actuators and other electronic indicator components. Programming in a block diagram environment and with embedded C to interface different hardware components.

Prereq: MATH 113 or MATH 115

Variable

EET 340 (4) Programmable Hardware Technology

Create working programmable hardware using FPGA, GAL and other logic technology. Use industry standard tools such as Verilog, Xilinx, Orcad and Multism along with development kits and extension boards to implement programmable systems. Interface LED displays, switches and I/O devices with programmable logic to create processing systems. Evolution of programmable logic and analog circuits.

Pre: EET 143

Spring

EET 341 (2) Electronic Shop Practices

An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards.

Pre: EET 142

Spring

EET 355 (3) Electrical Power Systems

Electrical power and magnetic circuit concepts, transformers, generators and motors (DC, synchronous, induction), special purpose motors, power-electronic motor drivers, prime movers/alternatives, generation, transmission/distribution, system stability/protection.

Pre: PHYS 212

Fall

EET 393 (1-4) Practicum

Elective credit for approved experience in off-campus work related to EET major.

Pre: Permission required.

Fall, Spring

EET 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: EET 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

EET 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 OSI model, the TCP/IP MODEL, different network topologies and associated hardware, error detection and correction, protocols, and security.

Pre: EET 143, EET 223, EET 254

Fall

EET 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

Spring

EET 441 (4) Embedded Systems

Design and prototyping of embedded systems including both hardware and software components. A variety of hardware, software, sensors and displays will be used depending on the embedded system requirements. Issues related to hardware and software specifications will be studied as well as appropriate documentation standards.

Pre: EET 143

Spring

EET 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

Fall

EET 455 (3) Power Electronics

Use of solid-state switching devices in the conversion and control of electrical energy for low power and high power applications such as switched-mode regulated DC power supplies, motor speed control, lighting control, uninterruptible power supplies and HVDC transmission.

Pre: EET 143

Variable

EET 456 (4) Analog Communications

Communications principles and systems. Practical engineering aspects involved in modulation-demodulation, receivers, transmitters and filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.

Pre: EET 222

Spring

EET 458 (1) Advanced Instrumentation

Experiences with electronic equipment and instrumentation including maintenance, repair, calibration, safety and component identification.

Pre: 25 hours of EET courses, or consent

Spring

EET 461 (4) Industrial Automation I

Automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PLCs, actuators, encoders, stages, motors, controllers, and drives. Students design, simulate, build, test and document automation systems for Capstone projects.

Pre: EET 223 and EET 254

Fall

EET 462 (4) Industrial Automation II

Continues building skills in automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PLCs, actuators, encoders, stages, motors, controllers and drives. Students design, simulate, build, test and document automation systems for Capstone projects.

Pre: EET 461

Spring

EET 484 (4) Microprocessors II

A study of a high performance microprocessor architecture. Applications of a microprocessor for monitoring and controlling systems will be studied. Optimal utilization of a microprocessors resources will be stressed. PC programming in assembly and a high level language.

Pre: EET 143

Fall

COMPUTER ENGINEERING TECHNOLOGY CONTINUED

EET 486 (3) Digital Communications

An overview of a communication system. Phase Shift Keying, Amplitude Shift Keying and Frequency Shift Keying. Coherent and non-coherent detection. Maximum likelihood receiver and Matched filter. Noise power, Noise figure, and Noise Temperature. Error performance in presence of noise. Linear block codes, cyclic codes and convolution codes. Spread Spectrum Techniques.

Pre: EET 142, EET 222

Variable

EET 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 223

Variable

EET 491 (1-4) In-Service

EET 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

Spring

EET 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

EET 497 (1-6) Internship

Should be taken at end of junior year.

Permission required. Pre: 40 hrs EET credits or written permission from program coordinator.

Fall, Spring

EET 498 (1-4) Topics

Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.

Pre: to be determined by course topic

EET 499 (1-4) Individual Study

Fall, Spring

COMPUTER INFORMATION TECHNOLOGY

Computer Information Technology

College of Science, Engineering & Technology

Department of Computer Information Science

273 Wissink Hall • 507-389-1412

Website: cset.mnsu.edu/cis

Chair: Leon Tietz

Cyrus Azarbod, Lee Cornell, Allan Hart, Sarah Kruse, Guarionex Salivia, Mahbur Syed, Christophe Veltsos, Michael Wells

Computer Information Technology (CIT) in its broadest sense encompasses all aspects of computing technology. CIT, as an academic discipline, focuses on meeting the needs of users within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies. The aim is to provide CIT major graduates with the skills and knowledge to take on appropriate professional positions upon graduation and grow into leadership positions or pursue research or graduate studies in the field. The CIT program also has five minors.

POLICIES/INFORMATION

Admission to the CIT program is granted by the department. Admission to the program is required before the student is permitted to take 300- and 400-level courses.

Requirements for admission to the CIT program are:

- A minimum of 32 earned semester credits
- Completion of MATH 121 or MATH 181 with a grade of "C" or better
- Completion of ENG 101 with a grade of "C" or better
- Completion of IT 210, and IT 214 with a grade of "C" or better and a GPA of 2.5 in these courses (or their equivalents).

GPA Policy. The completion of any major or minor in the Department of Computer Information Science requires both:

- a GPA of 2.5 or higher for all departmental courses (IT), or their substitutions, used to complete the major or minor, and
- a GPA of 2.5 or higher for all courses, or their substitutions, used to complete the major or minor. This includes all departmental courses, supporting courses, and General Education courses required for the major or minor.

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.

Grade Policy. All coursework used to complete a departmental major or minor, including required courses, required supporting courses, and required General Education courses, must be taken for a letter grade except for courses offered only as P/N.

No course completed with a grade of "D" can be used to complete a departmental major or minor program, or to meet a departmental prerequisite.

Registration Hold Policy. The department will place a registration hold on any student who earns a "D" or "F" in any of its courses. The department will also place such a hold on any student who drops any of its courses after the first two weeks of the semester. A student with a registration hold cannot register for courses until the hold is released, which requires filling out an appeal form and taking it to the student's advisor for discussion. Appeal forms are available from the departmental office. This hold policy does NOT apply to students who are taking 100-level IT courses.

Dual Major Policy. Students can earn at most one undergraduate major from this department.

Incomplete Policy. The department gives incomplete grades for only two conditions. The first condition is illness, which requires a doctor's written recommendation. 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. The student must have a satisfactory grade ("C" or better) in the course at the time of the onset of the condition.

Internship Policy. The Department of Computer Information Science 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 or a capstone experience for all IT majors.

Excluded Courses Policy. IT 201, IT 296 do not count toward a major or minor in the department.

Residency Policy. Students must earn at least 50 percent of the credits required for a departmental major or minor at Minnesota State Mankato.

COMPUTER INFORMATION TECHNOLOGY BS

Degree completion = 120 credits

Required General Education

- ENG 101 Composition (4)
- IT 202W Computers in Society (4)
- STAT 154 Elementary Statistics (3)
- (choose one of the following MATH Courses) (3-4 credits)
- MATH 121 Calculus I (4)
- MATH 181 Intuitive Calculus (3)
- (choose one of the following CMST Courses) (3 credits)
- CMST 100 Fundamentals of Communication (3)
- CMST 102 Public Speaking (3)
- CMST 212 Professional Communication and Interviewing (3)

Major Common Core

Three credits of IT 497 are required for the major. Additional credits may only be used to satisfy degree requirements.

- ENG 271W Technical Communication (4)
- IT 210 Fundamentals of Programming (4)
- IT 214 Fundamentals of Software Development (4)
- IT 320 Machine Structures and Operating Systems (4)
- IT 340 Introduction to Database Systems (4)
- IT 350 Information Security (4)
- IT 360 Introduction to Networking (4)
- IT 380 Systems Analysis & Design (4)
- IT 440 Database Management Systems II (4)
- IT 480 Software Quality Assurance and Testing (4)
- IT 483 Web Applications and User Interface Design (4)
- IT 497 Internship (1-12)

Major Restricted Electives

CHOOSE 1 CLUSTER

Cluster A (choose 8 credits)

- IT 442 Database Security, Auditing and Disaster Recovery (4)
- IT 444 Data Mining and Warehousing (4)
- IT 450 Information Warfare (4)

Cluster B (choose 8 credits)

- IT 442 Database Security, Auditing and Disaster Recovery (4)
- IT 450 Information Warfare (4)
- IT 460 Network and Security Protocols (4)
- IT 462 Network Security, Administration and Programming (4)

Cluster C (choose 8 credits)

- IT 310 Data Structures & Algorithms (4)
- IT 311 Business Application Programming (4)
- IT 414 Advanced Object-Oriented Programming with Design Patterns (4)
- IT 482 Human Computer Interaction (4)
- IT 484 Software Engineering (4)

Required Minor: Yes, Any (Computer Science excluded)

COMPUTER INFORMATION SCIENCE MINOR

Required for Minor

- IT 210 Fundamentals of Programming (4)
- IT 214 Fundamentals of Software Development (4)
- (choose three of the following courses)
- IT 483 Web Applications and User Interface Design (4)
- IT 320 Machine Structures and Operating Systems (4)

- IT 340 Introduction to Database Systems (4)
- IT 360 Introduction to Networking (4)
- IT 380 Introduction to Software Engineering (4)

COMPUTER TECHNOLOGY MINOR

Required for Minor

- IT 100 Introduction to Computing and Applications (4)
- IT 202W Computers in Society (4)
- IT 210 Fundamentals of Programming (4)
- (choose 8 credits) (choose two of the following)
- IT 214 Fundamentals of Software Development (4)
- IT 340 Introduction to Database Systems (4)
- IT 350 Information Security (4)
- IT 360 Introduction to Networking (4)
- IT 380 Systems Analysis and Design (4)

DATABASE TECHNOLOGIES MINOR

Required for Minor

- IT 210 Fundamentals of Programming (4)
- IT 214 Fundamentals of Software Development (4)
- IT 340 Introduction to Database Systems (4)
- (choose two of the following courses)
- IT 440 Database Management Systems II (4)
- IT 442 Database Security, Auditing, and Disaster Recovery (4)
- IT 444 Data Mining and Warehousing (4)

INTERNATIONAL TECHNOLOGY MINOR

This minor is designed to allow the student to gain technology project experience in a cross-cultural and cross-disciplinary environment. The student will participate in the process of conceiving, designing and implementing technological solutions/products in this environment.

Minor Core

Study abroad to earn at least 12 credits. For international students, this must be in a country whose culture differs significantly from the student's home country. The international program of study must be approved by both the student's advisor and by the chair of the Computer Information Science Department. The 12 credits can be taken as IT 390 or as other courses as determined and approved by the student, advisor, and CIS chair.

Elective

For Majors in CIS Department (choose 8 credits)

When this minor accompanies a major from the Computer Information Science Department, choose 8 credits of 300- and 400-level IT courses. These courses must not be included among those used to complete the requirements for the major.

IT 300 - IT 499

For Majors from another department (choose 8 credits)

When this minor accompanies a major from another department, choose 8 credits of IT courses numbered 200 and above.

IT 200 - IT 499

NETWORKING AND INFORMATION SECURITY MINOR

Required for Minor

- IT 210 Fundamentals of Programming (4)
- IT 214 Fundamentals of Software Development (4)
- IT 350 Information Security (4)
- IT 360 Introduction to Networking (4)
- (choose one of the following courses)
- IT 450 Information Warfare (4)
- IT 460 Network and Security Protocols (4)
- IT 462 Network Administration and Programming (4)

SOFTWARE DEVELOPMENT MINOR

Required for Minor

- IT 210 Fundamentals of Programming (4)
- IT 214 Fundamentals of Software Development (4)
- IT 310 Data Structures and Algorithms (4)
- IT 380 Systems Analysis and Design (4)

COMPUTER INFORMATION TECHNOLOGY CONTINUED

(choose one for the following courses)

- IT 414 Advanced Object-Oriented Programming w/Design Patterns (4)
- IT 480 Software Quality Assurance and Testing (4)
- IT 484 Software Engineering (4)

CERTIFICATE PROGRAMS

Requirements for Certificate Programs in Computer Information Technology.

Admission Requirements

Knowledge of programming (equivalent of IT 210 and IT 214) or equivalent programming experience.

Pre-requisites Requirements

For the Undergraduate Certificate Programs in IT, all of the Certificates' pre-requisite requirements can be met through Minnesota State Mankato coursework, transfers, substitutions and/or waivers, as may be appropriate.

Completion Requirements

Without exception, the twelve credits of coursework required for each Certificate must all be completed in the Department of Computer Information Science at Minnesota State University, Mankato.

CERTIFICATE IN DATABASE TECHNOLOGIES

The Database Technologies undergraduate certificate provides students with the necessary knowledge to apply information technology principles and theory so they are able to address real world business and organizational challenges and opportunities. This certificate focuses on planning, designing, programming and developing secure databases, and the challenges and specific issues in maintaining, managing and securing databases. Students are introduced to the security challenges and threats in database systems and are provided an understanding of the state-of-the art security technologies, and data recovery strategies.

Pre-requisites. Students must have fundamental knowledge or experience of database (equivalent of IT 340). Students planning to take IT 442 must also have knowledge or experience of information security (equivalent of IT 350). Students planning to take IT 483 must have basic knowledge or experience of database (equivalent of IT 340).

(choose three of the following courses) (12 credits)

- IT 440 Database Management Systems II (4)
- IT 442 Database Security, Auditing, and Disaster Recovery (4)
- IT 444 Data Mining and Warehousing (4)
- IT 483 Web Application and User Interface Design (4)

CERTIFICATE IN INFORMATION SECURITY

The Information Security certificate provides students with the necessary knowledge in information security principles and practices and an understanding of how information security functions in an organization from both business and technology aspects. The program will engage students with a thorough review of viruses, worms, backdoors, Trojan horses, Rootkits, and other threats. Students will analyze malware in order to understand the infection, propagation, and deception mechanisms of these attack vectors. It will also focus on risk assessment to identify reasonably foreseeable internal and external risks to the security, confidentiality and integrity of user information and assess the sufficiency of any safeguards in place to control these risks.

Pre-requisites. Students planning to take IT 460 must have basic knowledge of or experience in data communications and networking (equivalent of IT 360). Students planning to take IT 442 must have basic knowledge of or experience in databases (equivalent of IT 340).

(choose three of the following courses) (12 credits)

- IT 350 Information Security (4)
- IT 442 Database Security, Auditing, and Disaster Recovery (4)
- IT 450 Information Warfare (4)
- IT 460 Network and Security Protocols (4)

CERTIFICATE IN NETWORKING TECHNOLOGIES

The Networking Technologies certificate provides students with the necessary knowledge in networking principles, administration, programming, security issues and practices so that they are able to apply them in real world organizational challenges and opportunities. The students completing this certificate program will understand and evaluate current and emerging networking and security technologies and assess their applicability to address the needs of individuals and organizations.

Pre-requisites. Students planning to take IT 462 must have basic knowledge of or experience in information security (equivalent of IT 350). Students planning to take IT

483 must have basic knowledge of or experience in databases (equivalent of IT 340). (choose three of the following courses) (12 credits)

- IT 360 Introduction to Networking (4)
- IT 460 Network and Security Protocols (4)
- IT 462 Network Administration and Programming (4)
- IT 483 Web Application and User Interface Design (4)

CERTIFICATE IN SOFTWARE DEVELOPMENT

The software development certificate provides the students with an understanding of the successful delivery of software projects that support organizational goals. Students gain knowledge in the use of tools necessary to organize project objectives, create realistic plans, and build and manage an accomplished team through every phase of the software development project. Students gain practical skills needed to meet today's demands for faster and more efficient development.

Pre-requisites: Students must have fundamental knowledge of or experience in systems analysis and design (equivalent of IT 380). Students planning to take IT 414 must also have basic knowledge of or experience in data structures and databases (equivalent of IT 310 and IT 340). Students planning to take IT 483 must have basic knowledge of or experience in databases (equivalent of IT 340). (choose three of the following courses) (12 credits)

- IT 414 Advanced Object-Oriented Programming w/Design Patterns (4)
- IT 480 Software Quality Assurance and Testing (4)
- IT 482 Human Computer Interaction (4)
- IT 483 Web Applications and User Interface Design (4)
- IT 484 Software Engineering (4)

COURSE DESCRIPTIONS

IT 100 (4) Introduction to Computing and Applications

Basic foundations in computer concepts. Topics include: hardware, software, uses of technology in industry, and ethical, and social issues. Lab work covers various systems and applications software including word processing, email, the Internet, spreadsheets, databases, and presentation software.

Fall, Spring
GE-9, GE-13

IT 101 (3) Introduction to Information Systems

Introduction to personal computers as productivity tools for business majors. Using Microsoft Office suite, students learn to be productive with document processing, spreadsheets, electronic presentations, and databases. Cannot be used toward any major or minor in Information Systems & Information Technology.
Fall, Spring

IT 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.

Variable

IT 202W (4) Computers in Society

Students prepare written summaries and oral presentations related to the complex social and ethical issues associated with computers. Through thoughtful questions, informative readings, and the analysis of opposing viewpoints, participants gain insight into the complexity of technology-related issues in a world without clearly defined borders.

Fall, Spring
WI, GE-9, GE-13,

IT 210 (4) Fundamentals of Programming

This is the first course for students planning to major or minor in Information Systems or Information Technology. Programming in a high-level language, abstraction and problem-solving skills are emphasized.

Pre: MATH 112, MATH 115, MATH 121, MATH 181 or a Math placement score permitting placement in a course that requires any of these as a prerequisite.
Fall, Spring

IT 214 (4) Fundamentals of Software Development

A continuation of IT 210, IT 214 introduces object-oriented concepts, programming techniques, lists, stacks, queues, and trees. Students are expected to produce larger applications, utilizing multiple compilation units.

Pre: A 3.0 or higher grade in IT 210 or in an approved substitute is required, MATH 121 or MATH 180 or MATH 181

Fall, Spring

IT 296 (1-2) Introduction to Selected Topics

Special topics not covered in other 100- and 200-level courses. May be repeated for each new topic.

IT 310 (4) Data Structures & Algorithms

Study of trees, hashing, and graph algorithms. Analysis of algorithms, memory management, and proof techniques.

Pre: IT 214

Variable

IT 311 (4) Business Application Programming

Business application development using a non-object oriented programming language. Emphasis on principles of application programming such as control breaks, read a record/write a line, driver, shared sub-routines, pass by reference, and sub-programming. File concepts emphasized include index-sequential file handling, CRUD, heap files, sorting, transaction, and master files. Programming concepts include input-processing-output definitions, understanding requirements, structure charts, program documentation, and programming standards. Large group project is completed during semester.

Pre: IT 214

Spring

IT 320 (4) Machine Structures and Operating Systems

Introduction to computer hardware, Boolean logic, digital circuits, data representations, digital arithmetic, digital storage, performance metrics, pipelining, memory hierarchy, and I/O; Operating System concepts, interface, multi-tasking, threads, memory and file management, tools.

Pre: IT 214

Fall, Spring

IT 340 (4) Introduction to Database Systems

Introduction to database systems, entity relationship models, relational algebra, database design, data modeling, normalization, and conversion of business rules into relational model. Introduction to basic SQL including subqueries, joins, functions, sequences, triggers, views, and stored procedures.

Pre: IT 210, a 3.0 or higher grade in IT 210 or in an approved substitute is required.

Fall, Spring

IT 350 (4) Information Security

Security concepts and mechanisms; security technologies; authentication mechanisms; mandatory and discretionary controls; cryptography and applications; threats; intrusion detection and prevention; regulations; vulnerability assessment; information assurance; forensics; anonymity and privacy issues; disaster recovery planning, legal issues and ethics.

Pre: a 3.0 or higher grade in IT 210 or in an approved substitute is required.

Fall, Spring

IT 360 (4) Introduction to Networking

This course covers basic concepts related to computer networking. Topics addressed will include the OSI model, the Internet model, network management, network protocols and data security.

Pre: a 3.0 or higher grade in IT 210 or in an approved substitute is required.

Fall, Spring

IT 380 (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: IT 214, IT 340

Fall, Spring

IT 390 (12) International Technology Experience

Study abroad for one semester to participate in a project-based technology/media-oriented program of study. The program of study must be one approved by the student's advisor and the chair of this department.

Pre: Permission

Fall, Spring

IT 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: IT 380. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

IT 414 (4) Advanced Object-Oriented Programming with Design Patterns

This course provides student with a solid understanding of the principles, techniques and design patterns involved in advanced object-oriented programming. Successful students should have a distinct advantage in the marketplace.

Pre: IT 340, IT 310

Variable

IT 440 (4) Database Management Systems II

Extensive coverage of SQL, database programming, large scale data modeling, and database enhancement through reverse engineering. This course also covers theoretical concepts of query processing, and optimization, basic understanding of concurrency control and recovery, and database security and integrity in centralized/distributed environments. Team-oriented projects in a heterogeneous client server environment.

Pre: IT 380

Fall, Spring

IT 442 (4) Database Security, Auditing, and Disaster Recovery

Covers science and study of methods of protecting data, and designing disaster recovery strategy. Secure database design, data integrity, secure architectures, secure transaction processing, information flow controls, inference controls, and auditing. Security models for relational and object-oriented databases.

Pre: IT 350, IT 440

Variable

IT 444 (4) Data Mining and Warehousing

The course details data mining and warehousing. Emphasis is placed on data mining strategies, techniques and evaluation methods. Various data warehousing methods are covered. Students experiment with data mining and warehousing tools.

Pre: IT 440

Variable

IT 450 (4) Information Warfare

Covers information warfare principles and technologies. Information warfare concepts; Protocols, Authentication, and Encryption; Network attack techniques, methodologies, and tools; Network defense; Malware: trojans, worms, viruses, and malicious code; Electronic crimes and digital evidence.

Pre: IT 350

Fall

IT 460 (4) Network and Security Protocols

Advanced coverage of data communication, networking and security protocols. Topics: transmission methods, error detection and recovery, flow control, routing, security issues and performance analysis of existing and emerging protocols for secure communication.

Pre: IT 214, IT 360

Variable

IT 462 (4) Network, Security, Administration and Programming

Network and server systems administration. Domain administration; file system management; networked printers; user management; workstation configuration. Network programming assignments/projects in Layered Software Systems, HTTP Server, UDP (TFTP or DNS), CGI program, IPV6, RPC/SCTP.

Pre: IT 350, IT 460

Variable

COMPUTER INFORMATION TECHNOLOGY CONTINUED

IT 464 (4) Applications of Wireless and Mobile Networks

Existing and emerging mobile and wireless data networks with emphasis on digital data communications. Gain an understanding of the unique considerations that must be given to network protocols for wireless and mobile communication and their applications.

Pre: IT 460

Variable

IT 465 (4) Mobile Device Application Programming

This course is designed to give students the skills required to write applications for mobile devices (smartphones and tablets). Topics to be covered include interacting with the UI, using an emulator/simulator, application lifecycle, moving from one screen to another, services, alarms, broadcast receivers, maps API, location based programs, gps, persistence, hardware sensors, and web applications.

Pre: IT 214

Variable

IT 480 (4) Software Quality Assurance and Testing

Topics include software quality assurance, software quality metrics, software configuration management, software verification and validation, reviews, inspections, and software process improvement models, functional and structural testing models.

Pre: IT 380

Fall, Spring

IT 482 (4) Human Computer Interaction

This course discusses concepts and techniques for design, development and evaluation of user interfaces. Students will learn the principles of interaction design, interaction styles, user-centered design, usability evaluation, input/output devices, design and analysis of controlled experiments and principles of perception and cognition used in building efficient and effective interfaces. Group project work.

Pre: IT 380 or CS 230 and MATH 121

Fall

IT 483 (4) Web Applications and User Interface Design

HTTP Protocol; Web-markup languages; Client-side, Server-side programming; Web services; Web servers; Emerging technologies; Security; Standards & Bodies; Web interface design techniques; User-centered design; Visual development environments and development tools; Interface design effectiveness.

Pre: IT 340, IT 380

Fall, Spring

IT 484 (4) Software Engineering

An introduction to all important aspects of software engineering. The emphasis is on principles of software engineering including project planning, requirements gathering, size and cost estimation, analysis, design, coding, testing, implementation, and maintenance. Group project work.

Pre: IT 380

Fall, Spring

IT 495 (1) Seminar in Information Technology

Provides Information Technology majors an opportunity, in a small group setting, to explore a topic not normally covered in the curriculum.

Pre: Consent

Variable

IT 496 (1-4) Selected Topics in Information Technology

Special topics not covered in other courses. May be repeated for credit on each new topic.

Pre: Consent

Variable

IT 497 (1-12) Internship

Provides students with opportunity to utilize their training in a real-world business environment working under the guidance and direction of a faculty. (At most 4 hours toward a major in this department.)

Pre: Permanent admission to IT and consent

Fall, Spring, Summer

IT 498 (4) Information Technology Capstone

Develop high quality software application researching and applying fundamental software engineering techniques, several advanced development and test tools, human factors of interface design and a team approach, each student controlling only a part of the system.

Pre: Senior Standing and consent

Fall, Spring

IT 499 (1-4) Individual Study

Problems on an individual basis.

Pre: Consent

Fall, Spring

COMPUTER SCIENCE

Computer Science

Department of Integrated Engineering

College of Science, Engineering & Technology

131 Trafton Science Center N • 507-389-2744

Websites: cset.mnsu.edu/ie and cset.mnsu.edu/cs

COMPUTER SCIENCE MINOR

Minor Core

MATH 121 Calculus I (4)

(choose 1 option)

CS Option

CS 110 Computer Science I (4)

CS 111 Computer Science II (4)

CS 305 Algorithmic Structures (4)

EE/CE Option

This option is recommended for students majoring in electrical or computer engineering.

EE 106 Introduction to Electrical/Computer Engineering I (3)

EE 107 Introduction to Electrical/Computer Engineering II (3)

CS 111 Computer Science II (4)

CS 305 Algorithmic Structures (4)

Minor Electives (choose 6-7 credits)

(choose 2 classes from the following)

CS 230 Introduction to Intelligent Systems (4)

CS 350 Network Architectures (3)

CS 430 Artificial Intelligence (3)

CS 460 Operating Systems: Design and Implementation (3)

COURSE DESCRIPTIONS

CS 105 (3) Computer Science Foundations

This course provides fundamental conceptual, mathematical, and logical tools for students wishing to major in Computer Science. Topics include hardware concepts, number systems, computer arithmetic, counting, sets and functions, logic, simple induction, etc.

Coreq: Math 112

Fall

CS 110 (4) Computer Science I

Students will learn programming skills in object-oriented C++. Students will design algorithms and learn how to write, compile, run and debug programs that include selection and repetition structures, functions, and arrays. Study skills and professional development will be addressed.

Pre: MATH 112 (College Algebra)

Fall, Spring

CS 111 (4) Computer Science II

Continues the exploration of introductory Computer Science begun in CS 110. Focus is on developing basic knowledge of algorithms, programming skills and problem solving techniques. Topics include recursion, sorting, linked lists, stacks and queues.

Pre: CS 110 or EE 107. MATH 113 or MATH 115 or MATH 121

Fall, Spring

CS 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.
Pre: MATH 113 or MATH 115
Fall, Spring

CS 201W (4) Artificial Intelligence & Science Fiction

Course will explore the interplay between science fiction (1950s-present) and the development of artificial intelligence. Turing tests, agents, senses, problem solving, game playing, information retrieval, machine translation robotics, and ethical issues.
Variable
WI, GE-6, GE-9

CS 209 (2) C++ for Java Programmers

C++ syntax for students who already know Java. Specific topics: data types, operators, functions, arrays, string operations, pointers, structures, classes, constructors, destructors, pointers as class members, static classes, "this" pointer, operator functions, data type conversions, inheritance, polymorphism, and dynamic binding.
Pre: Consent
Variable

CS 210 (4) Data Structures

Investigates efficient data structuring techniques to support a variety of operations in different problem scenarios. Topics include binary trees, binary search trees, multiway search trees, hashing and hash tables, priority queues, and algorithm analysis for best, worst and average cases.
Pre: CS 111 and MATH 121
Fall, Spring

CS 220 (3) Machine Structures and Programming

This course introduces students to assembly language programming and basic machine structures. Topics include number systems; basic central processing unit (CPU) organization, instruction formats, addressing modes and their use with a variety of data structures; and parameter passing techniques.
Pre: CS 110 and EE 106
Fall, Spring

CS 221 (1) Machine Structures and Programming Lab

This laboratory course complements CS 220, offering students hands-on programming experience to reinforce assembly language programming concepts. Topics include number systems; instruction formats, addressing modes and their use; and parameter passing techniques including the use of a stack frame.
Coreq: CS 220
Fall, Spring

CS 230 (4) Introduction to Intelligent Systems

Fundamentals of data mining and knowledge discovery. Methods include decision tree algorithms, association rule generators, neural networks, and web-based mining. Rule-based systems and intelligent agents are introduced. Students learn how to apply data-mining tools to real-world problems.
Pre: CS 110
Fall

CS 271 (3) Introduction to Graphical Programming

An introduction to graphical programming environments. Topics include data and data types, repetition, selection, data acquisition, data dependency, efficiency, modular program construction, array processing, debugging, and visualization.
Pre: EET 113, MATH 121
Fall, Spring

CS 293 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants.
Pre: Recipient of a MAX scholarship or instructor consent
Fall, Spring

CS 294 (1-3) Workshop

Workshop topics will be announced. Workshops on different topics may be taken for credit.
Pre: Consent of instructor
Variable

CS 295 (1) Computer Science Seminar

Provides students interested in a computer science major or minor an opportunity to explore topics not normally covered in the curriculum. Speakers will include faculty, graduate students, undergraduate students admitted to the Computer Science major, visiting researchers and industry members.
Fall, Spring

CS 296 (1-2) Introduction to Selected Topics

Special topics not covered in other 100 or 200-level courses. May be repeated for each new topic.
Variable

CS 300 (4) Large-Scale Software Development

A team-based capstone experience for the mid-point of the CS program. Students are introduced to principles and methodologies of large-scale software development and engineering by working on a full life-cycle software project solving a substantial problem using multiple CS concepts.
Pre: CS 210 and CS 220
Spring

CS 305 (4) Algorithmic Structures

Study of the core algorithm design and analysis techniques of computer science and the data structures which support them with attention to the applicability to specific problem types and comparison metrics.
Pre: CS 111, MATH 121
Fall

CS 310 (3) Algorithm Analysis

Algorithm design and analysis is central to much of computer science. This course exposes students to fundamental algorithm design and analysis techniques. Topics include many of the basic topic areas of computer science: searching, sorting, numeric computation, data representation, communication.
Pre: CS 210
Fall

CS 315 (4) Introduction to Cryptographic Methods

An introduction to methods, algorithms, and tools of cryptography. We will study the algorithmic and mathematical aspects of cryptographic methods and protocols. We will experiment with how they can be used to solve particular data and communication security problems.
Pre: CS 305 or permission of instructor.
Variable

CS 320 (3) Computer Architecture

This course presents historical and current concepts and implementations of computer organization. Topics include instruction set design, digital storage, performance metrics, processor datapath and control, pipelining, memory hierarchy, busses and I/O interfacing, and parallel processors.
Pre: CS 111 and CS 220, or EE 334
Spring

CS 330 (4) Introduction to Neural Computation

This course provides an introduction to the theory and practice of neural computation. The goal is to familiarize students with the major models, techniques, and problems of neural network computation and to provide hands-on experience using these things. Topics include neural network models, supervised and unsupervised learning, associative memory models, and data representation.
Pre: CS 230
Coreq: Permission of the Instructor
Spring

CS 340 (3) Concepts of Database Management Systems

This course covers the fundamentals of database management focusing on the relational data model. Topics include database organization, file organization, query processing, concurrency control, recovery, data integrity, optimization and view implementation.
Pre: CS 210 and CS 320
Fall

CS 350 (3) Network Architectures

An introduction to data communications and networks. The field encompasses local area networks, wide area networks, and wireless communication. Topics include digital signals, transmission techniques, error detection and correction,

OSI model, TCP/IP model, network topologies, network protocols, and communications hardware.

Pre: CS 305 or EE 234

Spring

CS 351 (1) Network Architectures Lab

A laboratory in conjunction with CS 350.

Pre: CS 305 or EE 234. Permission of instructor

Coreq: CS 350

Fall

CS 360 (3) Systems Programming

This course focuses on machine level I/O and operating system file processing. Structure of systems programs including assemblers, linkers, and object-oriented utilities and interfaces. Students will gain experience in writing utility programs and extensions to an operating system.

Pre: CS 111 or EE 107, and CS 320

Fall

CS 361 (3) Windows Programming

This course introduces the student to Windows programming in C++ using the Application Programming Interface. Windows programs are created in a visual development environment which includes editing and code generating facilities. Hands-on programming skills are developed in the lab.

Pre: CS 210

Variable

CS 365 (3) Graphics and Game Programming I

The course introduces the student to graphics and game programming. Graphics programming topics addressed include modeling, rendering, and animation of vector-based components and bitmaps. Programs are created using a current graphics and game development environment.

Pre: CS 210, CS 220, MATH 121

Alt-Fall

CS 370 (3) Concepts of Programming Languages

Fundamental concepts of programming languages, including principles of language design, language constructs, and comparison of major languages. Topics: formal methods of examining syntax and semantics of languages and lexical analysis of language components and constructs, and propositional and predicate calculi.

Pre: CS 210

Fall

CS 380 (3) Analysis and Design of Software Systems

Students are introduced to techniques used in analysis and design of software systems. Traditional techniques are reviewed and current methodologies for both object-oriented and procedural systems are studied. Standard notations used to document software requirements and designs are presented.

Pre: CS 300

Spring

CS 400 (3) Software Design and Architecture

Current processes, methods and tools related to formal methods for modeling and designing software systems. Topics include software architectures, methodologies, model representations, component-based design, patterns, frameworks, CASE-based designs, and case studies.

Pre: CS 300 and MATH 121

Variable

CS 410 (3) Formal Languages/Abstract Machines

This course studies the theoretical underpinnings of modern computer science, focusing on three main models of computation: DFA, PDA, and Turing Machines. Students determine model capabilities and limitations: what is and is not computable by each of them.

Pre: CS 310 and MATH 375

Fall

CS 415 (3) High Performance Computing

High Performance Computing techniques used to address problems in computational science. Topics include application areas and basic concepts of parallel computing, hardware design of modern HPC platforms and parallel programming models, methods of measuring and characterizing serial and parallel performance.

Pre: CS 310, CS 350, and MATH 247

Variable

CS 420 (3) Advanced Computer Architecture

This course addresses 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: CS 320 and MATH 375

Variable

CS 425 (3) Real-time and Embedded Systems

This course provides an overview of embedded and real-time systems including design principles, methodologies, design tools and problem solving techniques. Students design and build a real-time operation system with a microprocessor to host real-time service data processing using sensor/actuator devices.

Pre: CS 210 and CS 320

Variable

CS 430 (3) Artificial Intelligence

Basic introductory concepts and a history of the field of Artificial Intelligence (AI) are covered. Emphasis is placed on the knowledge representation and reasoning strategies used for AI problem solving. Solutions are found using the LISP programming language.

Pre: CS 230 or CS 305

Alt-Fall

CS 431 (3) Computational Linguistics

Computational linguistics topics covered include regular expressions, finite state automata, information theory, context free grammars, hidden Markov models and Viterbi algorithms. Students will work on problems within the field including parsing, machine translation, speech recognition, information extraction and parsing.

Pre: CS 210 or CS 230

Alt-Fall

CS 433 (3) Data Mining and Machine Learning

A blend of computer science, information science, and statistics for storing, accessing, modeling, and understanding large data sets. Topics include fundamental data mining algorithms: decision trees, classification, regression, association rules, statistical models, neural networks, and support vector machines.

Pre: CS 210 and STAT 354

Alt-Spring

CS 452 (3) Network Protocol Internals

As an advanced coverage of data communication, this course explores principles, protocols and performance evaluation techniques of advanced networking technologies. Topics include error detection and recovery, flow control, routing, data throughput, and performance analysis of existing and emerging Internet protocols.

Pre: CS 350 and STAT 354

Variable

CS 454 (3) Mobile and Wireless Networks

Emerging mobile and wireless data networks technologies covered include standard wireless protocols (e.g., Bluetooth, IEEE 802.11, RFID, and WAP), and development of mobile and wireless applications (e.g., J2ME, WML, Brew).

Includes research, design, and implementation of a wireless, mobile application.

Pre: CS 320 and CS 350

Variable

CS 455 (4) Computational Geometry

This course studies the problems, methods, and algorithms of computational geometry. We will focus on the core problems and categories of the discipline: static problems, geometric query problems, and dynamic problems. Some additional attention will be given to numerical geometric problems (e.g., parametric surfaces).

Pre: CS 305 and Math 247 or permission of instructor.

Fall (Even), Spring (Odd Years)

CS 460 (3) Operating Systems: Design & Implementation

This course studies historical and current concepts and implementations of computer operating systems. Basic operating systems topics include processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, scheduling, file systems, storage, devices, protection, security, and privacy.

Pre: CS 305 or EE 395

Spring

CS 461 (1) Operating Systems Lab

A laboratory in conjunction with CS 460.

Pre: CS 305, EE 395. Permission of instructor

Coreq: CS 460

Spring

CS 465 (3) Graphics and Game Programming II

The second of a two-course sequence on graphics and game programming. The course concentrates on 3D graphics including modeling, rendering, and animation for computer games and graphic simulations. Programs are created using a current graphics and game development environment.

Pre: CS 365, MATH 375

Variable

CS 470 (3) Compilers

This course offers an introduction to specification and implementation of modern compilers. Topics include lexical scanning, parsing, type checking, code generation and translation, optimization, and compile-time and run-time support for modern programming languages. Students build a working compiler.

Pre: CS 370

Variable

CS 480 (3) Advanced Programming Practices

This course covers advanced programming for general-purpose software development. Topics include tools and processes appropriate for employing object-oriented designs and programming within a significant software development environment and advanced data structures and algorithms, graphical user interfaces, and software development processes.

Pre: CS 300 and CS 380

Variable

CS 481 (3) Software Engineering

Building upon the introduction provided in CS 300, provides a formal presentation of software engineering concepts. Additional topics include alternative design methods, software metrics, software project management, reuse and re-engineering.

Pre: CS 300, CS 380 and MATH 121

Variable

CS 482 (3) Software Verification

Provides an introduction to software quality assurance with focus on software testing processes, methods, techniques and tools. Topics include formal verification and validation techniques; black box and white box testing; integration, regression, performance, stress, and acceptance testing of software.

Pre: CS 300, CS 380 and MATH 354

Variable

CS 490W (4) Senior Capstone

Students gain experience working with a team to solve a substantial problem in the field of computer science using concepts that span several topic areas in computer science. Class time focuses primarily on project design and implementation.

Pre: Senior standing and successful completion of all core requirements.

Spring

WI

CS 493 (1) MAX Scholar Seminar

This class is for MAX scholars and covers topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members. Students will mentor lower division scholars and do presentations.

Pre: Recipient of a MAX scholarship or instructor consent

Fall, Spring

CS 494 (1-3) Workshop

Workshop topics will be announced. Workshops on different topics may be taken for credit.

Variable

Pre: Consent of Instructor

CS 495 (1) Computer Science Seminar

Provides Computer Science majors or minors an opportunity to explore topics not normally covered in the curriculum. Speakers will include faculty, graduate students, undergraduate students admitted to the Computer Science major, visiting researchers and industry members. This class may be repeated for credit.

Pre: Admitted to major

Fall, Spring

CS 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

Variable

CS 497 (1-6) Internship

This course is designed to provide students with an opportunity to utilize their training in a real-world environment. Participants work under the guidance and direction of a full-time staff member. (At most 4 hours towards the CS major.)

Pre: Permanent admission to the CS major, CS 300, consent.

CS 498W (4) Senior Thesis

Advanced study and research required. Topic of the senior thesis determined jointly by the student and the faculty advisor.

Pre: Senior standing and consent

Fall, Spring

WI

CS 499 (1-4) Individual Study

Problems in the field of computer science are studied on an individual basis under the guidance of a faculty mentor.

Pre: Consent

Fall, Spring

CONSTRUCTION MANAGEMENT

Construction Management

College of Science, Engineering & Technology

Department of Construction Management

302 Wiecking Center • 507-389-6385

www.MankatoConstructionDegree.com

Accreditation. American Council of Construction Education (ACCE).

The Construction Management major prepares graduates for success in the rapidly-changing construction industry. Course work emphasizes management with an additional focus on technology and systems specific to the construction industry. Typical entry-level positions include field manager, assistant superintendent, project engineer, scheduler, assistant estimator, project cost controller and safety director.

POLICIES/INFORMATION

Admission to Major is granted by the College of Science, Engineering and Technology. Admission requirements are:

- A minimum of 32 earned semester credit hours
- Overall GPA of "C" 2.0
- Completion of CM 111 "C" (2.0)
- Completion of ENG 101, grade of "C" (2.0) or above
- Completion of MATH 112 & MATH 113 or MATH 115, grade of "C" (2.0) or above
- Completion of CM 297

Contact the CSET Advising Center for application procedures.

GPA Policy. A minimum grade of "C" (2.0) is required in all courses listed in the Construction Management BS Degree.

P/N Grading Policy. All courses in the major must be taken for letter grade except where P/N is the only option.

CONSTRUCTION MANAGEMENT BS

Degree completion = 120 credits

Required General Education

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
ECON	207	Business Statistics (4)
ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	115	Precalculus Mathematics (4)

Analytical Science Courses

(choose 3-4 credits)

PHYS	101	Introductory Physics (3)
PHYS	211	Principles of Physics I (4)

(choose remaining credits - Choose 4-5 credits)

CHEM	201	General Chemistry I (5)
GEOL	100	Our Geologic Environment (3-4)

Major Common Core

ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
BLAW	200	Legal, Political, and Regulatory Environment of Business (3)
BLAW	476	Construction and Design Law (3)
CM	108	Construction Work Experience (1)
CM	111	Introduction to Construction Management (1)
CM	120	Construction Graphics (3)
CM	130	Construction Documents (2)
CM	210	Construction Materials and Methods I (3)
CM	220	Construction Materials and Methods II (3)
CM	222	Introduction to Statics and Mechanics of Materials (3)
CM	271	Civil Engineering Measurements (2)
CM	297	Construction Professional Practice (1)
CM	300	Construction Safety (3)
CM	310	Estimating I (3)
CM	330	Planning and Scheduling (3)
CM	340	Construction Project Management (3)
CM	350	Mechanical and Electrical Systems for Construction (3)
CM	380	Construction Equipment Management (3)
CM	410	Estimating II (3)
CM	450	Construction Capstone Project (3)
CM	492	Construction Management Seminar (3)
CM	497	Internship (1-12)
IT	101	Introduction to Information Systems (3)
MGMT	200	Introduction to MIS (3)
MGMT	330	Principles of Management (3)

Minimum of 3 credits required for CM 497

Major Restricted Electives

Select one of two classes. (choose 3 credits)

FINA	362	Business Finance (3)
MRKT	310	Principles of Marketing (3)

Required Minor: None.

COURSE DESCRIPTIONS

CM 108 (1) Construction Work Experience

Construction Work Experience must precede the internship program. The work may be direct application of technical or craft training or beginning exposure to managerial operations. The credit may be waived for experience acquired prior to enrolling at Minnesota State University Mankato.

Fall, Spring, Summer

CM 111 (1) Introduction to Construction Management

Overview of academic preparation and career opportunities in the fields of Construction Management. Skills needed for estimating, scheduling, project management and field supervision will be previewed with an emphasis on future trends in the industry.

CM 120 (3) Construction Graphics

Emphasis on plan reading, basic sketching and drawing techniques, graphic vocabulary, detail hierarchies, scale, content, notes and specifications, reference conventions, and computer applications.

Fall, Spring

CM 130 (2) Construction Documents

Basic understanding of the plans and specifications for construction projects. Emphasis on interpretation of bidding and contractual documents, conditions of the contract, plans/working drawings; and applications of existing and new technology preparing students for the future.

Fall, Spring

CM 210 (3) Construction Materials and Methods I

Understand how construction affects professional industry and society, present state of the profession and its future. Learn about the various materials used in construction—the composition, properties, standard designations, sizes, gradations and testing techniques. Understand changes in technology of building construction materials.

Pre: CM 111, CM 120, CM 130, IT 101

Fall, Spring

CM 220 (3) Construction Materials and Methods II

Fundamentals of building construction and their applications in construction systems and utilities. Application of the principles of building science to construction sites; relationship between technology and innovations in methods, sustainable building practices and “green” building requirements.

Pre: CM 210

Fall, Spring

CM 222 (3) Introduction to Statics and Mechanics of Materials

Course introduces the design theory and applied principles of force equilibrium, stress and strain, shear, bending moments, force diagrams, deformations of beams, and stress/strain analysis.

Pre: PHYS 101, MATH 113 or MATH 115 or MATH 121

Fall, Spring

CM 271 (2) Civil Engineering Measurements

Basic civil engineering measurements as relates to construction layout, including distances, angles, bearings, elevations, mapping and positioning.

Pre: MATH 113 or MATH 115 or MATH 121

Fall, Spring

CM 297 (1) Construction Professional Practice

Principles of professional conduct, ethical codes and best practices are applied to the development of a portfolio and presentation. Students will sit for interviews, set career goals, and begin building a professional network.

Pre: CM 108, CM 210

Fall, Spring

CM 300 (3) Construction Safety

Principles and practices of construction safety, health, and loss control. Emphasis is on hazard recognition, control procedures and management systems for measuring and evaluating loss control performance in the construction industry.

Pre: CM 210

Fall, Spring

CM 310 (3) Estimating I

This course covers types of estimates and their uses, the basics of quantity take-off, labor and equipment productivity and basic computer applications.

Pre: MATH 113 or MATH 115 or MATH 121

CM 330 (3) Planning and Scheduling

Understanding project planning, scheduling and control models with emphasis on the critical path methods. Introductions to the techniques used in the industry utilizing commercial software on personal computers, highlighting the importance of analysis of schedules; considering and understanding schedule alternatives will be stressed.

Pre: ENG 271W, CM 220

Fall, Spring

CM 340 (3) Construction Project Management

This course examines the project management framework, including key terminology, project management context, and project management processes. Topics include project management knowledge areas, life cycles, and organizational designs. Different project delivery methods will be discussed and the roles of project stakeholders will be identified and analyzed.

Pre: CM 220, CM 222, CM 297

Fall, Spring

CM 350 (3) Mechanical and Electrical Systems for Construction

Design concepts of plumbing, HVAC, and electrical and control systems are analyzed for attributes that affect the design and construction processes and the performance of completed structures.

Pre: CM 220

Fall, Spring

CM 380 (3) Construction Equipment Management

This course provides understanding of the different building and civil construction equipment's functions; analysis of equipment costs, production, methods of equipment selection and safety requirements including heavy equipment. Reading and understanding highway construction plans.

Pre: CM 220, CM 300

Fall, Spring, Summer

CM 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: The Co-Operative Experience is a zero-credit, full-time practical training experience. Please contact an advisor in the Construction Management program for details.

Fal, Spring, Summer

CM 410 (3) Estimating II

This course covers types of estimates and their uses, pricing and price databases, labor and equipment productivity, proposal presentations, computer applications in estimating and research in sustainable construction.

Pre: CM 310, CM 330

Fall, Spring

CM 450 (3) Construction Capstone Project

The course will involve the students in a Capstone Project in teams representing a construction company. This is a project where students will integrate the course-work concept of the core program through research, application and presentation.

Pre: CM 340, CM 410

Fall, Spring

CM 492 (3) Construction Management Seminar

A seminar course that involves a critical evaluation of an area in the construction management discipline and/or industry. Topics vary from year to year. Students are usually required to make a presentation to the class.

Pre: Senior Standing or instructor permission

Fall, Spring

CM 497 (1-12) Internship

Pre: CM 300, CM 310, CM 330

CM 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.

CORPORATE & COMMUNITY FITNESS/WELLNESS

Corporate & Community Fitness/Wellness

College of Allied Health & Nursing

Department of Human Performance

Chair: Robert Pettitt

1400 Highland Center • 507-389-6313

Coordinator: Mary Visser

This minor provides students with basic knowledge and technical skills to work in fitness programing/personal training in a variety of settings. Successful completion of the minor prepares students to obtain many fitness-related certifications and provides a strong background for students wishing to pursue a fitness-related career.

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 (HP 492) which is graded P/N.

CORPORATE & COMMUNITY FITNESS MINOR

Minor Core

BIOL 220	Human Anatomy (4)
BIOL 330	Principles of Human Physiology (4)
HLTH 210	First Aid and CPR (3)
HP 175	Fitness Activity (1)
HP 348	Structural Kinesiology and Biomechanics (3)
HP 414	Physiology of Exercise (3)
HP 439	Nutrition for Physical Activity and Sports (3)
HP 465	Legal Aspects of Physical Education and Sport (3)
HP 466	Graded Exercise Testing and Exercise Prescription (3)

CORRECTIONS

Corrections

College of Social & Behavioral Sciences

Department of Sociology & Corrections

113 Armstrong Hall • 507-389-1561

Website: <http://sbs.mnsu.edu/soccorr>

Chair: Luis Posas

Barbara Carson, Jeffery Dennis, James Robertson, Pedro Thomas, Sherrise Truesdale-Moore, 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 and criminological concepts, and a commitment to understanding and transforming 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.

POLICIES/INFORMATION

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.

CORRECTIONS CONTINUED

Residency Requirements

Excluding CORR 106 and SOC 101, all majors must complete 42 of the required 48 credits within the Department of Sociology and Corrections at Minnesota State Mankato. Transfer courses that will not be accepted are Field Practice, Capstone and Experiential courses such as CORR 200, CORR 350, CORR 355 CORR 485 and CORR 449.

Normally the department will not accept transfer courses at the 200-level for our upper level courses, except on a case-by-case basis.

Excluding CORR 106, all students minoring in corrections must complete 12 of the required 18 credit hours within the Department of Sociology and Corrections at Minnesota State Mankato.

GPA Policy: A minimum grade of "C" is required for all courses counting towards the Corrections major.

CORRECTIONS BS

Degree completion = 120 credits

Required General Education

CORR 106 Introduction to Criminal Justice Systems (3)
SOC 101 Introduction to Sociology (3)

Major Common Core

CORR 200 Foundations and Orientation to Corrections (3)
CORR 255 Juvenile Delinquency (3)
CORR 442 Criminology (3)
CORR 443 Penology (3)
CORR 447 Community Corrections (3) **OR**
CORR 447W Community Corrections (3)
CORR 448 Correctional Law (3)
CORR 449 Correctional Counseling (3)
CORR 496 Field Practice: Corrections (10)
CORR 497 Capstone Seminar (2)

Major Restricted Electives

(choose two courses (6 credits) from the following)

CORR 355 JOLT: Joint Opportunity to Learn and Thrive, Part II (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)
SOC 409 Family Violence (3)

Social and Behavioral (choose one course (3 credits) from the following)

GERO 200 Aging: Interdisciplinary Perspectives (3)
NPL 273 Introduction to the Nonprofit Sector (3)
SOC 351 Social Psychology (3)

Methods of Research (choose one course (3 credits) from the following)

SOC 201 Social Research I (3)
SOC 469 Survey Research (3)
SOC 479 Sociological Ethnography (3)
SOC 480 Qualitative Methods (3)

Inequality, Race, Gender and Ethnicity

(choose one course (3 credits) from the following)

CORR 444 Women in the Criminal Justice System (3)
SOC 446 Race, Culture and Ethnicity (3)
SOC 463 Social Stratification (3)

Required Minor. Yes. Any.

CORRECTIONS MINOR

Required for Minor

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 credits)

CORR 300-400 Level
CORR 300-400 Level
CORR 300-400 Level
CORR 300-400 Level

COURSE DESCRIPTIONS

CORR 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.

Fall, Spring

GE-5, GE-9

Diverse Cultures - Purple

CORR 200 (3) Foundations and Orientation to Corrections

Introduction to academic concepts and issues in corrections, with emphasis on student professional development. The course includes a 50-hour service learning component to be completed outside of class. Corrections majors should take this course as early as possible

Pre: CORR 106 and SOC 101

Fall, Spring

CORR 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.

Fall, Spring

GE-5, GE-9

CORR 291 (4) 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

Fall, Spring

CORR 350 (3) JOLT: Joint Opportunities to Learn and Thrive

JOLT is a collaborative effort between the University and several probation offices. Students will mentor delinquents in the community and be mentored by local probation officers. This is a year-long commitment.

Pre: CORR 300

Fall

CORR 355 (3) JOLT: Joint Opportunity to Learn and Thrive, Part II

JOLT-II is a second semester continuation of CORR 350. Can only enroll after completing CORR 350.

Pre: CORR 350

Spring

CORR 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

CORR 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

Spring

CORR 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

Fall, Spring

CORR 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

Fall, Spring

CORR 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 CORR 200

Fall, Spring

CORR 444 (3) Women in the Criminal Justice System

This course focuses on the experiences of women in the criminal justice system—as victims, offenders, and professionals. Women’s involvement in this system (whether they were a defendant, an attorney, an inmate, a correctional officer or a crime victim) has often been overlooked or devalued. The goal of this course is to bring the special needs and contributions of women in the criminal justice system into sharper focus.

Fall

Diverse Cultures - Purple

CORR 447 (3) Community Corrections

Addresses theoretical roots, historical developments, and current practices of probation, parole, and other community corrections programs. Special attention is given to innovative, future approaches to community corrections.

Pre: SOC 101 and CORR 106

Fall, Spring

CORR 447W (3) Community Corrections

Addresses theoretical roots, historical developments, and current practices of probation, parole, and other community corrections programs. Special attention is given to innovative, future approaches to community corrections.

Pre: SOC 101 and CORR 106

Fall, Spring

WI

CORR 448 (3) Correctional Law

Examines the rights of inmates, probationers, and parolees.

Pre: CORR 106 and CORR 200

Fall, Spring

CORR 449 (3) Correctional Counseling

Principles and methods of individual and group counseling with juvenile and adult offenders; development of interpersonal helping skills, negotiation, and mediation skills.

Fall, Spring

CORR 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

Variable

CORR 452 (3) Victimology

Overview of characteristics of victims, victim offender relationships, societal victimization, victim’s rights and services, and restorative justice.

Pre: SOC 101 and CORR 106

Fall

CORR 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.

Spring

CORR 459 (3) Issues in Corrections

A critical examination of current issues in the correctional field.

Spring

CORR 465 (3) Law & Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse.

Fall

CORR 471 (3) New Directions in Correctional Policy: Transforming Practice

A comprehensive historical and cross-cultural study of social policy analysis, the transforming role correctional policy formation plays in correctional practice, and the process of policy change and the mechanisms leaders can employ to encourage effective and ethical social policy.

Summer

CORR 485 (2-6) Selected Topics

Topics vary as announced in class schedule. May be retaken for credit if topic varies.

Pre: SOC 101

Variable

CORR 491 (1-6) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

Variable

CORR 492 (1) Honors Reading

For Honors students only.

Variable

CORR 496 (10) Field Practicum: 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

Fall, Spring

CORR 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.

Fall, Spring

CORR 498 (1-12) Internship: 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

Fall, Spring

CORR 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

Counseling and Student Personnel

College of Education

Department of Counseling and Student Personnel

107 Armstrong Hall • 507-389-2423

Fax: 507-389-5074

Website: www.coled.mnsu.edu/departments/csp

Chair: Dr. Jacqueline Lewis

The mission of Department of Counseling and Student Personnel (CSP) is to prepare professional practitioners at the graduate level who will serve in a variety of helping settings including elementary and secondary schools, colleges and universities, mental health and other community agencies, business and industry, and marriage and family counseling settings. In addition to the preparation of graduate students in the helping professions, the Department of Counseling and Student Personnel offers courses and other experiences designed to assist the undergraduate student in development of critical thinking skills, decision-making skills, and interpersonal helping skills. Please contact the department chair or visit the website for more information.

COURSE DESCRIPTIONS

CSP 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). Meets General Education requirements for critical thinking.

Fall, Spring

GE-2

CSP 115 (3) Processes & Skills for Facilitating Effective Change

An introduction to basic processes and skills related to facilitating effective change. Selected topics (chemical use and abuse, facilitating diversity, working in groups) related to personal, social and interpersonal issues effecting families, and professionals will be presented.

CSP 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

Summer

CSP 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.

Spring, Summer

CSP 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

Spring

CSP 491 (1-4) In-service

CSP 499 (1-4) Individual Study

DANCE

Dance

College of Arts & Humanities

Department of Theatre and Dance

201 Earley Center for Performing Arts • 507-389-2118

Fax: 507-389-2922

Website: www.msudance.com

Director: Julie Kerr-Berry, Ed.D.

The Minnesota State Mankato Dance Program offers students degree options that are grounded in the liberal arts tradition. Students learn about the depth and breadth of dance as they practice their art form in multiple arenas. The curriculum is designed to balance students' artistic experiences with practical applications in order to better prepare them to enter the dance world upon graduation. Students receive a comprehensive education that readies them for a lifetime in dance, including: teaching, performing, bodywork, choreographing, dance therapy, writing, dance technology, and dance production. Through an audition and adjudication process, students have many opportunities to present their choreographic work and/or perform in four concerts each year. Students can also audition to perform in musical theatre productions. Whatever their chosen path in dance, students emerge from the Minnesota State Mankato Dance Program with multiple skills, and the ability to think critically and act globally as emerging dance artists.

POLICIES/INFORMATION

GPA Policy. A grade of "C" or better must be earned for major or minor credit.

P/N Grading Policy. Required courses must be taken for a grade.

DANCE BFA

Required General Education

DANC	120	Introduction to Dance (3)
DANC	225	Worlds of Dance (3)
MUS	120	Introduction to Music (3)
THEA	101	Acting for Everyone (3)
(choose 3 credits)		
ART	160	Introduction to Visual Culture (3)
ART	261	Art History Survey II (3)

Major Common Core

DANC	225	Worlds of Dance (3)
DANC	321	Dance Composition I (2)
DANC	322	Dance Improvisation (2)
DANC	326	Advanced Ballet (2)
DANC	328	Advanced Modern Dance (2)
DANC	421	Dance Composition II (2)
DANC	427	Topics in Dance (3)
DANC	429	Senior Dance Project (1)
DANC	430	Choreographic Project I (1)
DANC	431	Choreographic Project II (1)
DANC	484	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)
(choose 5 credits) (choose 3 areas)		
THEA	102	Theatre Activity: Acting (1-2)
THEA	103	Theatre Activity: Management (1-2)
THEA	105	Theatre Activity: Stagecraft (1-2)
THEA	107	Theatre Activity: Costume (1-2)
THEA	108	Theatre Activity: Lighting (1-2)
THEA	109	Theatre Activity: Sound (1-2)

Theatre Practicum

(choose 1 credit)

THEA	301	Practicum: Directing (1-2)
THEA	302	Practicum: Acting (1-2)
THEA	303	Practicum: Theatre Management (1-2)
THEA	304	Practicum: Scene Design (1-2)
THEA	305	Practicum: Tech Theatre (1-2)
THEA	306	Practicum: Costume Design (1-2)
THEA	307	Practicum: Costume Construction (1-2)
THEA	308	Practicum: Light Design (1-2)
THEA	309	Practicum: Sound (1-2)

(choose 6 credits) (Take DANC 428 six times)

DANC	428	Dance Repertory (1)
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Major Restricted Electives

You must choose 10 credits from the following (courses may be repeated)

DANC	128	Beginning Modern Dance (2)
DANC	228	Intermediate Modern Dance (2)
DANC	328	Advanced Modern Dance (2)

You must choose 14 credits from the following (courses may be repeated)

DANC	126	Beginning Ballet (2)
DANC	226	Intermediate Ballet (2)
DANC	326	Advanced Ballet (2)

Major Unrestricted Electives (choose 4 credits)

DANC	125	Afro-Caribbean Dance Forms (2)
DANC	223	Intermediate Jazz Dance (2)
DANC	227	Intermediate Tap Dance (2)
DANC	320	Dance Somatics (2)
DANC	323	Advanced Jazz Dance (2)
DANC	324	Methods and Materials for Teaching Dance (3)
DANC	327	Advanced Tap Dance (2)

DANCE BA

Degree completion = 120 credits

Required General Education

DANC	120	Introduction to Dance (3)
DANC	225	Worlds of Dance (3)
THEA	101	Acting for Everyone (3)

(choose 3 credits)

ART	160	Introduction to Visual Culture (3)
ART	261	Art History Survey II (3)

Major Common Core

DANC	128	Beginning Modern Dance (2)
DANC	226	Intermediate Ballet (2)
DANC	228	Intermediate Modern Dance (2)
DANC	320	Dance Somatics (2)
DANC	321	Dance Composition I (2)
DANC	322	Dance Improvisation (2)
DANC	421	Dance Composition II (2)
DANC	427	Topics of Dance (3)
DANC	429	Senior Dance Project (1)
DANC	484	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)

(choose 3 credits) Take 3 times

DANC	428	Dance Repertory (1) (3 times)
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Major Restricted Electives (choose 3 credits from 2 areas listed below)

THEA	102	Theatre Activity: Acting (1-2)
THEA	103	Theatre Activity: Management (1-2)
THEA	105	Theatre Activity: Stagecraft (1-2)
THEA	107	Theatre Activity: Costume (1-2)
THEA	108	Theatre Activity: Lighting (1-2)
THEA	109	Theatre Activity: Sound (1-2)

Major Unrestricted Electives

(choose 14 credits of Dance not from Common Core)

Other Graduation Requirements**Required for Bachelor of Arts (BA) degree ONLY:** Language (8 credits)**Required Minor: Yes. Any.****DANCE BS**

Degree completion = 120 credits

Required General Education

DANC	120	Introduction to Dance (3)
DANC	225	Worlds of Dance (3)
THEA	101	Acting for Everyone (3)

(choose 3 credits)

ART	160	Introduction to Visual Culture (3)
ART	261	Art History Survey II (3)

Major Common Core

DANC	128	Beginning Modern Dance (2)
DANC	226	Intermediate Ballet (2)
DANC	228	Intermediate Modern Dance (2)
DANC	320	Dance Somatics (2)
DANC	321	Dance Composition I (2)
DANC	322	Dance Improvisation (2)
DANC	421	Dance Composition II (2)
DANC	427	Topics of Dance (3)
DANC	429	Senior Dance Project (1)
DANC	484	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)

(choose 3 credits) Take 3 times

DANC	428	Dance Repertory (1) (3 times)
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Major Restricted Electives

(choose 3 credits from 2 areas)

THEA	102	Theatre Activity: Acting (1-2)
THEA	103	Theatre Activity: Management (1-2)
THEA	105	Theatre Activity: Stagecraft (1-2)
THEA	107	Theatre Activity: Costume (1-2)
THEA	108	Theatre Activity: Lighting (1-2)
THEA	109	Theatre Activity: Sound (1-2)

Major Unrestricted Electives

(choose 14 credits in Dance not in Common Core)

Major Emphasis: Dance Generalist**Required Minor: Yes. Any.** (must be at least 18 credits)**Major Emphasis: Private Studio Teaching****Required Minor: Yes.**

Must be a Marketing Minor for Non-COB Majors (21 credits)

DANC	324	Methods and Materials for Teaching Dance (3)
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Major Emphasis: Dance Therapy (Pre-Professional)**Required Minor: Yes.** Must complete a Psychology Minor (18 credits)**K-12 DANCE EDUCATION BS**

Degree completion = 120 credits

Required General Education

DANC	120	Introduction to Dance (3)
DANC	225	Worlds of Dance (3)
HLTH	240	Drug Education (3)
HP	178	Social, Folk and Square Dance Techniques (1)
THEA	101	Acting for Everyone (3)

DANCE CONTINUED

(choose 3 credits)

ART	160	Introduction to Visual Culture (3)
ART	261	Art History Survey II (3)

Major Common Core

DANC	223	Intermediate Jazz Dance (2)
DANC	226	Intermediate Ballet (2)
DANC	227	Intermediate Tap Dance (2)
DANC	228	Intermediate Modern Dance (2)
DANC	321	Dance Composition I (2)
DANC	322	Dance Improvisation (2)
DANC	324	Methods and Materials for Teaching Dance (3)
DANC	328	Advanced Modern Dance (2)
DANC	421	Dance Composition II (2)
DANC	424	Dance Pedagogy (3)
DANC	427	Topics in Dance (3)
DANC	484	Dance History (3)
THEA	262	Dance Production: Costumes (1)
THEA	272	Dance Production: Lighting (1)
THEA	276	Dance Production: Sound (1)

(choose 3 credits) (Min 2 different areas)

THEA	102	Theatre Activity: Acting (1-2)
THEA	103	Theatre Activity: Management (1-2)
THEA	105	Theatre Activity: Stagecraft (1-2)
THEA	107	Theatre Activity: Costume (1-2)
THEA	108	Theatre Activity: Lighting (1-2)
THEA	109	Theatre Activity: Sound (1-2)

(choose 2 credits) (Take twice)

DANC	428	Dance Repertory (1)
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Major Unrestricted Electives (choose 8 credits)

DANC	123	Beginning Jazz Dance (2)
DANC	125	Afro-Caribbean Dance Forms (2)
DANC	126	Beginning Ballet (2)
DANC	127	Beginning Tap Dance (2)
DANC	128	Beginning Modern Dance (2)
DANC	320	Dance Somatics (2)
DANC	323	Advanced Jazz Dance (2)
DANC	326	Advanced Ballet (2)
DANC	327	Advanced Tap Dance (2)

Other Graduation Requirements - KSP Professional Education

KSP	201	Media Utilization (2)
KSP	210	Creating and Managing Successful Learning Environments (2)
KSP	220W	Human Relations in a Multicultural Society (3)
KSP	310	Development & Learning in the Inclusive Classroom (3-5)
KSP	410	Philosophy and Practices in the Middle and High School (3)
KSP	420	Planning, Instruction and Evaluation in the Sec. School (3)
KSP	475	The Social Context of Learning (1)
KSP	476	K-12 Student Teaching (11)

DANCE MINOR

Minor Core

DANC	120	Introduction to Dance (3)
DANC	125	Afro-Caribbean Dance Forms (2)
DANC	223	Intermediate Jazz Dance (2)
DANC	225	Worlds of Dance (3)
DANC	226	Intermediate Ballet (2)
DANC	227	Intermediate Tap Dance (2)
DANC	228	Intermediate Modern Dance (2)
DANC	322	Dance Improvisation (2)
THEA	101	Acting for Everyone (3)

Minor Electives

Must take 2 credits of the following:

DANC	123	Beginning Jazz Dance (2)
DANC	126	Beginning Ballet (2)

DANC	127	Beginning Tap Dance (2)
DANC	128	Beginning Modern Dance (2)
DANC	323	Advanced Jazz Dance (2)
DANC	326	Advanced Ballet (2)
DANC	327	Advanced Tap Dance (2)
DANC	328	Advanced Modern Dance (2)

COURSE DESCRIPTIONS

DANC 120 (3) Introduction to Dance

A survey of dance in all its vibrant forms intended to develop student understanding and appreciation for the significant role dance plays in world cultures.
Spring
GE-6, GE-8

DANC 120W (3) Introduction to Dance

A survey of dance in all its vibrant forms intended to develop student understanding and appreciation for the significant role dance plays in world cultures.
Spring
WI, GE-6, GE-8

DANC 123 (2) Beginning Jazz Dance

Fundamentals of jazz technique, including knowledge and application of terminology. May be repeated.
Spring
GE-11

DANC 125 (2) Afro-Caribbean Dance Forms

Fundamentals of African-based dance forms explored through West African and Caribbean roots. May be repeated.
ALT-Fall
GE-11

DANC 126 (2) Beginning Ballet

Fundamentals of ballet technique, including knowledge and application of terminology. May be repeated.
Fall
GE-11

DANC 127 (2) Beginning Tap Dance

Fundamentals of tap dance technique utilized in musical theatre. May be repeated.
Fall
GE-11

DANC 128 (2) Beginning Modern Dance

Fundamentals of modern dance technique, including an improvisatory component. May be repeated.
Fall, ALT-Spring
GE-11

DANC 129 (1-2) Dance Activities

Performing in a mainstage dance production. May be repeated.
Pre: Consent
Fall, Spring

DANC 223 (2) Intermediate Jazz Dance

Expanding knowledge and skill of jazz dance technique with more direct application to musical theatre and concert dance, as well as focus on emerging performance skills. May be repeated.
Pre: DANC 123 or consent
Fall, ALT-Spring
GE-11

DANC 225 (3) Worlds of Dance

Cross-cultural survey of dance from around the world with emphasis on historical, social, and cultural dimensions. Includes Western concert dance as one among many other forms.
Pre: DANC 125, DANC 126 or DANC 128
ALT-Spring
GE-8, GE-11
Diverse Cultures - Purple

DANC 226 (2) Intermediate Ballet

Expanding knowledge and skill of ballet technique with increasing development of centerfloor and across-the-floor variations, as well as emerging performance skills. May be repeated.

Pre: DANC 126 or consent
Fall, Spring
GE-11

DANC 227 (2) Intermediate Tap Dance

Expanding knowledge and skill of tap technique in musical theatre, as well as focus on emerging performance skills. May be repeated.

Pre: DANC 127 or consent
ALT-Spring
GE-11

DANC 228 (2) Intermediate Modern Dance

Expanding knowledge and skill of modern dance technique including floor work, elevations, inversions, and emerging performance skills. May be repeated.

Pre: DANC 128 or consent
Fall, Spring
GE-11

DANC 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
Fall, Spring
GE-11

DANC 295 (1-4) Touring Dance

This course is designed for dance students to perform as part of a touring dance production. May be repeated.

Pre: Consent

DANC 320 (2) Dance Somatics

Study and practice of specific techniques to improve dancers' performance, health, and teaching.

Pre: DANC 126, DANC 128 or consent
Spring

DANC 321 (2) Dance Composition I

The study of dance making, dance accompaniment, and dance criticism through the creation of dance works.

Pre: DANC 128, DANC 228, DANC 322
ALT-Fall, ALT-Spring

DANC 322 (2) Dance Improvisation

Exploration of a variety of improvisational techniques for beginning Dance Majors and Minors. May be repeated.

Pre: DANC 128
ALT-Fall, ALT-Spring

DANC 323 (2) Advanced Jazz Dance

Increasing difficulty of jazz dance technique though complexity of combinations, multiple turns, and more developed performance skills as applied to musical theatre or concert dance. May be repeated.

Pre: DANC 223 or consent
ALT-Spring

DANC 324 (3) Methods and Materials for Teaching Dance

This course is first in a two-part series of courses required for the K-12 Dance Education license. It examines the theory and practice of dance education and applies this knowledge to simulated teaching and to selected clinical settings.

Pre: DANC 226, DANC 228, DANC 321, DANC 322
Fall

DANC 325 (2) Movement Analysis: Laban Studies

Study of Laban-based systems and principles including Labanotation, Effort-Shape, and Space Harmony.

Pre: DANC 226, DANC 228
On-Demand

DANC 326 (2) Advanced Ballet

Increasing difficulty of ballet technique with more complex combinations, multiple turns, point work, and greater emphasis on performance skills. May be repeated.

Pre: DANC 226 or consent
ALT-Spring

DANC 327 (2) Advanced Tap Dance

Increasing complexity of tap technique for musical theatre with greater emphasis on performance skills. May be repeated.

Pre: DANC 126, DANC 223
ALT-Spring

DANC 328 (2) Advanced Modern Dance

Increasing complexity of modern dance technique including floor work, partnering, elevation, inversions, and performance skills. May be repeated.

Pre: DANC 228 or consent
Fall, Spring
GE-11

DANC 329 (1) Dance Practicum

Individualized teaching, performance, or choreographic experiences occurring on, or off-campus. May be repeated.

Pre: Consent
Fall, Spring

DANC 332 (1) Dance Partnering

Expanding knowledge and skill in dance partnering, with the emphasis on styles used in performance of concert dance. May be repeated.

Pre: DANC 322 or consent
Fall (On-Demand), Spring (On-Demand)

DANC 333 (1) Dance Partnering for Theatre

Expanding knowledge and skill in dance partnering, with the emphasis on styles used in performance of theatre and musical theatre. May be repeated.

Fall (On-Demand), Spring (On-Demand)

DANC 421 (2) Dance Composition II

Continuation of the principles and techniques of choreography with an emphasis on group forms.

Pre: DANC 321
ALT-Fall

DANC 424 (3) Dance Pedagogy

This course is the second in a two-part series of courses required for the K-12 Dance Education license. The focus of the course is on lesson planning, assessment, and teaching in a variety of K-12 settings.

Pre: DANC 324
Spring

DANC 427 (3) Topics in Dance

Rotation of a variety of topics in dance. May be repeated.

Pre: DANC 226, DANC 228
Fall, Spring

DANC 428 (1) Dance Repertory

Repertory experience in performance of the choreography by a variety of dance artists. May be repeated.

Pre: DANC 126, DANC 128 or consent
Fall, Spring

DANC 429 (1) Senior Dance Project

Capstone experience for all dance majors. Individually paced and directed, this project can be choreographic, performance, or written.

Pre: Completion of all dance major requirements.
Fall, Spring

DANCE CONTINUED

DANC 430 (1) Choreographic Project I

Course will advance individual student's compositional skills through her/his solo and group projects in a self-paced manner.

Pre: DANC 421

Variable

DANC 431 (1) Choreographic Project II

Course will further advance individual student's compositional skills through her/his solo and group projects in a self-paced manner.

Pre: DANC 430, consent

Variable

DANC 484 (3) Dance History

Historical investigation of Western concert dance from the 1600s to the present. From a more comprehensive perspective, concert forms are examined relative to sociopolitical ideologies of gender, race, sexuality, and cultural identity..

Pre: DANC 120, DANC 225, DANC 226, DANC 228, DANC 321

ALT-Fall

WI

DANC 484W (3) Dance History

Historical investigation of Western concert dance from the 1600s to the present. From a more comprehensive perspective, concert forms are examined relative to sociopolitical ideologies of gender, race, sexuality, and cultural identity.

Pre: DANC 120, DANC 225, DANC 226, DANC 228, DANC 321

ALT-Fall

DANC 497 (1-8) Dance Internship

This course is designed to provide dance students additional dance experiences through work beyond the campus environment.

Pre: consent

Fall, Spring

DANC 499 (1-3) Individual Study

This course is designed to provide student with specialized study in dance.

Pre: consent

Fall, Spring

DENTAL HYGIENE

Dental Hygiene

College of Allied Health & Nursing

Department of Dental Hygiene

3 Morris Hall • 507-389-1313

Dental Clinic • 507-389-2147

Email: msdentalclinic@mnsu.edu

Dept. Website: <http://ahn.mnsu.edu/dental>

Chair: Lisa Fleck

Terri Brown, Brigette Cooper, Julie Dittrich, Lynnette Engeswick, Lisa Fleck, Trisha Krenik-Matejcek, Angela Monson

Accreditation. American Dental Association (ADA).

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 accredited by the American Dental Association's Commission on Dental Accreditation, and meets the American Dental Association's Commission on Dental Accreditation Standards for Dental Hygiene. A Bachelor of Science degree is earned upon completion of the program.

POLICIES/INFORMATION

Admission to Program. Application for admission to the Dental Hygiene program is a separate process in addition to being admitted to the University. It is highly recommended to meet with a Dental Hygiene advisor to formulate a plan of study as soon as possible. Requirements for application for admission to the dental hygiene program include:

1. Completion of at least 36 semester credits.
2. A minimum career grade-point average of 2.9.
3. Successful completion of prerequisites of CMST 100 or CMST 102, ENG 101, PSYC 101, SOC 150 or SOC 101, BIOL 220, STAT 154 or SOC 202, DHYG 100, DHYG 219 or DHYG 225 and two of these three courses: BIOL 270, BIOL 330, CHEM 106 or CHEM 111

Transfer students are exempt from the application requirements to complete DHYG 219 or DHYG 225 prior to applying to the program. However, both DHYG 219 and DHYG 225 must be completed prior to starting the program in

the fall. Transfer students accepted into the fall DHYG class and first attending Minnesota State University in the fall to start the DHYG program will have DHYG 100 waived.

A maximum of two science courses can be repeated (each once) in order for the application to be accepted.

Required science courses for Dental Hygiene with a "W" listed next to them on the transcript will be counted as a science attempt on the Dental Hygiene application.

The application form may be obtained from the Dental Hygiene Department website ahn.mnsu.edu/dental/program/. The number of students admitted to the Dental Hygiene major is limited to 20 students each fall semester. Applicants are accepted primarily based on academic achievement in prerequisite courses with an emphasis placed on the science prerequisites.

P/N Grading 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 didactic course numbers DHYG 326 forward requires successful completion of previous Dental Hygiene courses obtaining a "C" or better in order to continue in the Dental Hygiene program. Students must achieve a "C" or higher in DHYG 219 and DHYG 225. A grade of "D" or "F" in either of these courses will result in academic suspension from the program and the student's position in the fall class will go to another individual on the waiting list.

Costs. A student in the dental hygiene program should be prepared to spend about \$375 each semester for books and supplies. At the beginning of the program students will purchase scrubs and lab coats (@\$200) and optional dental loupes/lights (@\$1,000). Students are responsible for purchasing two kits of instruments and supplies during the program. The first kit fee of \$1,200+ is attached to DHYG 313 in the fall of the junior year. The second kit fee of \$1,700+ is attached to DHYG 331 in the spring of the junior year. Upon acceptance to the program a deposit of \$500 towards the first kit fee is required.

Dental hygienists are at risk for exposure to blood borne pathogens (BBP). Accepted students will be required to be vaccinated against Hepatitis B and will also be required to have their blood tested following any exposures to BBP through needle sticks, cuts or splashes that occur at the Minnesota State Mankato Dental Clinic or any off-site clinical sites. Currently the vaccine series costs approximately \$150. Students must successfully complete a CPR course prior to enrolling fall semester.

The American Heart Association *Healthcare Provider* or the American Red Cross *Professional Rescuer* are the only CPR courses accepted.

KEY:

~ Must be completed prior to applying to Dental Hygiene Program

* Must be completed prior to starting Dental Hygiene Program

^ **Two of these three** courses must be successfully completed ("C" or above) prior to applying to the Dental Hygiene Program.

One of these two courses must be completed prior to **applying** to the program and the other must be completed prior to **starting** the program.

DENTAL HYGIENE BS

Degree completion = 120 credits

Required General Education

BIOL	270	Microbiology (4)^
ENG	101	Composition (4)~
HLTH	101	Health and the Environment (3)*
PSYC	101	Psychology (4)~
(choose 3 credits)		
SOC	101	Introduction to Sociology (3)~
SOC	150	Social Problems (3)~
(choose 3 credits)		
CMST	100	Fundamentals of Communication (3)~
CMST	102	Public Speaking (3)~
(choose 3 credits)		
SOC	202	Introductory Social Statistics (3)~
STAT	154	Elementary Statistics (3)~
(choose 3 credits)		
PHIL	120W	Introduction to Ethics (3)*
PHIL	222W	Medical Ethics (3)*
<u>Chemistry</u>		
(choose one course 3-5 credits)		
CHEM	106	Chemistry of Life Process Part I (General) (3)^
CHEM	111	Chemistry of Life Processes (5)^

Pre-requisites to the Major (choose 16 credits)

BIOL	220	Human Anatomy (4)~
BIOL	330	Principles of Human Physiology (4)^
DHYG	100	Perspectives in Dental Hygiene (1)~
DHYG	219	Head and Neck Anatomy and Histology (2)#
DHYG	223	Pharmacology (3)
DHYG	225	Oral Anatomy (2)#
FCS	242	Nutrition for Healthcare Professionals (3)*

Major Common Core

DHYG	311	Preclinical Orientation (3)
DHYG	313	Clinical Skills Development (3)
DHYG	321	Radiography I (3)
DHYG	322	Biomaterials I (2)
DHYG	326	Biomaterials II (2)
DHYG	327	Periodontology I (2)
DHYG	328	Radiography Interpretation (2)
DHYG	329	Oral Embryology and Pathology (3)
DHYG	331	Clinical Dental Hygiene I (2)
DHYG	332	Clinical Seminar I (2)
DHYG	333	Clinical Dental Hygiene IS (2)
DHYG	334	Dental Computer Software Management (1)
DHYG	420	Local Anesthesia (1)
DHYG	421	Clinical Dental Hygiene II (3)
DHYG	422	Clinical Seminar II (1)
DHYG	424	Nitrous Oxide Sedation (1)
DHYG	425W	Community Dental Health (3)
DHYG	426	Dental Hygiene Jurisprudence and Ethics (1)
DHYG	427	Periodontology II (2)
DHYG	428	Technology in Dentistry (1)
DHYG	431	Clinical Dental Hygiene III (3)
DHYG	432	Clinical Seminar III (2)
DHYG	435	Community Practicum (2)
DHYG	437	Dental Management of the Medically Compromised Patient (2)
DHYG	438	Advanced Community Practice I (1)
DHYG	439	Advanced Community Practice II (1)
DHYG	440	Restorative Functions (4)

Required Minor: None

DENTAL HYGIENE BS DEGREE COMPLETION OPTION

Students who have graduated with an A.S. or A.A.S. degree in Dental Hygiene from an accredited program are eligible to apply to the B.S. Degree Completion option. Courses within this program are 100% online, offered on a 2-year rotating schedule.

Requirements for admission to the Dental Hygiene BS Degree Completion option are:

1. Successful completion of a Program in Dental Hygiene accredited by the ADA Commission on Dental Accreditation.
2. License to practice dental hygiene (or eligible for licensure).
3. CPR level C certification
4. Completion of HBV series.
5. A minimum grade point average of 2.0

The Dental Hygiene BS degree completion option is considered a broad major and does not require a minor. Each student will develop an individual plan of study with the Degree Completion Coordinator to meet the general education and upper division requirements. Contact Julie Ditrich at julie.ditrich@mnsu.edu for more information.

Required for Major

DHYG	441	Advanced Dental Hygiene Practice (3)
DHYG	442	Current Issues in Dental Hygiene (3)
DHYG	443	Technology in Oral Health (3)
DHYG	444	Principles of Oral Health Promotion (3)
DHYG	445	Educational Methods in Dental Hygiene (3)
DHYG	451	Dental Hygiene Care Planning (3)
DHYG	452	Decision Making in Periodontology (3)
DHYG	453	Research Methods in Dental Hygiene (3)
DHYG	454	Oral Health Promotion Practice (3)
DHYG	455	Educational Practice in Dental Hygiene (3)
DHYG	456	Oral Medicine and Treatment Planning (2)

COURSE DESCRIPTIONS**DHYG 100 (1) Perspectives in Dental Hygiene**

This course will give the student an introduction to Dental Hygiene as a profession and career. Exploration of dental hygiene practice and an overview of the dental hygiene curriculum and conceptual framework will be covered.
Fall, Spring

DHYG 219 (2) Head and Neck Anatomy and Histology

Head and Neck Anatomy is the study of the hard and soft tissues of the head and neck including bones, muscles, nerves, blood supply, glands and how they function. Oral Histology is the study of cells and cell layers which compose basic tissues, oral mucosa, gingival and dentogingival tissues, orofacial structures, enamel, dentin and pulp.
Pre: BIOL 220
Variable

DHYG 223 (3) Pharmacology

Pharmacology is the study of drugs used in dentistry or medicine for the treatment, prevention and diagnosis of disease.
Pre: BIOL 220, CHEM 106 or CHEM 111
Fall

DHYG 225 (2) Oral Anatomy

This course includes the study of the permanent, mixed and primary dentitions including each individual tooth's morphology, function and occlusion.
Pre: BIOL 220
Variable

DHYG 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 Program and Dental Terminology packet
Fall

DHYG 313 (3) Clinical Skills 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 Program
Fall,
Variable

DHYG 321 (3) Radiography I

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 Program
Fall

DHYG 322 (2) Biomaterials I

This course is the first of two courses that studies the fundamental elements, purposes and uses of dental materials in the modern dental office. In addition it will give the dental hygiene student a fundamental understanding and skill level of basic dental assisting techniques utilized in the dental office.
Pre: Admission into Dental Hygiene Program
Fall

DHYG 326 (2) Biomaterials II

This course is the second of two courses that studies the fundamental elements, purposes and uses of the materials used in the modern dental office. The student will develop laboratory or clinical competency in functions using dental materials that are legal duties for Minnesota dental hygienists.
Spring

DHYG 327 (2) Periodontology I

This course will include a study of supporting tooth structures, identification, classification, etiology, progression and treatment of periodontal diseases.
Fall

DHYG 328 (2) Radiography Interpretation

This course will study the normal anatomical features from intraoral and extraoral radiographs. Students will then use this knowledge to interpret what is seen on radiographs to discern normal from abnormal. Interpretation of dental caries, periodontal disease and pathology are among the topics this course will cover.
Spring

DHYG 329 (3) Oral Embryology and Pathology

Oral Embryology encompasses development of human body from conception through birth, with a focus on development of the face and hard and soft tissues of the oral cavity. Oral Pathology addresses the causes and mechanisms of disease with special emphasis on common oral lesions and neoplasms, stressing their etiology and clinical manifestations.
Spring

DHYG 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.
Spring,
Variable

DHYG 332 (2) Clinical Seminar I

This course is designed to reinforce topics covered in DHYG 311 through the use of advanced case studies. Emphasis will be placed on evidence-based decision making. Also designed to collaborate with clinic needs as identified in DHYG 331.
Spring

DHYG 333 (2) Clinical Dental Hygiene IS

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic.
Summer
Variable

DHYG 334 (1) Dental Computer Software Management

This course is designed to equip the dental hygiene students with the skills necessary to manage a dental computer software program. A focus on networking, dental resource codes and insurance protocol will also be covered.
Spring

DHYG 336 (3) Cultural Awareness through the Lens of Health

Concepts of "Global Citizenship" and "Intercultural Competency" are desired attributes of future health care professionals. Students will self-assess their cultural knowledge in preparation for international travel. Interacting with individuals from different cultural backgrounds will provide the opportunity for students to become aware of their own cultural understanding and improve critical thinking and interpersonal skills. Through travel and experiential learning, the students will begin to develop the capacity to identify, discuss and reflect upon the ethical challenges presented in political, social, and personal lives to understand diverse world views of social justice and common good.
Spring
Diverse Cultures - Gold

DHYG 420 (1) Local Anesthesia

This course is designed to be a study of the fundamental elements, purposes, and uses of local anesthesia for the dental hygienist.
Spring

DHYG 421 (3) Clinical Dental Hygiene II

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.
Fall

DHYG 422 (1) 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.
Fall

DHYG 424 (1) Nitrous Oxide Sedation

The course is designed to be a study of the fundamental elements, purposes and uses of nitrous oxide sedation in the practice of dental hygiene. This course meets the educational criteria established by the Minnesota Board of Dentistry.
Fall

DHYG 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 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.
Fall

DHYG 425W (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 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. This course is an upper division writing intensive course for the traditional dental hygiene program.
WI

DHYG 426 (1) Dental Hygiene Jurisprudence and Ethics

This course focuses on legal and ethical issues as applied to the patient dental hygiene provider relationship.
Fall

DHYG 427 (2) Periodontology II

Didactic and clinical study of etiology, diagnosis, preventive and therapeutic procedures involved with periodontal disease.
Spring

DHYG 428 (1) Technology in Dentistry

This course is designed to prepare the dental hygiene student in the use of new technologies in the modern dental office. Students will learn to integrate these new technologies into the teledentistry model.
Fall

DHYG 431 (3) Clinical Dental Hygiene III

This course offers the student continued practice of dental hygiene treatment procedures in the Minnesota State Mankato Dental Clinic. It includes several mandatory off-campus experiences.
Fall
Variable

DHYG 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.

Spring

DHYG 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.

Fall

DHYG 437 (2) Dental Mgmt. of the Medically Compromised Patient

The course is designed to provide the dental hygiene practitioner with a survey of common medical disorders that may be encountered in a dental practice. The medical problems are organized to provide a brief overview of the basic disease process, etiology, incidence, prevalence, behavior characteristics, medications and oral manifestations commonly presented by the dental patients. As a result of the accumulation of evidence based research, the dental hygiene practitioner will be provided with an understanding of the disease, recognize the severity of the common medical disorders and make a dental management decision providing the patient with the highest possible level of oral health.

DHYG 438 (1) Advanced Community Practice I

The first of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.

Fall

DHYG 439 (1) Advanced Community Practice II

This is the second of two clinical courses designed to utilize the assessment, planning, implementation and evaluation process in a community based setting. This course will address efforts to reduce incidence and severity of oral diseases resulting in improved access to community oral health in complex cases.

Spring

DHYG 440 (4) Restorative Functions

This course meets the requirements of the Minnesota Board of Dentistry for dental hygienists and assistants to legally perform new expanded duties including the placement, contouring and adjustment of amalgam, glass ionomer and composite restorations and the placement and adjustment of stainless steel crowns.

Spring

DHYG 441 (3) Advanced Dental Hygiene Practice

Identify clinical skills and knowledge needed to improve effectiveness as a dental hygienist. Areas addressed: ultrasonic implementation using multiple types of devices, risk factor analysis, comprehensive treatment planning, Periscope (endoscope), carbide/diamond files, advanced instrumentation techniques, patient management, case presentation.

Spring, Summer (On-Demand)

DHYG 442 (3) Current Issues in Dental Hygiene

Topics included but not be limited to: advanced practice models to expand oral health services, including restorative procedures; counseling regarding smoking cessation; recent medical advances in the field of dentistry and legal and policy issues currently impacting dental hygiene.

Fall, Summer (On-Demand)

DHYG 443 (3) Technology in Oral Health

Assessment, planning, implementation and evaluation of the impact of emerging dental technology. Topics include dental practice software management, digital radiography, intra-oral cameras, patient education software, lasers in dentistry, and internet information sources for both practitioners and patients.

Fall (On-Demand), Spring

DHYG 444 (3) Principles of Oral Health Promotion

Leadership preparation in the delivery of oral health care in the public health model. Emphasis will be placed on defining oral health problems and solutions, community planning, implementation and evaluation based on the oral health objectives of Healthy People 2010.

Fall, Spring (On-Demand)

DHYG 445 (3) Educational Methods in Dental Hygiene

Examines educational methods needed for effective dental hygiene instruction. Topics addressed within this course will include learner and context analysis, performance objectives, assessment instruments, instructional strategies, formative and summative evaluations. Emphasis will be placed on competency based instruction.

Fall, Spring (On-Demand)

DHYG 447 (3) Dental Health Study Abroad in Belize

The purpose of this course is to introduce students to first hand experience in providing dental hygiene services through a study abroad opportunity. This course centers on an international week long service learning project to San Pedro, Belize. Most of our time and effort will be spent providing dental hygiene treatment for children attending Holy Cross Anglican School. This course will also address ethics, cultural issues, standard of care issues, as well as challenges in providing dental hygiene care in a third world country.

Spring

Diverse Cultures - Gold

DHYG 451 (3) Dental Hygiene Care Planning

Evidence based dental management of patients with medical disorders encountered in dental practice. Provides an overview of basic disease processes, epidemiology, pathophysiology, and accepted medical therapies utilizing human needs model to formulate a dental hygiene care plan.

Fall, Spring (On-Demand)

DHYG 452 (3) Decision Making in Periodontology

Combines the sciences and knowledge in the discipline of dental hygiene that permits synthesis and application of periodontal treatment techniques. Surgical and aggressive management of medically compromised periodontal patients will be addressed in this course.

Fall, Spring (On-Demand)

DHYG 453 (3) Research Methods in Dental Hygiene

Provides student awareness of the American Dental Hygienists' Research Agenda and prepares students on the methodology of research. Includes strengths and limitations of quantitative and qualitative research methods while developing methodological skills and proficiencies related to research.

Fall (On-Demand), Spring

DHYG 454 (3) Oral Health Promotion Practice

Demonstration of oral health delivery in community based clinics embracing oral health promotion efforts as a methodology. Increasing demand for care, dental services and prevention resulting in reduction of oral diseases and improved community oral health.

Pre: DHYG 444

Fall (On-Demand), Spring

DHYG 455 (3) Educational Practice in Dental Hygiene

Applies content from Principles of Educational Methods to support the role of dental hygiene educator in didactic and clinical instruction. Active participation in course design, delivery and evaluation in classroom, online or clinical format with emphasis on competency based instruction.

Pre: DHYG 445

Fall (On-Demand), Spring

DHYG 456 (2) Oral Medicine and Treatment Planning

This course is designed to facilitate critical thinking skills related to drugs used in dentistry and medicine with emphasis placed on the impact of the dental hygiene diagnosis.

Spring, Summer (On-Demand)

DHYG 499 (1-6) Individual Study

Earth Science

College of Social & Behavioral Sciences

Department of Geography

206 Morris Hall • 507-389-2617

Website: [www.http://sbs.mnsu.edu/geography](http://sbs.mnsu.edu/geography)

<http://cset.mnsu.edu/chemgeol/programs/geol>

Director: Phillip Larson, Ph.D.

Bryce Hoppie, Ph.D.

Earth Science studies the Earth's interrelated physical systems of atmosphere, biosphere, geosphere, hydrosphere, and outer space. Fundamental to Earth Science are the impacts of people and the interactions of chemical, physical, and biological processes at all spatial scales ranging from submicroscopic to planetary, and over time scales from the immediate to billions of years. Thus, courses in Astronomy, Biology, Chemistry, Geography, Geology, and Physics are required to fulfill degree requirements. Majors may choose to earn the BA or BS in the broadly based program or a more focused Geology "option" (BS only) is available. For secondary teacher licensure see the "Science Teaching" program and major. An Earth Science minor is available.

POLICIES/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.

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.

EARTH SCIENCE BA

Degree completion = 120 credits

Major Common Core

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	217	Weather (3)
GEOG	315	Geomorphology (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)

Major Restricted Electives (choose 6 credits)

AST	125	Observational Astronomy (3)
BIOL	432	Lake Ecology (4)
GEOG	313	Natural Disasters (3)
GEOG	370	Cartographic Techniques (4)
GEOG	373	Introduction to Geography Information Systems (4)
GEOG	411	Soils Geomorphology (3)
GEOG	412	Advanced Weather (4)
GEOG	414	Biogeography (3)
GEOG	415	Earth Surface Processes (4)
GEOG	416	Fluvial Geomorphology and Hydrology (4)

GEOG	420	Conservation of Natural Resources (3)
GEOG	440	Field Studies (1-4)
GEOG	471	Digital Field Mapping with GPS (4)
GEOG	474	Introduction to Remote Sensing (4)
GEOG	480	Seminar (1-4)
GEOL	320	Sedimentology and Stratigraphy (4)
GEOL	330	Structural Geology (4)
GEOL	350	Environmental Geology (4)
GEOL	370	Geotectonics (2)
GEOL	450	Hydrogeology (3)

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Minor Required: None.

EARTH SCIENCE BS

Degree completion = 120 credits

Major Common Core

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	217	Weather (4)
GEOG	315	Geomorphology (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)

Major Restricted Electives (choose 6 credits)

AST	125	Observational Astronomy (3)
BIOL	432	Lake Ecology (4)
GEOG	313	Natural Disasters (3)
GEOG	370	Cartographic Techniques (4)
GEOG	373	Introduction to Geographic Information Systems (4)
GEOG	411	Soils Geomorphology (3)
GEOG	412	Advanced Weather (4)
GEOG	414	Biogeography (3)
GEOG	415	Earth Surface Processes (4)
GEOG	416	Fluvial Geomorphology and Hydrology (4)
GEOG	420	Conservation of Natural Resources (3)
GEOG	440	Field Studies (1-4)
GEOG	471	Digital Field Mapping with GPS (4)
GEOG	474	Introduction to Remote Sensing (4)
GEOL	320W	Sedimentology and Stratigraphy (4)
GEOL	330	Structural Geology (4)
GEOL	350	Environmental Geology (4)
GEOL	370	Geotectonics (2)
GEOL	450	Hydrogeology (3)

Minor Required: None.

EARTH SCIENCE BS GEOLOGY OPTION

Geology is the study of the Earth, its materials, and its processes. It concerns itself with solving basic scientific problems and utilizing knowledge of the Earth for the benefit of humankind. Its concerns include but are not limited to soil preservation, water production and quality, hazards mitigation, resource exploration and production, engineering of structures large and small, climate change, and the history of life on Earth and the search for life on other planets.

Major Common Core

CHEM	201	General Chemistry I (5)
GEOL	121	Physical Geology (4)
GEOL	122	Earth History (4)

GEOL 201	Elements of Mineralogy (4)
GEOL 302	Petrology (4)
GEOL 320	Sedimentology and Stratigraphy (4)
GEOL 330	Structural Geology (4)
MATH 121	Calculus I (4)
PHYS 211	Principles of Physics I (4)

Major Restricted Electives (choose 6-8 credits)

GEOG 315	Geomorphology (3)
GEOG 373	Introduction to Geographic Information Systems (4)
GEOG 420	Conservation of Natural Resources (3)
GEOG 471	Digital Field Mapping with GPS (4)
GEOG 474	Introduction to Remote Sensing (4)
(choose 4-10 credits)	
GEOG 440	Geology Field Camp (4-8)
GEOG 497	Internship (1-10)
GEOL 499	Individual Study (1-5)
(choose 7-8 credits)	
GEOL 350	Environmental Geology (4)
GEOL 401	Field Studies (1-3)
GEOL 430	Petroleum and Ore Deposit Geology (3)
GEOL 450	Hydrogeology (3)

Other Graduation Requirements

Successful completion of Research Experience for Undergraduates (REU) can be substituted for GEOL 499 as the capstone experience subject to Department approval.

Minor Required: None.

EARTH SCIENCE BS TEACHING (5-12)

Requirements for the Earth Science, Teaching major can be found in the SCIENCE TEACHING section of this catalog.

GEOARCHEOLOGY CERTIFICATE

This certificate cross-trains students in archeology, geography, and geology to emphasize the necessity of understanding physical processes in places and regions as important vectors in shaping human habitation and resource use over time. The certificate prepares students to be highly competitive in either further education or the job market.

Major Common Core**Archeology Foundation**

ANTH 210	Introduction to Archaeology (4)
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Major Restricted Electives**Earth Science Foundation** (choose 3-4 credits)

GEOG 101	Introductory Physical Geography (3)
GEOL 122	Earth History (4)

Archeology Electives (choose 3 credits)

ANTH 410	Archeology of Minnesota (3)
ANTH 411	Archeology of Native North America (3)
ANTH 412	Archeology of Latin America (3)
ANTH 416	Archeological Methods (3)

Earth Science Electives (choose 6-8 credits)

GEOG 315	Geomorphology (3)
GEOG 411	Soils Geomorphology (3)
GEOG 415	Earth Surface Processes (4)
GEOG 416	Fluvial Geomorphology and Hydrology (4)
GEOL 201	Elements of Mineralogy (4)
GEOL 320W	Sedimentology and Stratigraphy (4)

EARTH SCIENCE MINOR**Required General Education for Minor**

AST 101	Introduction to Astronomy (3)
BIOL 100	Our Natural World (4)
CHEM 100	Chemistry in Society (4)
GEOG 101	Introductory Physical Geography (3)
PHYS 100	Cultural Physics (3)

Required for Minor

GEOL 121	Physical Geology (4)
GEOL 122	Earth History (4)
GEOG 217	Weather (4)
GEOG 315	Geomorphology (3)

Required Electives for Minor

(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

Economics

*College of Social & Behavioral Sciences,
Department of Economics*

150 Morris Hall • 507-389-2969

Website: www.mnsu.edu/dept/economics

Chair: Phillip Miller

Kwang-IL Choe, Ashok Chowdhury, Atrayee Ghosh Roy, Saleheen Khan, Ishuan Li, Phillip Miller, Ved Sharma, Robert Simonson, Michael Spencer, Kwang Woo Park

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.

POLICIES/INFORMATION

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.

P/N Grading Policy. Up to six credit hours of electives in the major may be taken as P/N grading. ECON 481 and ECON 498 must be taken as P/N grading.

GPA Policy. A minimum cumulative grade point average of 2.0 is required for all courses taken in the required economics core courses and required economics electives for the economics BS or BA major. Furthermore, a minimum of a "C" grade is required in each of the five courses that are prerequisites for ECON 482, ECON 207, ECON 301, ECON 355, ECON 356, and ECON 462.

Center for Economic Education - Dr. Ashok Chowdhury, Director. 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.

ECONOMICS CONTINUED

ECONOMICS BA

Degree completion = 120 credits

Major Common Core

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
ECON 207	Business Statistics (4)
ECON 301	Quantitative Methods in Economics (3)
ECON 355	Intermediate Microeconomics (3)
ECON 356	Intermediate Macroeconomics (3)
ECON 462	Econometrics (3)
ECON 482	Senior Research Seminar (3)

Major Unrestricted Electives

(choose at least 12 credits from the list of offered economics courses)

ECON 305	Money and Banking (3)
ECON 314W	Current Economic Issues (3)
ECON 403	Labor Economics (3)
ECON 405	Central Banking (3)
ECON 406	Economics of Unions (3)
ECON 411	Urban Economics (3)
ECON 412	Resource and Environmental Economics (3)
ECON 416	Sports Economics (3)
ECON 420	International Economics (3)
ECON 429	Economic Education (3)
ECON 440	Public Finance (3)
ECON 450	Economic Development (3)
ECON 463	Applied Econometrics of Financial Markets (3)
ECON 472	Industrial Organization (3)
ECON 480	Seminar in Economics (1-3)
ECON 481	Readings in Economics (1-3)
ECON 491	In-Service (1-3)
ECON 498	Internship (1-3)
ECON 499	Individual Study (1-3)

Major Emphasis

Labor Economics Emphasis

Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

ECON 403	Labor Economics (3)
ECON 406	Economics of Unions (3)
MGMT 380	Human Behavior in Organizations (3)
MGMT 440	Human Resource Management (3)
MGMT 442	Compensation Management (3)
MGMT 444	Organization Design, Development, and Change (3)

Economics of the Public Sector Emphasis

Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

ECON 403	Labor Economics (3)
ECON 412	Resource and Environmental Economics (3)
ECON 420	International Economics (3)
ECON 440	Public Finance (3)
ECON 462	Econometrics (3)
ECON 472	Industrial Organization (3)

Financial Economics Emphasis

Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

BLAW 455	Legal Aspects of Banking and Finance (3)
ECON 305	Money and Banking (3)
ECON 405	Central Banking (3)
ECON 420	International Economics (3)
ECON 463	Applied Econometrics of Financial Markets (3)
FINA 464	Financial Institutions and Markets (3)
FINA 482	Commercial Bank Management (3)

Graduate School Preparation

These courses are recommended for students wanting to attend graduate school in economics. (ECON 301, MATH 121-2, MATH 247, ECON 462 and MATH 354 are most important.) Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

ECON 301	Quantitative Methods in Economics (3)
ECON 462	Econometrics (3)

MATH 121	Calculus I (4)
MATH 122	Calculus II (4)
MATH 223	Calculus III (4)
MATH 247	Linear Algebra I (4)
MATH 321	Ordinary Differential Equations (4)
MATH 354	Concepts of Probability & Statistics (3)
MATH 417	Real Analysis I (4)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes. Any.

ECONOMICS BS

Degree completion = 120 credits

Major Common Core

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
ECON 207	Business Statistics (4)
ECON 301	Quantitative Methods in Economics (3)
ECON 355	Intermediate Microeconomics (3)
ECON 356	Intermediate Macroeconomics (3)
ECON 420	International Economics (3)
ECON 462	Econometrics (3)
ECON 482	Senior Research Seminar (3)

Required Non-Economics Core Courses

Business Foundation Requirements

BLAW 200	Legal, Political, and Regulatory Environment of Business (3)
FINA 362	Business Finance (3)
IT 101	Introduction to Information Systems (3)
MATH 112	College Algebra (4)
MGMT 200	Introduction to MIS (3)
MGMT 330	Principles of Management (3)
MGMT 346	Production & Operations Management (3)
MRKT 310	Principles of Marketing (3)
ACCT 217	Survey of Financial and Managerial Accounting (4)

Major Unrestricted Electives

Economics Course Electives

(choose at least 9 credits from the list of offered courses)

ECON 305	Money and Banking (3)
ECON 314W	Current Economic Issues (3)
ECON 403	Labor Economics (3)
ECON 405	Central Banking (3)
ECON 406	Economics of Unions (3)
ECON 411	Urban Economics (3)
ECON 412	Resource and Environmental Economics (3)
ECON 416	Sports Economics (3)
ECON 429	Economic Education (3)
ECON 440	Public Finance (3)
ECON 450	Economic Development (3)
ECON 463	Applied Econometrics of Financial Markets (3)
ECON 472	Industrial Organization (3)
ECON 480	Seminar in Economics (1-3)
ECON 481	Readings in Economics (1-3)
ECON 491	In-Service (1-3)
ECON 498	Internship (1-3)
ECON 499	Individual Study (1-3)

Major Emphasis

Labor Economics Emphasis

Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

ECON 403	Labor Economics (3)
ECON 406	Economics of Unions (3)
MGMT 380	Human Behavior in Organizations (3)
MGMT 440	Human Resource Management (3)
MGMT 442	Compensation Management (3)
MGMT 444	Organization Design, Development, and Change (3)

Economics of Public Sector Emphasis

Emphasis is not required in Major. Emphasis used only as an advising tool. See your advisor for guidance.

ECON 403	Labor Economics (3)
ECON 412	Resource and Environmental Economics (3)
ECON 420	International Economics (3)
ECON 440	Public Finance (3)
ECON 462	Econometrics (3)
ECON 472	Industrial Organization (3)

Financial Economics Emphasis

Emphasis is not required in Major. Emphasis used only as a advising tool. See your advisor for guidance.

BLAW 455	Legal Aspects of Banking and Finance (3)
ECON 305	Money and Banking (3)
ECON 405	Central Banking (3)
ECON 420	International Economics (3)
ECON 463	Applied Econometrics of Financial Markets (3)
FINA 464	Financial Institutions and Markets (3)
FINA 482	Commercial Bank Management (3)

Graduate School Preparation

These courses are recommendation for students wishing to attend graduate school in economics. (ECON 301, MATH 121, MATH 122, MATH 247, ECON 462 and MATH 354 are most important.) Emphasis is not required in Major. Emphasis used only as a advising tool. See your advisor for guidance.

ECON 301	Quantitative Methods in Economics (3)
ECON 462	Econometrics (3)
MATH 121	Calculus I (4)
MATH 122	Calculus II (4)
MATH 223	Calculus III (4)
MATH 247	Linear Algebra I (4)
MATH 321	Ordinary Differential Equations (4)
MATH 354	Concepts of Probability & Statistics (3)
MATH 417	Real Analysis I (4)

Required Minor: None.

ECONOMICS MINOR
Required for Minor

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)

Required Electives for Minor (12 credits)

ECON xxx	ECON xxx	ECON xxx	ECON xxx
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COURSE DESCRIPTIONS**ECON 100 (3) An Introduction to the U.S. 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 ECON 202, or equivalent.

Fall, Spring

GE-5

ECON 103W (3) The Economics of Women's Issues and Public Policy in the United States

This course will examine the gendered nature of public policy using standard microeconomic tools. It examines the impact of public policy on employment discrimination, reproductive rights, and sexual orientation.

Variable

WI, GE-2, GE-5

Diverse Cultures - Purple

ECON 199 (1) CLEP Economics**ECON 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.

Fall, Spring

GE-5

ECON 202 (3) Principles of Microeconomics

Examines decision making by the individual firm, the determination of prices and wages, and current problems facing business firms.

Fall, Spring

GE-5

ECON 207 (4) Business Statistics

Basic statistical methods including measures of central tendency and dispersion, 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.

Pre: MATH 112 or equivalent

Fall, Spring

GE-2, GE-4

ECON 301 (3) Quantitative Methods in Economics

This course will introduce the student to the use of mathematics in economic analysis. Topics include optimization methods, comparative statics, and linear algebra.

Pre: ECON 201, ECON 202, ECON 207, MATH 112 or equivalent

Fall, Spring

ECON 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 ECON 202

Fall, Spring

ECON 314W (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.

Fall

WI, GE-5, GE-8

ECON 320W (3) Gender Issues and Economic Globalization

This course will provide tools for analyzing the effects of economic globalization on employment, distribution of income, economic development and socio-economic issues from a gender perspective.

Spring (On-Demand), Summer (On-Demand)

WI

Diverse Cultures - Purple

ECON 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.

Pre: ECON 201, ECON 202 and ECON 301

Fall, Spring

ECON 356 (3) Intermediate Macroeconomics

Study of factors determining aggregate level of production, employment, inflation, and implications of monetary and fiscal policies.

Pre: ECON 201, ECON 202 and ECON 301

Fall, Spring

ECON 403 (3) Labor Economics

Employment, wages, and economic security. The structure and impact of labor organizations and labor legislation.

Pre: ECON 201 and ECON 202

Fall, Spring

ECON 405 (3) Central Banking

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 strategies: Monetarism, the demand for money, the money supply process, and the impact of financial deregulation on federal policy.

Pre: ECON 305

Spring

ECONOMICS CONTINUED

ECON 406 (3) Economics of Unions

Students examine the economics of unions, including the history of union activity, the development and impact of labor laws on labor markets, the economics of strikes and alternative dispute resolution systems, and the impact of unions on wages and price levels.

Pre: ECON 201 and ECON 202

Spring

ECON 411 (3) Urban Economics

Economic 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 ECON 202

Variable

ECON 412 (3) Resource and Environmental Economics

Concepts and techniques for evaluating the alternative uses, management and development of natural resources.

Pre: ECON 201 and ECON 202

Fall

ECON 416 (3) Sports Economics

This course examines the economics of professional and collegiate sports and sports institutions. Students examine the market for sports competitions, the labor market for player talent, and the role government plays in the business of sports.

Pre: ECON 202

Spring

ECON 420 (3) International Economics

The economic rationale for interregional trade: emphasis on current problems.

Pre: ECON 201 and ECON 202

Fall, Spring

ECON 429 (3) Economic Education

Fundamental ideas and structure of economics with emphasis on the application of such ideas in the K-12 school curriculum.

Variable

ECON 440 (3) Public Finance

Public expenditures, taxes and other revenues, debts and financial administration at federal, state, and local levels.

Pre: ECON 201 and ECON 202

Fall

ECON 450 (3) Economic Development

Economic underdevelopment and the relationships between mature economies and developing nations.

Pre: ECON 201 and ECON 202

Fall

ECON 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, ECON 202, and ECON 207

ECON 463 (3) Applied Econometrics of Financial Markets

This course is designed to cover basic tools in time series analysis and to equip students with quantitative skills to analyze the financial market.

Pre: ECON 207

Fall

ECON 472 (3) Industrial Organization

This course is an introduction to non-competitive markets using economic models and game theory.

Pre: ECON 201, ECON 202 and ECON 207

Fall, Spring

ECON 480 (1-3) Seminar in Economics

Pre: ECON 201 and ECON 202

Variable

ECON 481 (1-3) Readings in Economics

Fall, Spring

ECON 482W (3) Senior Research 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 semester-long research assignment using skills from the economics core requirements.

Pre: ECON, 207, ECON 301, ECON 355, ECON 356, ECON 462

Fall, Spring

WI

ECON 485W (4) Seminar In Applied Econometrics

Students learn how to conduct research projects in economics and related fields by using modern econometric tools and undertake a semester-long research assignment.

Pre: ECON 355, ECON 356, ECON 301, and ECON 462. In addition a student must get a minimum of a "C" grade in each prerequisite.

Fall, Spring, Summer (On-Demand)

WI

ECON 491 (1-3) In-Service

ECON 498 (1-3) Internship

Pre: ECON 201 and ECON 202

Fall, Spring

ECON 499 (1-3) Individual Study

Pre: ECON 201 and ECON 202

Fall, Spring

EDUCATIONAL LEADERSHIP

Educational Leadership

College of Education

Department of Educational Leadership

115 Armstrong Hall • 507-389-1116

Website: <http://ed.mnsu.edu/edleadership/>

Chair: Dr. Julie Carlson

The Department of Educational Leadership prepares professionals to enter leadership and administration roles in a variety of educational settings and positions. The department does not offer an undergraduate program, but undergraduate courses are offered on a limited basis for Experiential Education. Please contact the department or the website for more information.

COURSE DESCRIPTIONS

EXED 202 (3) Introduction to Experiential Education

This course introduces foundations of experiential education through direct experience with various applications connected through reflection and group processing. Course topics include, but are not limited to, project-based learning, service learning, adventure education, ethics in leadership, and wilderness experience. GE-11

EXED 490 (1-3) Workshop

EXED 499 (1-3) Individual Study

ELECTRICAL ENGINEERING

Electrical Engineering

College of Science, Engineering and Technology
 Department of Electrical & Computer Engineering and Technology
 242 Trafton Science Center N • 507-389-5747
 Website: www.cset.mnsu.edu/ecet

Chair: Vincent Winstead, P.E., Ph.D.

Program Coordinator: Vincent Winstead, P.E., Ph.D.

Gale Allen, Nannan He, Tom Hendrickson, Han-Way Huang, Harry Jones, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hamari, Vincent Winstead, Xuenhui Wu, Qun Zhang

Accreditation. The Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.ABET.org.

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 prepares its Electrical Engineering graduates 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.

The educational objectives for our Bachelor of Science in Electrical Engineering degree are to prepare our graduates to:

1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in engineering and other diverse careers.
3. Succeed in full time graduate and professional studies.
4. Pursue continuing and life-long learning opportunities.
5. Pursue professional registration.
6. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:

1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Monitoring of the success of our graduates in graduate and professional programs.
4. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
5. Reviewing the number and success of our students completing professional registration to advance their careers.

The Electrical Engineering degree curriculum includes 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 including instruction in basic practices and procedures, creativity, control, economics, and synthesis. The process begins with basic instruction during the first year and concludes with a capstone design project.
3. A choice of several sub-disciplines in their senior level elective offerings (digital, controls, communications, microelectronics design and fabrication).
4. Opportunities for students to develop sensitivity to the social and humanistic implications of technology and motivate them to make worth while contributions to the profession and society, while upholding the highest standards of professional ethics.
5. Courses in business and economics to promote awareness of management and the economic aspects of engineering.
6. Preparation for continuing study and professional development.

The curriculum offers students the opportunity to emphasize a number of specialized areas including digital systems, communications, controls, and microelectronic design and fabrication.

During the senior year, students must take the first step toward registration as a professional engineer by taking the Fundamentals of Engineering (FE) examination as described in the GPA Policy below.

Minnesota State Mankato 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.

POLICIES/INFORMATION

Admission to Major. Admission to the college is necessary before enrolling in 300- and 400-level courses. 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 the spring semester of the sophomore year, students should submit an application form for admission to the Electrical 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. Only students admitted to the program are permitted to enroll in upper-division electrical 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 62 semester credits including the following:

- General Physics (calculus-based) (12 credits)
- Calculus and Differential Equations (16 credits)
- Electrical Engineering Circuit Analysis I and II (including lab) (7 credits)
- Chemistry (3 credits)
- English Composition (4 credits)
- Statics (3 credits)
- Introduction to Electrical and Computer Engineering (6 credits)
- Technical Communication (4 credits)
- Microprocessor course and lab (3 credits)
- Digital Systems and Test (including lab) (4 credits)

A cumulative GPA of 2.5 for all science and math courses must have been achieved for program admittance. Grades must be 1.65 ("C-") or better for courses to be accepted.

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 in all upper division Minnesota State Mankato EE coursework;
3. have completed their senior design sequence at Minnesota State Mankato; and
4. have taken the FE exam and achieved the competency level set by the department.
5. Grades must be 1.65 ("C-") or better for courses taken at Minnesota State Mankato to be accepted

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled at Minnesota State Mankato.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

P/N Grading Policy. A student who majors in EE must elect the grade option for all courses even if offered by another department.

ELECTRICAL ENGINEERING BSEE

Degree completion = 128 credits

Required General Education

CHEM	191	Chemistry Applications (3)
ENG	101	Composition (4)
ENG	271W	Technical Communication (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4)
Economics (choose 3 credits from one of the following)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)

Pre-requisites to the Major

EE	106	Introduction to Electrical/Computer Eng. I (3)
EE	107	Introduction to Electrical/Computer Eng. II (3)
EE	230	Circuit Analysis I (3)
EE	231	Circuit Analysis II (3)
EE	234	Microprocessor Engineering I (3)
EE	235	Microprocessor Engineering Laboratory I (1)
EE	240	Evaluation of Circuits (1)
EE	281	Digital System Design with Testability (3)
EE	282	Digital System Design with Testability Lab (1)
MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
ME	212	Statics (3)
PHYS	222	General Physics II (3)
PHYS	223	General Physics III (3)
PHYS	232	General Physics II Lab (1)
PHYS	233	General Physics III Lab (1)

Major Common Core

EE	303	Introduction to Solid State Devices (3)
EE	304	Lab: Introduction to Solid State Devices (1)
EE	332	Electronics I (3)
EE	333	Electronics II (3)
EE	336	Principles of Engineering Design I (1)
EE	337	Principles of Engineering Design II (1)
EE	341	Signals and Systems (3)
EE	342	Electronics Laboratory (1)
EE	350	Engineering Electromagnetics (3)
EE	353	Communications Systems Engineering (3)
EE	358	Control Systems (3)
EE	363	Communication Systems Laboratory (1)
EE	368	Control Systems Laboratory (1)
EE	450	Engineering Economics (3)
EE	467W	Principles of Engineering Design III (1)
EE	477W	Principles of Engineering Design IV (1)
EE	482	Electromechanics (3)
ME	299	Thermal Analysis (2)

Major Restricted Electives

EE	334	Microprocessor Engineering II (3)
EE	344	Microprocessor II Laboratory (1)
EE	453	Advanced Communications Systems Engineering (3)
EE	471	Advanced Control Systems (3)
EE	472	Digital Signal Processing (3)
EE	473	Electrical Power Systems Analysis and Design (3)
EE	474	Power Electronics (4)
EE	475	Integrated Circuit Engineering (3)
EE	476	Antennas, Propagation & Microwave Engineering (3)
EE	479	Superconductive Devices (3)
EE	480	Integrated Circuit Fabrication Lab (1)
EE	481	VLSI Design Laboratory (1)
EE	484	VLSI Design (3)
EE	487	RF Systems Engineering (3)
EE	489	Real-time Embedded Systems (4)

Other Graduation Requirements

Choose seven (7) credits from Major Restricted Electives. Choose a minimum of twelve (12) credits from Humanities (6 credits) and Social Sciences (6 credits) courses. For a complete listing of approved Humanities and Social Science courses, please

consult the department website. In general, graduation credit toward the Humanities requirement is not allowed for any course in subject areas such as communication studies, writing, art, music, or theatre that involve performance or practice of basic skills. At least three (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.

Analysis/Probability & Statistics (choose 3 credits)

MATH	354	Concepts of Probability & Statistics (3)
ME	291	Engineering Analysis (3)

Business/Finance (choose 3 credits)

BLAW	200	Legal, Political, and Regulatory Environment of Business (3)
FINA	362	Business Finance (3)
MGMT	330	Principles of Management (3)
MGMT	340	Human Resource Management (3)
MRKT	310	Principles of Marketing (3)

Required Minor: None.

No minor or other major accepted toward degree.

COURSE DESCRIPTIONS

EE 100 (1) Explorations in Engineering

This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program.

Fall

GE-12

EE 106 (3) Introduction to Electrical/Computer Engineering I

This introductory course covers digital systems topics including binary numbers, logic gates, Boolean algebra, circuit simplification using Karnaugh maps, flip-flops, counters, shift registers and arithmetic circuits. Problem solving methods, study skills and professional development will be addressed throughout the course.

Pre: MATH 112

Fall Spring

EE 107 (3) Introduction to Electrical/Computer Engineering II

The course presents algorithmic approaches to problem solving and computer program design using the C language. Student will explore Boolean expressions, implement programs using control structures, modular code and file input/output, and interface with external hardware using robots and sensors.

Pre: EE 106

Coreq: EE 106

Spring

EE 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. Natural and step response of RL, RC, and RLC circuits.

Pre: PHYS 222 or concurrent, MATH 321 or concurrent

Fall

EE 231 (3) Circuit Analysis II

Continuation of Circuit Analysis I to include special topics in circuit analysis.

Pre: EE 230 and EE 240, MATH 321, PHYS 222

Spring

EE 234 (3) Microprocessor Engineering I

A course that teaches how to write computer assembly language programs, make subroutine calls, perform I/O operations, handle interrupts and resets, interface with a wide variety of peripheral chips to meet the requirements of applications.

Pre: EE 106, EE 107

Coreq: EE 235

Fall

EE 235 (1) Microprocessor Engineering Laboratory I

Use of development boards and assembly language programming to handle interrupts, interface with parallel I/O ports, memory, and timers. Experiments will involve signal and frequency measurements, data conversions, and interface design.

Pre: EE 106, EE 107

Coreq: EE 234

EE 240 (1) Evaluation of Circuits

Laboratory support for EE 230. Use of laboratory instrumentation to measure currents and voltages associated with DC and AC circuits. Statistical analysis of measurement data. Measurements of series, parallel and series-parallel DC and AC circuits. Measurement of properties for circuits using operational amplifiers. Measurement of transient responses for R-L and R-C circuits. Simulation of DC and AC circuits using PSPICE. Concepts covered in EE 230 will be verified in the laboratory.

Pre: Must be taken concurrently with EE 230.

Fall

EE 244 (2) Introduction to Digital Systems

Simple coding schemes, Boolean algebra fundamentals, elements of digital building blocks such as gates, flip-flops, shift registers, memories, etc.; basic engineering aspects of computer architecture.

EE 253 (1) Logic Circuits Lab

Laboratory support to complement EE 244. Use of laboratory instrumentation to measure characteristics of various logic circuits and digital subsystems. Experimental evaluation of digital logic devices and circuits including logic gates, flip-flops, and sequential machines.

Pre: EE 230 and concurrent with EE 244.

Spring

EE 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.

Pre: EE 230, EE 240 and concurrently with EE 231 and EE 244

Spring

EE 281 (3) Digital System Design with Testability

Introduction to representing digital hardware using a hardware description language. Introduction to implementation technologies such as PAL's, PLA'S, FPGA's and Memories. Analysis, synthesis and design of sequential machines; synchronous, pulse mode, asynchronous and incompletely specified logic.

Pre: EE 106, EE 107

Variable

EE 282 (1) Digital System Design with Testability Lab

Laboratory support for EE 282 practical aspects of design and analysis of different types of sequential machines will be presented through laboratory experience.

Coreq: EE 281

EE 298 (1-4) Topics

Varied topics in Electrical and Computer Engineering. May be repeated as topics change.

Pre: to be determined by course topic

EE 303 (3) Introduction to Solid State Devices

Introduction to crystal structure, energy band theory, conduction and optical phenomenon in semiconductors, metals and insulators. Study of 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

Fall

EE 304 (1) Lab: Introduction to Solid State Devices

Laboratory support for EE 303. Experiments include resistivity and sheet resistance measurements of semiconductor material, probing material, probing of IC chips, PN-junction IV and CV measurements, BJT testing to extract its parameters, MOS-FET testing and evaluating its parameters, cv-measurements of MOS structure, and familiarization with surface analysis tools.

Fall

EE 332 (3) Electronics I

Introduction to discrete and microelectronics circuits including analog and digital electronics. Device characteristics including diodes, BJT's, JFET's, and MOSFET's will be studied. DC bias circuits, small and large signal SPICE modeling and analysis and amplifier design and analysis will be discussed.

Pre: EE 231

Fall

EE 333 (3) Electronics II

The second course of the electronics sequence presenting concepts of feedback, oscillators, filters, amplifiers, operational amplifiers, hysteresis, bi-stability, and non-linear functional circuits. MOS and bipolar digital electronic circuits, memory, electronic noise, and power switching devices will be studied.

Pre: EE 332

Spring

EE 334 (3) Microprocessor Engineering II

A more advanced study of microprocessors and microcontrollers in embedded system design. Use of C language in programming, interrupt interfaces such as SPI, I2C, and CAN. External memory design and on-chip program memory protection are also studied.

Fall

EE 336 (1) Principles of Engineering Design I

Electrical and computer engineering project and program management and evaluation techniques will be studied. Emphasis will be placed on the use of appropriate tools for planning, evaluation, and reporting on electrical and computer engineering projects.

Pre: Junior Standing

Fall

EE 337 (1) Principles of Engineering Design II

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: EE 336

Spring

EE 341 (3) Signals & Systems

Analysis of linear systems and signals in the time and frequency domain. Laplace and Fourier transforms. Z-transform and discrete Fourier transforms.

Pre: EE 230, MATH 321 and PHYS 222

Fall

EE 342 (1) Electronics Laboratory

This lab is designed to accompany EE 332. The lab covers the experimental measurement and evaluation of diode, BJT, and MOS characteristics; various feedback topologies; oscillator and op-amp circuits; and rectifiers and filter circuitry.

Pre: EE 231 and EE 332 taken concurrently.

Fall

EE 344 (1) Microprocessor II Laboratory

Laboratory support for EE 334. Use of development boards and C Programming language to handle I/O devices, interrupts, and all peripheral functions. Multiple functions such as timers, A/D converters, I/O devices, interrupts, and serial modules will be used together to perform desired operations.

Pre: Concurrent with EE 334

Fall

EE 350 (3) 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: EE 231, MATH 223, MATH 321 and PHYS 222

Spring

EE 353 (3) Communications 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 341 & MATH 223

Spring

EE 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

Spring

EE 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

Spring

EE 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

Spring

EE 395 (3) Computer Hardware and Organization

High-level language constructs using a selected assembly language, design alternatives of computer processor datapath and control, memory hierarchy/management unit, use of HDL in describing and verifying combinational and sequential circuits. Design of Computer processor and memory system.

Pre: EE 234, EE 235, EE 281

Spring

EE 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: EE 235. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

EE 450 (3) Engineering Economics

Overview of accounting and finance and their interactions with engineering. Lectures include the development and analysis of financial statements, time value of money, decision making tools, cost of capital, depreciation, project analysis and payback, replacement analysis, and other engineering decision making tools.

Pre: Advanced standing in the program

Fall

EE 453 (3) Advanced Communications Systems Engineering

Behavior of analog systems and digital systems in the presence of noise, principles of digital data transmission, baseband digital modulation, baseband demodulation/detection, bandpass modulation and demodulation of digital signals. Channel coding, modulation and coding trade-offs, spread spectrum techniques, probability and information theory.

Pre: EE 353 and EE 363

Fall

EE 463 (3) Advanced Digital System Design

Design of combinational and sequential systems and peripheral interfaces. Design techniques using MSI and LSI components in an algorithmic state machine; implementation will be stresses. Rigorous timing analysis transmission-line effects and metastability of digital systems will be studied.

Pre: EE 244

EE 467W (1) Principles of Engineering Design III

The 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

Fall

WI

EE 471 (3) Advanced Control Systems

This course is a continuation of EE 358. Techniques for the analysis of continuous and discrete systems are developed. These techniques include pole placement, state estimation, and optimal control.

Pre: EE 358 and EE 368

Fall

EE 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

Spring

EE 473 (3) Electrical Power Systems Analysis and Design

Power generation, transmission and consumption concepts, electrical grid modeling, transmission line modeling, electric network power flow and stability, fault tolerance and fault recovery, economic dispatch, synchronous machines, renewable energy sources and grid interfacing.

Pre: EE 231 or via permission from instructor

Variable

EE 474 (4) Power Electronics

This course is designed to provide students with knowledge of the design and analysis of static power conversion and control systems. The course will cover the electrical characteristics and properties of power semiconductor switching devices, converter power circuit topologies, and the control techniques used in the applications of power electronic systems. Laboratories consist of computer-based modeling and simulation exercises, as well as hands-on laboratory experiments on basic converter circuits and control schemes.

Pre: EE 333

Spring

EE 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.

Pre: EE 303 and EE 332

Fall

EE 476 (3) Antennas, Propagation, & 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

Variable

EE 477W (1) Principles of Engineering Design IV

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 and Senior Standing

Spring

WI

EE 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

Variable

EE 480 (1) Integrated Circuit Fabrication Lab

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.

Pre: Concurrent with EE 475

Fall

EE 481 (1) VLSI Design Laboratory

This laboratory accompanies EE 484. The laboratory covers the basics of layout rules, chip floor planning, the structure of standard cells and hierarchical design, parasitic elements, routing, and loading. Students will learn to design and layout standard cells as well as how to use these cells to produce complex circuits. The laboratory culminates with the individual design and layout of a circuit.

Pre: Concurrent with EE 484

Spring

EE 482 (3) Electromechanics

Electrical power and magnetic circuit concepts, switch-mode converters, mechanical electromechanical energy conversion, DC motor drives, feedback controllers, AC machines and space vectors, permanent magnet AC machines and drives, induction motors and speed control of induction motors, stepper motors.

Pre: EE 230

Fall

EE 484 (3) VLSI Design

The basics of digital VLSI technology. Bipolar and MOS modeling for digital circuits. Physical transistor layout structure and IC process flow and design rules. Custom CMOS/BICMOS static and dynamic logic styles, design and analysis. Clock generation, acquisition, and synchronization procedures. Special purpose digital structures including memory, Schmitt triggers, and oscillators. Individual design projects assigned.

Pre: EE 333

Spring

EE 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 EE 363

Variable

EE 489 (4) Real-time Embedded Systems

This course introduces students the recent advances in real-time embedded systems design. Topics cover real-time scheduling approaches such as clock-driven scheduling and static and dynamic priority driven scheduling, resource handling, timing analysis, inter-task communication and synchronization, real-time operating systems (RTOS), hard and soft real-time systems, distributed real-time systems, concepts and software tools involved in the modeling, design, analysis and verification of real-time systems.

Pre: EE 107, EE 334, EE 395

Variable

EE 491 (1-4) In-Service**EE 494 (1) Global Experience in Engineering and Technology**

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

EE 497 (1-6) Internship**EE 498 (1-4) Topics**

Varied topics in Electrical and Computer Engineering. May be repeated as topics change. Prerequisite: to be determined by course topic

EE 499 (1-6) Individual Study

ELECTRONIC ENGINEERING TECHNOLOGY

Electronic Engineering Technology

College of Science, Engineering & Technology

Department of Electrical & Computer Engineering and Technology

242 Trafton Science Center N • 507-389-5747

Website: www.cset.mnsu.edu/ecet

Chair: Vincent Winstead, P.E., Ph.D

Program Coordinator: Vincent Winstead, P.E., Ph.D.

Gale Allen, Nannan He, Tom Hendrickson, Han-Way Huang, Harry Jones, Muhammad Khaliq, Julio Mandojana, Puteri Megat-Hamari, Vincent Winstead, Xuanhui Wu, Qun Zhang

Accreditation. The Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org

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 in digital and analog circuits and systems. Computers, controls/ automation, robotics, instrumentation, and communications are just a few fields open to engineering technologists.

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

The Educational Objectives for our Bachelors Degree in Electronic Engineering Technology program area:

1. Function as responsible members of society with an awareness of the social, ethical, and economic ramifications of their work.
2. Become successful practitioners in electronic engineering technology and other diverse careers.
3. Pursue continuing and life-long learning opportunities.
4. Provide necessary skills to advance technically and/or managerially
5. Provide foundational education that allows for personal growth and flexibility through their career.

Our metrics for determining success in meeting these objectives will include:

1. Assessment of societal, economic awareness, and ethical performance of our graduates by the graduate and employer.
2. Monitoring of the success of our graduates in the work force.
3. Assessment of continuing and life-long learning by the graduate (and their employer as applicable).
4. Ongoing contact with graduates to determine career paths and challenges confronted.

ELECTRONIC ENGINEERING TECHNOLOGY CONTINUED

POLICIES/INFORMATION

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.

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 Minnesota State Mankato EET coursework; and
- 3) have completed their senior design sequence (EET 461 and EET 462) at Minnesota State Mankato.

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 communication studies courses equal less than 9 credits, either an advanced communication studies 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 catalog for students transferring to Minnesota State Mankato from other schools, the electronic engineering technology 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, EET 113 and EET 114. The student may also attempt to test out of EET 114, EET 222, and EET 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.
4. Grades must be "C-" (1.67) or better for courses taken at Minnesota State Mankato.

Petition to evaluate transfer credits must occur no later than the first semester the student is enrolled in or declared a major housed in the Department of Electrical and Computer Engineering and Technology.

All international students wishing to have transfer credits granted from non-U.S. schools will be required to use the ECE evaluation service to be completed no later than first semester at Minnesota State Mankato.

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 Minnesota State Mankato or for any EET course above EET 223.

Grades must be 1.65 "C-" or better for courses taken at Minnesota State Mankato to be accepted.

ELECTRONIC ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

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

Students in this degree program must complete 21 additional general education course credit hours to meet university general education and diverse cultures requirements.

CMST	102	Public Speaking (3)
ENG	101	Composition (4)

Pre-requisites to the Major

EET	113	DC Circuits (3)
EET	114	AC Circuits (3)
EET	141	Integrated Computer Technology I (4)
EET	142	Integrated Computer Technology II (4)
EET	143	Integrated Computer Technology III (4)
EET	221	Electronic CAD (3)
EET	222	Electronics I (4)
EET	223	Electronics II (4)
EET	254	Microprocessors I (4)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)
MATH	127	Calculus II for Engineering Technology: Integration (2)
PHYS	211	Principles of Physics I (4)
PHYS	212	Principles of Physics II (4)

Major Common Core

Three (3) credits of EET 497 may be used to satisfy common core requirements.

CHEM	104	Introduction to Chemistry (3)
EET	340	Programmable Hardware Technology (4)
EET	341	Electronic Shop Practices (2)
EET	355	Electrical Power Systems (3)
EET	452	Operational Amplifier Applications (3)
EET	456	Analog Communications (4)
EET	461	Industrial Automation I (4)
EET	462	Industrial Automation II (4)
EET	484	Microprocessors II (4)
EET	497	Internship (3)
MET	427	Quality Management Systems (3)

Major Restricted Electives

(choose a minimum of 6 credits from 300-level and 400-level courses with advisor's approval.)

Major Unrestricted Electives

(choose one of the following)

STAT	154	Elementary Statistics (3)
STAT	354	Concepts of Probability and Statistics (3)

Other Graduation Requirements

EE	450	Engineering Economics (3)
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Required Minor: None.

RENEWABLE ENERGY CERTIFICATE PROGRAM

Renewable Energy certificate includes targeted courses in power systems, instrumentation and fluid power intended to supplement the contents of a technical Associate of Science (AS) degree or Technician program in Wind Turbine Technology or AS/BS degree in Renewable Energy. The certificate includes three courses for a total of nine credits.

Common Core

AET	334	Fluid Power (3)
EET	315	Programmable Instrumentation (3)
EET	355	Electrical Power Systems (3)

ELECTRONIC ENGINEERING TECHNOLOGY MINOR

Required for Minor

EET	112	Elementary Electricity and Electronics (3)
EET	113	DC Circuits (3)

EET	114	AC Circuits (3)
EET	222	Electronics I (4)

Required for Minor (Elective Options, 7-8 credits)

Digital Option

EET	254	Microprocessors I (4)
EET	141	Integrated Computer Technology I (4)

Electronics Option

EET	223	Electronics II (4)
(choose one of the following)		
EET	452	Operational Amplifier Applications (3)
EET	455	Power Electronics (3)
EET	492	Integrated Circuit Technology (4)

Networking Option

EET	254	Microprocessors I (4)
EET	430	Computer Networking I (4)

Communications Options

EET	223	Electronics II (4)
EET	456	Analog Communications (4)

Power Option

EET	223	Electronics II (4)
EET	355	Electrical Power Systems (3)

COURSE DESCRIPTIONS

EET 112 (3) Elementary Electricity and Electronics

The basic elements of electricity and electronics are explored in an internet enabled, self paced course. Laboratories make use of a Virtual Laboratory environment to provide experience with issues in wiring, power, circuits, and digital electronics.

Fall, Spring
GE-3

EET 113 (3) DC Circuits

A study of DC electrical circuits, Kirchoff's laws, series and parallel circuits, inductors, capacitors, circuit response to RL, RC and RLC circuits. Thevenin's equivalent circuit theorem, and other network analysis theorems. Use of dependent sources in DC circuits.

Pre: MATH 115, or concurrent
Fall, Spring

EET 114 (3) AC Circuits

A study of AC circuits, power, phasors, series and parallel AC networks, and network analysis theorems. Ohm's Laws and Kirchoff's Laws for AC circuits. Use of dependent sources in AC circuits.

Pre: EET 113
Fall, Spring

EET 115 (3) Understanding Computers

A self-paced, interactive, multi-media course, for nonengineering students, exploring the basics of computer hardware. The course will cover concepts behind computer design and operation, including issues such as the need for RAM, hard drive, memory, ROM, etc.

Fall, Spring
GE-13

EET 116 (3) Communications-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. 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.

Variable
GE-13

EET 117 (3) Introduction to Digital Electronics

Hands-on experiences in the use of digital integrated circuits and 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. Variable

EET 118 (3) Electricity - Generation, Usage & Green Alternatives

This course covers the development and status of electrical power as a global resource. This includes usage, generation, and impact on societies through out the world. Finally, the course will exam the many renewable generation options.

Variable
GE-3, GE-8

EET 125 (3) Perspective on Technology

Historical, cultural, ethical, philosophical, developmental, and creative aspects of engineering and technology as a discipline are explored. The course also examines concepts and events leading to important innovations of recent times; microwave ovens, FAX machines, personal computers, traffic signals, and video games. Available for general education and cultural diversity offered as self-paced online format.

Fall
GE-6, GE-8
Diverse Cultures - Purple

EET 141 (4) Integrated Computer Technology I

Digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers binary arithmetic, clock distribution, timing, TTL, CMOS, logic gates, Boolean algebra, multiplexer, counter, adder, logic simulation, C language elements, C programming techniques and use of digital test equipment. Students design and build an Arithmetic Logic Unit (ALU) from small-scale logic components and simulate each block in C.

Coreq: EET 113
Fall

EET 142 (4) Integrated Computer Technology II

Continues building digital circuit, logic, and C programming skills needed for electronic and computer engineering technology. Covers comparators, decoding, encoding, multiplexers, flip-flops, Schmitt Trigger, C functions, arrays, variables, recursive functions, structures, and strings. Students design, build and test a microprocessor using TTL gates and simulate each block in C.

Pre: EET 141
Spring

EET 143 (4) Integrated Computer Technology III

Sequential circuits, logic timing, clock distribution, counter, LED display, shift register, transceiver, 555 timer, 555 oscillator, D/A converter, RAM, ROM, mass memory, synchronous logic, asynchronous logic, microprocessor-interfacing, testability, and simulation.

Pre: EET 142
Fall

EET 221 (3) Electronic CAD

Drafting principles involving use of computer electronic CAD software in laying out block diagrams, schematic diagrams, production drawings, graphical presentation of data, and printed circuit board layout and construction.

Pre: EET 113
Fall

EET 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 113
Fall

EET 223 (4) Electronics II

An introduction to differential amplifier, linear and nonlinear operational amplifiers, power amplifiers, linear digital ICs, oscillators, power supplies, D/A, A/D conversion, four layered devices and their applications.

Pre: EET 222
Coreq: EET 114
Spring

EET 254 (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 methods, synchronous serial I/O methods, A/D conversion, and timer applications.

Pre: EET 143

Spring

EET 298 (1-4) Topics

Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.

Pre: to be determined by course topic

EET 310 (4) Programming Tools

Several programming tools and their use in creating electronic hardware systems are covered in this course. Creating special-purpose hardware using numerical analysis programs written in C. Creating hardware utilizing Visual applications written in C. Use of scripting languages in hardware applications. Using Excel for input-output functions.

Pre: EET 143, EET 222 and EET 254

EET 315 (3) Programmable Instrumentation

Instrumentation system design and integration with sensors, actuators and other electronic indicator components. Programming in a block diagram environment and with embedded C to interface different hardware components.

Pre: MATH 113 or MATH 115

Variable

EET 340 (4) Programmable Hardware Technology

Create working programmable hardware using FPGA, GAL and other logic technology. Use industry standard tools such as Verilog, Xilinx, Orcad and Multism along with development kits and extension boards to implement programmable systems. Interface LED displays, switches and I/O devices with programmable logic to create processing systems. Evolution of programmable logic and analog circuits.

Pre: EET 143

Spring

EET 341 (2) Electronic Shop Practices

An introduction to tools, equipment, materials, and techniques used in fabrication of electronic projects and printed circuit boards.

Pre: EET 142

Spring

EET 355 (3) Electrical Power Systems

Electrical power and magnetic circuit concepts, transformers, generators and motors (DC, synchronous, induction), special purpose motors, power-electronic motor drivers, prime movers/alternatives, generation, transmission/distribution, system stability/protection.

Pre: PHYS 212

Fall

EET 393 (1-4) Practicum

Elective credit for approved experience in off-campus work related to EET major. Permission required.

Fall, Spring

EET 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: EET 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

EET 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 OSI model, the TCP/IP MODEL, different network topologies and associated hardware, error detection and correction, protocols, and security.

Pre: EET 143, EET 223, EET 254

Fall

EET 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

Spring

EET 441 (4) Embedded Systems

Design and prototyping of embedded systems including both hardware and software components. A variety of hardware, software, sensors and displays will be used depending on the embedded system requirements. Issues related to hardware and software specifications will be studied as well as appropriate documentation standards.

Pre: EET 143

Spring

EET 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

Fall

EET 455 (3) Power Electronics

Use of solid-state switching devices in the conversion and control of electrical energy for low power and high power applications such as switched-mode regulated DC power supplies, motor speed control, lighting control, uninterruptible power supplies and HVDC transmission.

Pre: EET 143

Variable

EET 456 (4) Analog Communications

Communications principles and systems. Practical engineering aspects involved in modulation-demodulation, receivers, transmitters and filters. Also included are radiation and antennas, guided waves, microwaves, and microwave systems.

Pre: EET 222

Spring

EET 458 (1) Advanced Instrumentation

Experiences with electronic equipment and instrumentation including maintenance, repair, calibration, safety and component identification.

Pre: 25 hours of EET courses, or consent

Spring

EET 461 (4) Industrial Automation I

Automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PLCs, actuators, encoders, stages, motors, controllers, and drives. Students design, simulate, build, test and document automation systems for Capstone projects.

Pre: EET 223 and EET 254

Fall

EET 462 (4) Industrial Automation II

Continues building skills in automation components and subsystems involving sensors, transistors, logic, amplifiers, software, microprocessors, PLCs, actuators, encoders, stages, motors, controllers and drives. Students design, simulate, build, test and document automation systems for Capstone projects.

Pre: EET 461

Spring

EET 484 (4) Microprocessors II

A study of a high performance microprocessor architecture. Applications of a microprocessor for monitoring and controlling systems will be studied. Optimal utilization of a microprocessors resources will be stressed. PC programming in assembly and a high level language.

Pre: EET 143

Fall

EET 486 (3) Digital Communications

An overview of a communication system. Phase Shift Keying, Amplitude Shift Keying and Frequency Shift Keying. Coherent and non-coherent detection. Maximum likelihood receiver and Matched filter. Noise power, Noise figure, and Noise Temperature. Error performance in presence of noise. Linear block codes, cyclic codes and convolution codes. Spread Spectrum Techniques.

Pre: EET 142, EET 222

Variable

EET 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 223

Variable

EET 491 (1-4) In-Service**EET 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

Spring

EET 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

EET 497 (1-6) Internship

Should be taken at end of junior year. Permission required.

Pre: 40 hrs EET credits or written permission from program coordinator.

Fall, Spring

EET 498 (1-4) Topics

Varied topics in Electronic and Computer Engineering Technology. May be repeated as topics change.

Pre: to be determined by course topic

EET 499 (1-4) Individual Study

Fall, Spring

ELEMENTARY EDUCATION

Elementary Education

College of Education

Department of Educational Studies: Elementary and Early Childhood

328 Armstrong Hall • 507-389-1516

Chair: Karen Colum

Ronald Browne, Karl Matz, Lori Piowski, Maureen Prens, Steven Reuter, Elizabeth Sandell, Marsha Traynor

The Department of Education Studies: Elementary and Early Childhood has a major responsibility to provide professional education for early childhood and elementary teachers. The general goals of this program are to develop the dispositions, knowledge, and skills of candidates for licensure; to make available pre-professional field experiences in order to introduce students to the total school context; 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.

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

POLICIES/INFORMATION

Admission to the Major.

1. Completion of 30 credits.
2. Minimum grade of "B" in ENG 101 and CMST 100 or CMST 102.
3. Cumulative grade point average of 3.00 or better.

Admission to Professional Education.

1. Minimum grade of "B" (ENG 101, CMST 100 or CMST 102)
2. MATH 201; EEC 215 and EEC 222W
3. Cumulative GPA of 3.00 or higher
4. Completion of 40 credits
5. Completion of or registration for Minnesota Teacher Licensing Examination Basic Skills
6. Successful completion of Writing Lab
7. Completion of National Criminal Background Check
8. Proof of liability insurance

Admission to Blocks. Admission to Blocks is based upon an application process and is competitive based upon cumulative GPA. While in Blocks students will be monitored for:

1. Successful completion of coursework
2. Successful completion of field experiences
3. A cumulative GPA of 3.00 or higher
4. Evaluation of professional dispositions
5. Completion and validation of application materials one year prior to student teaching semester.
6. Completion of National Criminal Background Check.

Admission to Student Teaching (119 Armstrong Hall)

Director of Office of Field and International Experience: Elizabeth Finsness, Ph.D. Student teaching at Minnesota State Mankato is a results-oriented, performance based 16-week program requiring the demonstration of an acceptable level of teaching performance in the areas of planning and preparation, enhancing the learning environment, teaching for student learning, and professionalism. Multiple methods of assessment are used and evidence collected to provide a view of the teacher candidate's skills and dispositions. These methods include direct observations of teaching activities by public school and university faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in learning communities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Director of the Office of Field and International Experience requests placements for all teacher candidates in partner districts, especially our Professional Development Schools. Teacher candidates should not contact schools regarding their placement.

ELEMENTARY EDUCATION CONTINUED

Admission to the student teaching experience is contingent upon completion of:

1. Completion of all coursework in major and General Education requirements.
2. A cumulative GPA of 3.00 or higher; grades of "C" or higher in all program requirements.
3. Admittance to Professional Education.
4. Completion of all professional education course work.
5. Completion and validation of formal application materials one year prior to student teaching semester.
6. Attendance at all preliminary student teaching meeting(s).
7. Recommendation of advisor.
8. Approval of placement by school district administration, a mentor teacher, and Director of the Office of Field and International Experience, and completion of Minnesota State Police Background check materials.

Application material and specific deadline dates are available online at <http://ed.mnsu.edu/filed/studentteaching/applications.html>

The majority of Block 3 and Block 4 (Student Teaching) field experiences will be long-term placements. Long-term placements are consecutive placements during the last two semesters in one setting. These typically take place in our professional development schools.

Study abroad experiences may be available during student teaching. Selection is based on personal interview, faculty recommendation, and grade point average. Students develop interpersonal communication skills and dispositions for living in a global society. Student participating in study abroad opportunities will be required to complete course requirements in a shorter timeframe, thus long-term placements for Block 3 field experiences and student teaching will be highly recommended. Additional fees will be incurred with participation in student teaching abroad programs.

Teacher Licensure (118 Armstrong Hall)

Coordinator: Gail Orcutt.

The University recommends licensure to a state upon satisfactory completion of a licensure program. However, licensure does not occur automatically through graduation and the awarding of a diploma. Students need to make application for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to meeting all program requirements, the MTLE Basic Skills examination in reading, writing, and mathematics needs to be successfully completed, as well as the Elementary Pedagogy and Content examinations. Minnesota State Law requires that all candidates applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will also need to be completed and signed. There is a \$31 fee for the criminal background check. The fee for the issuance of a Minnesota teaching license is \$57.

GPA Policy. All coursework listed in the elementary Education degree requires a cumulative GPA of 3.00 and a grade of "C" or higher. Students must achieve at least a 3.00 GPA in Professional Education courses.

Admission to major and Professional Education is granted by the academic department.

ELEMENTARY EDUCATION BS, TEACHING

Degree completion = 120 credits

Required General Education

HIST 190-US History to 1877 is required of all Elementary Education majors beginning Fall 2014.

ART	100	Elements and Principles of Art (3)
AST	101	Introduction to Astronomy (3)
CHEM	100	Chemistry in Society (4)
EEC	222W	Human Relations in a Multicultural Society (3)
ENG	101	Composition (4)
GEOG	100	Elements of Geography (3)
GEOL	100	Our Geologic Environment (3)
HLTH	240	Drug Education (3)
MATH	201	Elements of Mathematics I (3)
THEA	101	Acting for Everyone (3)

Communication Studies (choose 1 course- 3 credits)

CMST	100	Fundamentals of Communication (3)
CMST	102	Public Speaking (3)

Major Common Core (choose 28 credits)

ART	421	Art Methods Elementary School (2)
BIOL	480	Biological Lab. Experiences for Elementary Teachers (3)
EEC	215	Introduction to Educational Psychology and Instruction for the Elementary Classroom (4)
ENG	325	Children's Literature (3)
HP	323	Elementary Physical Education Methods (2)
KSP	417	Materials for Children (3)
MATH	202	Elements of Mathematics II (3)
MATH	203	Elements of Math III (3)
MUS	340	Materials and Methods of Teaching Music (2)
PHYS	480	Lab Experience in Physical Science (3)

Block I (choose 12 credits)

EEC	321	Literacy Field Experience (1)
EEC	325	Classroom Management I (1)
EEC	355	Assessment in the Elementary School (3)
EEC	412	Kindergarten Methods and Materials (3)
EEC	422	Reading Fundamentals (4)

Block II (choose 15 credits)

EEC	320	Social Studies in Elementary School (3)
EEC	322	Science/Health in the Elementary School (3)
EEC	323	Block 2 Field Experience (1)
EEC	324	Teaching Elementary School Mathematics (3)
EEC	326	Classroom Management II (1)
EEC	334	Reading and Language Arts Methods (4)

Block III (choose 12 credits)

EEC	421	Reading Interventions (4)
EEC	423	Field Experience in Reading (1)
EEC	424	Special Education and Behavioral Needs in Elementary Education (3)
ENG	491	Teaching English Language Learners in the Mainstream Classroom (4)

Block IV (choose 12 credits)

EEC	473	Student Teaching Elementary (12)
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FIELD EXPERIENCES. A major component of professional education coursework involves field experiences in area schools. These experiences are sequential in development, time commitment, and skills practice. Field experiences are required for EEC 215 and EEC 222W. During blocks students will have extensive field experience, Monday through Friday. Multiple methods of assessment are used to document competencies. These methods include direct observations of teaching activities by public school and University faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in on-line activities, and participation in activities reflective of the professional responsibilities of teachers. The successful completion of each clinical experience is necessary for progression in the program. All field placements are initiated by the Office of Field Experience.

Background Checks. All field placements are initiated by the Office of Field Experience. Students involved in any field experience need to undergo a national criminal background check prior to admittance to professional education and prior to student teaching. Students are responsible for the fees associated with the background checks. This information is provided to districts for their determination of suitability for placement. The Office of Field Experience coordinates the background check process.

Middle School Math Minor

Minor Core

EEC	342	Teaching Science, Technology and Social Studies in the Middle School (2)
EEC	410	Philosophy & Practices in the Middle School (3)
EEC	428	Teaching Reading and Writing in the Content Areas (3)
EEC	494	Student Teaching Middle School (4)
MATH	112	College Algebra (4)
MATH	181	Intuitive Calculus (3)
MATH	203	Elements of Math III (3)
STAT	154	Elementary Statistics (3)

Middle School Science Minor**Minor Core**

AST	101	Introduction to Astronomy (3)
BIOL	100	Our Natural World (4)
CHEM	201	General Chemistry I (5)
EEC	342	Teaching Science, Technology and Social Studies in the Middle School (2)
EEC	410	Philosophy & Practices in the Middle School (3)
EEC	428	Teaching Reading and Writing in the Content Areas (3)
EEC	494	Student Teaching Middle School (4)
GEOL	121	Physical Geology (4)
GEOL	310	Earth and Space Systems (3)

Middle School Communication Arts & Literature Minor**Minor Core**

EEC	410	Philosophy & Practices in the Middle School (3)
EEC	428	Teaching Reading and Writing in the Content Areas (3)
EEC	494	Student Teaching Middle School (4)
ENG	242W	Introduction To Creative Writing (4)
ENG	285	Practical Grammar (2)
ENG	425	Topics in Children's Literature (2-4)
ENG	464	Teaching Literature in the Middle School (3)

Modern Language: French (15 credits)**Pre-requisites:**

1. FREN 101, FREN 102, FREN 201, FREN 202 or equivalent. Students may demonstrate their language proficiency level through coursework or through credit by examination. Credit by examination for FREN 101, FREN 102, FREN 201, and FREN 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 WLC 462 and WLC 463. Contact the Department of World Languages & Cultures or a member of the French faculty for details.

Required Language Courses (11-12 credits)

Language credits may be completed on the Minnesota State Mankato campus or, in part, while on the Minnesota State Mankato program in La Rochelle, France.

Minnesota State Mankato Campus

FREN	302W	Composition (2-4)
FREN	305	France Today (1-4) OR
FREN	402	French Civilization (3-4)
FREN	323	French Phonetics and Applied Linguistics (2-4)
FREN	366	Oral Communication (1-3)

Minnesota State Mankato in La Rochelle, France

FREN	315	Composition (1-3)
FREN	316	Conversation (1-3)
FREN	317	Modern France (1-3)

Required Methods (4 credits)

WLC	462	FLES Methods (3)
WLC	463	Applied FLES Methods (1)

offered on Minnesota State Mankato campus only.

Required Cultural Experience. Students must demonstrate that they have had firsthand experience with the culture(s) represented by the French language. The La Rochelle program provides students with this firsthand experience. When study-abroad is not possible for students, Elementary Education students will need to conduct their practicum in a school setting and interact with a community that has a significant number of French speakers.

Students who complete the "Specialization" meet the MN BOT requirements for World Language Teachers in French at the K-8 level.

Modern Language: German (15 credits)**Pre-requisites:**

1. GER 101, GER 102, GER 201, GER 202 or equivalent. Students may demonstrate their language proficiency level through coursework or through credit by examination. Credit by exam for GER 101, GER

102, GER 201, GER 202 can be arranged with 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 WLC 462 and WLC 463. Contact the Department of World Languages & Cultures for details at 507-389-2116.

Required Language Courses (11-12 credits)

Language credit may be completed on Minnesota State Mankato campus or may be transferred from a study abroad experience with prior approval by the German program. The following courses are offered on the Minnesota State Mankato campus.

GER	340	Topics in Language (1-4 credits)
GER	341	Composition and Conversation (4 credits)
GER	343	German Civilization (1-4 credits) or study abroad 300-level or above

Required Methods

WLC	462	FLES Methods (3)
WLC	463	Applied FLES Methods (1)

offered on Minnesota State Mankato campus only.
OPI in German of Intermediate-Mid, required.
Students who complete the "Specialization" meet the MN BOT requirements for World Language Teachers in German at the K-8 level.

Modern Language: Spanish (15 credits)**Pre-requisites:**

1. SPAN 101, SPAN 102, SPAN 201, SPAN 202, or equivalent. Students may demonstrate their language proficiency level through course work or through credit by examination. Credit by exam for SPAN 101, SPAN 102, SPAN 201, SPAN 202 is conducted one time each Fall and Spring semester. Contact the Department of World Languages & Cultures 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 WLC 462 and WLC 463. Contact the Department of World Languages & Cultures for details at 507-389-2116.

Required Language Courses (11-12 credits)

(Language credits may be completed on Minnesota State Mankato campus or while on Minnesota State Mankato program in Mexico).

Minnesota State Mankato Campus

SPAN	310	Advanced Conversation and Composition (1-4)
SPAN	356	Latin American Civilization (4)
SPAN	365	Selected Readings (1-4)

Minnesota State Mankato in Mexico campus

SPAN	394	Supervised Study in Mexico: Advanced Spanish (1-6)
SPAN	494	Supervised Study in Mexico: Themes in Hispanic Culture (1-6)
SPAN	494	Supervised Study in Mexico: Themes in Spanish American Literature (1-6)

Required Methods

WLC	462	FLES Methods (3)
WLC	463	Applied FLES Methods (1)

offered on Minnesota State Mankato campus only.

Required Cultural Experience. Students must demonstrate that they have had firsthand experience with the culture(s) represented by the Spanish language. Study abroad provides students with this firsthand experience. When study-abroad is not possible for the student, Elementary and Early Childhood students will need to conduct their practicum in a school setting **and** interact with a community that has a significant number of heritage Spanish speakers.

Students who complete the "Specialization" meet the MN BOT requirements for World Language Teachers in Spanish at the K-8 level.

Elementary Education STEM Certificate

The Elementary Education STEM Certificate will provide teacher candidates with preparation needed to become effective STEM teachers.

ELEMENTARY EDUCATION CONTINUED

Major Emphasis: Elementary Education STEM Certificate

BIOL 480	Biological Laboratory Experiences for Elementary Teachers (3)
EEC 280	Engineering for Elementary Teachers (3)
EEC 344	Educational Technology-STEM (3)
EEC 360	Special Topics: STEM for Elementary Teachers (1)
EEC 408	Integrating Science, Technology, Engineering, and Math for Elementary Teachers (3)
EEC 429	Field Experience in Reading and STEM (1)
MATH 203	Elements of Math III (3)
PHYS 480	Lab Experiences in Physical Science (3)

COURSE DESCRIPTIONS

ELEMENTARY EDUCATION

EEC 092 (2) Reading Strategies

This course is designed to assist students in the development of specific reading strategies necessary for success with the literacy demands of the university classroom and beyond.

Fall, Spring

EEC 200 (3) Early Clinical Experience: Elementary School

A first course for elementary education majors. Experience in elementary classrooms, understanding children as learners, levels of instruction, general methods, and the teaching role.

Fall, Spring

EEC 205 (3) Service Learning: Society and the Environment

Community-based field experience to increase understanding for elementary education teachers about today's complex environmental challenges. Students examine the interrelatedness of human society and the natural environment through a service learning experience at an area public school.

GE-10

EEC 210 (1-4) Seminar

An early course for elementary education majors. Exploration of the career field, introduction to the role of standards in education, overview of general methodology for the elementary classroom.

Variable

EEC 215 (4) Introduction to Educational Psychology and Instruction in the Elementary

This course provides students opportunities to: 1, understand the theories and contributions of major educational psychologist and theorists; 2, develop and demonstrate skills in educational technologies; 3, develop context for the knowledge and skills described above through activities/field experience.

Fall, Spring

EEC 220 (1-4) Field Study

This experience is designed jointly between student, advisor and a classroom teacher for the student to gain insight into the workings of the elementary classroom.

Variable

EEC 222W (3) Human Relations in a Multicultural Society

Study of interpersonal skills, motivation and group skills. Applied to educational settings. Meets State of Minnesota human relations requirement for teacher licensure.

Fall, Spring

WI, GE-7, GE-11

Diverse Cultures - Gold

EEC 225 (2) Technology Applications in Education

Provides the necessary knowledge base and instructional applications for using technology in the classroom.

EEC 230 (1-4) Individual Study

An experience/project designed by the student and advisor to provide for further study of a topic or component within the realm of elementary education. Could be exploratory in nature.

Variable

EEC 235 (1-4) Independent Study

Student directed learning; project jointly determined between student and advisor.

Variable

EEC 240 (1-4) Research

An opportunity to truly research an area within elementary education to provide a more in depth understanding.

Variable

EEC 250 (1-4) Internship

An opportunity to work in an elementary classroom under the direction of the classroom teacher.

Variable

EEC 280 (3) Engineering for Elementary Teachers

This course provides hands-on experiences through which students learn the basics of engineering. Topics include the engineering design process, reverse engineering, and engineering fields/professions. The course focuses on the engineering strand of the K-6 Minnesota State Science Standards.

Summer

EEC 300 (1-4) Seminar: Children's Literature

Introduction to children's literature, both current and classic works. Exploration of authors, genres, and illustrations. Selection, evaluation, and use with K-6 children.

Variable

EEC 301 (1-2) September School Experience

EEC 302 (1) Extended School Experience

Individually-designed field experience in an elementary education classroom. Variable credits for 30 hours of practical experience in consultation with academic advisor and cooperating classroom teachers.

EEC 303 (1) Classroom Methods

Presentation and experience of creative, active learning methods for teaching in the elementary education classroom.

EEC 310 (1-4) Individual Studies: Health for Elementary Teachers

The course is designed to prepare the elementary classroom teacher with methods and materials for teaching health.

Variable

EEC 315 (1-4) Individual Study: Drug/Alcohol Education

This is a course jointly designed by the student and advisor to address the State of Minnesota requirements concerning drug/alcohol education for licensure.

Variable

EEC 316 (1-4) Field Study: Math for Elementary Students

The purpose of this course is to prepare elementary level mathematics teachers to use appropriate content, materials, and methods in teaching.

Variable

EEC 317 (1-4) Field Study: Math Grades 1-6

This course is designed to provide students with the necessary math content for successful math instruction in the elementary classroom.

Variable

EEC 318 (1-4) Field Studies: Math Grades 7-8

This course is designed to provide math content to assist the middle school level math educator.

Variable

EEC 320 (3) Social Studies in Elementary School

Selection and organization of content, materials, activities, and procedures for the elementary classroom.

Pre: Admission to Professional Education, EEC 333

Coreq: EEC 321, EEC 334, EEC 335, EEC 355

Fall, Spring

EEC 321 (1) Literacy Field Experience

Experiences in elementary classrooms.

Coreq: EEC 320, EEC 334, EEC 355

Fall, Spring

EEC 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: EEC 333

Coreq: EEC 323, EEC 324, EEC 407, EEC 421, EEC 444

Fall, Spring

EEC 323 (1) Block 2 Field Experience

Science/health/math experience in elementary classrooms.

Coreq: EEC 322, EEC 324, EEC 407, EEC 421, EEC 444

Fall, Spring

EEC 324 (3) Teaching Elementary School Mathematics

To prepare elementary level mathematics teachers to use appropriate content, materials and methods in teaching.

Pre: EEC 320, EEC 333

Coreq: EEC 322, EEC 323, EEC 407, EEC 421

Fall, Spring

EEC 325 (1) Classroom Management I

Basic methods and approaches for organizing the classroom for instruction and for addressing minor misbehaviors.

Fall, Spring

EEC 330 (1-4) Individual Study: Social Studies in the Elementary School

This course is designed to prepare the elementary classroom teacher to select and organize content, materials, activities, procedures for effective instruction in the area of social studies.

Variable

EEC 331 (1-4) Individual Study: History for Elementary Teachers

This course is designed to prepare the elementary classroom teacher with the necessary content to teach American History.

Variable

EEC 332 (2) Developmental Reading

Principles and organization of the reading program. Instructional materials and procedures. This course does not meet requirement for elementary education.

Fall

EEC 333 (2) Classroom Learning Theory

Focus on principles of psychology and techniques of learning--behavioristic, cognitive, and humanistic.

Fall, Spring

EEC 334 (4) Reading and Language Arts Methods

Curriculum and methods for teaching literacy in elementary schools, K-6.

Pre: EEC 333

Coreq: EEC 320, EEC 321, EEC 355

Fall, Spring

EEC 336 (1-4) Individual Study: Geography for Elementary Teachers

This course is designed to prepare students with the necessary content knowledge to teach geography in the elementary classroom.

Variable

EEC 340 (1-4) Research: Science Elementary Teaching

This course is designed to prepare the elementary classroom teacher to use appropriate content, materials, and methods in teaching.

Variable

EEC 341 (1-4) Experiences in Biology for Elementary Teachers

This course is designed to provide students with a variety of experiences within the biological science realm to apply in the elementary classroom.

Pre: BIOL 100

Variable

EEC 342 (2) Teaching Science, Technology and Social Studies in the Middle School

Project-based interdisciplinary instruction, infusing technology in middle school mathematics, social studies, and science classrooms.

Fall, Spring

EEC 343 (1-4) Experiences in Physics for Elementary Teachers

This course is designed to provide the student with a variety of experiences within the physical science realm to apply in the elementary classroom.

Pre: PHYS 101

Variable

EEC 344 (3) Educational Technology-STEM

Elementary education teacher candidates will study the technology skills needed in order to become effective STEM teachers.

Variable

EEC 350 (1-4) Internship: Trends/Issues in Education

An opportunity to explore in an extended manner many of the current trends and issues within the elementary school setting to gain a more in-depth understanding.

Variable

EEC 352 (2) Reading in the Middle School

Development and definition of literacy in the middle school.

Pre: EEC 333

Variable

EEC 355 (3) Assessment in the Elementary School

Students will develop the knowledge they need to understand the difference between assessment and evaluation; what validity, reliability and bias mean; the uses, advantages and limitations of different types of assessments and how to interpret their results. Students will also design assessments and scoring instruments.

Pre: EEC 333

Coreq: EEC 320, EEC 321, EEC 334, EEC 355

Fall, Spring

EEC 360 (1) Special Topics: STEM for Elementary Teachers

This course provides students with familiarity in regard to emerging topics of importance in elementary STEM education.

Variable

EEC 368 (4) Preprimary Methods and Materials

Instructional strategies, theories of curriculum and development, integrated curriculum for 3, 4, and 5 year olds.

Coreq: EEC 369

Fall, Spring

EEC 369 (1) Preprimary Field Experience

Clinical experience to accompany EEC 368.

Coreq: EEC 368

Fall, Spring

EEC 400 (1-4) Seminar: Music Fundamentals

To provide the background content necessary for the elementary classroom teacher.

Variable

EEC 401 (1-4) Seminar: Music Elementary Teaching

To provide the methods and materials necessary to teach music in the elementary classroom.

EEC 402 (3) Introduction to Teaching the LEP Student

For teachers of students whose dominant language is other than English.

Variable

EEC 405 (1-4) Individual Studies: Art for Elementary Teachers

This course is designed to provide necessary methods and materials for use in teaching art in the elementary classroom.

Variable

ELEMENTARY EDUCATION CONTINUED

EEC 408 (3) Integrating Science, Technology, Engineering, and Math for Elementary Teachers

In this pedagogy course, elementary teachers will learn to integrate the four disciplines of STEM: science, technology, engineering, and math.

Pre: EEC 280

Variable

EEC 410 (3) Philosophy & Practices in the Middle School

The middle school concept, curriculum, and teaching methods.

Pre: EEC 333

Fall, Spring

EEC 412 (3) Kindergarten Methods and Materials

Instructional strategies, theories of curriculum and development, integrated curriculum for kindergarten children.

Coreq: EEC 413 for early childhood education major only.

Fall, Spring

EEC 413 (1) Kindergarten Methods and Materials: Lab

Clinical experience to accompany EEC 412.

Coreq: EEC 413 for early childhood education majors only.

Fall

EEC 414 (2-4) Diagnosis and Corrective Instruction in Elementary Mathematics

Diagnostic teaching, evaluating deficiencies, skill analysis, use of case studies and tools of diagnosis.

Pre: EEC 324

Variable

EEC 415 (1-4) Field Study: Physical Education for Elementary Teachers

This course is designed to prepare the elementary classroom teacher with methods and materials for teaching physical education.

Variable

EEC 417 (3) Teaching Reading to ESL Students

This course presents the theoretical base for the reading process, strategies for vocabulary development, and methods for content area learning as applied to second language learners.

Spring

EEC 418 (2) Elementary School Science Activities

Identification of appropriate science equipment, process skills, concepts and instructional attitudes for science in the elementary school.

Pre: EEC 322

Variable

EEC 420 (3) Reading Difficulties

Foundation level of knowledge concerning the characteristics, causes, diagnosis and treatment of reading difficulties.

Pre: EEC 332 or EEC 334

Variable

EEC 421 (4) Reading 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.

Coreq: EEC 322, EEC 323, EEC 324, EEC 407, EEC 444

Fall, Spring

EEC 422 (4) Reading Fundamentals

This course explores young children's (birth to age 8) development of emergent literacy skills related to reading, writing, visual representation, speaking, listening, and viewing. The role of parents and early childhood learning environments are included. Observation, assessment, and strategies to promote emergent literacy are discussed. The use of appropriate children's literature is promoted.

Fall, Spring

EEC 423 (1) Field Experience in Reading

A field experience focused on diagnosis and remediation of the struggling reader.

Fall, Spring

EEC 424 (3) Special Education and Behavioral Needs in Elementary Education

Provides elementary education majors with information about special needs students in the regular classroom. Includes strategies for effectively teaching and managing behavior of these students.

Fall, Spring

EEC 425 (1-4) Individual Study: Reading for Elementary

This course is designed to prepare the elementary classroom teacher with the methods and materials for teaching reading to the K-6 student.

Variable

EEC 426 (1-4) Research: Utilizing Media for Teaching

This course is designed to prepare the elementary classroom teacher to use media effectively for instruction.

Variable

EEC 428 (3) Teaching Reading and Writing in the Content Areas

Presents strategies for teaching reading and writing knowledge, attitudes and skills in the various teaching content areas.

Fall

EEC 429 (1) Field Experience in Reading and STEM

Field experience focusing on the struggling reader and instruction in an integrated approach to teaching science, technology, engineering, and math (STEM).

Fall, Spring

Coreq: EEC 421, EEC 424, EEC 491

EEC 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

Variable

EEC 443 (1) Primary Grade Mathematics and Science Lab

Clinical field experience to accompany EEC 442. Students will observe and teach primary age children. Requires 30 contact hours in an primary grade classroom. Students will plan and implement developmentally appropriate activities/lessons related to math, science, and social studies.

Coreq: EEC 440, EEC 441, EEC 442

Fall

EEC 450 (1-14) Internship: Elementary Student Teaching

Student teaching in the elementary school. Includes weekly seminar.

Variable

EEC 451 (2) Middle School Experience

Middle school visitations, observations, participation; understanding characteristics of students.

Variable

EEC 471 (6) Kindergarten Student Teaching and Seminar

Full responsibility of classroom with university supervision.

Pre: EEC 370 and EEC 473, and admission to student teaching

Fall, Spring

EEC 472 (11) Student Teaching: Moderately/Severely Mentally Handicapped

Student teaching in special education. (TMH)

Pre: Special Ed. Methods

Fall, Spring

EEC 473 (12) Student Teaching Elementary

Student teaching in the elementary school. Includes weekly seminar.

Pre: Methods Courses; admission to student teaching.

Coreq: EEC 466, EEC 494

Fall, Spring

EEC 478 (5) Supplementary Student Teaching Elementary

Student teaching in the elementary school including weekly seminar for K-12 majors.
Pre: Admission to student teaching.
Coreq: EEC 476 and KSP 475
Fall, Spring

EEC 479 (11) Student Teaching Mildly/Moderately Mentally Handicapped

Student teaching in special education. (EMH)
Pre: Admission to student teaching
Fall, Spring

EEC 483 (2) Supervision of Student Teachers

Assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers.
Variable

EEC 490 (1-3) Workshop

The workshop format provides teachers and others opportunity to study a specific topic in a shortened, hands-on course.
Variable

EEC 491 (1-4) In-Service

Variable

EEC 493 (5) Student Teaching Middle School

Student teaching in a content area for a full-day, half-semester, in a middle school setting. For elementary students student teaching in middle school.

EEC 494 (4) 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: EEC 473
Fall, Spring

EEC 495 (2-4) Internship: Early Childhood Family Education

Principles and practices in Early Childhood/Family Education and programs. On-site experiences are required.
Pre: FCS 483, FCS 488
Variable

EEC 496 (3-6) Internship

Provides clinical experiences for pre-service teachers; extends laboratory experiences for those who have completed pre-student teaching experiences.
Pre: Required methods
Variable

EEC 497 (3-6) Reading Internship

Student directed learning; project determined jointly between student and advisor.
Pre: EEC 332 or EEC 334, EEC 420, EEC 422 or EEC 428
Variable

EEC 499 (1-4) Individual Study

By contract between student and faculty member.
Variable

English

College of Arts & Humanities

Department of English

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Website: www.english.mnsu.edu

Chair: Matthew Sewell

Jacqueline Arnold, Edward Avila, John Banschbach, Robin Becker, Candace Black, Heather Camp, Donna Casella, Kirsti Cole, Nancy Drescher, Danielle Haque, Sara Henderson Lee, Geoff Herbach, Diana Joseph, Karen Lybeck, Nancy MacKenzie, Lindsay Mason, Roland Nord, Glen Poupore, Melissa Purdue, Richard Robbins, Steven Rybin, Matthew Sewell, Roger Sheffer, Stephen Stoyhoff, Richard Terrill, Lee Tesdell, Jennifer Veltsos, Gwen Westerman, Elizabeth Williamsen

The Department of English prepares students to study, understand, and use the English language in order to

- communicate through written composition
- comprehend and create written texts
- gain a critical and analytical understanding of texts
- prepare for careers in teaching, writing, editing, publishing, and other professions that value such knowledge and skills.

The department's goals are:

1. offering quality undergraduate education in creative writing, English education, film, linguistics, literature, and technical communication;
2. offering general education and service courses that foster effective reading, writing, speaking, and critical thinking, that promote an understanding of literature and film, and that promote an appreciation for the variety of cultures within our country and throughout the world;
3. contributing to students' education in writing and teaching by means of instruction in the effective use of communication technologies.

The department's undergraduate programs prepare graduates for a wide variety

of careers, including middle and high school English teaching, free-lance writing, literary publishing and editing, and technical and professional writing, publishing, and editing. Some English majors choose to go on for master's or doctoral degrees that will qualify them to teach at the college level. Others find careers in a wide range of fields in business, government, and nonprofit organizations. Still others find that their English degrees are ideal gateways into training for professions such as law.

POLICIES/INFORMATION

Admission to Major is granted by the department. ENG 101: Composition must be completed before admission to the major.

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.

Supporting Coursework. Since the different programs in English complement a wide range of different fields of study, English majors should consult regularly with their faculty advisors regarding choice of a minor and other elective courses beyond the major or minor. In consultation with faculty advisors, students may choose a second major instead of a minor.

English Majors and Minors. Students majoring in English may also elect one of the following minors: film studies, linguistics, and technical communication. However, a course used to meet the requirements of an English major, minor, or certificate cannot also be used to meet the requirements of another English major, minor, or certificate. Consequently, because the technical communications programs share so many required courses, students may elect only one of them: BA English Studies Technical Communications Emphasis, BS English Technical Communications Option, the Certificate in Technical Communications, or the Technical Communications Minor.

ENGLISH BA Program Options

Degree completion = 120 credits

Required for Bachelor of Arts (BA) degree: Language (8 credits)

Choose Creative Writing, English Studies or Literature Option

1. **Creative Writing Option**
2. **English Studies Option**
3. **Literature Option**

1. CREATIVE WRITING BA OPTION**Major Common Core**

ENG 275W Introduction to Literary Studies (4)

British Survey (choose 4 credits)

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785 to Present (4)

American Survey (choose 4 credits)

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to Present (4)

Major Authors (choose 4 credits)

ENG 403 must focus on three or fewer authors. Some sections of ENG 449 may be acceptable for this requirement. See program director.

ENG 403 Selected Authors (2-4)

ENG 405 Shakespeare: Comedies and Histories (2)

ENG 406 Shakespeare: Tragedies (2)

ENG 449 Topics in Creative Writing Form and Technique (2-4)

Theory and Criticism, or Linguistics (choose 4 credits)

ENG 381 Introduction to English Linguistics (4)

FILM 416 Film Theory and Criticism (4)

ENG 441 Literary Theory and Criticism (4)

ENG 481 History of the English Language (4)

ENG 482 English Structures and Pedagogical Grammar (4)

Major Emphasis: Required Creative Writing Courses

ENG 448 Contemporary Writers (4)

Form and Technique (choose 4 credits)

ENG 340 Form and Technique in Prose (4)

ENG 341 Form and Technique in Poetry (4)

Genre (choose 12 credits)

Choose two in a primary genre (poetry or prose) and one in a secondary genre (poetry or prose)

ENG 342 Beginning Creative Nonfiction Workshop (4)

ENG 343 Beginning Fiction Workshop (4)

ENG 344 Beginning Poetry Workshop (4)

ENG 442 Advanced Creative Nonfiction Workshop (4)

ENG 443 Advanced Fiction Workshop (4)

ENG 444 Advanced Poetry Workshop (4)

ENG 445 Advanced Critical Writing Workshop (4)

ENG 446 Screenwriting Workshop (4)

ENG 494 English Workshop (selected sections, 1-6)

Other Graduation Requirements - Language (8 credits)**Required Minor: Yes. See faculty advisor.****2. ENGLISH STUDIES BA OPTION****Major Common Core**

48 total credits required for this degree. If you select 4 credits in the Foundation Category, you must select 40 credits in the Content Areas Category.

ENG 275W Introduction to Literary Studies (4)

Major Restricted Electives**FOUNDATION** (choose 4-8 credits total in the Foundation Category)Creative Writing and Linguistics (choose 0-8 credits)

ENG 242W Introduction to Creative Writing (4)

ENG 381 Introduction to English Linguistics (4)

Technical Communication (choose 0-4 credits)

ENG 271W Technical Communication (4)

ENG 272W Business Communication (4)

CONTENT AREAS

Choose 36-40 credits total in the Content Areas Category (Literature Surveys, Content-Area Electives, and General Electives).

Literature Surveys (choose 8-12 credits)

ENG 320 British Literature to 1785 (4)

ENG 321 British Literature: 1785-Present (4)

ENG 327 American Literature to 1865 (4)

ENG 328 American Literature: 1865 to the Present (4)

ENG 433 Selected Studies in World Literature (4)

Content-Area Electives (choose 8-12 credits)

ENG 340 Form and Technique in Prose (4)

ENG 341 Form and Technique in Poetry (4)

ENG 342 Beginning Creative Nonfiction Workshop (4)

ENG 343 Beginning Fiction Workshop (4)

ENG 344 Beginning Poetry Workshop (4)

ENG 381 Introduction to English Linguistics (4)

ENG 474W Research and Writing Technical Reports (4)

ENG 475 Editing Technical Publications (4)

ENG 476 Online Documentation (4)

ENG 477W Technical Documentation, Policies, and Procedures (4)

ENG 482 English Structure and Pedagogical Grammar (4)

ENG 484 Pedagogical Grammar and Academic English (4)

ENG 485 Language and Culture in TESL (4)

ENG 486 Theories of Teaching ESL (4)

Major Unrestricted Electives

General Electives (choose 12-24 credits)

Courses may not be double-counted from other categories

ENG 300 - ENG 499 Selected in consultation with an advisor.

FILM 300 - FILM 499 Selected in consultation with an advisor.

Other Graduation Requirements**Required for Bachelor of Arts (BA) degree:** Language (8 credits)

48 total credits required for this degree.

Required Minor: None.**3. ENGLISH LITERATURE BA OPTION****Major Common Core**

ENG 275W Introduction to Literary Studies (4)

Major Restricted ElectivesSurveys (choose 12-16 credits)

Must include at least one British and one American literature course.

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 Present (4)

ENG 433 Selected Studies in World Literature (4)

Theory (choose 4 credits)

FILM 416 Film Theory and Criticism (4)

ENG 441 Literary Theory and Criticism (4)

Shakespeare (choose 2 credits)

ENG 405 Shakespeare: Comedies and Histories (2)

ENG 406 Shakespeare: Tragedies (2)

Cultural Diversity (choose 2-4 credits)

ENG 318 Multicultural Literature (2-4)

ENG 436 Native American Literature (2-4)

ENG 438 African American Literature (2-4)

Electives (10-16 credits). Choose from any 300- or 400-level literature or linguistics course in consultation with an advisor.

ENG 300 - ENG 400

Required for Bachelor of Arts (BA) degree: Language (8 credits)**Required Minor: Yes. See faculty advisor.**

BFA CREATIVE WRITING**Major Common Core**

ENG 275W	Introduction to Literary Studies (4)
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 Present (4)
ENG 340	Form and Technique in Prose (4)
ENG 341	Form and Technique in Poetry (4)
ENG 405	Shakespeare: Comedies and Histories (2)
ENG 406	Shakespeare: Tragedies (2)
ENG 448	Contemporary Writers (4)

Major Restricted Electives

(choose 4 credits)

ENG 433	Selected Studies in World Literature (4)
ENG 435	The World Novel (2-4)

(choose 4 credits)

Emphasis must be on three or fewer authors

ENG 403	Selected Authors (4)
ENG 449	Topics in Creative Writing Form and Technique (2-4)

(choose 4 credits)

ENG 381	Introduction to English Linguistics (4)
FILM 416	Film Theory and Criticism (4)
ENG 441	Literary Theory and Criticism (4)
ENG 481	History of the English Language (4)
ENG 482	English Structure and Pedagogical Grammar (4)
ENG 485	Language and Culture in TESL (4)

(choose 4 credits)

Must be literature, theory, or linguistics course

ENG 300- ENG 499

(choose 12 credits)

ENG 344 or ENG 444 cannot be double-counted

ENG 342	Beginning Creative Nonfiction Workshop (4)
ENG 343	Beginning Fiction Workshop (4)
ENG 344	Beginning Poetry Workshop (4)
ENG 442	Advanced Creative Nonfiction Workshop (4)
ENG 443	Advanced Fiction Workshop (4)
ENG 444	Advanced Poetry Workshop (4)
ENG 446	Screenwriting Workshop (4)

(choose 4 credits)

ENG 344 or ENG 444 cannot be double-counted

ENG 344	Beginning Poetry Workshop (4)
ENG 444	Advanced Poetry Workshop (4)

Other Graduation Requirements**Required for Bachelor of Arts (BA) degree:** Language (8 credits)**Required Minor:** None.**ENGLISH BS PROGRAM OPTIONS**

Degree completion = 120 credits

Choose Communication Arts and Literature or Technical Communication option.

1. Communication Arts and Literature Education
2. Technical Communication

1. COMMUNICATION ARTS AND LITERATURE EDUCATION BS**Required General Education**

CMST 102	Public Speaking (3)
CMST 310	Performance of Literature (4)
HLTH 240	Drug Education (3)
KSP 220W	Human Relations in a Multicultural Society (3)
MASS 110	Introduction to Mass Media (4)

Literature, Humanities, Film (choose 4 credits)

Choose one course in literature, or in humanities, or in film from the following list.

ENG 110	Introduction to Literature (4)
ENG 112W	Introduction to Poetry and Drama (4)

ENG 113W	Introduction to Prose Literature (4)
ENG 118	Diverse Cultures in Literature and Film (4)
ENG 125	International Children's Literature (4)
ENG 146	Introduction to Shakespeare (4)
ENG 211W	Perspectives in Literature and Human Diversity (4)
ENG 212W	Perspectives in World Literature (4)
ENG 213W	Perspectives: Ethics and Civic Responsibility in Literature (4)
ENG 215	Topics in Literature (2-4)
ENG 242W	Introduction To Creative Writing (4)

Any 100-200 Film course. Any 100-200 Humanities course.

Major Common Core

Only two credits of CMST 201 are required. Total Major Common Core credits: 38. Total Major Restricted Elective credits: 9. Total credits in program: 47.

CMST 101W	Interpersonal Communication (4)
CMST 201	Small Group Communication (2-4)
CMST 215	Effective Listening (2)
CMST 420	Methods: Teaching Communication Arts (2)
CMST 425	Methods: Directing and Coaching Forensics (2)
ENG 275W	Introduction to Literary Studies (4)
ENG 285	Practical Grammar (2)
ENG 327	American Literature to 1865 (4)
ENG 328	American Literature: 1865 to the Present (4)
ENG 361	Teaching Literature, Grades 5-12 (4)
ENG 362	Teaching English, Writing, Grades 5-12 (4)
ENG 381	Introduction to English Linguistics (4)

Major Restricted Electives*British Literature* (choose 4 credits)

ENG 320	British Literature to 1785 (4)
ENG 321	British Literature: 1785-Present (4)

World Literature (choose 2 credits)

Only two credits of world literature are required.

ENG 433	Selected Studies in World Literature (4)
ENG 435	The World Novel (2-4)
ENG 461	World Literature for Children and Young Adults (2-4)

Young Adult Literature (choose 3 credits)

Only three credits of young adult literature are required.

ENG 463	Adolescent Literature (3)
ENG 464	Teaching Literature in the Middle School (3)

Other Graduation Requirements

See the Secondary 5-12 & K-12 Professional Education section of the bulletin for admission requirements for professional education and for a list of required professional education courses. Students will take two credits of general electives to meet the 120-credit degree requirement.

Required Minor: None.**2. TECHNICAL COMMUNICATION BS OPTION****Major Common Core****Required Introductory Course** (choose 4 credits)

ENG 271W	Technical Communication (4)
ENG 272W	Business Communication (4)

Required Courses

ENG 474W	Research and Writing Technical Reports (4)
ENG 475W	Editing Technical Publications (4)
ENG 498W	Internship (3-4)
Documentation (choose 4 credits)	
ENG 476	Online Documentation (4)
ENG 477W	Technical Documentation, Policies, and Procedures (4)

Major Restricted Electives (18-19 credits)

Major Common Core and Electives must total 37 credits.

ENG 462	Document Design (4)
ENG 466	Usability (4)
ENG 467	International Technical Communications (1-4)
ENG 469	Project Management in Technical Communication (4)

ENGLISH CONTINUED

ENG 471	Visual Technical Communication (4)
ENG 472	Topics in Technical Communication (1-4)
ENG 473	Desktop Publishing (4)
ENG 474W	Research and Writing Technical Reports (4)
ENG 476	Online Documentation (4)
ENG 477W	Technical Documentation, Policies, and Procedures (4)
ENG 478	Technical and Scientific Literature (4)
ENG 479	Rhetorical Theory Applied to Technical Documents (4)
ENG 480	Proposals (4)
ENG 494	English Workshop (selected sections, 1-6)

Other Graduation Requirements. English Department policy does not permit double-counting of courses for any English major or minor.

Minor. Choose a technical minor from the list below: Automotive Engineering Technology, Civil Engineering, Electronic Engineering Technology, Manufacturing Engineering Technology, Biology, Chemistry, Community Health, Computer Information Science, Computer Technology, Environmental Science, Geography, Geology, Math, Physics, Psychology, or others with approval. Contact your advisor or the program director.

CERTIFICATE IN TECHNICAL COMMUNICATION

This certificate program prepares participants for careers in technical communication, emphasizing current industry practice in the researching, writing, editing, and publishing of print or online technical documents. Required coursework emphasizes the development of student skills in audience analysis, problem solving, and collaboration within the workplace as well as the production of text and graphics for print and online publication. Special topics courses focus on industry practice in standards and documentation, document design, web development, usability testing, international communication, and other topics of importance to technical communicators.

Major Common Core

ENG 471	Visual Technical Communication (4)
ENG 475	Editing Technical Publications (4)
<u>Documentation</u> (choose 4 credits)	
ENG 476	Online Documentation (4)
ENG 477W	Technical Documentation, Policies, and Procedures (4)

Major Restricted Electives (choose 12 credits)

ENG 462	Document Design (4)
ENG 466	Usability (4)
ENG 469	Project Management in Technical Communications (4)
ENG 472	Topics in Technical Communication (1-4)
ENG 473	Desktop Publishing (4)
ENG 474W	Research and Writing Technical Reports (4)
ENG 476	Online Documentation (4)
ENG 477W	Technical Documentation, Policies, and Procedures (4)
ENG 480	Proposals (4)

Other Graduation Requirements

English Department policy does not permit double-counting of courses for any English major or minor.

ENGLISH GENERAL MINOR

Required for Minor (Core 12 credits)

ENG 275W	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 Present (4)

Required Electives for Minor (8 credits)

Choose 8 credits from any 300 or 400-level English courses (except ENG 325, ENG 362, ENG 463, or ENG 464)

ENGLISH CREATIVE WRITING MINOR

Required for Minor (Core 8 credits)

ENG 342	Beginning Creative Nonfiction Workshop (4)
ENG 343	Beginning Fiction Workshop (4)

ENG 344	Beginning Poetry Workshop (4)
ENG 442	Advanced Creative Nonfiction Workshop (4)
ENG 443	Advanced Fiction Workshop (4)
ENG 444	Advanced Poetry Workshop (4)
ENG 445	Advanced Critical Writing Workshop (4)
ENG 446	Screenwriting Workshop (4)
ENG 494	may be chosen when topic is appropriate.

Required Electives for Minor

Choose an additional 8 credits from any 300/400 English courses (except ENG 362, ENG 470)

LINGUISTICS MINOR

Required for Minor

(choose 8-16 credits from the following)

ENG 381	Introduction to English Linguistics (4)
ENG 482	English Structure and Pedagogical Grammar (4)
ENG 485	Language and Culture in TESL (4)
ENG 494	English Workshop (selected sections, 1-6)
ENG 495	Special Studies (1-4)
ENG 494 or ENG 495	may be chosen when topic is appropriate (see advisor).

Electives (0-8 credits)

(choose up to 8 credits from the following courses)

CDIS 201	Observation of Human Communication (3)
CDIS 290	Introduction to Communication Disorders (3)
CDIS 312	Speech and Language Development (3)
CDIS 392	Phonetics (3)
CDIS 402	Child Language Disorders (2)
CDIS 403	Child Language Disorders Lab (1)
CDIS 438	Speech Sound Disorders (3)
GER 445	Topics in German Linguistics (1-4)
FREN 323	French Phonetics & Applied Linguistics (2-4)
FREN 404	French Syntax (2-4)
SPAN 301	Topics in Language (1-4)
SPAN 401	Topics in Linguistics (1-4)

TEACHING ENGLISH AS A SECOND LANGUAGE, NON-LICENSURE MINOR

Minor Core

ENG 381	Introduction to English Linguistics (4)
ENG 482	English Structures and Pedagogical Grammar (4)
ENG 484	Pedagogical Grammar & Academic English (4)
ENG 485	Language and Culture in TESL (4)
ENG 486	Theories of Teaching ESL (4)
ENG 487	Methods of Teaching ESL (4)

TEACHING ENGLISH AS A SECOND LANGUAGE MINOR

Minor Core

ENG 381	Introduction to English Linguistics (4)
ENG 482	English Structures and Pedagogical Grammar (4)
ENG 484	Pedagogical Grammar & Academic English (4)
ENG 485	Language and Culture in TESL (4)
ENG 486	Theories of Teaching ESL (4)
ENG 487	Methods of Teaching ESL (4)
ENG 489	Policies and Programs in ESL (4)

Required for Minor (Required for a state of Minnesota teaching license, an additional 30 credits of professional education courses.) See the SECONDARY 5-12 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. 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.

TECHNICAL COMMUNICATION MINOR

Minor Core

Required introductory course for minor (choose 4 credits)

- ENG 271W Technical Communication (4)
 ENG 272W Business Communication (4)

Required advanced course for minor (choose 4 credits)

- ENG 474W Research and Writing Technical Reports (4)
 ENG 475 Editing Technical Publications (4)
 ENG 476 Online Documentation (4)
 ENG 477W Technical Documentation, Policies, and Procedures (4)

Electives for Minor

(Choose 8 credits, may not include the advanced course chosen above.)

- ENG 462 Document Design (4)
 ENG 466 Usability (4)
 ENG 469 Project Management in Technical Communication (4)
 ENG 471 Visual Technical Communication (4)
 ENG 472 Topics in Technical Communication (1-4)
 ENG 473 Desktop Publishing (4)
 ENG 474W Research and Writing Technical Reports (4)
 ENG 475 Editing Technical Publications (4)
 ENG 476 Online Documentation (4)
 ENG 477W Technical Documentation, Policies, and Procedures (4)
 ENG 478 Technical and Scientific Literature (4)
 ENG 479 Rhetorical Theory Applied to Technical Documents (4)
 ENG 480 Proposals (4)

INTERDISCIPLINARY MINOR IN COMMUNICATIONS

This interdisciplinary minor is for students who wish to enhance their communication skills for use in business and other professional settings. Students completing this minor will develop an understanding of contexts and rhetorical strategies for oral and written communication among professionals. Students will also develop their own ability to communicate through written texts, oral communication, and electronic formats. These skills are highly desired by employers in a wide range of business, government, and nonprofit organizations. Students may major in any of the programs affiliated with this minor, but the courses taken for the minor will not count toward the major. Students must earn a "C" or better in English courses in order to apply them to the minor.

Minor Core

- CMST 212 Professional Communication & Interviewing (4)
 CMST 412 Organizational Communication (4)
 ENG 271W Technical Communication (4)
 ENG 474 Research and Writing Technical Reports (4)

Minor Electives

Choose 11 credits from the following programs. At least one course must be at the 3/400 level.

- CMST 225 Communicating With/Through Technology (4)
 CMST 305 Communication & Community (4)
 CMST 333 Advanced Public Communication (4)
 CMST 445 Conflict Management (4)
 ECON 201 Principles of Macroeconomics (3)
 ECON 202 Principles of Microeconomics (3)
 ENG 301W Advanced Writing (4)
 ENG 454 Persuasive Writing on Public Issues (4)
 ENG 455 Advanced Writing Workshop (4)
 ENG 471 Visual Technical Communication (4)
 ENG 473 Desktop Publishing (4)
 ENG 474 Research and Writing Technical Reports (4)
 ENG 475 Editing Technical Publications (4)
 IT 100 Introduction to Computing and Applications (4)
 RPLS 377 Public Relations (3)
 RPLS 465 Event Management (3)
 URBS 150 Sustainable Communities (3)
 URBS 230 Community Leadership (3)
 URBS 412 Public Information and Involvement (3)

WRITING STUDIES MINOR

Minor Common Core

- ENG 201W Intermediate Writing (4)
 ENG 301W Advanced Writing (4)

Minor Electives

(choose 12 credits from the following courses)

- ENG 285 Practical Grammar (2)
 ENG 430 Independent Reading (1-4)
 ENG 442 Advanced Creative Nonfiction Workshop (4)
 ENG 453 Topics in Rhetoric and Composition (4)
 ENG 454 Persuasive Writing on Public Issues (4)
 ENG 455 Advanced Writing Workshop (4)

COURSE DESCRIPTIONS

ENG 098 (2-4) Integrated Reading and Writing (P/N Only)

This course offers instruction in, and practice with, critical reading and writing strategies. Credit does not apply toward graduation. P/N only.

ENG 100 (4) Introduction to Composition

A writing course that progresses from personal writing to writing about readings and the use of sources. Does not fulfill general education requirement 1A.

ENG 101 (4) Composition

This course helps students develop a flexible writing process, practice rhetorical awareness, read critically to support their writing, research effectively, represent others' ideas in multiple ways, reflect on their writing practices, and polish their work. GE-1A

ENG 103 (4) Stretch Composition I

This course helps students develop a flexible writing process, increase their rhetorical awareness, acquire critical reading skills to support their writing, represent others' ideas in multiple ways, reflect on their writing development, and polish their work.

Fall

ENG 104 (4) Stretch Composition II

This course helps students gain greater facility with the writing process, expand their rhetorical awareness, research effectively, compose argument-driven texts, represent others' ideas in multiple ways, reflect on their writing development, and polish their work.

Spring
 GE-1A

ENG 107 (1-4) English Writing for Academic Purposes

This writing course focuses on the processes and products of writing for academic purposes in the American context, with particular interest in the structural variation among academic genres. This course is intended for non-native speakers of English. This course does not meet General Education requirements.

Pre: TOEFL iBT score of 89 or above, or completed ESL 136 with a "C" or higher, or the equivalent.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

ENG 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.

GE-6

ENG 112W (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.

Pre: ENG 101

WI, GE-6

ENG 113W (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.

Pre: ENG 101

WI, GE-6

ENG 118 (4) Diverse Cultures in Literature and Film

Students in this course learn about diverse peoples and societies by reading and writing about novels, non-fiction, poetry, and/or films.

Variable

GE-6, GE-7

Diverse Cultures - Purple

ENG 125 (4) International Children's Literature

The course purpose is to increase students' knowledge of international children's literature that is written in English or translated into English. Students will be introduced to individual books, authors, and methods of responding to literature. This course studies children's literature set in countries such as Afghanistan, WWII Germany, and the Dominican Republic.

Variable

GE-6, GE-8

Diverse Cultures - Purple

ENG 146 (4) Introduction to Shakespeare

This course will introduce students to Shakespeare's plays (histories, tragedies, and comedies) and sonnets. Students will read, analyze, and develop interpretations of these works, learning about Shakespeare's language, historical situations, and world views.

Variable

GE-6, GE-8

ENG 201W (4) Intermediate Writing

Work on developing mastery of the rhetorical principles of planning, executing, and revising written texts. Emphasis on strengthening analytical writing, both expository and argumentative; valuable for writing on the job.

Pre: ENG 101

WI, GE-2

ENG 211W (4) Perspectives in Literature and Human Diversity

Courses will explore various specialized topics in literature to increase understanding of literary 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.

Pre: ENG 101

WI, GE-6, GE-7

Diverse Cultures - Purple

ENG 212W (4) Perspectives in World Literature

Courses will introduce students to works of literature 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. May be repeated with different topics.

Pre: ENG 101

WI, GE-6, GE-8

ENG 213W (4) Perspectives: Ethics and Civic Responsibility

Courses will focus on some characteristic ways in which literature addresses 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.

Pre: ENG 101

WI, GE-6, GE-9

ENG 215 (2-4) Topics in Literature

Course will explore specialized topics in literature; may be repeated under a different topic.

GE-6

ENG 219 (1) Visiting Writers Series

This course operates as an independent study of those writers visiting campus for the Good Thunder Reading Series.

ENG 242W (4) Introduction To Creative Writing

An introduction to writing poetry and short prose. This course does not assume previous creative writing experience on the part of the student.

WI, GE-11

ENG 271W (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

WI, GE-2, GE-13

ENG 272W (4) Business Communication

Introduction to business communications. Assignments include writing and presenting proposals, reports, and documentation typical to a business/industry setting. Emphasis on use of rhetorical analysis, software applications, collaboration, and usability testing to complete business communication tasks.

Fall, Spring

WI, GE-2, GE-13

ENG 275W (4) Introduction to Literary Studies

An introduction to literary genres and to the techniques of writing about literature.

Pre: ENG 101

WI

ENG 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.

ENG 301W (4) Advanced Writing

Expressive expository and argumentative writing. For anyone interested in developing advanced rhetorical skills such as invention, arrangement, and style in discourse. Especially recommended for students who plan to write as part of their careers or pursue graduate study.

Pre: ENG 101 and permission of instructor

WI, GE-2

ENG 207 (1-4) Special Topics in ESL

Special interest courses devoted to specific topics within the field of English as a Second Language. Topics vary, and the course may be re-taken for credit under different topic headings.

Variable

ENG 316 (1-4) Topics in Literature

Topic-oriented course in literature. May be repeated with change of topic.

Variable

ENG 318 (2-4) 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.

Diverse Cultures - Purple

ENG 320 (4) British Literature to 1785

Representative works from British literature encompassing Beowulf through the Eighteenth Century.

Pre: ENG 275W

Fall

ENG 321 (4) British Literature: 1785-Present

Representative works from British Literature, the Romantic Period, to the present.

Pre: ENG 275W

Spring

ENG 325 (3) Children's Literature

Introduction to authors, genres, illustrations, and works of literature published for elementary age children. Current and classic works.

ENG 327 (4) American Literature to 1865

A survey of American Literature from its beginnings to the end of the Civil War.
Pre: ENG 275W
Fall

ENG 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 275W
Spring

ENG 340 (4) Form and Technique in Prose

Study of the technical underpinnings of fiction and nonfiction genres.
Fall

ENG 341 (4) Form and Technique in Poetry

Study of the technical underpinnings of poetry.
Spring

ENG 342 (4) Beginning Creative Nonfiction Workshop

Introduction to writing personal essays and literary journalism.

ENG 343 (4) Beginning Fiction Workshop

Introduction to writing short stories.
Variable

ENG 344 (4) Beginning Poetry Workshop

Introduction to writing poems.
Variable

ENG 359 (4) Topics and Research

Topics and Research is a variable topics course giving students the opportunity to work closely with a professor to study a specific aspect of English and do research in a specialized area.
Variable

ENG 361 (4) Teaching English: Literature, Grades 5-12

Theory, practice, and materials for teaching English language arts in middle school and high school, with particular attention to literature.
Fall (On-Demand), Spring (On-Demand)

ENG 362 (4) Teaching English: Writing, Grades 5-12

Theory, practice and materials for teaching English language arts in middle school and high school, with particular attention to language and writing.
Fall

ENG 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).
Fall

ENG 402 (2-4) Gender in Literature

Selected topics course on literature by and about women.
Diverse Cultures - Purple

ENG 403 (2-4) Selected Authors

Content changes. May be repeated.

ENG 405 (2) Shakespeare: Comedies and Histories

A study of Shakespeare's comedies and histories. This course will run for a half-semester.
Spring

ENG 406 (2) Shakespeare: Tragedies

A study of Shakespeare's tragedies. This course will run for a half-semester.
Spring

ENG 410 (1-4) 21st Century Literature

Study of literature from the 21st century, with an emphasis on how these works reflect contemporary concerns.
Pre: ENG 275W
Variable

ENG 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.
Fall

ENG 426 (2-4) Selected Periods

Selected periods of literary study.

ENG 430 (1-4) Independent Reading

Extensive reading in an area for which the student has had basic preparation.
Pre: Consent

ENG 432 (2-4) Selected Studies in the Novel

Content changes. May be repeated.

ENG 433 (4) Selected Studies in World Literature

Topics on themes, issues and developments in genres of the literatures of the world. Content changes. May be repeated.
Fall
Diverse Cultures - Purple

ENG 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.
Spring

ENG 436 (2-4) Native American Literature

This course surveys the earliest Native American literary works, from oral tradition and songs to contemporary works and authors, with a particular emphasis on tribal and cultural contexts that identify these works as Native American.
Diverse Cultures - Purple

ENG 438 (2-4) African American Literature

This course surveys the earliest African American literary works, including slave narratives, poetry, folklore, and oration, through 20th century movements such as the Jazz Age, Harlem Renaissance, and Black Arts Movement of the 1960s, to contemporary works and authors.
Diverse Cultures - Purple

ENG 441 (4) Literary Theory and Criticism

Theories of literature and its production and use.
Pre: 6 semester credits in literature
Variable

ENG 442 (4) Advanced Creative Nonfiction Workshop

Advanced workshop in writing personal essays and literary journalism. May be repeated.
Pre: ENG 340 or ENG 342
ALT-Fall

ENG 443 (4) Advanced Fiction Workshop

An advanced course in writing short stories and novels. May be repeated.
Pre: ENG 340 or ENG 343
ALT-Spring

ENG 444 (4) Advanced Poetry Workshop

An advanced course in writing poems. May be repeated.
Pre: ENG 341 or ENG 344
ALT-Spring

ENG 445 (4) Advanced Critical Writing Workshop

An advanced course in writing critical essays. May be repeated.
Pre: Writing course or consent
Variable

ENG 446 (4) Screenwriting Workshop

Introduction to writing for the screen. May be repeated.
Pre: Writing course or consent
Spring

ENG 448 (4) Contemporary Writers

This course approaches works of fiction, poetry, and creative nonfiction from the past 30 years with a special focus on the craft issues that are central components of each work's success. English 448 is a required course for BA and BFA majors in creative writing.

Spring

Diverse Cultures - Purple

ENG 449 (2-4) Topics in Creative Writing Form and Technique

Topics in Creative Writing Form and Technique will be a variable-title course that explores special topics relating to the technical mastery of one or more creative genres, or the technical achievement of one or more practitioners. May be repeated with different topics.

Fall, Spring, Summer

ENG 453 (4) Topics in Rhetoric and Composition

Topics in Rhetoric and Composition will be a variable title course that explores special topics relating to the theory, history, and practice of one or more areas within rhetoric and composition.

Pre: ENG 201W, ENG 301W

Variable

ENG 454 (4) Persuasive Writing on Public Issues

Advanced writing course emphasizing major contemporary public issues. Practice in and study of: the logic by which writers construct arguments; the various means that writers use to persuade an audience; the conventions of evidence, claims and arguments in persuasive discourses.

Pre: ENG 201W, ENG 301W

Variable

ENG 455 (4) Advanced Writing Workshop

Advanced interdisciplinary writing emphasizes critical reading and thinking, argumentative writing, library research, and documentation of sources in an academic setting. Practice and study of selected rhetorics of inquiry employed in academic disciplines preparing students for different systems of writing.

Pre: ENG 201W, ENG 301W

Variable

ENG 461 (2-4) World Literature for Children and Young Adults

Selected works of literature for students in grades 5-12 from a variety of countries and cultures.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

ENG 462 (4) Document Design

Addresses theories of design and teaches students design strategies in typography, graphics, tables, color, and information architecture that will subsequently be applied to documents.

Pre: ENG 271W or ENG 272W

Variable

ENG 463 (3) Adolescent Literature

A survey of literature for students in grades 5-12, fiction and non-fiction, and methods of teaching this literature.

Fall

ENG 464 (3) Teaching Literature in the Middle School

Survey of books suitable for the middle school classroom, covering a variety of topics and genres.

Spring

ENG 466 (4) Usability

Introduces students to theories of usability and teaches students various methods to evaluate design for usability including heuristic evaluations, card-sorting, task-based evaluations, and fieldwork.

Pre: ENG 271W or ENG 272W

Variable

ENG 467 (1-4) International Technical Communication

Students learn how to research and write technical information for multiple cultures, both locally and internationally.

Variable

ENG 469 (4) Project Management in Technical Communication

This course is designed to introduce students to technical project management. This introduction is achieved through participation in a simulated project management experience. Assignments include standard documentation associated with project management and reflective writing.

Pre: ENG 271W

Fall, Spring

ENG 470 (1-4) Independent Writing

Writing in an area and of a type for which the student has demonstrated ability. May be repeated.

Pre: Consent

ENG 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.

ENG 472 (1-4) Topics in Technical Communication

Overview of technical communication theory with emphasis on contemporary approaches. Hands-on workshop which implements the theories discussed.

ENG 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 micro-computer experience will be helpful.

ENG 474W (4) Research and Writing Technical Reports

Practice in writing various types of reports for a variety of purposes and audiences. Includes primary and secondary research methods, and data analysis of information to be used in reports.

Pre: ENG 271W or ENG 272W

WI

ENG 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 computer and software applications for technical editing tasks.

Spring

ENG 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.

ENG 477W (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).

Fall

WI

ENG 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-Fall

ENG 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-Spring

ENG 480 (4) Proposals

Practice in the development and production of proposals, focusing on the research, writing, and management of proposals by technical communicators.

ENG 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.

ENG 482 (4) English Structures and Pedagogical Grammar

The English sound system and English structure studied for the purpose of discovering how they can be taught to students of English as a second or foreign language.

Fall

ENG 484 (4) Pedagogical Grammar and Academic English

Investigation of English grammatical structures and the features of Academic English for the purposes of understanding their use and of teaching them to speakers of English As A Second Language.

Spring

ENG 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.

Spring

Diverse Cultures - Gold

ENG 486 (4) Theories of Teaching ESL

Introduction to theories of second language acquisition, focusing on some of the major theories in this field, including individual and sociocultural factors in language learning, as well as practical issues and applications of theory in a wide range of settings.

Fall

ENG 487 (4) Methods of Teaching ESL

Examines the integration of skills, including listening, speaking, reading, writing, and vocabulary use in a variety of contexts, e.g. K-12, adult, higher education, ESL, EFL.

Spring

ENG 489 (4) Policies and Programs in ESL

This course describes state and federal legislation affecting ESL; identification, assessment, placement, and tracking of English Language Learners in the K-12 context; current models of ESL program delivery; and Minnesota State Standards and standardized testing.

Spring

ENG 490 (1-4) Topics in TESL

Topics in learning and teaching English as a Second/Foreign Language. May be repeated for credit.

Variable

ENG 491 (4) Teaching English Language Learners in the Mainstream Classroom

This course introduces education majors to teaching ELLs. Included in this course is an investigation of the attendant orthography, morphology, and syntax of English, and exposure to lesson planning, assessment, and differentiated instruction appropriate for ELLs in the mainstream classroom.

Fall, Spring

ENG 492 (2-4) Selected Topics

Various topic-oriented courses in literature.

ENG 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.

ENG 495 (1-4) Special Studies

Specialized, in-depth study of topics such as Holocaust literature, environmental literature, or regional literature.

ENG 498 (1-6) Internship

On-site field experience, the nature of which is determined by the specific needs of the student's program option.

ENG 499 (1-4) Individual Study

Extensive reading and writing in an area for which the student has had basic preparation.

Pre: Consent

ENGLISH FOR NON-NATIVE SPEAKERS/ENGLISH AS A SECOND LANGUAGE

English for Non-Native Speakers/ English as a Second Language

College of Arts & Humanities

Department of English

230 Armstrong Hall • 507-389-2117

Chair: Matthew Sewell

Nancy Drescher, Karen Lybeck, Glen Poupore, Stephen Stoyhoff

Courses in English for Non-Native Speakers (English as a Second Language) are intended to help international students and other students who are non-native speakers of English. These courses are advanced level second language courses that prepare students to meet the language demands of academic study. Placement into these courses occurs at the beginning of each semester for newly admitted students, including students who have transferred to Minnesota State Mankato from other institutions. International students must register for and complete any required courses as determined by placement exams. Specific information regarding the testing and placement process may be secured from the office of the English Department or the Kearney International Center.

POLICIES/INFORMATION

GPA Policy. A grade of "C" (2.0) or better must be earned in these courses.

COURSE DESCRIPTIONS

ESL 102 (4) Intensive English for Non-Native Speakers: Academic Oracy Skills I

This IELI course focuses on oral skills in content areas. This will provide insights into U.S. culture(s), academic life in the U.S., and discipline specific topics. It will help prepare students for regular entrance to the university.

Fall, Spring

ESL 103 (4) Intensive English for Non-Native Speakers: Academic Oracy Skills II

This IELI course focuses on more advanced oral skills in content areas. This will provide insights into U.S. culture(s), academic life in the U.S., and discipline specific topics. It should prepare students for regular entrance to the university.

Fall, Spring

ESL 112 (4) Intensive English for Non-Native Speakers: Academic Literacy Skills I

This IELI course focuses on academic literacy skills. Students use reading and process-writing strategies for understanding and producing academic texts in a variety of disciplines and purposes. It helps prepare students for regular entrance to the university.

Fall, Spring

ESL 113 (4) Intensive English for Non-Native Speakers: Academic Literacy Skills II

This IELI course continues to develop academic literacy skills. Students use reading and process-writing strategies for understanding and producing academic texts in a variety of disciplines and purposes. It should prepare students for regular entrance to the university.
Fall, Spring

ESL 125 (4) Advanced Oracy for Non-Native Speakers

In this developmental English class, regularly admitted students continue to develop the oral skills necessary for academic success. These skills include listening to academic lectures and taking notes, participating in small group discussions, study skills, and practice giving oral presentations.
Fall, Spring

ESL 135 (4) Introduction to Composition

This writing course focuses on grammar, sentence combining, paraphrase, organization, library work, revising, and discourse structures. It is designed to meet the needs of students who have graduated from US schools and whose first language is not English.
Fall, Spring

ESL 136 (4) Introduction to Composition for International Students

This writing course focuses on grammar, sentence combining, paraphrase, organization, library work, revising, and discourse structures. It is designed to meet the needs of students who have graduated from high school outside of the United States.
Fall, Spring

ENVIRONMENTAL SCIENCES

Environmental Sciences

College of Science, Engineering & Technology
Department of Biological Sciences
242 Trafton Science Center S • 507-389-2786
Website: www.cset.mnsu.edu/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 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.

POLICIES/INFORMATION

Admission to Major is granted by the department. Admission requirements are: - 32 earned credit hours including BIOL 105 and BIOL 106 with a grade of "C" in both BIOL 105 and BIOL 106 plus a minimum cumulative GPA of 2.00.

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.

Residency Requirement. At least 20 credits of 300-400 level courses required for the Environmental Science major must be taken at Minnesota State Mankato. Fourteen of these 20 credits must include ENVR 440 (3 credits), ENVR 450 (3 credits), ENVR 460 (4 credits), ENVR 470 (3 credits) and 1 credit for ENVR 498 (internship) OR ENVR 480 (Research).

GPA Policy. A minimum grade of "C" is required in all courses applied to the Environmental Sciences BS degree.

Several scholarships in the Department of Biological Sciences are available for entering first year students and currently enrolled Minnesota State Mankato students who meet the requirements. Application deadline is March 1 of each year.

ENVIRONMENTAL SCIENCES BS

Degree completion = 120 credits

Required General Education

BIOL 105 General Biology I (4)

Select one of the following math classes (choose 4 credits)

- MATH 112 College Algebra (4)
- MATH 115 Precalculus Mathematics (4)
- MATH 121 Calculus I (4)

Select one of the following chemistry classes (choose 3-5 credits)

- CHEM 106 Chemistry of Life Process Part I (General) (3)
- CHEM 201 General Chemistry I (5)

Major Common Core

- BIOL 106 General Biology II (4)
- BIOL 215 General Ecology (4)
- BIOL 410 Global Change Biology (3)
- ENVR 440 Environmental Regulations (3)
- ENVR 450 Environmental Pollution & Control (3)
- ENVR 460 Analysis of Pollutants (4)
- ENVR 470 Environmental Assessment (3)

Major Restricted Electives

Select one of the following classes (choose 1-6 credits)

- ENVR 480 Senior Research (1-6)
- ENVR 498 Internship (1-6)

Select One of the Following Classes (choose 3 credits)

- HLTH 475 Biostatistics (3)
- STAT 154 Elementary Statistics (3)

Select one of the following classes (choose 5 credits)

- CHEM 111 Chemistry of Life Process Part II (Organic & Biochemistry) (5)
- CHEM 202 General Chemistry II (5)

CHOOSE 1 CLUSTER

Select TWO courses from ONE of the following 6 Areas

Aquatic Ecology

- BIOL 402 Stream Ecology (4)
- BIOL 404 Wetlands (4)
- BIOL 405 Fisheries Biology (3)
- BIOL 432 Lake Ecology (4)

Vertebrate Ecology

- BIOL 316 Animal Diversity (3)
- BIOL 405 Fisheries Biology (3)
- BIOL 408 Vertebrate Ecology (4)
- BIOL 409 Advanced Field Ecology (4)
- BIOL 412 Soil Ecology (4)
- BIOL 431 Comparative Animal Physiology (3)
- BIOL 436 Animal Behavior (4)

Ecology

- BIOL 316 Animal Diversity (3)
- BIOL 403 Conservation Biology (3)
- BIOL 405 Fisheries Biology (3)
- BIOL 412 Soil Ecology (4)
- BIOL 421 Entomology (3)
- BIOL 443 Plant Ecology (4)

Toxicology

- BIOL 460 Introduction to Toxicology (3)
- BIOL 461 Environmental Toxicology (4)
- BIOL 464 Methods of Applied Toxicology (3)
- BIOL 465 Applied Toxicology Project (3)
- BIOL 467 Industrial Hygiene (3)

Plant Science

- BIOL 217 Plant Science (4)
- BIOL 412 Soil Ecology (4)
- BIOL 441 Plant Physiology (4)
- BIOL 442 Flora of Minnesota (4)
- BIOL 443 Plant Ecology (4)

Microbiology

- BIOL 270 Microbiology (4)
- BIOL 420 Diagnostic Parasitology (3)
- BIOL 475 Medical Microbiology (4)
- BIOL 476 Microbial Physiology and Genetics (5)
- BIOL 478 Food Microbiology and Sanitation (4)

CHOOSE 1 CLUSTER

Select TWO courses from ONE of the following 6 areas. These electives cannot be used in the minor and are in addition to the two courses selected from one of the 6 areas in Biology

Geography

- GEOG 370 Cartographic Techniques (4)
- GEOG 373 Introduction to Geographic Information Systems (4)
- GEOG 410 Climatic Environments (3)
- GEOG 420 Conservation of Natural Resources (3)
- GEOG 471 Digital Field Mapping with GPS (4)
- GEOG 473 Intermediate GIS (4)
- GEOG 474 Introduction to Remote Sensing (4)
- GEOG 475 Applied Remote Sensing & GIS (4)

Urban and Regional Studies

- URBS 402 Urban Analysis (3)
- URBS 411 Urban Policy and Strategic Analysis (3)
- URBS 417 Urban Law (3)
- URBS 433 Urban Development (3)
- URBS 455 Regional & County Development (3)

Political Science

- POL 451 Administrative Law (3)
- POL 452 Jurisprudence (3)
- POL 453 Constitutional Law (3)
- POL 461 Environmental Politics (3)
- POL 472 Urban Government (3)
- POL 473 Legislative Process (3)
- POL 474 Executive Process (3)
- POL 475 Judicial Process (3)

Recreation, Parks and Leisure Services

- RPLS 378 Commercial Recreation and Tourism (3)
- RPLS 379 Management of Parks and Recreation Facilities (3)
- RPLS 475 Public Land Use Policies (3)
- RPLS 481 Park Planning (3)
- RPLS 483 Legal Processes in Recreation, Parks and Leisure Services (3)

Business Law

- BLAW 453 International Legal Environment of Business (3)
- BLAW 474 Environmental Regulation and Land Use (3)
- BLAW 476 Construction and Design Law (3)

Biology

- BIOL 316 Animal Diversity (3)
- BIOL 320 Cell Biology (4)
- BIOL 324 Neurobiology (3)
- BIOL 402 Stream Ecology (4)
- BIOL 403 Conservation Biology (3)
- BIOL 404 Wetlands (4)
- BIOL 405 Fisheries Biology (3)
- BIOL 408 Vertebrate Ecology (4)
- BIOL 409 Advanced Field Ecology (4)
- BIOL 412 Soil Ecology (4)
- BIOL 417 Biology of Aging and Chronic Diseases (3)
- BIOL 420 Diagnostic Parasitology (3)
- BIOL 421 Entomology (3)

- BIOL 424 Developmental Biology (3)
- BIOL 431 Comparative Animal Physiology (3)
- BIOL 432 Lake Ecology (4)
- BIOL 435 Histology (4)
- BIOL 436 Animal Behavior (4)
- BIOL 438 General Endocrinology (3)
- BIOL 441 Plant Physiology (4)
- BIOL 442 Flora of Minnesota (4)
- BIOL 443 Plant Ecology (4)
- BIOL 451 Plant Biotechnology (4)
- BIOL 460 Introduction to Toxicology (3)
- BIOL 461 Environmental Toxicology (4)
- BIOL 464 Methods of Applied Toxicology (3)
- BIOL 472 Microbial Ecology and Bioremediation (4)
- BIOL 474 Immunology (4)
- BIOL 476 Microbial Physiology and Genetics (5)
- BIOL 478 Food Microbiology and Sanitation (4)
- BIOL 479 Molecular Biology (4)

General Electives

It is the student's responsibility to ensure that he/she has completed 40 credits at the 300-400 level. This is a University requirement for graduation.

Minor

Select One Minor from the following: Anthropology, Automotive Engineering Technology, Business Law, Chemistry, Geography, Geology, Law Enforcement, Political Science, Recreation, Parks and Leisure Services, or Urban and Regional Studies

ENVIRONMENTAL SCIENCES MINOR

Minor Core

- ENVR 440 Environmental Regulations (3)
- ENVR 450 Pollution and Control (3)*
- ENVR 460 Analysis of Pollutants (4)
- ENVR 470 Environmental Assessment (3)

*Requires 2 semesters of chemistry

Minor Electives

Select one of the following: CHEM 106 and CHEM 111 OR CHEM 201 and CHEM 202

COURSE DESCRIPTION

ENVR 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.

Fall, Spring
GE-8, GE-10

ENVR 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.

ENVR 450 (3) Environmental Pollution & 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. Strongly recommended that this course be taken immediately after completing 1 year of Chemistry.

Pre: 1 year CHEM
Fall

ENVIRONMENTAL SCIENCES CONTINUED

ENVR 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.

Spring

ENVR 470 (3) Environmental Assessment

Introduces students to National Environmental Policy Act and requirements for Environmental Impact Statements and Environmental Assessment Worksheets. Phase I Environmental Assessment of land and buildings, an international perspective on environmental assessments, and economic and social impact assessment are discussed.

Pre: ENVR 440

Spring

ENVR 480 (1-6) Senior Research

Participate in an independent research project with advisory support and with a focus on the student's career objectives.

Fall, Spring

ENVR 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

ENVR 491 (1-2) In-Service

Fall, Spring

ENVR 498 (1-6) Internship

Only three credits can be counted toward major. Experience in applied Environmental Sciences according to a prearranged training program.

Fall, Spring

ENVR 499 (1-6) Individual Study

Individual Research Project.

Fall, Spring

ETHNIC STUDIES

Ethnic Studies

College of Social & Behavioral Sciences

Department of Ethnic Studies

109 Morris Hall • 507-389-2798

Fax 507-389-6377

Website: www.mnsu.edu/dept/ethnic

Chair: Kebba Darboe

Wayne Allen, Hanh Huy Phan

The Department of Ethnic Studies (ES), is an interdisciplinary program, academically committed to promoting multicultural and ethnic knowledge, skills and values both within and outside the United States and to preparing our students for effective participation in culturally diverse global communities. A major in ethnic studies gives students exposure to and understanding of those historical, economic, social and political forces which have contoured the cross-cultural and ethnic experience in and outside the United States. This program prepares students to identify social injustice issues (e.g., racism, discrimination, oppressing social conflict) effectively and also aims to provide students with multicultural/ethnic knowledge, multicultural/ethnic values and skills (e.g., cultural competency skills and other professional skills). The ES majors is academically strong and competitive on the market. ES majors must take both ES core courses and skill-oriented or applied courses focusing on one of the following areas of emphasis: Governmental/Public, Business/Corporate, local Community and Human Services, International Community and Human Services and Extended Program.

POLICIES/INFORMATION

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.

GPA Policy. 2.0 GPA.

P/N Grading Policy. No more than 1/4 of total undergraduate credits may be taken as P/N.

ETHNIC STUDIES BS

Degree completion = 120 credits

Prerequisites to the Major - General Education

(choose one of the following 3 credit courses)

ETHN 100 American Racial Minorities (3)

ETHN 101 Introduction to Multicultural & Ethnic Studies (3)

Major Common Core

Research Methods/Skills Course

(choose one of the following 3 credit courses)

ETHN 401 Applied Cultural Research (3)

ETHN 402W Ethnic Research Methods/Skills (3)

Critical Thinking/Theoretical Course

(choose one of the following 3 credit courses)

ETHN 400 Cultural Pluralism (3)

ETHN 410 Foundations of Oppression (3)

Major Restricted Electives

(choose at least 15 credit(s): Two must be writing intensive "WI" courses and two must be 400 level courses)

ETHN 150 Multi-Cultural/Ethnic Experience (3)

ETHN 201W Perspectives on African Americans (3)

ETHN 202W Perspectives on American Indians (3)

ETHN 203W Perspectives on Asian Americans (3)

ETHN 204W Perspectives on Latinos/Hispanics (3)

ETHN 220W Civil Rights in the United States (3)

ETHN 295 Selected Topics (1-4)

ETHN 300W American Indian Leaders (3)

ETHN 330 Immigration and Ethnicity (3)

ETHN 405 Immigration/ Ethnicity (3)

ETHN 420 African American Studies (3)

ETHN 430 American Indian Studies (3)

ETHN 440 Asian American Studies (3)

ETHN 450 Latino/Hispanic Studies (3)

ETHN 460 Urban Minority Problems (3)

ETHN 470 Women of Color (3)

ETHN 480 Social Justice in Ethnicity & Gender (3)

ETHN 482 Civil Rights in the United States (3)

ETHN 486 Racial and Ethnic Politics (3)

ETHN 495 Selected Topics: Black History (3)

ETHN 496 Workshop (1-3)

ETHN 497 Internship (1-10)

ETHN 498 College Teaching Internship (1-6)

Major Unrestricted ElectivesMulticultural Courses: (choose at least 15 credits)

ANTH 240	Language and Culture (4)
GEOG 103	Introductory Cultural Geography (3)
HIST 434	East Asian History: 1800-1945 (4)
HIST 437	African History to 1800 (4)
HIST 442	History of Latin America (4)
HIST 477	Advanced African-American History (3)
MUS 125	Pop Music USA: Jazz to Country to Blues (3)
MUS 126	Pop Music USA: R&B to MTV (3)
PHIL 115W	Philosophy of Race, Class and Gender (3)
PHIL 205W	Culture, Identity, and Diversity (3)
SOC 101	Introduction to Sociology (3)
THEA 285W	Theatre of Diversity (3)

MAJOR EMPHASIS: BUSINESS/CORPORATE

(Students are encouraged to minor in Marketing, Human Resource Management or International Business) (choose at least 15 credits)

IBUS 380	Principles of International Business (3)
MGMT 330	Principles of Management (3)
MGMT 440	Human Resource Management (3)
MGMT 445	Training & Development (3)
MRKT 100	Global Business Concepts (3)
MRKT 310	Principles of Marketing (3)
PSYC 463	Survey of Industrial/Organizational Psychology (4)

MAJOR EMPHASIS: INTERNATIONAL COMMUNITY AND HUMAN SERVICES

(Students are encouraged to minor in International Relations or any foreign language.) (choose at least 15 credits)

CMST 203	Intercultural Communication (4)
ECON 450	Economic Development (3)
ENG 101	Composition (4)
ETHN 497	Internship (1-10)
GEOG 341	World Regional Geography (3)
GEOG 373	Introduction to Geographic Information Systems (4)
GWS 220	Global Perspectives on Women and Change (4)
HIST 191	United States Since 1877 (4)
IBUS 380	Principles of International Business (3)
POL 106	Politics in the World Community (3)
POL 431	International Relations (3)
PSYC 358	Cultural Psychology (4)
SOWK 255	Global Responses to Human Need (3)
URBS 150	Sustainable Communities (3)

MAJOR EMPHASIS: LOCAL COMMUNITY AND HUMAN SERVICES

(Students are encouraged to minor in Psychology, Social Work, and Counseling/ Education.) (choose at least 15 credits)

CSP 471	Interpersonal Helping Skills (3)
ETHN 497	Internship (1-10)
HLTH 260	Introduction to Health Education (3)
KSP 235	Human Development (3)
PSYC 101	Introduction to Psychological Science (4)
PSYC 358	Cultural Psychology (4)
URBS 230W	Community Leadership (3)

MAJOR EMPHASIS: PUBLIC/GOVERNMENT

(Students are encouraged to minor in Political Science, Law Enforcement or Urban Studies.) (choose at least 15 credits)

CORR 485	Selected Topics (2-6)
ECON 100	An Introduction to the U.S. Economy (3)
ETHN 482	Civil Rights in the U.S. (3)
ETHN 497	Internship (1-10)
LAWE 234	Policing in a Diverse Society (3)
POL 101	Introduction to Public Life (3)
POL 111	United States Government (3)
POL 260	Introduction to Public Administration (3)
SOC 417	Program Administration (3)
URBS 100	Introduction to the City (3)
URBS 415	Urban Housing Policy (3)

EXTENDED PROGRAM COURSES (SUBJECT TO AGREEMENT)**One computer skills course or quantitative/ statistical skills course (3)
Four multicultural electives are to be taken within or outside Department of Ethnic Studies but subject to the approval of ES advisors.***

* [Example of multicultural electives outside the ES Department may include but are not limited to: the curricula of social/behavioral sciences, arts/humanities, education or other academic areas—e.g., **Anthropology** (ANTH 240: Language and Culture), **Gender and Women's Studies** (GWS 220: Perspectives on Women and Change or GWS 251: Coming Age: Gender and Culture.), **Geography** (GEOG 103: Introductory Cultural Geography), **History** (one Advanced African American History—HIST 437 or HIST 477, or Asian History—HIST 434 or Latin American History—HIST 442), **Music** (MUS 125 or MUS 126: Pop Music USA, Jazz or R&B) **Philosophy** (PHIL 115W: Race, Class and Gender; or PHIL 205W: Culture, Identity and Diversity), **Sociology** (SOC 446: Race, Culture and Ethnicity), **Theatre** (THEA 285W Theatre of Diversity) All these are just examples subject to the approval of ES advisors.]

Required Minor: Yes. Any.**ETHNIC STUDIES MINOR ONLINE**

(18 credits required)

This Online Ethnic Studies Minor Program requires a total of 18 credits--semester hours. Faculty teach courses via the Desire2Learn. The Desire2Learn (D2L) is Minnesota State University's (MSU) web-based management system, which manages the delivery of the online courses. All registered students have immediate access to D2L via its link on the MSU homepage. Upon completion, students can transfer the coursework to the baccalaureate degree at MSU or other universities.

Admission requirements. Students must be admitted to a major at Minnesota State Mankato or other universities and must have a minimum cumulative GPA of 2.00 or higher.

Pre-requisites to the Minor Core

(choose at least three credits from the following)

ETHN 100	American Racial Minorities (3)
ETHN 101	Introduction to Multicultural & Ethnic Studies (3)

Minor CoreWriting Intensive

(choose at least three credits from the following)

ETHN 201W	Perspectives on African Americans (3)
ETHN 202W	Perspectives on American Indians in Ethnic Studies (3)
ETHN 203W	Perspectives on Asian Americans (3)
ETHN 204W	Perspectives on Latinos/Hispanics (3)
ETHN 220W	Civil Rights in the U.S. (3)

Research Methods/Skills

(choose at least three credits from the following)

ETHN 401	Applied Cultural Research (3)
ETHN 402	Ethnic Research Method/Skills (3)

Critical Thinking/Theoretical Course

(choose at least three credits from the following)

ETHN 400	Cultural Pluralism (3)
ETHN 410	Foundations of Oppression (3)

Major Restricted Electives

(choose at least six credits from the following)

ETHN 150	Multicultural/Ethnic Experience (3)
ETHN 200	Interracial/Interethnic Dating/Marriage (3)
ETHN 300	American Indian Leaders (3)
ETHN 330	Immigration/Ethnicity (3)
ETHN 420	African American Studies (3)
ETHN 430	American Indian Studies (3)
ETHN 440	Asian American Studies (3)
ETHN 450	Latino/Hispanic Studies (3)
ETHN 460	Urban Minority Problems (3)
ETHN 470	Women of Color (3)
ETHN 480	Social Justice in Ethnicity and Gender (3)
ETHN 486	Racial and Ethnic Politics (3)

COURSE DESCRIPTIONS

ETHN 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.

Fall, Spring

GE-5, GE-7

Diverse Cultures - Purple

ETHN 101 (3) Introduction to Multicultural & Ethnic Studies

This course introduces students to multicultural and ethnic knowledge and values in and outside the United States. Students are exposed to such issues as race, culture, ethnicity, dominance, immigration, stereotypes, discrimination, and intergroup relations through interdisciplinary approaches--anthropological, economic, historical, political, psychological and/or sociological.

Fall, Spring

GE-5, GE-7

Diverse Cultures - Purple

ETHN 150 (3) Multi-Cultural/Ethnic Experience

Students will participate in field trips, activities, and guest discussions 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. Students are expected to learn actively in and outside the classroom by experiencing events or people from diverse cultural groups.

Fall

GE-7

Diverse Cultures - Gold

ETHN 200 (3) Interracial/Interethnic Dating/Marriage

This course deals with the history of interracial/interethnic and intergroup (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.

Variable

GE-7

ETHN 201W (3) Perspectives on African Americans

This course will explore the historical, social, political, and cultural experience of African Americans. It will also examine the contributions of African Americans to the growth and development of the United States.

WI, GE-5, GE-7

Diverse Cultures - Purple

ETHN 202W (3) Perspectives on American Indians in Ethnic Studies

This course is an examination of the historical and contemporary issues and forces affecting American Indian peoples.

WI, GE-5, GE-7

ETHN 203W (3) Perspectives on Asian Americans

Introduction to the history and cultures of the major Asian American ethnic groups with a comparative approach to their similarities and differences.

WI, GE-5, GE-7

Diverse Cultures - Purple

ETHN 204W (3) Perspectives on Latinos/Hispanics

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.

WI, GE-5, GE-7

Diverse Cultures - Purple

ETHN 220W (3) Civil Rights in the U.S.

This course will focus on the struggle for civil rights by diverse groups in the United States. Emphasis will be on how these struggles have impacted their communities and cultural pluralism in the U.S.

Variable

WI, GE-5

Diverse Cultures - Purple

ETHN 295 (1-4) Selected Topics

The course is offered according to student demand and instructor availability/expertise. A variety of topics related to ethnic and cultural areas will provide curriculum enrichment on an ongoing, but irregular basis.

Variable

ETHN 296 (1-3) Workshop

Courses will employ changing topics from year to year and will deal with cogent issues of current interest to ethnic and minority communities.

Variable

ETHN 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.

Fall, Spring

ETHN 300W(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: Consent

Variable

WI

ETHN 330 (3) Immigration and Ethnicity

Examines the history, identity, conflict and ethnic relations related to immigration as explored from an Ethnic Studies perspective as well as from American and global perspectives.

ETHN 400 (3) Cultural Pluralism

This course will examine issues confronted in a multicultural society. It will study ethnic/minority groups not usually included in mainstream society, including their uniqueness and harmonious coexistence with other ethnic groups.

Fall, Spring

ETHN 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, ANTH 230 or consent; ETHN 100, ETHN 101 or ETHN 150 or consent

Variable

Diverse Cultures - Gold

ETHN 402W (3) Ethnic Research Methods/Skills

This is a comprehensive course, which introduces students to qualitative, quantitative and evaluation social research methods. It provides students with hands-on experience of collecting and analyzing data, from any given diverse ethnic community through participant observation and needs assessment.

Pre: ETHN 100 or ETHN 101 or ETHN 150, or Consent

Variable

WI

Diverse Cultures - Gold

ETHN 403 (3) Chicana Feminisms

This course examines the different forms of Chicana Feminisms produced by Chicana scholars and activists. It demonstrates how Chicana Feminisms challenge social inequalities, and focuses on the construction of Chicana identities regarding the intersections of gender, race/ethnicity, sexuality and culture.

Diverse Cultures - Purple

ETHN 405 (3) Perspectives on New Immigrants

The purpose of this course is to examine the challenges and opportunities of the new immigrants, refugees, families, and specifically their children, in the United States.

Fall

ETHN 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 ATHN 400

Fall

Diverse Cultures - Purple

ETHN 420 (3) African American Studies

This course will provide students with an in-depth examination of the issues affecting present-day Africans, and those of the Black Diaspora. Possible topics are fair representation in the media, education, cross-cultural interactions, economics, politics/law, and racial identity.

Pre: ETHN 110 or ETHN 400 or consent

Variable

ETHN 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

Variable

ETHN 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

Variable

GE-5

ETHN 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

Variable

ETHN 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.

Spring

Diverse Cultures - Purple

ETHN 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

Spring

Diverse Cultures - Purple

ETHN 480 (3) Social Justice in Ethnicity & 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

Variable

ETHN 482 (3) African American Civil Rights Movement

This course will take an interdisciplinary ethnic studies approach to examine the past, present and future implications of the African American civil rights movement on race relations in the United States.

Fall

ETHN 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.

Variable

Diverse Cultures - Purple

ETHN 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

Variable

ETHN 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

Variable

ETHN 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.

Variable

ETHN 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

Fall, Spring

ETHN 498 (1-6) College Teaching Internship

Students assist a faculty member in teaching an ETHN 100 or ETHN 101.

ETHN 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

Fall, Spring

Exercise Science

College of Allied Health & Nursing

Department of Human Performance

1400 Highland Center • 507-389-6313

Website: www.mnsu.edu/dept/colahn/hp.html

Chair: Robert Pettitt

The Exercise Science major is recognized by the National Strength and Conditioning Association for successfully meeting established educational criteria in strength and conditioning. It is a broad-based, science-oriented major that prepares students to create effective exercise prescriptions and to oversee exercise programs for normally healthy individuals. An Exercise Science major also prepares students for admission to graduate programs in Exercise Physiology, Cardiac Rehabilitation, Sports Psychology, and related areas. Students who have also completed the pre-physical or pre-occupational therapy concentrations in addition to this major have successfully gained admission to graduate programs in those areas.

Exercise science students are not required to complete a minor but may choose to obtain one to gain additional training or expertise.

POLICIES/INFORMATION

Admission to Program. Admission to the Exercise Science major is selective and not all students who apply will be accepted. Minimum requirements for application are as follows:

1. Minimum overall grade point average to 2.75
2. Completion of BIOL 330 with a grade of "C" or better
3. Successful completion of at least 32 semester credits

EXERCISE SCIENCE, BS

Degree completion = 120 credits

Required General Education

ENG	101	Composition (4)
IT	100	Introduction to Computing and Applications (4)

Major Common Core

Students may take HP 466W instead of HP 466.

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	414	Physiology of Exercise (3)
HP	439	Nutrition for Physical Activity and Sport (3)
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)

Major Restricted Electives

(Please select 2 credits from these activity classes)

HP	103	Fitness for Living (1)
HP	104	Adult Fitness (1)
HP	105	Beginner and Advanced Beginner Swimming (1)
HP	107	Orienteering (1)
HP	114	Billiards and Bowling (1)
HP	117	Aerobic Conditioning (1)
HP	130	Self-Defense for Women (1)
HP	138	Beginning Horsemanship (1)
HP	139	Winter Survival (1)
HP	143	Aqua Exercise (1)
HP	145	Aquatic Conditioning and Water Polo (1)
HP	146	Intercollegiate Bowling (1)
HP	147	Intercollegiate Cross Country (1)
HP	148	Intercollegiate Softball (1)
HP	149	Intercollegiate Volleyball (1)

HP	150	Intercollegiate Wrestling (1)
HP	152	Intercollegiate Track and Field (1)
HP	153	Intercollegiate Swimming (1)
HP	154	Intercollegiate Football (1)
HP	155	Intercollegiate Basketball (1)
HP	156	Intercollegiate Baseball (1)
HP	157	Intercollegiate Golf (1)
HP	158	Intercollegiate Tennis (1)
HP	159	Intercollegiate Hockey (1)
HP	160	Introduction to Human Performance Studies (2)
HP	161	Intercollegiate Soccer (1)
HP	166	Team Game Skills (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 Techniques (1)
HP	179	Winter Activities (1)
HP	180	Introduction to Handball (1)
HP	181	Advanced Handball (1)
HP	182	Aquatic Skills (1)
HP	190	Sport Activities (1)

Major Unrestricted Electives

Elective courses (choose 3-6 credits)

Pre-Physical Therapy emphasis requires 3 credits. The General Exercise Science emphasis requires 6 credits. Electives may not be double counted for courses required in the emphases.

BIOL	320	Cell Biology (4)
BIOL	324	Neurobiology (3)
BIOL	380	Blood Banking/Urinalysis (3)
BIOL	417	Biology of Aging and Chronic Diseases (3)
BIOL	433	Cardiovascular Physiology (3)
BIOL	466	Principles of Pharmacology (3)
BIOL	474	Immunology (4)
CHEM	360	Principles of Biochemistry (4)
FCS	440	Nutrition II (3)
FCS	446	Lifespan Nutrition (3)
HLTH	210	First Aid & CPR (3)
HLTH	321	Medical Terminology (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	455	Health and Aging (3)
HP	340	Prevention and Care (2)
HP	341	Athletic Training Techniques (3)
HP	413	Lifespan Motor Development (1-2)
HP	415	Advanced Sports Medicine (2)
HP	418	Intercultural Competence for Allied Health Professionals (3)
HP	421	Teaching Sport to Individuals with Disabilities (2)
HP	440	Medical Aspects of Athletic Training (3)
HP	441	Organize & Administer (2)
HP	451	Principles of Coaching (3)
HP	467	Worksite Wellness Program Development (3)
HP	470	Psychology of Coaching (3)
HP	472	Psychology of Sport and Athletic Injury (3)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	460	Psychology of Women (3)
PSYC	466	Psychology of Aging (3)

Required Minor: None.

Major Emphasis: General Exercise Science

The General Exercise Science emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

Required General Education

CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
FCS	140	Introduction to Nutrition (3)
HLTH	210	First Aid & CPR (3)
MATH	112	College Algebra (4)

General Exercise Science Core

HP	160	Introduction to Human Performance Studies (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	291	Concepts of Fitness (2)
HP	392	Group Exercise Instruction (3)
HP	403	Research Methods & Statistics in Exercise Science (3)
HP	477	Behavior Change Strategies and Foundations (3)
HP	486	Small Group Personal Training (3)
HP	487	Applied Exercise Science (3)

General Exercise Science Capstone (choose 3-10 credits)

The General Exercise Science emphasis requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours.

HP	496	Internship (1-10)
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Major Emphasis: Pre-Physical Therapy

The Pre-Physical Therapy emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

Required General Education

BIOL	105	General Biology I (4)
CHEM	201	General Chemistry I (5)
MATH	115	Precalculus Mathematics (4)
PHYS	211	Principles of Physics I (4)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (3)

Pre-PT Core

BIOL	106	General Biology II (4)
CHEM	202	General Chemistry II (5)
HLTH	321	Medical Terminology (3)
HP	265	Orientation to Occupational and Physical Therapy (2)
PHYS	212	Principles of Physics II (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	466	Psychology of Aging (4)

Pre-PT Capstone (choose 3-10 credits)

The Pre-Physical Therapy emphases requires a minimum of 3 credits of HP 496 which can be split across semesters. One credit = 50 hours. Students commonly use physical therapy observation hours to fulfill the internship requirement.

HP	496	Internship (1-10)
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FAMILY CONSUMER SCIENCE

Family Consumer Science

College of Allied Health & Nursing
Department of Family Consumer Science
 102 Wiecking Center • 507-389-2421
 Website: <http://ahn.mnsu.edu/fcs/>

Chair: Jill Conlon

David Bissonnette, Joye Bond, Daniel Moen, Heather Von Bank

Accreditation. National Council on Family Relations (NCFR). Academy of Nutrition and Dietetics (ACEND).

The mission 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 dietetics, family consumer science education, child development and family studies, and food and nutrition.

POLICIES/INFORMATION

Declaring an FCS Major. Students may declare an FCS major at any point in their academic program. Upon declaring an FCS major, an advisor is assigned. Full admission to the department and major requires:

- A minimum of 32 earned semester credit hours.
- A minimum cumulative GPA of 2.5. FCS Education majors need a minimum GPA of 2.75.

Contact the department for application procedures.

GPA Policy. All courses required for major or minor option must be at "C" level or higher.

Course Policy. For those options requiring FCS 440 (dietetics, food and nutrition

major and minor): CHEM 111 and BIOL 330 must both be completed at "C" level or higher in order to receive permission to register.

P/N Policy. All FCS courses required for an option must be taken for a grade, except where P/N grading is mandatory.

FAMILY CONSUMER SCIENCE, BS

Degree completion = 120 credits

Required for Major (Option). Select one of the following options to correspond with personal and professional objectives:

CHILD DEVELOPMENT AND FAMILY STUDIES OPTION

This option helps prepare students to work with children, adults and families in a variety of human services, educational and community settings.

Required General Education

FCS	100	Personal and Family Living (3)
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Major Common Core

FCS	101	Introduction to Family Consumer Science (3)
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Major Restricted Electives**Family Consumer Science Electives**

(choose 6 credits from the following FCS courses)

FCS	120	Clothing and People (2)
FCS	140	Introduction to Nutrition (3)
FCS	150	Food, Culture and You (3)
FCS	280	Orientation to Family Consumer Science Education (2)
FCS	331	Clothing Construction and Textiles (4)
FCS	473	Consumer Protection (3)

Child Development and Family Studies

(choose 18 credits from the following)

FCS	230	Child Care Psychology (3)
FCS	270	Family Housing (2)
FCS	360	Romantic Relationships (3)

FAMILY CONSUMER SCIENCE CONTINUED

FCS 402	Play and Child Development (3)
FCS 403	Parents and Peers and Adolescent Development (3)
FCS 446	Lifespan Nutrition (3)
FCS 474	Community Resources and Family Support (3)
FCS 478	Family Finance (3)
FCS 483	Adult Education in Family Consumer Science (3)
FCS 495	Intern: Early Child Family (3-4)
FCS 496	Selected Topics: CDFS
FCS 497	Internship (1-6)
FCS 498	Undergraduate Internship (1-6)

Major Emphasis: Child Development and Family Studies

FCS 275	Consumers in the Economy (3)
FCS 301	Lifespan Development (3)
FCS 303	Working with Families (3)
FCS 400	Culturally Diverse Family Systems (3)
FCS 401	Family Life Development (3)
FCS 414	Family Policy and Ethics (3)
FCS 482	Teaching Family Life/Parent Education (3)
FCS 488	Parenting Education (3)
FCS 496	Selected Topics: CDFS (2-3)
HLTH 311	Family Life & Sex Education (3)

Minor

Choose 16-36 credits from any minor

Becoming a Certified Family Life Educator (CFLE)

The Child Development and Family Studies program has been approved by the National Council on Family Relations. Minnesota State Mankato graduates with an CDFS major or minor who have taken the approved courses are eligible to become Certified Family Life Educators. Being a CFLE recognizes a broad understanding of family life issues. Certification is available to professionals from all disciplines who have met the requirements.

DIETETICS OPTION

The Dietetics Option* promotes growth among students wanting to become competent dietetics professionals by providing the 'highest practicable quality' advisory, academic, real-life and interactive opportunities while at Minnesota State Mankato, and by developing confidence and competence to advance after graduation to Dietetics Internship, graduate programs and/or related employment.

A student who chooses to become a Registered Dietitian (RD) upon graduation from Minnesota State Mankato will also need to:

- Meet published requirements to receive a Verification Form from the Dietetics Director.
- Apply, be accepted, and complete a supervised practice program (Dietetic Internship).
- Pass a national registration examination.

Minnesota State Mankato faculty are committed to positioning majors for successful transition from Minnesota State Mankato to Dietetic Internship and beyond. Regular and continuous advising is recommended to be successful.

Graduates are employed as RDs or non-RD nutritionists in health care; community, public health, and corporate fitness settings or as members of food management teams.

* The Dietetics Option, a Didactic Program in Dietetics (DPD) is accredited by the Accreditation Council for Education in Nutrition and Dietetics, the accrediting agency for the Academy of Nutrition and Dietetics. Academy of Nutrition and Dietetics 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606. (800-877-1600 ext. 5400) www.eatright.org/ACEND.

Required General Education

BIOL 270	Microbiology (4)
CHEM 106	Chemistry of Life Process Part I (General) (3)
ENG 101	Composition (4)
IT 100	Introduction to Computing and Applications (4)
MATH 112	College Algebra (4)
SOC 101	Introduction to Sociology (3)

(choose 3 credits)

CMST 100 Fundamentals of Communication (3)

CMST 102 Public Speaking (3)

(choose 3 credits)

ETHN 101 Introduction to Multicultural & Ethnic Studies (3)

ETHN 150 Multi-Cultural/Ethnic Experience (3)

Prerequisites to the Major

BIOL 220 Human Anatomy (4)

BIOL 330 Principles of Human Physiology (4)

CHEM 111 Chemistry of Life Process Part II (Organic & Biochemistry) (5)

ENG 271W Technical Communication (4)

HLTH 321 Medical Terminology (3)

HLTH 475 Biostatistics (3)

HLTH 477 Behavior Change Foundations and Strategies (3)

PSYC 101 Introduction to Psychological Science (4)

Major Common Core

FCS 101 Introduction to Family Consumer Science (3)

Major Emphasis: Dietetics

(2 credits from FCS 497 required)

FCS 150 Food, Culture and You (3)

FCS 242 Nutrition for Healthcare Professionals (3)

FCS 252 Food Service Systems I (3)

FCS 340 Food Science (4)

FCS 342 Food Production Management (3)

FCS 350 Food Service Systems II (3)

FCS 420 Nutrition Assessment (3)

FCS 440 Nutrition II (3)

FCS 442 Medical Nutrition Therapy I (3)

FCS 446 Lifespan Nutrition (3)

FCS 447 Food Policy (3)

FCS 448 Medical Nutrition Therapy II (3)

FCS 483 Adult and Technical Education in Family Consumer Science (3)

FCS 492 Dietetics Seminar (2)

FCS 497 Internship (1-6)

FOOD AND NUTRITION OPTION

This option prepares graduates for various careers in health promotion, wellness, food service, and/or nutrition, (such as restaurant or school lunch management); research and development or quality assurance in the food industry; and/or in corporate food distribution, production, sales and service. A supervised internship during the major allows students to gain experience in a particular area of interest. While a minor is not required, it is strongly recommended in order to improve employment opportunities.

Required General Education

CHEM 106 Chemistry of Life Process Part I (General) (3)

CHEM 111 Chemistry of Life Process Part II (Organic & Biochemistry) (5)

ENG 271W Technical Communication (4)

FCS 140 Introduction to Nutrition (3)

Prerequisites to the Major

BIOL 220 Human Anatomy (4)

BIOL 330 Principles of Human Physiology (4)

HLTH 475 Biostatistics (3)

Major Common Core

FCS 101 Introduction to Family Consumer Science (3)

Major Unrestricted Electives

(choose 8 credits; at least 3 credits must be from 3-400 level courses)

BIOL 270 Microbiology (4)

BIOL 478 Food Microbiology and Sanitation (4)

FCS 100 Personal & Family Living (3)

FCS 275 Consumers in the Economy (3)

FCS 400 Culturally Diverse Family Systems (3)

FCS 417 Principles of Wellness Coaching (3)

FCS	439	Nutrition for Physical Activity and Sport (3)
FCS	473	Consumer Protection (3)
HLTH	210	First Aid & CPR (3)
HLTH	212	Consumer Health (3)
HLTH	260	Introduction to Health Education (3)
HLTH	315	Holistic Health and Wellness (3)
HLTH	321	Medical Terminology (3)
HLTH	361	Health Communication and Advocacy (4)
HLTH	380W	Health Education Planning, Implementing, and Evaluating 1 (3)
HLTH	400	Women's Health (3)
HLTH	410	Current Health Issues (3)
HLTH	450	Environmental Health (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	455	Health and Aging (3)
HLTH	460	Introduction to Epidemiology (3)
HLTH	465	Health Care Delivery in the United States (3)
HLTH	467	Public Health Law (3)
HLTH	480	Health Education Planning, Implementing and Evaluating 2 (3)
HLTH	481	Community Organizing for Health (3)
HLTH	488	Worksite Health Promotion (3)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	414	Physiology of Exercise (3)
HP	465	Legal Aspects of Physical Education and Sport (3)
HP	466	Graded Exercise Testing and Exercise Prescription (3)

Major Emphasis: Foods and Nutrition

FCS	150	Food, Culture and You (3)
FCS	242	Nutrition for Healthcare Professionals (3)
FCS	252	Food Service Systems I (3)
FCS	340	Food Science (4)
FCS	342	Food Production Management (3)
FCS	350	Food Service Systems II (3)
FCS	420	Nutrition Assessment (3)
FCS	440	Nutrition II (3)
FCS	444	Experimental Food Science (3)
FCS	446	Lifespan Nutrition (3)
FCS	447	Food Policy (3)
FCS	483	Adult & Technical Education in Family Consumer Science (3)
FCS	497	Internship (1-6)

Required Minor: None

FAMILY CONSUMER SCIENCE EDUCATION BS TEACHING

This option prepares men and women to teach family consumer science in grades 5-12 and for other education-related professions.

Required General Education (35 credits)

FCS	100	Personal & Family Living (3)
FCS	140	Introduction to Nutrition (3)
HLTH	240	Drug Education (3)

Major Common Core

FCS	101	Introduction to Family Consumer Science (3)
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Major Emphasis

FCS	120	Clothing and People (2)
FCS	150	Food, Culture and You (3)
FCS	270	Family Housing (2)
FCS	275	Consumers in the Economy (3)
FCS	284	Foundations of FCS Education (3)
FCS	301	Lifespan Development (3)
FCS	331	Clothing Construction and Textiles (4)
FCS	340	Food Science (4)
FCS	400	Culturally Diverse Family Systems (3)
FCS	414W	Family Policy and Ethics (3)
FCS	478	Family Finance (3)
FCS	484	Program Development in Family Consumer Science (4)
FCS	488	Parenting Education (3)
HLTH	311	Family Life & Sex Education (3)

Other Graduation Requirements

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

FAMILY CONSUMER SCIENCE MINOR

The Department of Family Consumer Science offers a flexible minor consisting of 20 semester hours of approved FCS courses or other courses approved by advisor. Students may work with an FCS advisor to select the courses that will be most helpful. However, most students will benefit from a minor with one of three focus areas below.

FOOD AND NUTRITION MINOR

Students majoring in Nursing, Human Performance, Dental Hygiene, Food Science Technology, Community Health, or other similar majors can benefit from a Food and Nutrition minor.

Required Courses (18 credits)

FCS	140	Introduction to Nutrition (3)
FCS	150	Food, Culture and You (3)
FCS	242	Nutrition for Healthcare Professionals (3)
FCS	420	Nutrition Assessment (3)
FCS	440	Nutrition II (3)
FCS	446	Lifespan Nutrition (3)

Required Minor Electives

(choose a minimum of 2 credits from any 300-400 level FCS courses)

CHILD DEVELOPMENT AND FAMILY STUDIES MINOR

A minor with a focus in Child Development and Family Studies is useful to a variety of students going into professions related to health and human services, especially those who will work with children and families. Students may choose any combination of 20 credits from the list of courses below for a minor. Other courses may be chosen with advisor approval. A minor in this area can enable students to become Certified Family Life Educators through National Council on Family Relations.

Minor Electives (choose 20 credits)

FCS	100	Personal & Family Living (3)
FCS	101	Introduction to Family Consumer Science (3)
FCS	230	Child Care Psychology (3)
FCS	270	Family Housing (2)
FCS	275	Consumers in the Economy (3)
FCS	301	Lifespan Development (3)
FCS	303	Working With Families (3)
FCS	400	Culturally Diverse Family Systems (3)
FCS	401	Family Life Development (3)
FCS	402	Play and Child Development (3)
FCS	403	Parents and Peers and Adolescent Development (3)
FCS	408	Family Life Dynamics (3)
FCS	414W	Family Policy and Ethics (3)
FCS	446	Lifespan Nutrition (3)
FCS	474	Community Resources and Family Support (3)
FCS	478	Family Finance (3)
FCS	482	Teaching Family Life/Parenting Education (3)
FCS	483	Adult and Technical Education in Family Consumer Science (3)
FCS	488	Parenting Education (3)
FCS	496	Selected Topics: CDFS (2-3)
FCS	497	Internship (1-6)
HLTH	311	Family Life & Sex Education (3)

CONSUMER STUDIES MINOR

Professionals in this business related area usually work with people in professions such helping consumers get the best product or service for their money, advocating for a good availability of choices, resolving consumer complaints to achieve fair solutions, and helping consumers with a variety of money management issues.

FAMILY CONSUMER SCIENCE CONTINUED

Core Course

FCS 101 Introduction to Family Consumer Science (3)

Consumer Related Courses

FCS 376 Household Equipment (3)
FCS 275 Families in the Economy (3)
FCS 473 Consumer Protection (3)
FCS 474 Residential Mgmt. for Families and Special Needs People (4)
FCS 475 Family Policy (2)
FCS 478 Family Finance (2)
(May count one of the following)
FCS 140 Introduction to Nutrition (3)
FCS 120 Clothing and People (2)
FCS 270 Family Housing (2)
FCS 303 Working with Families (2)
FCS 483 Adult Education in Family Consumer Science (2)
FCS 496 Topics (2-3)
FCS 498 Internship (1-3)

Strongly Recommended Electives

MRKT 310 Principles of Marketing (3)
MRKT 316 Consumer Behavior (3)

COURSE DESCRIPTIONS

FCS 100 (3) Personal & 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.

Fall, Spring
GE-5

FCS 101 (3) Introduction to Family Consumer Science

An overview of the scope of family consumer sciences and the career potentials of the profession.

Fall, Spring

FCS 120 (2) Clothing and People

Relationship of clothing to people from cultural, social, psychological, economic and aesthetic perspectives.

Fall
Diverse Cultures - Purple

FCS 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.

Fall, Spring
GE-3 non-lab

FCS 150 (3) Food, Culture, and You

Introduces students to basic food preparation and culinary techniques. Students look at different cultures and the roles of individuals and nations in a global context using food habits as a model.

Fall, Spring

FCS 230 (3) Child Care Psychology

Principles of psychology applied to child rearing.
Diverse Cultures - Gold

FCS 242 (3) Nutrition for Healthcare Professionals

The science of six nutrition classes, including digestion through metabolism, and application of nutrition knowledge to clinical care, including weight control and common chronic conditions requiring nutrition therapy.

Pre: BIOL 220, CHEM 106 or CHEM 111
Fall, Spring

FCS 252 (3) Food Service Systems I

Principles of food services operations related to menu planning, standardized recipes, production, and service in for profit and nonprofit settings. Includes the NRA ServSafe certification.

Fall

FCS 270 (2) 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.

Spring

FCS 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.

Fall

FCS 284 (3) Foundations of FCS Education

Nature and scope of Family and Consumer Sciences (FCS) education for grades 5-12. Principles and application of traditional, career/technical and critical science FCS Education perspectives studied. Presentation of varied FCS teaching methods and techniques.

Alt-Fall

FCS 301 (3) Lifespan Development

Study of the family from a historical perspective; in terms of the family system and the broader ecological system; in terms of stresses faced and coping responses. This course will address issues at each of four life stages: infancy and early childhood; the school years; transition from school to adult life; and the adult years.

Fall

FCS 303 (3) 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. Students will participate in a service learning activity.

Fall, Spring

FCS 331 (4) Clothing Construction and Textiles

Introduction to principles and hands-on application of construction techniques for clothing and home furnishings. Emphasis on terminology, equipment, application and practice of sewing skills. Emphasis on consumer aspect of textiles and applications. Student projects will be aligned with sewing skills and experience.

Spring

FCS 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: FCS 150

Fall

FCS 342 (3) Food Production Management

Planning, preparing and serving meals with emphasis on effective management, nutritive needs, purchasing, and equipment. Includes quantity food service laboratory.

Pre: FCS 252, FCS 340, FCS 350

Spring

FCS 350 (3) Food Service Systems II

Principles of food services management related to budgeting, food safety and operational sanitation, analysis and control of quality and quantity in institutional and public food service operations.

Pre: FCS 252

Spring

FCS 360 (3) Romantic Relationships

This course is an in-depth examination and discussion of the many complex dynamics that make up romantic relationships. A diverse set of relationship topics are covered, including attachment, intimacy building and conflict diffusing strategies. Open discussion, critical thought, and application are encouraged via classroom and online opportunities.

Fall

FCS 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.

Fall

Diverse Cultures - Purple

FCS 401 (3) Family Life Development

The course is a study of development through the family life cycle. Emphasis on developmental interaction and systems theory.

Spring

FCS 402 (3) Play and Child Development

An examination of the important role that play has in the cognitive, emotional, physical, and social development of the child from birth to adolescence.

Summer

FCS 403 (3) Parents and Peers and Adolescent Development

Examination of how adolescents' development are affected by their relationships with their parents and with their peers.

Spring

FCS 414W (3) Family Policy and Ethics

An examination, analysis, and application of the impact of law, public policy, and ethical principles on family life.

Spring

WI

FCS 417 (3) Principles of Wellness Coaching

This course contains content associated with challenging entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, well-being assessment, and goal setting.

Fall, Spring

FCS 420 (3) Nutrition Assessment

In-depth study and practice of nutrition assessment techniques including dietary histories, anthropometrics, physical signs and symptoms, and laboratory interpretation in various age groups and conditions. Students will use findings to determine nutritional needs and make nutritional diagnoses.

Pre: FCS 242

Spring

FCS 439 (3) Nutrition for Physical Activity and Sport

Provides in-depth exploration of the dietary needs of physically active individuals across the lifespan. Its laboratory component will focus on performance and interpretation of assessments commonly used to determine dietary and physiological status.

Pre: FCS 140 or FCS 242

Fall, Spring

FCS 440 (3) Nutrition II

An advanced nutrition course in human metabolism, emphasizing the function and interaction of nutrients in metabolic and physiologic processes. A grade of "C" must be attained in CHEM 111 and BIOL 330 before taking this course.

Pre: BIOL 330, CHEM 111, FCS 242

Spring

FCS 442 (3) Medical Nutrition Therapy 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, HLTH 321

Fall

FCS 444 (3) Experimental Food Science

Food quality, safety, formulation, processing, preservation, and biotechnology are explored. Original food science experiments are planned, executed, interpreted, and presented using appropriate scientific techniques.

Pre: ENG 271W, FCS 340; HLTH 475

Spring

FCS 446 (3) Lifespan Nutrition

Study of nutritional needs of pregnancy, infancy, childhood, and adulthood. Experience in group dynamics in providing nutritional education to a target population.

Pre: FCS 140 or FCS 242

Fall

FCS 447 (3) Food Policy

The development, establishment, and execution of personal, local, federal and global food issues are studied. A previous nutrition course is not required. Graduate students, with the instructor, will develop an additional project, relating the student's major interest to food policy.

Summer

FCS 448 (3) Medical Nutrition Therapy II

The pathophysiological, nutrient assessment, planning and counseling aspects of biliary, surgical, endocrine, cardiovascular and renal conditions. Case-based approach.

Pre: FCS 442

Spring

FCS 454 (3) Sensory Evaluation and Food Product Development

Principles of sensory evaluation and application of those principles and other food science by selecting, planning, conducting, and reporting on a food product development project.

Spring

FCS 473 (3) Consumer Protection

Emphasizes the analyses and assessment of the effectiveness of consumer protection efforts. Emphasis will be placed on government laws, regulations, and agencies at the federal, state and local levels.

Variable

FCS 474 (3) Community Resources and Family Support

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, older adults, special needs, singles, and low income.

Spring

FCS 478 (3) 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.

Variable

FCS 482 (3) 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.

Fall

FCS 483 (3) Adult and Technical Education in Family Consumer Science

Study of the philosophy, objectives, and implementation of adult and technical education for family consumer science professionals. Emphasis is placed on the knowledge and skills which are necessary for the process and preparation of delivering effective leader-led individual and group learning with concentration on methods, tools, and techniques employed in facilitating adult learning.

Fall, Spring

FCS 484 (4) Program Development in Family Consumer Science

Philosophy, scope/sequence, curriculum, evaluation and administration of family consumer science educational programs for youth of varied abilities, interests, and socioeconomics levels. 12 hour program clinical required.

Fall

FAMILY CONSUMER SCIENCE CONTINUED

FCS 487 (1-3) Topic: Family Consumer Science Education

Current issues and/or research findings to be announced as offered. May be repeated.
Variable

FCS 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.
Fall

FCS 490 (1-3) Workshop

Workshop topics vary as announced in class schedule. May be repeated.
Variable

FCS 491 (1-4) In-Service

May be repeated on each new topic.
Variable

FCS 492 (2) 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; FCS 497 or concurrent
Fall

FCS 495 (3-4) Intern: Early Child Family

A scheduled work assignment that will include on-site experiences with parents in early childhood family education.
Fall, Spring

FCS 496 (2-3) Selected Topics: CDFS

Topics announced as offered. May be repeated.
Variable

FCS 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
Fall, Spring

FCS 498 (1-6) Undergraduate Internship

A scheduled work assignment with supervision in private business, industry, and government agency appropriate to each area of concentration.
Pre: Consent
Fall, Spring

FCS 499 (1-4) Individual Study

Arranged with the instructor.
Pre: Consent
Fall, Spring

FILM AND MEDIA STUDIES

Film and Media Studies

College of Arts and Humanities
Department of English
230 Armstrong Hall • 507-389-2117

Program Director (Film Studies): Donna Casella 507-389-5260
Program Director (Media Studies): Amy Lauters 507-389-5523

Chair: Matthew Sewell (English)
Chair: Mavis Richardson (Mass Media)

Faculty:

Film Studies: Donna Casella, Brandon Cooke, Najda Kramer, Steven Tybin, Matthew Sewell, Richard Terrill
Media Studies: Rachael Hanel, Amy Lauters, Chuck Lewis, Jane McConnell, Heather McIntosh, Ellen Mrja, Mavis Richardson

The Film and Media Studies Major is an undergraduate liberal arts program in the College of Arts and Humanities that teaches students to look at all aspects of media including: technical, creative, aesthetic, historical, theoretical and cultural perspectives. The program prepares students for careers as communicators, innovative creators of film and other media texts, and competent professionals in such fields as news, public relations, film production and other-media related fields. The degree also prepares students for graduate work in film and media studies.

POLICIES/INFORMATION

Admission to the Major is granted by the Program Directors. Please see one of the directors for information on admission procedures.

GPA Policy. Majors must earn a cumulative GPA of 2.5 or better in their major, in addition to the 2.0 overall GPA required by the University for graduation. A student must earn a "C" or better for a course to apply to their major; this includes the required general electives.

P/N Grading Policy. A course leading to a Film and Media Studies major may not be taken on a P/N basis, unless it is an Internship or an Independent Study not connected to the student's Capstone Project.

Transfer Credit. The program accepts no more than 16 credits from other colleges and universities as transfer credits to be applied toward the major. They must be taken in courses that match or are the equivalent of courses that are offered in the program. Please consult the Program Directors on any transfer issues.

Internships. In addition to the two-credit Internship Option for the Capstone Project, students may take additional internship credits up to a total of six internship credits. Opportunities for film and media studies internships exist on and off campus for majors who want to work in a professional setting.

Additional Requirement. Students may not use any course in this major to meet the requirements of any other degree in the Mass Media or English departments.

Student Advising. Students are encouraged to consult the Program Directors on a regular basis for advice about course selection and career planning. Please see the Program Director in the area that matches your career interests: Film or Media Studies.

FILM AND MEDIA STUDIES BA

Required General Education

These credits do not count towards the major.

ENG	101	Composition (4)
FILM	114	Introduction to Film (4)
MASS	110	Introduction to Mass Media (4)

Major Common Core

FILM	210W	Film Genres (4)
FILM	329	Film History (4)
FILM	416	Film Theory and Criticism (4)
MASS	221W	Basic Writing for Mass Media (4)
MASS	411	Mass Media Ethics and Criticism (4)
MASS	412	Mass Media History (4)

Capstone (choose 2 credits)

The 2-credit Capstone Project may be an internship either in film production or a mass media field, or an individual study involving either a creative portfolio (for example: short film, screenplay, multimedia web design) or a written critical paper of no less than 10 pages using the type of research and critical thinking expected in the student's upper-division major classes. Students must consult one of the Program Directors about the design of their chosen project which typically is completed in their junior or senior year. Choose 2 credits of one of the following:

FILM	498	Internship (1-6)
FILM	499	Individual Study (1-4)
MASS	498	Mass Media Internship (2-4)
MASS	499	Individual Study in Mass Media (1-2)

Major Restricted Electives

Group A (choose 8 credits)

MASS	312	Mass Media Law (4)
MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	334	Writing & Speaking for Broadcast (4)
MASS	436W	Specialized Writing (4)

Group B (choose 8 credits)

ENG	446	Screenwriting Workshop (4)
FILM	216W	Writing About Film (4)
FILM	217	Introduction to Film Production (4)
FILM	317	Advanced Film Production (4)

Group C (choose 4 credits)

MASS	233	Public Relations Principles (4)
MASS	260	Principles of Visual Mass Media (4)
MASS	351	Digital Imaging for Mass Media (4)
MASS	360	Digital Design for Mass Media (4)
MASS	434W	Public Relations Writing (4)

Group D (choose 4 credits)

Students taking PHIL 465 must add 1 credit of PHIL 499 (Individual Study) at the time they take this course in order to meet the 4 credit requirement for Group D.

FILM	214	Topics in Film (1-4)
FILM	334W	International Cinema (4)
FILM	493	Topics in Film Studies (1-4)
GER	460	Topics in German Cinema (4)
PHIL	465	Philosophy of Film (3)

Other Graduation Requirements - Language (8 credits)

FILM STUDIES MINOR

Minor Core

FILM	114	Introduction to Film (4)
FILM	329	Film History (4)
FILM	416	Film Theory and Criticism (4)

Minor Electives

(choose 8 credits; 4 credits must be at the 300-400 level International film course)

FILM	210W	Film Genres (4)
FILM	214	Topics in Film (1-4)
FILM	216W	Writing About Film (4)
FILM	217	Introduction to Film Production (4)
FILM	317	Advanced Film Production (4)
FILM	334W	International Cinema (4)
FILM	493	Topics in Film Studies (1-4)
GER	460	Topics in German Cinema (4)
PHIL	465	Philosophy of Film (3)

COURSE DESCRIPTIONS

FILM 110 (4) Film Appreciation

Promotes appreciation and understanding of cinema through the study of film style, film history, film genres, and the cultural impact of films.

Variable

GE-6

FILM 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.

GE-6

FILM 210W (4) Film Genres

Study and analysis of the techniques, thematic conventions, and cultural and historical contexts of major film genres including the western, the musical, crime, melodrama, science fiction, and gangster. Films will include a mix of classic and contemporary examples.

Fall

WI, GE-6

FILM 214 (1-4) Topics in Film

Courses will explore specialized topics in film. May be repeated as topics change.

GE-6

FILM 216W (4) Writing About Film

Studies analytical film language in several different film writing forms, including short-and long-form reviews, collaborative analysis, and formal critical essays. Emphasizes social and critical contexts needed for film analysis and practice of writing in these film forms.

Variable

WI, GE-6

FILM 217 (4) Introduction to Film Production

Introduces fundamentals of film production: writing, producing, directing, lighting, shooting, and editing, through lecture, critiquing the work of other filmmakers, and hands on production. By the end of this course students will be ready to pursue their own film projects.

Fall, Spring

GE-6, GE-11

FILM 317 (4) Advanced Film Production

Designed for students who have prior experience and want to make an experimental, narrative and/or documentary film. Students will move from screenplay/proposal to production and post production of short films. May be repeated

Pre: FILM 217 or permission of instructor

Fall, Spring

FILM 329 (4) Film History

The course is designed to give students a foundation in film history. The course focuses on major directors, genres, and periods in film history with an emphasis on social technological and critical context in order to provide an analytical framework that will support subsequent work.

FILM 334W (4) International Cinema

Introduces students to film from a variety of world cultures. Designed to increase knowledge of world cultures and appreciation and understanding of cultural differences in representation. Emphasizes history of national cinemas, film analysis, and writing.

Variable

WI, GE-6, GE-8

Diverse Cultures – Purple

FILM 416 (4) Film Theory and Criticism

Trends in film theory and criticism. Practice in critical analysis.

Pre: FILM 329 or permission of instructor

Variable

FILM 493 (1-4) Topics in Film Studies

Topic-oriented course in film studies. May be repeated with change in topic.

Variable

FILM 498 (1-6) Internship

On-site field experience, the nature of which is determined by the specific needs of the student's program plan.

Pre: Consent of instructor

Fall, Spring, Summer

FILM 499 (1-4) Individual Study

Extensive reading, research, writing and/or film production in an area for which the student has had basic preparation.

Pre: Consent of instructor

Fall, Spring, Summer

Finance

College of Business

Department of Finance

150 Morris Hall • 507-389-1319

Chair: Roger Severns

Yilin Chen, Puneet Jaiprakash, Hyuna Park, Joseph Reising, Harold Thiewes, Stephen Wilcox

The objective of the department is to prepare students for entry-level positions in the field of finance. 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, Financial Planning and Insurance, General Finance, Investment Analysis, and Institutional Finance

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's junior year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Finance Major

1. Cumulative (including Transfer) Grade Point Average: minimum 2.7
2. Credits and Courses: 33 completed credits of the 44 general education requirements.
3. Completion of the following courses: IT 101, MATH 130, ACCT 200, ACCT 210, BLAW 200, MGMT 200, BUS 295, ECON 201, ECON 202, ECON 207. Complete one of the following courses: PHIL 120W, PHIL 205W, PHIL 222W, PHIL 224W, PHIL 226W, PHIL 240W.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Advising Center. When a student applies to the College of Business, he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, 507-389-2963.

College of Business Laptop Program. Students enrolled in College of Business courses numbered 200 and above are required to have a laptop computer. For further information, please visit the College website at www.cob.mnsu.edu.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. Students must be admitted to the College of Business to be granted a Bachelor of Science degree in any College of Business major.

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

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

No more than three of the required nine courses in a track may be transferred from another university and be applied toward the Finance degree, if a student is to be awarded a degree in finance from Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA 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.

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

Student Organizations. The Finance Club provides students with a direct link to professionals employed in finance positions. This is a professional and social club and 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 Council of Student Business Organizations (COSBO), which is comprised of the presidents of nine 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.

FINANCE BS

Degree completion = 120 credits

Required General Education

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
MATH 130	Finite Mathematics and Introductory Calculus (4)
Ethics (choose 3 credits)	
PHIL 120W	Introduction to Ethics (3)
PHIL 205W	Culture, Identity, and Diversity (3)
PHIL 222W	Medical Ethics (3)
PHIL 224W	Business Ethics (3)
PHIL 226W	Environmental Ethics (3)
PHIL 240W	Law, Justice & Society (3)

Pre-requisites to the Major

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
BLAW 200	Legal, Political and Regulatory Environmental of Business (3)
BUS 295	Professional Preparation for Business Careers (2)
ECON 207	Business Statistics (4)
FINA 201	Orientation to College of Business Majors (0)
IT 101	Introduction to Information Systems (3)
MGMT 200	Introduction to MIS (3)

Major Common Core (Required of all College of Business Majors)

(choose 18 credits)	
FINA 362	Business Finance (3)
IBUS 380	Principles of International Business (3)
MGMT 330	Principles of Management (3)
MGMT 346	Production and Operations Management (3)
MGMT 481	Business Policy and Strategy (3)
MRKT 310	Principles of Marketing (3)

Required Finance Major (Required of all Finance Majors)

FINA 460	Investments (3)
FINA 462	Strategic Financial Management (3)
FINA 464	Financial Institutions and Markets (3)
FINA 467	Insurance and Risk Management (3)

Major Emphasis - CORPORATE FINANCE

ACCT	300	Intermediate Financial Accounting I (3)
ACCT	310	Management Accounting I (3)
FINA	461	Advanced Corporate Finance (3)

Electives (choose 6-12 credits)

Choose two of the following, at least one being FINA, for a total of at least 6 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.

ACCT	301	Intermediate Financial Accounting II (3)
ACCT	311	Management Accounting II (3)
ACCT	320	Accounting Information Systems (3)
ACCT	330	Individual Income Tax (3)
ACCT	410	Business Income Tax (3)
BUS	397	IBE Practicum (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	463	Security Analysis (3)
FINA	469	International Business Finance (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)
FINA	498	Internship (3)

Major Emphasis - FINANCIAL PLANNING AND INSURANCE

ACCT	330	Individual Income Tax (3)
FINA	459	Personal Financial Planning (3)
FINA	470	Personal Insurance (3)

Electives (choose 6 credits)

Choose two of the following, for a total of at least 6 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.

ACCT	410	Business Income Tax (3)
BUS	397	IBE Practicum (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	458	Estate Planning (3)
FINA	463	Security Analysis (3)
FINA	466	Employee Benefit Planning (3)
FINA	477	Real Estate (3)
FINA	478	Real Estate Investment (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)
FINA	498	Internship (3)
MRKT	412	Professional Selling (3)

Major Emphasis - GENERAL FINANCE

(choose five of the following, three of which must be FINA courses, for a total of at least 15 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.)

ACCT	300	Intermediate Financial Accounting I (3)
ACCT	301	Intermediate Financial Accounting II (3)
ACCT	310	Management Accounting I (3)
ACCT	311	Management Accounting II (3)
ACCT	330	Individual Income Tax (3)
ACCT	410	Business Income Tax (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	458	Estate Planning (3)
FINA	459	Personal Financial Planning (3)
FINA	461	Advanced Corporate Finance (3)
FINA	463	Security Analysis (3)
FINA	466	Employee Benefit Planning (3)
FINA	469	International Business Finance (3)
FINA	470	Personal Insurance (3)
FINA	477	Real Estate (3)
FINA	478	Real Estate Investments (3)
FINA	480	Options and Futures (3)
FINA	482	Commercial Bank Management (3)
FINA	492	Study Tour (3)
FINA	493	Maverick Fund (1-6)
FINA	498	Internship (3)
MRKT	412	Professional Selling (3)

Major Emphasis - INSTITUTIONAL FINANCE

FINA	461	Advanced Corporate Finance (3)
FINA	463	Security Analysis (3)
FINA	482	Commercial Bank Management (3)

Electives (choose 6-12 credits)

(choose two courses, at least one being FINA, for a total of at least 6 credits. Students who register for FINA 493 should register for 3 credits each time they register for the course.)

ACCT	300	Intermediate Financial Accounting I (3)
ACCT	301	Intermediate Financial Accounting II (3)
BUS	397	IBE Practicum (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	469	International Business Finance (3)
FINA	470	Personal Insurance (3)
FINA	477	Real Estate (3)
FINA	478	Real Estate Investment (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)
FINA	498	Internship (3)

Major Emphasis - INVESTMENT ANALYSIS

Students who register for FINA 493 should register for 3 credits each time they register for the course.

ACCT	300	Intermediate Financial Accounting I (3)
FINA	463	Security Analysis (3)
FINA	480	Options and Futures (3)
FINA	493	Maverick Fund (1-6)

Electives (Choose 3-12 credits)

(choose at least one of the following)

ACCT	301	Intermediate Financial Accounting II (3)
ACCT	330	Individual Income Tax (3)
BUS	397	IBE Practicum (3)
ECON	463	Applied Econometrics of Financial Markets (3)
FINA	459	Personal Financial Planning (3)
FINA	466	Employee Benefit Planning (3)
FINA	469	International Business Finance (3)
FINA	470	Personal Insurance (3)
FINA	477	Real Estate (3)
FINA	478	Real Estate Investment (3)
FINA	498	Internship (3)

Required Minor: None.

FINANCIAL PLANNING MINOR**Minor Core**

FINA	459	Personal Financial Planning (3)
FINA	467	Insurance and Risk Management (3)

(choose 3 credits)

FINA	100	Personal Financial Management (3)
FINA	362	Business Finance (3)

Minor Electives (choose 9 credits)

(choose at least three of the following courses)

ACCT	330	Individual Income Tax (3)
FINA	458	Estate Planning (3)
FINA	460	Investments (3)
FINA	463	Security Analysis (3)
FINA	464	Financial Institutions and Markets (3)
FINA	466	Employee Benefit Planning (3)
FINA	470	Personal Insurance (3)
FINA	477	Real Estate (3)
FINA	478	Real Estate Investment (3)
FINA	498	Internship (3)
MRKT	412	Professional Selling (3)

COURSE DESCRIPTIONS**BUS 100 (3) Introduction to Business and Business Careers**

This course prepares students for success by exposing them to the requirements, expectations, resources and opportunities of the COB. Students will have business experiences and will develop professional skills.

Variable

BUS 397 (3) IBE Practicum

An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students. Pre: Must be admitted to the College of Business
Coreq: FINA 362, MGMT 330, MRKT 310
Fall, Spring

FINA 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.
Variable

FINA 362 (3) Business Finance

An introduction to finance relating to problems, methods, and policies in financing business enterprise.
Pre: ACCT 200, Jr. Standing
Fall, Spring

FINA 372 (3) Special Topics in Finance

Current topics of significance in Finance. May be repeated for credit.
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

FINA 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: FINA 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
Fall, Spring, Summer

FINA 458 (3) Estate Planning

Principles and techniques for estate planning. Examination of various retirement plans available, and the legal and tax environment impacting an estate's portfolio.
Pre: FINA 100 or FINA 362
Fall

FINA 459 (3) Personal Financial Planning

Fundamental concepts of personal financial management: insurance, budgeting, credit, savings, investments, retirement and estate planning, and consumer debt management.

Pre: ACCT 330 or ACCT 411, FINA 460, FINA 467
Spring

FINA 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
Fall, Spring

FINA 461 (3) Advanced Corporate Finance

This course encompasses advanced principles and concepts concerning the nature and types of debt financing, the valuation and use of leases, the process and tools of risk management, the calculation and estimation of financial ratios, the financial planning and forecasting processes, and the understanding of working capital.

Pre: FINA 362
Fall

FINA 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
Fall, Spring

FINA 463 (3) Security Analysis

Tools and techniques to aid in individual and institutional portfolio management.

Pre: FINA 362 and FINA 460
Spring

FINA 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
Fall, Spring

FINA 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 100 or FINA 362
Spring

FINA 467 (3) Insurance and Risk Management

Examination of the fundamentals of the insurance industry; the risk management process; and commercial insurance exposures and policies including commercial property, general liability, and workers' compensation.

Fall, Spring

FINA 468 (3) Commercial Property/Liability Insurance

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.

Pre: FINA 467
Variable

FINA 469 (3) International Business Finance

Financing investments and working capital management problems in multinational environments.

Pre: FINA 362
Variable

FINA 470 (3) Personal Insurance

Examination of personal insurance exposures and policies including auto, health, home, and life.

Pre: FINA 467
Fall

FINA 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 362
Variable

FINA 477 (3) Real Estate

Fundamental principles: valuation, brokerage, financing, law, property management, land descriptions and basic investment.

Pre: FINA 100 or FINA 362
Variable

FINA 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
Variable

FINA 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.

FINA 480 (3) Options and Futures

Trading practices and procedures utilizing these contracts in hedging and risk management policies for business.

Pre: FINA 362
Fall

FINA 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
Spring

FINA 491 (1-4) In-Service

Fall, Spring

FINA 492 (1-3) Study Tour

Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.

Pre: Permission Required

Variable

FINA 493 (1-6) Maverick Fund

Students are responsible for generating investment ideas consistent with the Maverick Fund Investment Policy Statement.

Pre: FINA 362. Permission required. Students must apply to take this course and selected applicants will be granted permission to register. Application information and forms are available at <http://cob.mnsu.edu/finc/>.

Coreq: FINA 460

Fall, Spring

FINA 497 (1-9) Internship

Supervised experience in business, industry, state or federal institutions.

Pre: Permission Required

Fall, Spring

FINA 498 (3) Internship

Supervised experience in business, industry, state or federal institutions.

Pre: Permission Required

Fall, Spring

FINA 499 (1-3) Individual Study

Pre: Permission Required

Fall, Spring

FIRST YEAR EXPERIENCE

First Year Experience

103 Preska Residence Community • 507-389-5498

Director: Nicole Stock

FYEX 100 (1) First Year Seminar

This course supports the development of student success skills, such as reading, writing and speaking; helps students gain intellectual confidence; builds in the expectation of academic success; and provides assistance in making the transition to the University.

GE-12

FOOD SCIENCE TECHNOLOGY

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); Mary Hadley, Ph.D. (Chemistry); Gregg Marg, Ph.D. (Biology); Dorothy Wrigley, Ph.D. (Biology).

Recent outbreaks of food borne disease and concern for safe food products for consumers is driving the market for individuals with a degree in Food Science Technology. Graduates can expect to find employment within the food industry and testing laboratories or government laboratories. These positions require a diversified training in both foods and sciences, especially microbiology, nutrition, and chemistry. This undergraduate major is easily adapted for students wanting to continue into graduate education.

POLICIES/INFORMATION

Admission to major is granted by the Department of Biology and follows minimum University admission requirements:

- a minimum of 32 earned semester credits hours
- a minimum cumulative GPA of 2.00

GPA Policy. A minimum GPA of 2.00 must be maintained in the major.

P/N Grading Policy. All courses in the major must be taken for grade.

FOOD SCIENCE TECHNOLOGY BS

Degree completion = 120 credits

Required General Education

BIOL 105 General Biology I (4)

STAT 154 Elementary Statistics (3)

MATH

(choose 4 credits) Math 121 Calculus is strongly suggested if graduate study is intended.

MATH 112 College Algebra (4)

MATH 115 Precalculus Mathematics (4)

MATH 121 Calculus I (4)

Prerequisites to the Major

BIOL 220 Human Anatomy (4)

Major Common Core

BIOL 106 General Biology II (4)

BIOL 270 Microbiology (4)

BIOL 330 Principles of Human Physiology (4)

BIOL 453 Biological Engineering Analysis I (4)

BIOL 478 Food Microbiology and Sanitation (4)

CHEM 201 General Chemistry I (5)

CHEM 202 General Chemistry II (5)

CHEM 305 Analytical Chemistry (4)

CHEM 322 Organic Chemistry I (4)

CHEM 323 Supplemental Organic Functional Group Chemistry (1)

CHEM 360 Principles of Biochemistry (4)

ENG 271W Technical Communication (4)

FCS 150 Food, Culture and You (3)

FCS 242 Nutrition for Healthcare Professionals (3)

FCS 340 Food Science (4)

FCS 444 Experimental Food Science (3)

Practicum (choose 2-4 credits) (choose 2 credits from the following)

BIOL 497 Internship I (1-12)

BIOL 499 Individual Study (1-4)

Major Restricted Electives (choose 1 course)

BIOL 452 Biological Instrumentation (3)

BIOL 467 Industrial Hygiene (3)

Required Minor: None.

French

College of Arts & Humanities
 Department of World Languages & Cultures
 227 Armstrong Hall • 507-389-2116
 Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Faculty: Evan Bibbee

Studying French provides insight into the literature and culture of France and other French-speaking countries. 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 study-abroad opportunity, or who acquire language experience on their own initiative, may receive credit if arrangements are made in advance.

Communicate in Languages Other Than English

- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
 Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
 Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures

- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
 Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information

- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
 Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture

- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
 Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World

- Standard 5.1: Students use the language both within and beyond the school setting.
 Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

POLICIES/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.

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 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 BA Language Requirement. Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a credit by exam (see above section). Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State 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 French Education:

Emphasis on communication (four skills plus culture and language analysis).

FRENCH BA

Degree completion = 120 credits

Prerequisites to Major Elementary French - (choose 2-10 credits)

- FREN 101 Elementary French I (5)
 FREN 102 Elementary French II (5)
 FREN 200 Entry-Level Intermediate French (2-4)

Major Common Core

Language (choose 11-21 credits)

- FREN 302W 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)

Literature (choose 4-15 credits)

- 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)

Civilization (choose 3-4 credits)

- FREN 305 France Today (3-4)
 FREN 402 French Civilization (3-4)

Major Restricted Electives (choose 1-12 credits)

- FREN 201 Intermediate French I (4)
 FREN 202 Intermediate French II (4)
 FREN 204 Advanced Intermediate French (2-4)
 FREN 211 Intermediate Readings (1-3)
 FREN 214 Paris et L'ILE de France (1-3)
 FREN 215 Composition (1-3)
 FREN 216 Conversation (1-4)
 FREN 217 Modern France (1-3)
 FREN 218 On Y Va (1)
 FREN 261 Conversation & Pronunciation (1-3)
 FREN 293 Supervised Study in French-Speaking Countries (1-6)
 FREN 299 Individual Study (1-4)
 FREN 301 Third Year Vocabulary Review (3)
 FREN 302 Composition (2-4)
 FREN 302W Composition (2-4)

FREN 304	Third Year Grammar Review (3)
FREN 305	France Today (1-4)
FREN 313	Third Year French (1-4)
FREN 314	Paris et L'ILE de France (1-3)
FREN 315	Composition (1-3)
FREN 316	Conversation (1-4)
FREN 317	Modern France (1-3)
FREN 318	Introduction to Business French (1-4)
FREN 320	French Seminar (1-3)
FREN 322	Listening Comprehension and Pronunciation (1-3)
FREN 323	French Phonetics & Applied Linguistics (2-4)
FREN 350	Introduction to French Literature (3)
FREN 366	Oral Communication (1-6)
FREN 393	Supervised Study in French-Speaking Countries (1-6)
FREN 402	French Civilization (3-4)
FREN 404	French Syntax (2-4)
FREN 405	Business French I (2-4)
FREN 406	Business French II (2-4)
FREN 414	Paris et L'ILE de France (1-3)
FREN 415	Composition (1-3)
FREN 416	Conversation (1-4)
FREN 417	Modern France (1-3)
FREN 420	French Seminar (1-4)
FREN 432	French Literature I (1-4)
FREN 442	French Literature II (1-4)
FREN 452	French Literature III (1-4)
FREN 492	Individual Study (1-4)
FREN 494	Supervised French Study (1-6)
FREN 497	Internship (1-6)
FREN 499	Individual Study (1-4)

Required Minor: Yes. Any.

FRENCH BS

Degree completion = 120 credits

Prerequisites to Major (Elementary French - (choose 2-10 credits))

FREN 101	Elementary French I (5)
FREN 102	Elementary French II (5)
FREN 200	Entry-Level Intermediate French (2-4)

Major Common Core

Language (choose 11-21 credits)

FREN 302W	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)

Literature (choose 4-15 credits)

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)

Civilization (choose 3-4 credits)

FREN 305	France Today (3-4)
FREN 402	French Civilization (3-4)

Major Restricted Electives (choose 1-9 credits)

FREN 211	Intermediate Readings (1-3)
FREN 214	Paris et L'ILE de France (1-3)
FREN 215	Composition (1-3)
FREN 216	Conversation (1-4)
FREN 217	Modern France (1-3)
FREN 218	On Y Va (1)
FREN 261	Conversation & Pronunciation (1-3)
FREN 293	Supervised Study in French-Speaking Countries (1-6)
FREN 299	Individual Study (1-4)
FREN 301	Third Year Vocabulary Review (3)

FREN 302	Composition (2-4)
FREN 302W	Composition (2-4)
FREN 304	Third Year Grammar Review (3)
FREN 305	France Today (1-4)
FREN 313	Third Year French (1-4)
FREN 314	Paris et L'ILE de France (1-3)
FREN 315	Composition (1-3)
FREN 316	Conversation (1-4)
FREN 317	Modern France (1-3)
FREN 318	Introduction to Business French (1-4)
FREN 320	French Seminar (1-3)
FREN 322	Listening Comprehension and Pronunciation (1-3)
FREN 323	French Phonetics & Applied Linguistics (2-4)
FREN 350	Introduction to French Literature (3)
FREN 366	Oral Communication (1-6)
FREN 393	Supervised Study in French-Speaking Countries (1-6)
FREN 402	French Civilization (3-4)
FREN 404	French Syntax (2-4)
FREN 405	Business French I (2-4)
FREN 406	Business French II (2-4)
FREN 414	Paris et L'ILE de France (1-3)
FREN 415	Composition (1-3)
FREN 416	Conversation (1-4)
FREN 417	Modern France (1-3)
FREN 420	French Seminar (1-4)
FREN 432	French Literature I (1-4)
FREN 442	French Literature II (1-4)
FREN 452	French Literature III (1-4)
FREN 492	Individual Study (1-4)
FREN 494	Supervised French Study (1-6)
FREN 497	Internship (1-6)
FREN 499	Individual Study (1-4)

FRENCH BS, TEACHING

Degree completion = 120 credits

Prerequisites to Major Elementary French (choose 2-10 credits)

FREN 101	Elementary French I (5)
FREN 102	Elementary French II (5)
FREN 200	Entry-Level Intermediate French (2-4)

Major Common Core

Language (choose 11-21 credits)

FREN 302W	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)

Literature (choose 4-15 credits)

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)

Civilization (choose 3-4 credits)

FREN 305	France Today (3-4)
FREN 402	French Civilization (3-4)

Methods (choose 8 credits)

WLC 460	Methods of Teaching Modern Language (3)
WLC 461	Applied Modern Language Teaching Methods (1)
WLC 462	Foreign Language Elementary School (FLES) Methods (3)
WLC 463	Applied (FLES) Methods (1)

Major Restricted Electives (choose 1 credit)

FREN 201	Intermediate French I (4)
FREN 202	Intermediate French II (4)
FREN 204	Advanced Intermediate French (2-4)
FREN 211	Intermediate Readings (1-3)
FREN 214	Paris et L'ILE de France (1-3)

FRENCH CONTINUED

FREN 215	Composition (1-3)
FREN 216	Conversation (1-4)
FREN 217	Modern France (1-3)
FREN 218	On Y Va (1)
FREN 261	Conversation & Pronunciation (1-3)
FREN 293	Supervised Study in French-Speaking Countries (1-6)
FREN 299	Individual Study (1-4)
FREN 301	Third Year Vocabulary Review (3)
FREN 302	Composition (2-4)
FREN 302W	Composition (2-4)
FREN 304	Third Year Grammar Review (3)
FREN 305	France Today (1-4)
FREN 313	Third Year French (1-4)
FREN 314	Paris et L'ILE de France (1-3)
FREN 315	Composition (1-3)
FREN 316	Conversation (1-4)
FREN 317	Modern France (1-3)
FREN 318	Introduction to Business French (1-4)
FREN 320	French Seminar (1-3)
FREN 322	Listening Comprehension and Pronunciation (1-3)
FREN 323	French Phonetics & Applied Linguistics (2-4)
FREN 350	Introduction to French Literature (3)
FREN 366	Oral Communication (1-6)
FREN 393	Supervised Study in French-Speaking Countries (1-6)
FREN 402	French Civilization (3-4)
FREN 404	French Syntax (2-4)
FREN 405	Business French I (2-4)
FREN 406	Business French II (2-4)
FREN 414	Paris et L'ILE de France (1-3)
FREN 415	Composition (1-3)
FREN 416	Conversation (1-4)
FREN 417	Modern France (1-3)
FREN 420	French Seminar (1-4)
FREN 432	French Literature I (1-4)
FREN 442	French Literature II (1-4)
FREN 452	French Literature III (1-4)
FREN 492	Individual Study (1-4)
FREN 494	Supervised French Study (1-6)
FREN 497	Internship (1-6)
FREN 499	Individual Study (1-4)

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 or equivalent. Contact department for details. Also required for the major are first-hand experiences with the target cultures.

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.

FRENCH MINOR

Required for Minor (Core, 24 credits)

Elementary French or other proof of skill is needed.

Intermediate sequence counts toward the minor.

FREN 302W	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 one course from the following)	
FREN 305	France Today (3-4)
FREN 402	French Civilization (3-4)

COURSE DESCRIPTIONS

FREN 101 (5) Elementary French I

An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing.

GE-8

FREN 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

GE-8

FREN 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

GE-8

FREN 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

GE-8

FREN 214 (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 101, FREN 102, or equivalent

FREN 216 (1-4) Conversation

Practice in intermediate-level conversational skills.

Pre: FREN 101, FREN 102, or equivalent

FREN 217 (1-3) Modern France

Introduction to contemporary French civilization.

Pre: FREN 101, FREN 102, or equivalent

FREN 218 (1) On y va

Preparation for study in France.

FREN 261 (1-3) Conversation & 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, FREN 202, or equivalent

FREN 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, FREN 102, or equivalent

FREN 299 (1-4) Individual Study

Topics will vary.

FREN 301 (3) Third-Year Vocabulary Review

Systematic review of French vocabulary.

Pre: FREN 201, FREN 202, or equivalent

FREN 302W (2-4) Composition

Review of grammar and vocabulary. Practice in descriptive, narrative, and expository prose.

Pre: FREN 201, FREN 202, or equivalent

WI

FREN 304 (3) Third-Year Grammar Review

Systematic review of French grammar.

Pre: FREN 201, FREN 202, or equivalent

FREN 305 (1-4) France Today

Social, political, and economic trends in contemporary France.
Pre: FREN 201, FREN 202, or equivalent

FREN 314 (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 201, FREN 202, or equivalent

FREN 315 (1-3) Composition

Practice in descriptive and narrative prose. Acquisition of grammatical structures and vocabulary beyond the intermediate sequence.
Pre: FREN 201, FREN 202, or equivalent

FREN 316 (1-4) Conversation

Practice in conversational skills.
Pre: FREN 201, FREN 202, or equivalent

FREN 317 (1-3) Modern France

Introduction to contemporary French civilization.
Pre: FREN 201, FREN 202, or equivalent

FREN 318 (1-4) Introduction to Business French

Introduction to basic concepts associated with French business practices.
Pre: FREN 201, FREN 202, or equivalent

FREN 322 (1-3) Listening Comprehension and Pronunciation

Development of listening comprehension and pronunciation through the use of tapes, videos, films, compact discs, and other recorded materials.
Pre: FREN 201, FREN 202, or equivalent

FREN 323 (2-4) French Phonetics & Applied Linguistics

A study of the sound system in French. Intensive oral practice.
Pre: FREN 201, FREN 202, or equivalent

FREN 350 (3) Introduction to French Literature

A beginning literature course designed to teach students to read with understanding and critical ability.
Pre: FREN 201, FREN 202, or equivalent

FREN 366 (1-6) Oral Communication

Intensive practice in advanced conversational skills. May be repeated for credit.
Pre: FREN 201, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 402 (3-4) French Civilization

Survey of historical, philosophical, literary and artistic development of France from the beginning to the present.
Pre: FREN 201, FREN 202, or equivalent

FREN 404 (2-4) French Syntax

Systematic review of French grammar.
Pre: FREN 201, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 414 (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 201, FREN 202, or equivalent

FREN 416 (1-4) Conversation

Practice in advanced conversation skills.
Pre: FREN 201, FREN 202, or equivalent

FREN 417 (1-3) Modern France

In-depth study of different aspects of contemporary French civilization.
Pre: FREN 201, FREN 202, or equivalent

FREN 420 (1-4) French Seminar

In-depth study of an author, genre, movement, theme or period.
Pre: FREN 201, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 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, FREN 202, or equivalent

FREN 492 (1-4) Individual Study

Topics will vary.
Pre: FREN 201, FREN 202, or equivalent

FREN 494 (1-6) Supervised French Study

Topics will vary. Study for credit must be approved by the department prior to departure.
Pre: FREN 201, FREN 202, or equivalent

FREN 497 (1-6) Internship

Pre: FREN 201, FREN 202, or equivalent

FREN 499 (1-4) Individual Study

Pre: FREN 201, FREN 202, or equivalent

Gender and Women's Studies

College of Social & Behavioral Sciences

Department of Gender and Women's Studies

109 Morris Hall • 507-389-2077

Website: <http://sbs.mnsu.edu/women/>

Chair: Shannon Miller

Laura Harrison

The Department of Gender and Women's Studies familiarizes students with interdisciplinary feminist perspectives through coursework, internships, research, and activism. Students learn to examine the historical, social, psychological, political, economic, and cultural dimensions of gender, while gaining a more complex understanding of the construction of gender and its intersection with other categories of difference, power, and inequality. By understanding how interlocking systems of oppression function locally and internationally, students will be better situated to apply their critical thinking skills as they work toward social justice in a global society.

The department supports a variety of opportunities for personal and professional development, including a student club and honor society, community and teaching internships, workshops and conferences, and cultural events. Students are encouraged to take leadership roles in the development of special programs and to become actively involved with community and campus-based activist groups, applying feminist theory to the practice of empowering women and creating social change.

POLICIES/INFORMATION

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.

GPA Policy. A Gender and Women's Studies major GPA of 2.0 is required, AND a grade of "C-" or better must be earned in all Gender and 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.

GENDER AND WOMEN'S STUDIES BA

Degree completion = 120 credits

Major Common Core

GWS	110	Introduction to Gender (4)
GWS	220	Global Perspectives on Women and Change (4)
GWS	310	Feminist Thought (4)
GWS	330	Feminist Research and Action (4)
GWS	340	Undergraduate Seminar (4)

Major Restricted Electives

(choose a minimum of 13 credits from the following)

AIS	240	American Indian Women (3)
AIS	240W	American Indian Women (3)
ANTH	432	Kinship, Marriage and Family (3)
ANTH	433	Anthropology of Gender (3)
ART	419	Gender in Art (3)
BIOL	102	Biology of Women (3)
CORR	444	Women in the Criminal Justice System (3)
ENG	402	Gender in Literature (2-4)
ETHN	470	Women of Color (3)
GWS	120	Violence and Gender (4)
GWS	120W	Violence and Gender (4)
GWS	225	Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS	225W	Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)

GWS	230	Gender, Race, and Popular Culture (4)
GWS	251	Coming of Age: Gender and Culture (4)
GWS	251W	Coming of Age: Gender and Culture (4)
GWS	260	Selected Topics (1-4)
GWS	265	Women and Spirituality (1)
GWS	277	Individual Study (1-6)
GWS	290	Workshop (1-4)
GWS	440	Feminist Pedagogy (3)
GWS	455	Politics of Sexuality (3)
GWS	460	Selected Topics (1-4)
GWS	477	Individual Study (1-6)
GWS	490	Workshop (1-4)
GWS	497	Internship: Teaching (1-6)
GWS	498	Internship: Community (1-6)
HIST	155	History of the Family in America (3)
HIST	408	History of Women in Preindustrial Europe (4)
HIST	487	United States Women's History (4)
HLTH	400	Women's Health (3)
LAWE	235	Women in Law Enforcement (3)
PHIL	445	Feminist Philosophy (3)
POL	424	Women & Politics (3)
PSYC	460W	Psychology of Women (3)
SOC	209	Sociology of Human Sexualities (3)
SOC	307	Sex & Gender in Contemporary Society (3)
SOC	409	Family Violence (3)
SOWK	420	Women's Issues in Social Work (3)
SOWK	427	Social Work and Domestic Violence (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY - Language (8 credits)

Required Minor: Yes. Any.

GENDER AND WOMEN'S STUDIES BS

Degree completion = 120 credits

Major Common Core

GWS	110	Introduction to Gender (4)
GWS	220	Global Perspectives on Women and Change (4)
GWS	310	Feminist Thought (4)
GWS	330	Feminist Research and Action (4)
GWS	340	Undergraduate Seminar (4)

Internship (choose 4 credits from the following)

GWS	497	Internship: Teaching (1-6)
GWS	498	Internship: Community (1-6)

Major Restricted Electives

(choose a minimum of 9 credits from the following)

AIS	240	American Indian Women (3)
AIS	240W	American Indian Women (3)
ANTH	432	Kinship, Marriage and Family (3)
ANTH	433	Anthropology of Gender (3)
ART	419	Gender in Art (3)
BIOL	102	Biology of Women (3)
CORR	444	Women in the Criminal Justice System (3)
ENG	402	Gender in Literature (2-4)
ETHN	470	Women of Color (3)
GWS	120	Violence and Gender (4)
GWS	120W	Violence and Gender (4)
GWS	225	Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS	225W	Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS	230	Gender, Race, and Popular Culture (4)
GWS	251	Coming of Age: Gender and Culture (4)
GWS	251W	Coming of Age: Gender and Culture (4)
GWS	260	Selected Topics (1-4)
GWS	265	Women and Spirituality (1)
GWS	277	Individual Study (1-6)
GWS	290	Workshop (1-4)

GWS 440	Feminist Pedagogy (3)
GWS 455	Politics of Sexuality (3)
GWS 460	Selected Topics (1-4)
GWS 477	Individual Study (1-6)
GWS 490	Workshop (1-4)
HIST 155	History of the Family in America (3)
HIST 408	History of Women in Preindustrial Europe (4)
HIST 487	United States Women's History (4)
HLTH 400	Women's Health (3)
LAW 235	Women in Law Enforcement (3)
PHIL 445	Feminist Philosophy (3)
POL 424	Women & Politics (3)
PSYC 460W	Psychology of Women (3)
SOC 209	Sociology of Human Sexualities (3)
SOC 307	Sex & Gender in Contemporary Society (3)
SOC 409	Family Violence (3)
SOWK 420	Women's Issues in Social Work (3)
SOWK 427	Social Work and Domestic Violence (3)

SOC 307	Sex & Gender in Contemporary Society (3)
SOC 409	Family Violence (3)
SOC 420	Identity Work in Women's Reentry Experiences (3)
SOWK 420	Women's Issues in Social Work (3)
SOWK 427	Social Work and Domestic Violence (3)

SEXUALITY STUDIES MINOR

The Sexuality Studies minor is an interdisciplinary course of study designed to complement any major. The objective of the curriculum is to develop a critical framework for understanding social justice by examining how sexual practices, expressions, identities, and representations are shaped by social, anthropological, historical, psychological, legal, sociological, and political contexts. Under the coordination of the Department of Gender and Women's Studies, the minor focuses on issues of social ethics and sexuality, including the impact of factors cultural inequality upon sexual well-being and sexual health.

Minor Core

GWS 225	Introduction to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 230	Gender, Race, and Popular Culture (4)
GWS 455	Politics of Sexuality (3)
PSYC 333	Psychology of Sexual Health (3)
SOC 209	Sociology of Human Sexualities (3)
(choose one of the following courses)	
ANTH 269	Anthropology of Sex (3)
ANTH 340	Language and Power (4)

Required Minor: Yes. Any.

GENDER AND WOMEN'S STUDIES MINOR

Minor Core (16 credits)

Minors choose between GWS 110, GWS 110W and GWS 220, GWS 220W. If both are taken, one can be applied toward electives.

GWS 110	Introduction to Gender (4)
GWS 110W	Introduction to Gender (4)
GWS 220	Global Perspectives on Women and Change (4)
GWS 220W	Global Perspectives on Women and Change (4)
GWS 310	Feminist Thought (4)
GWS 330	Feminist Research and Action (4)
GWS 340	Undergraduate Seminar (4)

Minor Electives

(choose a minimum of 5 credits from the following)

AIS 240	American Indian Women (3)
AIS 240W	American Indian Women (3)
ANTH 432	Kinship, Marriage and Family (3)
ANTH 433	Anthropology of Gender (3)
ART 419	Gender in Art (3)
BIOL 102	Biology of Women (3)
CORR 444	Women in the Criminal Justice System (3)
ENG 402	Gender in Literature (2-4)
ETHN 470	Women of Color (3)
GWS 120	Violence and Gender (4)
GWS 120W	Violence and Gender (4)
GWS 225	Intro. to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 225W	Intro. to Lesbian, Gay, Bisexual, and Transgender Studies (4)
GWS 230	Gender, Race, and Popular Culture (4)
GWS 251	Coming of Age: Gender and Culture (4)
GWS 251W	Coming of Age: Gender and Culture (4)
GWS 260	Selected Topics (1-4)
GWS 265	Women and Spirituality (1)
GWS 277	Individual Study (1-6)
GWS 290	Workshop (1-4)
GWS 440	Feminist Pedagogy (3)
GWS 455	Politics of Sexuality (3)
GWS 460	Selected Topics (1-4)
GWS 477	Individual Study (1-6)
GWS 490	Workshop (1-4)
GWS 497	Internship: Teaching (1-6)
GWS 498	Internship: Community (1-6)
HIST 155	History of the Family in America (3)
HIST 408	History of Women in Preindustrial Europe (4)
HIST 487	United States Women's History (4)
HLTH 400	Women's Health (3)
LAW 235	Women in Law Enforcement (3)
PHIL 445	Feminist Philosophy (3)
POL 424	Women & Politics (3)
PSYC 460	Psychology of Women (3)
SOC 209	Sociology of Human Sexualities (3)

COURSE DESCRIPTIONS

GWS 110 (4) Introduction to Gender

This course familiarizes students with the field of Gender and Women's Studies. It focuses on major questions and approaches to understanding gender alongside race, class, and sexuality, among other identity categories.

Fall, Spring, Summer
GE-5, GE-7
Diverse Culture - Purple

GWS 110W (4) Introduction to Gender

This course familiarizes students with the field of Gender and Women's Studies. It focuses on major questions and approaches to understanding gender alongside race, class, and sexuality, among other identity categories.

Fall, Spring, Summer
WI, GE-5, GE-7
Diverse Culture - Purple

GWS 120 (4) Violence and Gender

We will examine the gendered systemic, and institutional nature of violence. We will seek to understand and prevent gender-based violence: sexual assault and harassment, intimate partner abuse, and hate crimes. We will think critically about gender, oppression, and privilege.

Fall, Spring, Summer
GE-9
Diverse Cultures - Purple

GWS 120W (4) Violence and Gender

We will examine the gendered systemic, and institutional nature of violence. We will seek to understand and prevent gender-based violence: sexual assault and harassment, intimate partner abuse, and hate crimes. We will think critically about gender, oppression, and privilege.

Fall, Spring, Summer
WI, GE-9
Diverse Cultures - Purple

GWS 220 (4) Global Perspectives on Women and Change

This course will examine women's lives and activism, past and present, throughout the world. We will explore and evaluate individual and collective efforts to achieve social justice in the context of interlocking systems of oppression.

Fall, Spring, Summer
GE-8, GE-9
Diverse Cultures - Purple

GWS 220W (4) Global Perspectives on Women and Change

This course will examine women's lives and activism, past and present, throughout the world. We will explore and evaluate individual and collective efforts to achieve social justice in the context of interlocking systems of oppression.

Fall, Spring, Summer

WI, GE-8, GE-9

Diverse Cultures - Purple

GWS 225 (4) Intro. to Lesbian, Gay, Bisexual and Transgender Studies

An introduction to the study of lesbian, gay, bisexual and transgender communities and identities, including challenges to homophobia and heterosexism. We will explore social and historical constructions of LGBT identities as they vary across ethnic, class, and gender lines.

Fall, Spring

GE-5, GE-7

Diverse Cultures - Gold

GWS 225W (4) Intro. to Lesbian, Gay, Bisexual and Transgender Studies

An introduction to the study of lesbian, gay, bisexual and transgender communities and identities, including challenges to homophobia and heterosexism. We will explore social and historical constructions of LGBT identities as they vary across ethnic, class, and gender lines.

Fall, Spring

WI, GE-5, GE-7

Diverse Cultures - Gold

GWS 230 (4) Gender, Race, and Popular Culture

Explores how popular culture shapes and mirrors our understandings of gender and sexuality and their intersections with race and class. Critically examines representations of gender and race in popular culture forms such as film, television, music, books, and the internet.

On-Demand

GE-2, GE-6

Diverse Cultures - Purple

GWS 251 (4) Coming of Age: Gender and Culture

This course explores the gendered coming-of-age experience in different time periods and cultures. Students will learn and apply tools from women's studies to analyze the impact of gender, race, class, and sexuality on childhood, adolescence and adulthood.

Fall, Spring

GE-6, GE-7

Diverse Cultures - Purple

GWS 251W (4) Coming of Age: Gender and Culture

This course explores the gendered coming-of-age experience in different time periods and cultures. Students will learn and apply tools from gender and women's studies to analyze the impact of gender, race, class, and sexuality on childhood, adolescence and adulthood.

Fall, Spring

WI, GE-6, GE-7

Diverse Cultures - Purple

GWS 260 (1-4) Selected Topics

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.

Variable

GWS 265 (1) Women and Spirituality

Workshop brings together people of diverse spiritual traditions and creates an atmosphere where ideas about traditions and spiritual growth can be shared.

Fall

GWS 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

Fall, Spring

GWS 290 (1-4) Workshop

Topics to be announced. May be retaken for credit.

Variable

GWS 310 (4) Feminist Thought

This course will introduce you to major theories of feminism as well as key issues in contemporary feminist thought. Students will have an opportunity to advance their own feminist thinking through engagement with a diversity of theoretical perspectives on gender.

Fall

GWS 330 (4) Feminist Research and Action

This course examines fundamentals of feminist research and the relationship between theory and practice. Students will engage philosophical and methodological questions about the production of knowledge; learn concrete research skills; and complete individual research/action projects.

Spring

GWS 330W (4) Feminist Research and Action

This course examines fundamentals of feminist research and the relationship between theory and practice. Students will engage philosophical and methodological questions about the production of knowledge; learn concrete research skills; and complete individual research/action projects.

Spring

WI

GWS 340 (4) Undergraduate Seminar

Advanced topics in women's and gender studies.

Pre: GWS 110 or GWS 220 or consent

Spring

GWS 440 (3) Feminist Pedagogy

We explore key philosophical and methodological issues in feminist teaching with an emphasis on application of the material.

GWS 455 (3) Politics of Sexuality

This course explores the interconnections between sex, gender, and sexuality, with special attention to how institutions and communities shape experience and identity.

GWS 460 (1-4) Selected Topics

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.

Variable

GWS 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

Fall, Spring

GWS 490 (1-4) Workshop

Topics to be announced. May be retaken for credit.

Variable

GWS 497 (1-6) Internship: Teaching

Students assist a faculty member in teaching GWS 110 or GWS 220.

(Complete course handbook available from: cynthia.veldhuisen@mnsu.edu)

Pre: GWS 110 or GWS 220 and consent.

GWS 498 (1-6) Internship: Community

The Gender and Women's Studies internship provides students with the opportunity to gain experience within an on-campus, off-campus private, public or community organization. This internship provides a means for pursuing an interest in a field of work, or within a particular organization; gaining work and/or activist experience and practical skills; making appropriate contacts which might be useful in establishing a future career.

Geography

College of Social & Behavioral Sciences

Department of Geography

206 Morris Hall • 507-389-2617

Chair: Donald A. Friend

Woo Jang, Phillip Larson, Jose Javier Lopez, Cynthia A. Miller, Martin D. Mitchell, Rama Mohapatra, Ginger Schmid, Forrest Wilkerson, Fei Yuan

Both a social and natural science seeking to understand the interactions between people and their environment, Geography examines the distribution of physical and cultural phenomena across the Earth. Divided into two main parts, cultural and physical geography, cultural geography explores the characteristics of societies including demographics, religion, economy, and government and how these traits diffuse or contract across space and time. Physical geography examines landforms, climate, flora and fauna along with natural resources and the processes governing their distributions and use. Explored together in regional geography, the cultural and physical traditions are supplemented by cutting edge geospatial technologies (GIS Remote Sensing, and GPS), which provides students with skills highly prized in the work force. The Department of Geography offers a full suite of courses covering the cultural, physical, and regional and geospatial branches of geography at the undergraduate and graduate levels.

The majors, minor and Geographic Information Science Certificate offered by the Department provide background and training that enable students to enter careers in the public or private sectors as well as prepare them for graduate study.

POLICIES/INFORMATION

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.

COMBINED BS GEOGRAPHY AND MA URBAN PLANNING LEADING TO ACCELERATED COMPLETION OF MASTER'S DEGREE

Geography and Urban Studies share an arrangement for an accelerated Bachelor's/Master's degree program. Undergraduate students in Geography with a GPA of at least 3.0 can apply to the accelerated program in their Junior year. If accepted, in their Senior year they petition to take three Geography courses at the graduate level, and those courses are then included in both their undergraduate program and in the Master's of Urban Planning program. Contact either department for specific 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 GEOG 497 and GEOG 409 at instructor discretion. All other courses must be taken for letter grades. All courses for the minor must be taken for letter grades.

GEOGRAPHY BA

Degree completion = 120 credits

Major Common Core

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)

Major Restricted Electives

Cultural-Systematic (choose 3 credits)

GEOG 425 Economic Geography (3)

GEOG 435 Urban Geography (3)

GEOG 436 Rural Geography (3)

GEOG 437 Political Geography (3)

GEOG 438 Social Geography (3)

Physical (choose 3 credits)

GEOG 217 Weather (4)

GEOG 313 Natural Disasters (3)

GEOG 315 Geomorphology (3)

GEOG 410 Climatic Environments (3)

GEOG 414 Biogeography (3)

GEOG 420 Conservation of Natural Resources (3)

Foreign Regional (choose 3 credits)

GEOG 445 Latin America (3)

GEOG 446 Canada (3)

GEOG 450 Europe (3)

GEOG 454 Russian Realm (3)

GEOG 456 Africa (3)

GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)

GEOG 440 Field Studies (1-4)

GEOG 480 Seminar (1-4)

GEOG 491 Senior Paper (1-4)

GEOG 497 Internship (1-10)

Major Unrestricted Electives

Additional Electives (choose 1-8 credits)

Total credits in major must equal or exceed 32. Take number of credits needed to reach 32.

GEOG 200 - GEOG 499

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor. Yes. Any.

PROFESSIONAL BA

Degree completion = 120 credits

Major Common Core

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)

Major Restricted Electives

Cultural-Systematic (choose 3 credits)

GEOG 425 Economic Geography (3)

GEOG 435 Urban Geography (3)

GEOG 436 Rural Geography (3)

GEOG 437 Political Geography (3)

GEOG 438 Social Geography (3)

Physical (choose 3 credits)

Students taking GEOG 217 are encouraged to take GEOG 218

GEOG 217 Weather (4)

GEOG 218 Weather Laboratory (1)

GEOG 313 Natural Disasters (3)

GEOG 315 Geomorphology (3)

GEOG 410 Climatic Environments (3)

GEOG 414 Biogeography (3)

GEOG 420 Conservation of Natural Resources (3)

Foreign Regional (choose 3 credits)

GEOG 445 Latin America (3)

GEOG 446 Canada (3)

GEOG 450 Europe (3)

GEOG 454 Russian Realm (3)

GEOG 456 Africa (3)

GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)

GEOGRAPHY CONTINUED

- GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives

Additional Electives (choose 15-24 credits)

Total credits in major must equal or exceed 48. Up to 6 elective credits may be taken outside Geography with departmental permission.

GEOG 200-499

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor. None.

GEOGRAPHY BS

Degree completion = 120 credits

Major Common Core

- 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)

Major Restricted Electives

Cultural-Systematic (choose 3 credits)

- GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 437 Political Geography (3)
GEOG 438 Social Geography (3)

Physical (choose 3 credits)

- GEOG 217 Weather (4)
GEOG 313 Natural Disasters (3)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 414 Biogeography (3)
GEOG 420 Conservation of Natural Resources (3)

Foreign Regional (choose 3 credits)

- GEOG 445 Latin America (3)
GEOG 446 Canada (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)

- GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives

Additional Electives (choose 1-8 credits)

Total credits in major must equal or exceed 32. Take number of credits needed to reach 32.

GEOG 200 - GEOG 499

PROFESSIONAL BS

Degree completion = 120 credits

Major Common Core

- 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)

Major Restricted Electives

Cultural-Systematic (choose 3 credits)

- GEOG 425 Economic Geography (3)
GEOG 435 Urban Geography (3)
GEOG 436 Rural Geography (3)
GEOG 437 Political Geography (3)
GEOG 438 Social Geography (3)

Physical (choose 3 credits)

Students taking GEOG 217 are encouraged to take GEOG 218

- GEOG 217 Weather (4)
GEOG 218 Weather Laboratory (1)
GEOG 313 Natural Disasters (3)
GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 414 Biogeography (3)
GEOG 420 Conservation of Natural Resources (3)

Foreign Regional (choose 3 credits)

- GEOG 445 Latin America (3)
GEOG 446 Canada (3)
GEOG 450 Europe (3)
GEOG 454 Russian Realm (3)
GEOG 456 Africa (3)
GEOG 458 Geography of East Asia (3)

Capstone Experience (choose 1-4 credits)

- GEOG 440 Field Studies (1-4)
GEOG 480 Seminar (1-4)
GEOG 491 Senior Paper (1-4)
GEOG 497 Internship (1-10)

Major Unrestricted Electives

Additional Electives (choose 15-24 credits)

Total credits in major must equal or exceed 48. Up to 6 elective credits may be taken outside Geography with departmental permission.

GEOG 200- GEOG 499

GEOMORPHOLOGY AND EARTH SURFACE PROCESSES CERTIFICATE

Geomorphology is the study of the form and character of the Earth's surface. Earth Surface Processes shape and transform our planet's landscape. Students will develop a broad theoretical understanding and learn to apply specific analytical skill to the field of Geomorphology through a multi-disciplinary curriculum in Geography, Geology and Anthropology.

Major Common Core

Take either GEOG 315 or GEOG 415 and GEOG 410

- GEOG 315 Geomorphology (3)
GEOG 410 Climatic Environments (3)
GEOG 415 Earth Surface Processes (4)

Major Restricted Electives (choose one from the following)

- GEOG 411 Soils Geomorphology (3)
GEOG 416 Fluvial Geomorphology and Hydrology (4)

Major Unrestricted Electives

At least six credits must be taken. Choose courses from two of the three listed departments. GEOG 411 and GEOG 416 can be taken as an unrestricted elective if they were not taken as a restricted elective.

- ANTH 331 Environmental Anthropology (3)
GEOG 411 Soils Geomorphology (3)
GEOG 416 Fluvial Geomorphology and Hydrology (4)
GEOG 440 Field Studies (1-4)
GEOL 201 Elements of Mineralogy (4)
GEOL 320W Sedimentology and Stratigraphy (4)

GEOGRAPHIC INFORMATION SCIENCE (GISc) CERTIFICATE (18-20 credits)

Students will receive a fundamental knowledge and understanding of Geographic Information Systems (GIS) and Remote Sensing technologies with the option to focus more intensively on advanced GIS, Remote Sensing or Global Positioning Systems (GPS) principles and applications.

Major Common Core

- GEOG 373 Introduction to Geographic Information Systems (4)
 GEOG 473 Intermediate GIS (4)
 GEOG 474 Introduction to Remote Sensing (4)

Major Restricted Electives (choose 6-8 credits)

- GEOG 480 must be the "Seminar: Environmental Hazards"
 GEOG 439 Transportation Modeling & GIS (4)
 GEOG 471 Digital Field Mapping with GPS (4)
 GEOG 475 Applied Remote Sensing & GIS (4)
 GEOG 476 Spatial Statistics (3)
 GEOG 478 Spatial Analysis with GIS (3)
 GEOG 479 GIS Practicum (1-4)
 GEOG 480 Seminar (1-4)

GEOGRAPHY MINOR**Required for Minor**

- GEOG 101 Introductory Physical Geography (3)
 GEOG 103 Introductory Cultural Geography (3)
 GEOG 340 United States (3)

Minor Electives

Choose 9 credits from GEOG 200 - GEOG 499

COURSE DESCRIPTIONS**GEOG 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 their cultural and physical features. Students will be tasked to think critically and diversely about various cultures and features of the modern world.

Fall, Spring
 GE-8, GE-10
 Diverse Cultures - Purple

GEOG 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.

Fall, Spring
 GE-3, GE-10

GEOG 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.

Fall, Spring
 GE-5, GE-8
 Diverse Cultures - Purple

GEOG 210W (3) Landscapes and Places

Introduction to the concepts of landscape and place in a variety of geographical writings. Emphasizes works with strong regional overtones. The interaction between the physical and cultural environments is paramount. Field observation and integrating imagery into original student writing documents is also addressed.

WI, GE-10

GEOG 217 (4) 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.

Fall, Spring

GEOG 218 (1) Weather Laboratory

Covers applied aspects of weather, including understanding weather codes, analysis and interpretation of weather maps, basic techniques of forecasting, and familiarity with weather instruments.

Fall, Spring

GEOG 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
 Fall, Spring

GEOG 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.

Variable

GEOG 315 (3) Geomorphology

Covers 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.

Fall

GEOG 340 (3) United States

Students will develop a knowledge of the similarities and contrasts in regional landscapes and cultures of the United States.

Fall, Spring

GEOG 341 (3) World Regional Geography

Differences and similarities in the cultural and natural environments by the world's major regions. Useful survey of world geography for educators and international relations students.

Fall, Spring
 Diverse Cultures - Purple

GEOG 342 (3) Geography of Minnesota

The course involves the natural and human environments of Minnesota. The physical resources, population history, and current issues are emphasized.

Spring

GEOG 352 (3) GIS for Crime Analysis

This is a hands-on, exercise-based GIS for Law Enforcement course analyzing the contemporary realities of the spatial and geographic aspects of crime. Students acquire practical tools necessary to conduct effective mapping and spatial analyses of crime using GIS software. Lab activities are designed to benefit those working with public safety and emergency response systems.

Fall (Odd Years)

GEOG 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.

Fall, Spring

GEOG 373 (4) Introduction to Geographic Information Systems

The course will be an introduction to the analysis of spatial data using the concept of a geographic 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 ArcGIS.

Fall, Spring

GEOG 401 (1) Colloquium

Overview of geographic work, interests, and research by guest speakers.

Fall

GEOG 409 (1-4) 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.

Fall, Spring

GEOG 410 (3) Climatic Environments

The characteristics of particular climates and understanding the factors that control their spatial distribution.

Pre: GEOG 101, or consent

Fall

GEOG 411 (3) Soils Geomorphology

This course examines soils and their role in interpreting the history of landform development. Soils chronicle the environment in which they have formed, and reflect the environment they currently support. Understanding their formation and subsequent distribution is essential to good management practices. Applications include the analysis of soil data bases and assimilation of field derived soil profile data.

Fall, Spring (On-Demand), Summer (On-Demand)

GEOG 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 217

ALT-Fall

GEOG 414 (3) Biogeography

Analyzes the distribution and concentration of plants and animals throughout the world. Emphasis is placed on the role of evolution, tectonics, and physical barriers to the distribution and migration of species. Special emphasis is placed on the role of humans in the modern redistribution of species.

Fall

GEOG 415 (4) Earth Surface Processes

This course examines the natural processes that operate on our planet and shape the landscape presently. This will be done through a focus on applied exercises, measurements and direct/indirect observations. Through applied projects students will have an understanding of how these processes interact within a variety of Earth Systems.

Fall (On-Demand), Spring (On-Demand), Summer

GEOG 416 (4) Fluvial Geomorphology and Hydrology

An in-depth investigation into fluvial systems including sediment transport, sediment budget analysis, channel geometry/morphology, drainage basin analysis, geomorphic evolution of fluvial landscapes, hydrology (i.e., runoff generation and channel formation, storm hydrograph and flood analysis, discharge measurements) of fluvial systems, and effects of anthropogenic modification and use of fluvial systems.

Fall, Spring (On-Demand)

GEOG 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.

Spring

GEOG 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.

GEOG 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.

Fall

GEOG 436 (3) Rural Geography

Introduction to theoretical frameworks for analyzing processes of economic, environmental, and social change in rural regions. Includes basic and advanced geographical principles and techniques for studying non-urban areas. Designed to equip students with the knowledge and skills necessary for carrying out research projects on rural environments.

Spring

GEOG 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.

Spring

GEOG 438 (3) Social Geography

Concepts and theories concerning global and national social problems and the significance of geographic analytic methods for social research. Study of factors related to variations in regional standards of living.

Fall

GEOG 439 (4) Transportation Modeling & GIS

Four major sets of ideas will be covered: Introduction to Spatial Organization, Network Analysis, Allocation Methods, and Urban Transportation. The emphasis is on these approaches to understanding the geography of transport by description, explanation, and normative or optimal methods.

Fall

GEOG 440 (1-4) Field Studies

Various excursions to study physical and cultural landscapes inside and outside of Minnesota.

Variable

GEOG 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.

Fall

GEOG 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-Fall

GEOG 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.

Spring

GEOG 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.

Variable

GEOG 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.

Variable

GEOG 458 (3) Geography of East Asia

Examines the physical and human environments of eastern Asia, mainly China, Korea and Japan. The class will be assisted by visual sources and hands-on use of primary documents.

Variable

GEOG 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.

Variable

GEOG 471 (4) Digital Field Mapping with GPS

This course covers the basic strategies for field mapping using data acquired from global positioning systems (GPS).

Pre: GEOG 373 or equivalent

Fall

GEOG 473 (4) Intermediate GIS

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
Spring

GEOG 474 (4) Introduction to Remote Sensing

This is an introductory course on theories and techniques of remote sensing. Focus will be placed on providing students with a general overview of the application of remote sensing to practical problems, and hands-on experience for image processing and analysis.
Fall

GEOG 475 (4) Applied Remote Sensing & GIS

This course provides students the opportunity to develop further knowledge of remote sensing. Emphasis will be placed on introducing advanced theories and techniques for digital image processing and helping students obtain independent research skills using remote sensing data.
Pre: GEOG 373, GEOG 474
Spring

GEOG 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 and tables.
Spring

GEOG 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
Variable

GEOG 478 (3) Spatial Analysis with GIS

Introduction to theoretical frameworks for spatial analysis and geographic quantitative methods. Includes basic and advanced geographic principles and techniques for studying spatial patterns. Designed to equip students with the skills necessary to carry out research projects that demand advanced statistics.

GEOG 479 (1-4) 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 professional-level experience.
Pre: GEOG 373 or GEOG 473, or consent
Variable

GEOG 480 (1-4) Seminar

Topics vary in physical, cultural, economic, political, and historical geography, as well as environmental conservation and geographic techniques.
Pre: GEOG 373
Variable

GEOG 491 (1-4) Senior Paper

Fall, Spring

GEOG 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
On Demand

GEOG 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
On Demand

Geology

College of Science, Engineering and Technology
Department Chemistry & Geology
241 Ford Hall • 507-389-1963

Chair: Mary Hadley

Bryce Hoppie, Steven Losh, Chad Wittkop

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 MAJOR - See Earth Science Major

GEOLOGY MINOR**Required for Minor**

GEOG 121 Physical Geology (4)
GEOG 122 Earth History (4)
GEOG 201 Elements of Mineralogy (4)

Required Electives for Minor

(choose a minimum of 6 credits from the following)
GEOL 330 Structural Geology (4)
GEOL 350 Environmental Geology (4)
GEOL 370 Geotectonics (2)
GEOL 401 Field Studies (1-3)
GEOL 450 Hydrogeology (3)
GEOL 499 Individual Study (1-5)

COURSE DESCRIPTIONS**GEOL 100 (3-4) 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.
Fall, Spring
GE-3, GE-10

GEOL 108 (3) Oceans of the World

An introduction to the world's oceans: how they work, what they contain, how they impact everything on Earth, and how humans impact them.
Fall, Spring
GE-3, GE-10

GEOL 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.

Fall
GE-3, GE-10

GEOL 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 illustrate principles discussed in lectures.

Spring
GE-3

GEOL 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 GEOL 121
Fall

GEOL 302 (4) Petrology

Study of the compositions and origins of igneous, sedimentary, and metamorphic rocks in a plate tectonic context. Topics include mineral optics and geochemistry. Lab portion of course emphasizes identification and study of rocks.

Pre: GEOL 201
Spring

GEOL 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
Fall, Spring

GEOL 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 relationship 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
Fall

GEOL 320W (4) Sedimentology and Stratigraphy

Focused studies of the origins and processes of transportation, deposition, burial and diagenesis of sedimentary materials. Lab assignments focus on sedimentary material identification and analysis. Field trips required.

Pre: GEOL 121
Fall
WI

GEOL 330 (4) Structural Geology

Study of processes and results of rock deformation at scales ranging from microscopic to plate tectonic, and at conditions ranging from the Earth's surface to the deep interior.

Pre: GEOL 121

GEOL 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-Spring

GEOL 351 (2) Engineering Geology

This course focuses on the application of geologic data and principles created by human occupancy and use of the physical environment. This course meets concurrently with GEOL 350 Environmental Geology through the last eight weeks of the semester. It is intended for civil engineering students that previously completed Geotechnical Engineering, CIVE 360.

Pre: GEOL 121, CIVE 360, or instructor permission
ALT-Spring

GEOL 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 GEOL 330
Variable

GEOL 401 (1-3) Field Studies

This course is devoted to the study and practice of geological field investigations. Students will first learn basic field investigative methods. Students will then be appropriately versed in the geological history and importance of a region selected for in-depth study. Finally, students will participate in a field trip to a regional site of geologic importance over an extended weekend (4-6 days). Potential study sites may include Minnesota's North Shore and Iron Range, the Badlands and Black Hills of South Dakota, the Ozarks, or the Rocky Mountains.

Pre: GEOL 100 or GEOL 121 and GEOL 122
Variable

GEOL 430 (3) Petroleum and Ore Deposit Geology

Comprehensive survey of ore deposit and petroleum geology, including exploration and production technologies. Course emphasizes projects using industry data.

Pre: GEOL 121, GEOL 201, GEOL 122
Coreq: GEOL 320W, GEOL 302, GEOL 330
Variable

GEOL 440 (4-8) Geology Field Camp

Geologic field mapping and interpretation in diverse settings. Course is offered by universities throughout the U.S. and elsewhere.

Pre: GEOL 121, GEOL 122, GEOL 201, GEOL 320W, GEOL 330
Summer

GEOL 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, GEOL 121
ALT-Spring

GEOL 479 (4) Teaching Earth Sciences

Material and methods of earth science study directed toward future teachers of students in junior high and high schools.

Pre: GEOL 121, GEOG 217 or instructor permission
Variable

GEOL 490 (1-4) Workshop**GEOL 499 (1-5) Individual Study**

German

College of Arts & Humanities
 Department of World Languages & Cultures
 227 Armstrong Hall • 507-389-2116
 Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Faculty: Nadja Krämer

In our changing global environment, communication is the key to understanding other peoples and cultures. The German program prepares its students to thrive as global citizens in a diverse world. Students in German language education acquire language proficiency and cultural competence that provide insight into the culture, literature, and history of German-speaking countries and enables them to travel, study, and work in areas where the target language is used.

At the end of their program, students will meet the National Standards for Foreign Language Learning:

Communicate in Languages Other Than English

- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures

- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information

- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture

- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World

- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

POLICIES/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").

A minimum GPA of 2.5 is required in all German courses. Contact the department for application procedures.

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 BA Language Requirement. Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking a language competency exam under the rules for credit by exam (see above section). Students do not meet the BA language requirements merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows. Major: a minimum of eight credits upper division courses other than Independent or Individual Study. At least one of these courses must be at the 400 level. Minor: a minimum of one upper division course other than Independent or Individual Study, for a total of at least four 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 German Education:

Emphasis on communication (four skills plus culture and language analysis).

GERMAN BA

Degree completion = 120 credits

Prerequisites to the Major

- GER 101 Elementary German I (4)
 GER 102 Elementary German II (4)

Major Common Core (24 credits)

- GER 340 Topics in Language (1-4)
 GER 341 Composition and Conversation (4)
 GER 342 Selected Readings (1-4)
 GER 343 German Civilization (1-4)
 GER 441 Conversation and Composition (4)
 GER 442 German Literature (1-4)

Major Unrestricted Electives (12 credits)

- GER 150W The German-speaking Countries: An Interdisciplinary Introduction (4)
 GER 201 Intermediate German I (4)
 GER 202 Intermediate German II (4)
 GER 293 Supervised Foreign Study: Intermediate (1-4)
 GER 299 Individual Study (1-4)
 GER 340 Topics in Language (1-4)
 GER 393 Supervised Foreign Study (1-6)
 GER 443 Topics in German Studies (1-4)
 GER 445 Topics in German Linguistics (1-4)
 GER 460 Topics in German Cinema (4)
 GER 490 Senior Capstone Project (1-4)
 GER 493 Supervised Foreign Study (1-6)
 GER 497 Internship (1-6)
 GER 499 Individual Study (1-4)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

GERMAN CONTINUED

GERMAN BS

Degree completion = 120 credits

Pre-requisites to the Major

- GER 101 Elementary German I (4)
GER 102 Elementary German II (4)

Major Common Core (24 credits)

- GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)

Major Restricted Electives (12 credits)

- GER 150W The German-speaking Countries: An Interdisciplinary Introduction (4)
GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)

GERMAN BS, TEACHING

Degree completion = 120 credits

Pre-requisites to the Major

- GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)

Major Common Core

Language (choose 1-4 credits)

- GER 340 Topics in Language (1-4)

Literature (choose 1-8 credits)

- GER 342 Selected Readings (1-4)
GER 442 German Literature (1-4)

Civilization

- GER 343 German Civilization (1-4)

Methods (choose 8 credits)

- WLC 460 Methods of Teaching Modern Language (3)
WLC 461 Applied Modern Language Teaching Methods (1)
WLC 462 Foreign Language Elementary School (FLES) Methods (3)
WLC 463 Applied (FLES) Methods (1)

Composition & Conversation

- GER 341 Composition and Conversation (4)

Major Restricted Electives (1-10 credits)

- GER 150W The German-speaking Countries: An Interdisciplinary Introduction (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 340 Topics in Language (1-4)
GER 342 Selected Topics (1-4)
GER 343 German Civilization (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 442 German Literature (1-4)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)

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 or equivalent. Contact the department for details. Also required for the major are first-hand experiences with the target cultures.

Required for Major: (Professional Education, 30 credits). See the SECONDARY 5-12 AND K-12 PROFESSIONAL EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Required Minor: None.

GERMAN MINOR

Required for Minor: Elementary German or other proof of skill is needed. The intermediate sequence counts toward the minor.

Required for Minor (choose 8-16 credits)

At least 14 credits at the upper-division level are required for the minor. Eight of the upper division credits must be in skills courses selected from the list below

- GER 340 Topics in Language (1-4)
GER 341 Composition and Conversation (4)
GER 342 Selected Readings (1-4)
GER 343 German Civilization (1-4)

German Minor Electives (choose 8-16 credits)

- GER 201 Intermediate German I (4)
GER 202 Intermediate German II (4)
GER 293 Supervised Foreign Study: Intermediate (1-4)
GER 299 Individual Study (1-4)
GER 393 Supervised Foreign Study (1-6)
GER 441 Conversation and Composition (4)
GER 442 German Literature (1-4)
GER 443 Topics in German Studies (1-4)
GER 445 Topics in German Linguistics (1-4)
GER 460 Topics in German Cinema (4)
GER 490 Senior Capstone Project (1-4)
GER 493 Supervised Foreign Study (1-6)
GER 497 Internship (1-6)
GER 499 Individual Study (1-4)

COURSE DESCRIPTIONS

GER 101 (4) Elementary German I

Introduction to German for students with little or no language experience.
GE-8

GER 102 (4) Elementary German II

Pre: GER 101 or equivalent
GE-8

GER 150W (4) The German-speaking Countries: An Interdisciplinary Introduction

This course offers an interdisciplinary introduction to the German-speaking countries (Germany, Austria, Switzerland, Liechtenstein); it will provide an overview of their geography, history, culture, society and current political situation in comparison to the U.S.

Variable
WI, GE- 6, GE-8
Diverse Cultures - Purple

GER 201 (4) Intermediate German I

A review of German structure and its application to reading, conversation, and composition.
Pre: GER 102 or equivalent
GE-8

GER 202 (4) Intermediate German II

Pre: GER 201 or equivalent
GE-8

GER 293 (1-4) Supervised Foreign Study: Intermediate**GER 299 (1-4) Individual Study**

Pre: as appropriate for level of project

GER 340 (1-4) Topics in Language

Topics will vary and course may be repeated for credit. Language topics include pronunciation and intonation, advanced grammar, etc. The focus is on advanced oral or written communication.

Pre: Two years of university level German or equivalent.

GER 341 (4) Composition and Conversation

Intensive practice in speaking and writing for students who have completed the intermediate sequence or equivalent.

Pre: completion of GER 202 or equivalent.

GER 342 (1-4) Selected Readings

Discussion and analysis of major themes and movements based on selected readings from representative authors from the German-speaking world.

Pre: Completion of GER 202 or equivalent

GER 343 (1-4) German Civilization

Major cultural and historical aspects of German from ancient times to the present.

Pre: Completion of GER 202 or equivalent

GER 393 (1-6) Supervised Foreign Study

Study for credit must be approved by the department prior to departure.

Pre: Intermediate Sequence

GER 441 (4) Conversation and Composition

Intensive practice in speaking and writing German.

Pre: Completion of at least one 300 level course in German.

GER 442 (1-4) German Literature

Topics vary and course may be repeated if a different topic/genre is the focus. Major writers from German speaking countries. Genres include novel, poetry, theatre, short story, etc.

Pre: Completion of readings GER 302 or equivalent

GER 443 (1-4) Topics in German Studies

The course deals with the complex cultural traditions and political histories of German-speaking countries in Central Europe, such as the metropolis Berlin, the Holocaust, minority voices. Topics vary and the course may be repeated if a different topic is the focus.

Fall, Spring

GER 445 (1-4) Topics in German Linguistics

Topics may vary. Course may be repeated for credit. Discussion and analysis of German phonetics and syntax and historical linguistics, for example.

Pre: Completion of a least one 300 level German course.

GER 460 (4) Topics in German Cinema

The course explores 20th and 21st century German film in historical, social, cultural contexts and events. Topics may be a survey, or concentration on Weimar Cinema, New German Cinema, East German cinema, transnational cinema. Topics vary. Course may be repeated.

Variable

GER 490 (1-4) Senior Capstone Project

An individual project by German majors or minors that demonstrates the ability to focus on a specific topic or question in-depth in the field of German culture and literature studies. Approval required by a designated advisor in the German program.

Pre: GER 340, GER 341, GER 342, GER 343, GER 441. Student has to be admitted as a German major or minor and of senior standing.

On-Demand

GER 493 (1-6) Supervised Foreign Study

Study for credit must be arranged by contract prior to departure.

Pre: Experience appropriate for level of credit

GER 497 (1-6) Internship

Pre: Experience appropriate to project

GER 499 (1-4) Individual Study

Pre: As appropriate for level of project

HEALTH SCIENCE

Health Science

College of Allied Health & Nursing

Department of Health Science

213 Highland Center N • 507-389-1527

Website: www.mnsu.edu/dept/health/

Chair: Marlene K. Tappe, Ph.D.

Autumn Hamilton, HSD; Amy Hedman, Ph.D.; Dawn Larsen, Ph.D.; Judith Luebke, Ph.D.; Marge Murray-Davis, Ph.D.; Marlene Tappe, Ph.D.; Mark Windschitl, Ph.D.; Joseph Visker, Ph.D.

POLICIES/INFORMATION**Health Science**

The Department of Health Science offers undergraduate degrees in Alcohol and Drug Studies, Community Health Education, and School Health Education. It also offers an undergraduate degree in Health and Physical Education in collaboration with the Department of Human Performance. The department also offers a 21 credit Health Science Minor.

Admission Requirements. Please see the admission requirements specific to each of the undergraduate programs offered by the Department of Health Science

Academic Requirements

Grade Policy. The Department of Health Science requires students in Alcohol and Drug Studies, to earn a "C" or better in all required general education, required, and elective courses in the major. Students in Community Health Education, Health and Physical Education, and School Health Education are required to earn a "C" or better in all required general education (except Chemistry), required major courses (except Human Anatomy), and elective courses in these majors. The department also requires students in the Health Science minor to earn a "C" or better in all core and elective courses in the minor.

Minimum G.P.A. Policy. The Department of Health Science requires students in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education to maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses in a major). A G.P.A. of 2.5 in the major is required for graduation in Alcohol and Drug Studies, Community Health Education, Health and Physical Education, and School Health Education.

P/N Grading Policy. All required general education, required, and elective courses must be taken for grade except HLTH 495, HLTH 496, and HLTH 497.

Academic Integrity Policy

The Department of Health Science values and supports an environment conducive to learning as well as academic integrity. Therefore, students are expected to comply with Minnesota State Mankato student responsibilities and policies for academic integrity. Academic integrity includes meeting ones responsibilities

in an honest and forthright manner and avoiding acts of dishonesty, plagiarism, cheating, collusion, and other forms of academic misconduct. An act of dishonesty, cheating, collusion, and/or any other form of academic misconduct will result in a 0 on the assessment and a full letter grade deduction from the final course grade (e.g., "A-" to "B-"). An act of plagiarism will result in a 0 on the assessment or assessments and the student will be required to meet with the chair of the Department of Health Science and receive remediation related to plagiarism. Two acts of dishonesty, cheating, collusion, and/or any other form of academic misconduct and/or an act of plagiarism after remediation will result in a final course grade of "F". Evidence related to any act of academic misconduct will be submitted to the Chairperson of the Department of Health Science. Two acts of academic misconduct or a repeated act of plagiarism after remediation in any Health Science course or courses will result in discontinuance from, or eligibility to enroll in, the academic programs offered by the Department of Health Science. Additionally, evidence related to academic misconduct will be submitted, as appropriate, to the Office of Academic Affairs and and/or the College of Education. Please note: Policy reflects minimum departmental standards. Individual instructors may impose more severe sanctions for an act of academic dishonesty within their courses.

Alcohol and Drug Studies (BS)

Program Information. Students must earn a "C" or better in all required general education, required, and elective courses in the Alcohol and Drug Studies major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses in a major). A G.P.A. of 2.5 in the major is required for graduation in Alcohol and Drug Studies.

Admission Requirements. ADS admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. 2.5,
- a "C" or better in HLTH 225: Introduction to Alcohol and Drug Studies
- a "C" or better in two of the following four required General Education courses:
 - CMST 102: Public Speaking,
 - CMST 203: Intercultural Communications,
 - PSYC 101: Introduction to Psychological Science, and/or
 - SOC 101: Introduction to Sociology.
- Meeting with the Alcohol and Drug Studies Coordinator to complete the Alcohol and Drug Studies Program Permission Form and sign the Alcohol and Drug Studies Form of Understanding.

Internship Pre-requisites. Pre-requisites for the Alcohol and Drug Studies internship (HLTH 496: Internship: Alcohol and Drug Studies) include:

- a "C" or better in all Major Common Core courses;
- a minimum G.P.A. of 2.5;
- submission of the completed Alcohol and Drug Studies Internship Application Packet one full semester prior to the anticipated beginning of the internship (the packet is available in the Alcohol Drug Studies Student Handbook);
- successful completion of an internship interview with the Alcohol and Drug Studies Coordinator;
- successful completion of a Department of Human Services background check; and
- submission of the internship Site Approval Form signed by an official designee of the approved internship site.

The Alcohol and Drug Studies Internship. The internship requires the completion of 880 clock hours at an approved internship site per the Minnesota Board of Behavioral Health and Therapy licensure requirements.

Chemical Use Problems. Consistent with standards of practice in the field, students participating in the internship process must be free of chemical use problems for at least two years immediately preceding their internship. Examples of chemical use problems include, but are not limited to:

- receiving treatment for chemical use within this time period
- chemical use that has a negative impact on the student's academic performance;
- chemical use that affects the student's professional credibility of treatment services with clients, referral sources, or other members of

the community; and

- symptoms of intoxication or withdrawal during academic roles.

Background Check. Students involved in any field experience need to undergo a criminal background check prior to registering for HLTH 497 Internship: Alcohol and Drug Studies. Students are responsible for the fees associated with the background check. This information is provided to health agencies and organizations for their determination of suitability for placement. The Department of Health Science coordinates the background check process.

Licensure and Certification. The Alcohol and Drug Studies Major provides students with the academic coursework necessary to pursue a number of credentialing options. Students are responsible for verifying their eligibility for credentialing with their respective credentialing boards.

Community Health Education BS

Program Information: Students must earn a "C" or better in all required general education courses (except Chemistry), required major courses (except Human Anatomy), and elective courses in the Community Health Education major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses). A G.P.A. of 2.5 in the major is also required for graduation in Community Health Education.

Admission Requirements. CHE major admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. of 2.5,
- a "C" or better in HLTH 101: Health and the Environment,
- a "C" or better in HLTH 260: Introduction to Health Education.

The Community Health Education Internship. The internship requires the completion of 450 clock hours at an approved internship site.

Maximum Number of Credit Hours During the Community Health Education Internship. Students may take no more than 12 credits of coursework, including 9 credits of HLTH 496: Internship: Health Education, during the internship semester.

Background Check. Students involved in any field experience need to undergo a criminal background check prior to registering for HLTH 496 Internship: Health Education. Students are responsible for the fees associated with the background checks. This information is provided to health agencies and organizations for their determination of suitability for placement. The Department of Health Science coordinates the background check process.

Internship Pre-requisites. Pre-requisites for the Community Health Education internship (HLTH 496: Internship: Health Education) include:

- a "C" or better in all Major Common Core courses (except Human Anatomy);
- a minimum G.P.A. of 2.5;
- a meeting with the Director of the Community Health Education Internship Program one semester in advance of their anticipated internship semester;
- submission of required application materials by the designated due date;
- official approval of the site by the Internship Director. Note: Eligibility for selection at internship sites may be subject to terms and policies of the internship site (i.e. background checks, criminal history, etc.) and the Community Health Education Program; and
- completion of a criminal background check.

Health and Physical Education BS

Program Information. This major has two General Education waivers: 40 credits of General Education, and 2) BIOL 220: Human Anatomy and BIOL 310: Human Physiology to meet Goal area 3 lab requirement.

Students must earn a "C" or better in all required general education (except Chemistry) and required courses (except Human Anatomy) in the Health and Physical Education major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education and required courses). A G.P.A. of 2.5 in the major is also required for graduation in Health and Physical Education.

Admission Requirements. Health and Physical Education major admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. 2.5,
- and a “C” or better in ENGL 101, and
- a “C” or better in general education MATH.

Professional Education admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum of cumulative G.P.A. of 2.75,
- evidence of registration for MTLE Basic Skills Exam,
- enrollment in or completion of KSP 220W,
- a “C” or better in ENG 101, and
- a “C” or better in general education MATH.

School Health Education BS

Program Information. Students must earn a “C” or better in all required general education (except Chemistry), required courses (except Human Anatomy), and elective courses in the School Health Education major. Students must also maintain a G.P.A. of 2.5 or better in the major (required general education, required, and elective courses). A G.P.A. of 2.5 in the major is also required for graduation in School Health Education.

Admission Requirements

School Health Education major admission requirements include:

- completion of a minimum of 32 credit hours,
- a minimum cumulative G.P.A. 2.5,
- a “C” or better in ENG 101,
- a “C” or better in general education MATH,
- a “C” or better in HLTH 101, and
- a “C” or better in HLTH 260.

Professional Education admission requirements include:

- a minimum of 32 credit hours,
- a minimum of cumulative G.P.A. of 2.75,
- evidence of registration for MTLE Basic Skills Exam,
- enrollment in or completion of KSP 220W,
- a “C” or better in ENG 101, and
- a “C” or better in general education MATH.

ALCOHOL AND DRUG STUDIES MAJOR BS

Degree completion = 120 credits

The Alcohol and Drug Studies major is an interdisciplinary program administered by the Department of Health Science. The program prepares students to enter the addictions field or further their knowledge of addictions to strengthen their competency within other disciplines. The Alcohol and Drug Studies major provides students with the academic coursework necessary to pursue the Licensed Alcohol and Drug Counselor (LADC) credential through the Minnesota Board of Behavioral Health and Therapy and the Board Certified Counselor (BCC) credential through the Minnesota Certification Board. Students are responsible for verifying their eligibility for credentialing within their respective credentialing boards.

Required General Education

CMST	102	Public Speaking (3)
CMST	203	Intercultural Communication (4)
PSYC	101	Introduction to Psychological Science (4)
SOC	101	Introduction to Sociology (3)

Major Common Core

A total of 12 credit hours of HLTH 497 must be completed.

CSP	470	Group Procedures (3)
CSP	471	Interpersonal Helping Skills (3)
CSP	473	Counseling the Chemically Dependent Family (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	406	Ethics and Professionalism for Addictions Professionals (3)
HLTH	407	Pharmacology for Alcohol and Drug Professionals (3)
HLTH	408	Theories and Methods for Addictions Professionals (3)
HLTH	456	Assessment and Diagnosis of Substance Use Disorders (3)
HLTH	469	Co-Occurring Disorders (3)

HLTH	497	Internship: Alcohol and Drug Studies (1-12)
SOC	465	Law and Chemical Dependency (3)

Major Restricted Electives

9 credits of Health Science Electives

Required Minor: Yes. Any.

COMMUNITY HEALTH EDUCATION BS

Degree completion = 120 credits

Required General Education

CMST	102	Public Speaking (3)
HLTH	101	Health and the Environment (3)
HLTH	212	Consumer Health (3)
(choose 3 credits. Must complete one of the CHEM courses listed)		
CHEM	104	Introduction to Chemistry (3)
CHEM	106	Introduction to Chemistry (for Allied Health) (3)
CHEM	111	Chemistry of Life Processes (5)
CHEM	201	General Chemistry I (5)

Pre-requisites to the Major

Community Health Education Major admission requirements include completion of a minimum of 32 credit hours, a minimum cumulative G.P.A. 2.5, a “C” or better in HLTH 101: Health and the Environment, and a “C” or better in HLTH 260: Introduction to Health Education.

Major Common Core (44 total credits)

BIOL	220	Human Anatomy (4)
BIOL	310	Basics of Human Physiology (4)
HLTH	260	Introduction to Health Education (3)
HLTH	361	Health Communication and Advocacy (4)
HLTH	380W	Health Education Planning, Implementing, and Evaluating 1 (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	460	Introduction to Epidemiology (3)
HLTH	475	Biostatistics (3)
HLTH	480	Health Education Planning, Implementing and Evaluating 2 (3)
HLTH	482	Administration and Grant Writing in Health Education (4)
HLTH	495	Senior Seminar in Health Education (1)
HLTH	496	Internship: Health Education (1-9)

Major Unrestricted Electives

(Electives: 6 total credits)

FCS	242	Nutrition for Healthcare Professionals (3)
HLTH	210	First Aid & CPR (3)
HLTH	211	Human Sexuality in a World of Diversity (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	240	Drug Education (3)
HLTH	311	Family Life & Sex Education (3)
HLTH	315	Holistic Health and Wellness (3)
HLTH	321	Medical Terminology (3)
HLTH	400	Women’s Health (3)
HLTH	410	Current Health Issues (3)
HLTH	417	Principles of Wellness Coaching (3)
HLTH	440	Teaching First Aid and CPR (2)
HLTH	441	Death Education (3)
HLTH	450	Environmental Health (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	455	Health and Aging (3)
HLTH	456	Assessment of Chemical Dependency (3)
HLTH	459	Critical Topics in Health (1-3)
HLTH	465	Health Care Delivery in the United States (3)
HLTH	466	Global Health (3)
HLTH	467	Public Health Law (3)
HLTH	469	Chemical Dependency: Dual Diagnosis (3)
HLTH	477	Behavior Change Foundations and Strategies (3)
HLTH	488	Worksite Health Promotion (3)
HLTH	491	Directed Research in Health Science (1-6)

HEALTH SCIENCE CONTINUED

Required Minor: None

HEALTH AND PHYSICAL EDUCATION BS

Degree completion = 120 credits

The Health (5-12) and Physical Education (K-12) teaching program meets national and state standards for the preparation of school health educators and physical educators. This program prepares future teachers for what they should know and be able to do in order to help their students' develop health-related knowledge and skill to engage in healthy behaviors including life-long physical activity. This major is a joint program offered by the Departments of Health Science and Human Performance that meets Minnesota Board of Teaching (BOT) requirements for licensure in both Health Education and Physical Education.

Required General Education

CHEM	106	Chemistry of Life Process Part I (General) (3)
FCS	140	Introduction to Nutrition (3)
HLTH	101	Health and the Environment (3)
HLTH	240	Drug Education (3)
HP	182	Aquatic Skills (1)
HP	291	Concepts of Fitness (2)
KSP	220W	Human Relations in a Multicultural Society (3)
PSYC	101	Introduction to Psychological Science (4)

Pre-requisites to the Major

BIOL	220	Human Anatomy (4)
BIOL	310	Basic of Human Physiology (4)

Major Common Core

HLTH	210	First Aid & CPR (3)
HLTH	311	Family Life & Sex Education (3)
HLTH	320	School Health Education (3)
HLTH	410	Current Health Issues (3)
HLTH	420W	Health Teaching Methods (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	454	Chronic and Infectious Diseases (3)
HP	202	Introduction to Teaching PE & Health (1)
HP	203	Fundamentals of Indoor and Outdoor Team Sports (2)
HP	204	Fundamentals of Individual and Dual Sports (2)
HP	205	Fundamentals of Rhythm and Dance (2)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	356	Methods of Elementary Physical Education (3)
HP	387	Methods of Secondary Physical Education (3)
HP	411	Developmental/Adapted Physical Education (3)
HP	413	Lifespan Motor Development (2)
HP	414	Physiology of Exercise (3)

Other Graduation Requirements

K-12 Education: Refer to the list of required professional education courses. KSP 220W Human Relations in a Multicultural Society is included in the required general education section. Therefore, total professional education credits counted in this section will be 27 instead of 30.

SCHOOL HEALTH EDUCATION BS

Degree completion = 120 credits

The School Health Education (5-12) teaching program meets national and state standards for the preparation of school health educators. This program prepares future teachers for what they should know and be able to do in order to help their students develop health-related knowledge and skills to engage in healthy behaviors. This major meets Minnesota Board of Teaching (BOT) requirements for licensure in Health Education.

Required for General Education

BIOL	100	Our Natural World (4)
CMST	102	Public Speaking (3)
FCS	140	Introduction to Nutrition (3)
HLTH	101	Health and the Environment (3)
HLTH	210	First Aid and CRP (3)
KSP	220W	Relations in the Multicultural Society (3)

Major Common Core

BIOL	220	Human Anatomy (4)
BIOL	310	Basics of Human Physiology (4)
CHEM	106	Chemistry of Life Process Part I (General) (3)
HLTH	212	Consumer Health (3)
HLTH	240	Drug Education (3)
HLTH	260	Introduction to Health Education (3)
HLTH	311	Family Life and Sex Education (3)
HLTH	320	Health Teaching Methods I (3)
HLTH	410	Current Health Issues (3)
HLTH	420W	Health Teaching Methods II (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	475	Biostatistics (3)

Major Restricted Electives (choose 3 credits)

HLTH	361	Health Communication and Advocacy (4)
HLTH	440	Teaching First Aid and CPR (2)
HLTH	441	Death Education (3)
HLTH	450	Environmental Health (3)
HLTH	459	Critical Topics in Health (1-3)
HLTH	460	Introduction to Epidemiology (3)
HP	414	Physiology of Exercise (3)

Other Graduation Requirements

Secondary Education: Refer to the list of required professional education courses. KSP 220W Human Relations in a Multicultural Society is included in the required general education section. Therefore, total professional education credits counted in this section will be 27 instead of 30.

ALCOHOL AND DRUG STUDIES MINOR

Minor Core

CSP	470	Group Procedures (3)
CSP	471	Interpersonal Helping Skills (3)
CSP	473	Counseling the Chemically Dependent Family (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	406	Ethics and Professionalism for Addictions Professionals (3)
HLTH	407	Pharmacology for Alcohol and Drug Professionals (3)
HLTH	408	Theories and Methods for Addictions Professionals (3)
HLTH	456	Assessment and Diagnosis of Substance Use Disorders (3)
HLTH	469	Co-Occurring Disorders (3)

HEALTH SCIENCE MINOR

Minor Core

HLTH	101	Health and the Environment (3)
HLTH	260	Introduction to Health Education (3)

In addition to the Core, choose one 3 credit 200-level course: (choose 3 credits)

HLTH	210	First Aid & CPR (3)
HLTH	211	Human Sexuality in a World of Diversity (3)
HLTH	212	Consumer Health (3)
HLTH	225	Introduction to Alcohol and Drug Studies (3)
HLTH	240	Drug Education (3)

Electives

In addition to the Core, choose 12 credits from the following list of 300 and 400 level courses:

HLTH	311	Family Life & Sex Education (3)
HLTH	315	Holistic Health and Wellness (3)
HLTH	321	Medical Terminology (3)
HLTH	400	Women's Health (3)
HLTH	410	Current Health Issues (3)
HLTH	417	Principles of Wellness Coaching (3)
HLTH	440	Teaching First Aid and CPR (2)
HLTH	441	Death Education (3)
HLTH	450	Environmental Health (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	454	Chronic and Infectious Diseases (3)
HLTH	455	Health and Aging (3)

HLTH	459	Critical Topics in Health (1-3)
HLTH	460	Introduction to Epidemiology (3)
HLTH	465	Health Care Delivery in the United States (3)
HLTH	466	Global Health (3)
HLTH	467	Public Health Law (3)
HLTH	475	Biostatistics (3)
HLTH	477	Behavior Change Foundations and Strategies (3)
HLTH	488	Worksite Health Promotion (3)
HLTH	491	Directed Research in Health Science (1-6)

COURSE DESCRIPTIONS

HLTH 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.

Fall, Spring, Summer
GE-10

HLTH 210 (3) First Aid & 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.

Fall, Spring, Summer
GE-11

HLTH 211 (3) Human Sexuality in a World of Diversity

This course is an overview of Human Sexuality with special emphasis on how sexuality relates to marginalized populations. This course requires a supervised field trip.

Variable

GE-7
Diverse Cultures - Gold

HLTH 212 (3) Consumer Health

This is 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.

Fall, Spring, Summer
GE-2

HLTH 215 (1) First Responder/CPR Recertification

This course is for people currently certified (or expired within the last month) in ARC CPR/AED. This course is also for people currently certified (or expired within the last year) in ARC Emergency Response or as a First Responder.

HLTH 225 (3) Introduction to Alcohol and Drug Studies

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.

Fall, Spring, Summer

HLTH 240 (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.

Fall, Spring, Summer
GE-5

HLTH 260 (3) Introduction to Health Education

Introduction to Health Education 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.

Pre: HLTH 101
Coreq: HLTH 101
Fall, Spring, Summer

HLTH 311 (3) Family Life & 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.

Fall, Spring, Summer

HLTH 315 (3) Holistic Health and Wellness

This course presents a study of the essential nature and characteristics of total health. The course explores dimensions of mental, physical, social, and spiritual wellbeing. Various approaches to holistic health and wellness are considered.

Variable

HLTH 320 (3) School Health Education

This course provides School Health teaching majors the knowledge, skills, and dispositions they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.

Spring

HLTH 321 (3) Medical Terminology

For health care personnel, emphasis on spelling, pronunciation and meaning.

Fall, Spring, Summer

HLTH 361 (4) Health Communication and Advocacy

Health Communication and Advocacy focuses upon the development of communication and advocacy skills for the health educator. Identifying credible sources, communicating public health information, health media campaigns, health advocacy; written and verbal communication skills emphasized.

Pre: HLTH 260

Fall, Spring

HLTH 380W (3) Health Education Planning, Implementing & Evaluating 1

This course requires students to plan a health promotion and health education program. Skills include assessing needs, determining objectives, identifying measurement and intervention strategies, and developing an evaluation plan.

Pre: HLTH 260, HLTH 361

Coreq: HLTH 361

Fall, Spring

WI

HLTH 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.

Variable

HLTH 406 (3) Ethics and Professionalism for Addiction Professionals

The focus of this course is on the foundations of ethics and professionalism for addictions professionals. The course will cover professional and ethical codes as well as topics related to continued development as a professional.

Pre: HLTH 225

Fall

HLTH 407 (3) Pharmacology for Alcohol and Drug Professionals

This course provides information on characteristic and classifying information, pharmacology, pharmacokinetics, pharmacodynamics, behavioral effects, and pharmacotherapy options for drugs of abuse. The course will focus on the application of topics in alcohol and drug professional settings.

Pre: HLTH 225

HLTH 408 (3) Theories and Methods for Addictions Professionals

This course explores counseling theories and strategies and how they can be applied to clients in alcohol and drug treatment programs. The course also provides an overview of primary functions of addictions professionals and methods to deliver effective services.

Pre: HLTH 225

Summer

HLTH 410 (3) Current Health Issues

An in-depth review of significant health concerns and controversies in health science using critical thinking as the framework for critiquing the issues.

Fall, Spring

Diverse Cultures - Purple

HLTH 417 (3) Principles of Wellness Coaching

This course contains content associated with achieving entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, well-being assessment, and goal setting.

Fall, Spring

HLTH 420 (3) Health Teaching Methods

This course provides School Health teaching majors the knowledge and skills they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.

Pre: HLTH 320

Fall

HLTH 420W (3) Health Teaching Methods

This course provides School Health teaching majors the knowledge and skills they will need to be a part of a coordinated school health program team and teach comprehensive school health education in middle/junior and senior high schools.

Pre: KSP 330

Fall, Spring

WI

HLTH 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

Summer

HLTH 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.

Variable

HLTH 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

Variable

HLTH 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.

Fall

HLTH 451 (3) Emotional Health and Stress

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.

Fall, Summer

HLTH 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: BIOL 220, BIOL 310

Fall, Spring

HLTH 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.

Spring, Summer

HLTH 456 (3) Assessment and Diagnosis of Substance Use Disorders

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 or Rule 25 training in Chemical Dependency Assessment.

Pre: HLTH 225

Spring

HLTH 459 (1-3) Critical Topics in Health

An in-depth study of specific topics of current interest in the Health Science discipline.

Variable

HLTH 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.

Fall, Spring

HLTH 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.

Variable

HLTH 466 (3) Global Health

This course focuses on the determinants of health, the concept of culture, and the intersection of health issues, culture, and health status. Linkages between health and development are addressed and research methods instrumental for identifying relationships between culture and health are discussed. The course examines diverse strategies for measuring health and explores how public health efforts (domestic and global) benefit from understanding and working with cultural processes. Emphasis is placed on the burden of disease, risk factors, populations most affected by different disease burdens, and key measures to address the burden of disease in cost-effective ways.

Fall (On-Demand), Spring (On-Demand)

Diverse Cultures - Purple

HLTH 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.

Variable

HLTH 469 (3) Co-Occurring Disorders

The focus of this course is on assessment and treatment of persons with coexisting mental disorders as well as chemical dependency.

Pre: HLTH 225

Fall

HLTH 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.

Pre: MATH 110

Fall, Spring

HLTH 477 (3) Behavior Change Foundations and Strategies

Behavior Change Foundations and Strategies (3 semester credits) is a course that focuses upon the complexity of health behavior change and the skills necessary for a health promotion professional to assess, plan, and evaluate behavior change interventions for individuals and communities. Health behavior change theories and strategies will be discussed. Topics covered in class will include: behavior modification, goal setting, self-management, coping skills, and social support. Emphasis will also be given to the impact of policy and environmental influences on behavior.

Fall, Spring

HLTH 480 (3) Health Education Planning, Implementing & Evaluating 2

This course includes health program evaluation and research, with emphasis on evaluation models and approaches, qualitative and quantitative methods, process and summative evaluation, logic models, and dissemination of results.

Pre: HLTH 380W

Fall, Spring

HLTH 482 (4) Administration and Grant Writing in Health Education

Focuses on entry-level competencies related to the administration and management of health education programs. These include obtaining acceptance and support for programs, leadership, managing human resources, facilitating partnerships in support of health education, grant writing, and training individuals involved in the implementation of health education.

Pre: HLTH 380W

Fall, Spring

HLTH 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.

Spring, Summer

HLTH 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. Variable

HLTH 491 (1-6) Directed Research in Health Science

Supervise individual research or investigation in Health Science under guidance of a faculty mentor. Culminating research project with paper and/or presentation required.

On-Demand

HLTH 495 (1) Senior Seminar in Health Education

A seminar for students preparing for a career in Health Education. Emphasis on: reviewing coursework, identifying and securing an internship site, and exploring employment opportunities within community organizations, public health agencies, work sites, health care facilities, and educational settings for health education

Pre: HLTH 380W

Coreq: HLTH 380W

Fall, Spring

HLTH 496 (1-9) Internship: Health Education

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: BIOL 220, BIOL 310, HLTH 260, HLTH 361, HLTH 380W, HLTH 454, HLTH 460, HLTH 475, HLTH 480, HLTH 482, HLTH 495

Fall, Spring

HLTH 497 (1-12) Internship: Alcohol and Drug Studies

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: Completion of all Alcohol and Drug Studies required core courses.

Fall, Spring

HLTH 499 (1-6) Individual Study

An in-depth study on a topic of particular interest to the student and project supervisor.

Fall, Spring

HISTORY

History

College of Social & Behavioral Sciences

Department of History

110B Armstrong Hall • 507-389-1618

Website: www.mnsu.edu/history/

Chair: H. Matthew Loayza

Melodie J. Andrews, Angela Jill Cooley, Christopher R. Corley, Kathleen L. Gorman, Lori Ann Lahlum, H. Matthew Loayza, Marlene Medrano, Agnes Odinga, Tao Peng

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.

POLICIES/INFORMATION

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.

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 (1-12 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 Department of History to have their transfer credits reviewed prior to registration for classes.

Residency Requirement. All transfer students majoring in history are required to take at least 9 semester credits at the Minnesota State Mankato Department of History. All transfer students minoring in history are required to take at least 6 semester credits at the Minnesota State Mankato Department of History.

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) - HIST 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 studies (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."

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.

HISTORY CONTINUED

HISTORY BA

Degree completion = 120 credits

Major Common Core

HIST 495 Senior Seminar (4)

Survey Sequence (choose 8 credits)

Student must take one of the survey sequences (World History, European History, or United States History).

HIST 170 Ancient World Civilization to 1500 (4)

HIST 170W Ancient World Civilization to 1500 (4)

HIST 171 World Civilization, 1500 - Present (4)

HIST 171W World Civilization, 1500 - Present (4)

HIST 180 European History to 1648 (4)

HIST 180W European History to 1648 (4)

HIST 181 European History: 1648 to the Present (4)

HIST 181W European History: 1648 to the Present (4)

HIST 190 United States to 1877 (4)

HIST 190W United States to 1877 (4)

HIST 191 United States Since 1877 (4)

HIST 191W United States Since 1877 (4)

Major Unrestricted Electives

Upper Division Courses and Distribution Requirement (choose 24 credits)

At least one 300-400 level course must be taken from each of the following areas: United States, Europe, Third World (Africa, Asia, Latin America, or Middle East)

HIST 302 World History: An Overview (4)

HIST 390 Readings for Honors: United States History (1)

HIST 391 Reading for Honors: European History (1)

HIST 392 Reading for Honors: World History (1)

HIST 401 Classical World of Greece & Rome (4)

HIST 402 Foundations of Judaism, Christianity, & Islam (4)

HIST 403 The Middle Ages (4)

HIST 406 Social History of Renaissance and Reformation Europe (4)

HIST 407 The Age of Absolutism and Enlightenment (4)

HIST 408 History of Women in Preindustrial Europe (4)

HIST 409 Social History of Preindustrial Europe (4)

HIST 412 Modern Germany since 1500 (4)

HIST 414 Early England to 1603 (4)

HIST 415 England since 1603 (4)

HIST 419 France since the Revolution in 1789 (4)

HIST 421 Modern Russia (4)

HIST 424 Scandinavian History (4)

HIST 427 Eastern Europe (4)

HIST 430 United States: Selected Topics (1-4)

HIST 431 European History: Selected Topics (1-4)

HIST 432 World History: Selected Topics (1-4)

HIST 434 East Asian History: 1800-1945 (4)

HIST 435 East Asian History: 1945 - The Present (4)

HIST 436 History of East Asian Relations with the United States (4)

HIST 437 African History to 1800 (4)

HIST 438 Modern Africa (4)

HIST 442 History of Latin America (4)

HIST 452 Minnesota History (4)

HIST 454 Early America to 1763 (4)

HIST 455 Revolutionary & Early National America 1763-1820 (4)

HIST 458 U.S. History 1820-1861 (4)

HIST 459 U.S. History 1861-1900 (4)

HIST 462 U.S. History, 1900-1945 (4)

HIST 463 U.S. History, 1945-Present (4)

HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)

HIST 466 History of U.S. Foreign Relations in the Twentieth Century (4)

HIST 470 American Frontier (4)

HIST 471 20th Century American West (4)

HIST 476 Comparative Slavery and Emancipation (4)

HIST 477 Advanced African-American History (3)

HIST 478 America in Vietnam (4)

HIST 481 U.S. Civil Rights Since 1945 (4)

HIST 483 American Social and Cultural History (4)

HIST 484 American Labor History (4)

HIST 485 History of American Immigration and Ethnicity (4)

HIST 486 American Environmental History (4)

HIST 487 United States Women's History (4)

HIST 490 Workshops (1-4)

HIST 497 Internship (1-12)

HIST 499 Individual Study (1-3)

Other Graduation Requirements:

Required for Bachelor of Arts (BA) degree ONLY: Language: (8 credits)

Required Minor: Yes. Any.

HISTORY BS

Degree completion = 120 credits

Major Common Core

HIST 495 Senior Seminar (4)

Major Restricted Electives

Survey Sequence (choose 8 credits)

Student must take one of the survey sequences (World History, European History, or United States History).

HIST 170 Ancient World Civilization to 1500 (4)

HIST 170W Ancient World Civilization to 1500 (4)

HIST 171 World Civilization, 1500 - Present (4)

HIST 171W World Civilization, 1500 - Present (4)

HIST 180 European History to 1648 (4)

HIST 180W European History to 1648 (4)

HIST 181 European History: 1648 to the Present (4)

HIST 181W European History: 1648 to the Present (4)

HIST 190 United States to 1877 (4)

HIST 190W United States to 1877 (4)

HIST 191 United States Since 1877 (4)

HIST 191W United States Since 1877 (4)

Major Unrestricted Electives

Upper Division Courses and Distribution Requirement (choose 24 credits)

At least one 300-400 level course must be taken from each of the following areas: United States, Europe, Third World (Africa, Asia, Latin America, or Middle East)

HIST 302 World History: An Overview (4)

HIST 390 Readings for Honors: United States History (1)

HIST 391 Reading for Honors: European History (1)

HIST 392 Reading for Honors: World History (1)

HIST 401 Classical World of Greece & Rome (4)

HIST 402 Foundations of Judaism, Christianity, & Islam (4)

HIST 403 The Middle Ages (4)

HIST 406 Social History of Renaissance and Reformation Europe (4)

HIST 407 The Age of Absolutism and Enlightenment (4)

HIST 408 History of Women in Preindustrial Europe (4)

HIST 409 Social History of Preindustrial Europe (4)

HIST 412 Modern Germany since 1500 (4)

HIST 414 Early England to 1603 (4)

HIST 415 England since 1603 (4)

HIST 419 France since the Revolution in 1789 (4)

HIST 421 Modern Russia (4)

HIST 424 Scandinavian History (4)

HIST 427 Eastern Europe (4)

HIST 430 United States: Selected Topics (1-4)

HIST 431 European History: Selected Topics (1-4)

HIST 432 World History: Selected Topics (1-4)

HIST 434 East Asian History: 1800-1945 (4)

HIST 435 East Asian History: 1945 - The Present (4)

HIST 436 History of East Asian Relations with the United States (4)

HIST 437 African History to 1800 (4)

HIST 438 Modern Africa (4)

HIST 442 History of Latin America (4)

HIST 452 Minnesota History (4)

HIST 454 Early America to 1763 (4)

HIST 455 Revolutionary & Early National America 1763-1820 (4)

HIST 458 U.S. History 1820-1861 (4)

HIST 459 U.S. History 1861-1900 (4)

HIST 462 U.S. History, 1900-1945 (4)

HIST 463 U.S. History, 1945-Present (4)

HIST 465 History of U.S. Foreign Relations, 1775-1900 (4)

HIST 466	History of U.S. Foreign Relations in the Twentieth Century (4)
HIST 470	American Frontier (4)
HIST 471	20th Century American West (4)
HIST 476	Comparative Slavery and Emancipation (4)
HIST 477	Advanced African-American History (3)
HIST 478	America in Vietnam (4)
HIST 481	U.S. Civil Rights Since 1945 (4)
HIST 483	American Social and Cultural History (4)
HIST 484	American Labor History (4)
HIST 485	History of American Immigration and Ethnicity (4)
HIST 486	American Environmental History (4)
HIST 487	United States Women's History (4)
HIST 490	Workshops (1-4)
HIST 497	Internship (1-12)
HIST 499	Individual Study (1-3)

Required Minor. Yes. Any

HISTORY MINOR

Minor Requirements. A minor in history consists of 18 semester hours with a minimum of 9 semester hours at the 300-400 level.

COURSE DESCRIPTIONS

HIST 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.

Variable

GE-5, GE-7

Diverse Cultures - Purple

HIST 170 (4) Ancient World Civilization to 1500

A history of the physical, political, cultural, social, and economic foundations of world civilizations to 1500.

Fall, Spring

GE-5, GE-8

HIST 170W (4) Ancient World Civilization to 1500

A history of the physical, political, cultural, social, and economic foundations of world civilizations to 1500. Same content as HIST 170, except this course satisfies WI, Writing Intensive. Students may not take both HIST 170 and HIST 170W for credit.

Variable

WI, GE-5, GE-8

HIST 171 (4) World Civilization, 1500-Present

Review of major changes in World Civilizations since 1500.

Fall, Spring

GE-5, GE-8

Diverse Cultures - Purple

HIST 171W (4) World Civilization, 1500-Present

Review of major changes in World Civilization since 1500. Same content as HIST 171, except this course satisfies the writing intensive, WI. Students may not take both HIST 171 and HIST 171W for credit.

Variable

WI, GE-5, GE-8

HIST 180 (4) European History to 1648

A survey of European civilization from Egypt to the end of the Thirty Years War.

Fall, Spring

GE-5, GE-9

HIST 180W (4) European History to 1648

A survey of European civilization from Egypt to the end of the Thirty Years War. Same content as HIST 180, except this course satisfies the writing intensive, WI. Students may not take both HIST 180 and HIST 180W for credit.

Variable

WI, GE-5, GE-9

HIST 181 (4) European History: 1648 to the Present

A survey of European history from the end of the Thirty Years War to the present.

Fall, Spring

GE-5, GE-8

HIST 181W (4) European History: 1648 to the Present

Survey of European history from the end of the Thirty Years War to the present.

Same content as HIST 181, except this course satisfies the writing intensive, WI. Students may not take both HIST 181 and HIST 181W for credit.

Fall, Spring

WI, GE-5, GE-8

HIST 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.

Fall, Spring

GE-5, GE-7

Diverse Cultures - Purple

HIST 190W (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. Same content as HIST 190, except this is a writing intensive course and satisfies WI. Students may not take both HIST 190 and HIST 190W for credit.

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

HIST 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.

Fall, Spring

GE-5, GE-7

Diverse Cultures - Purple

HIST 191W (4) United States Since 1877

This course is designed to provide an overview of America's political, social, economic, and cultural development from 1877 to the present. This course has the same content as HIST 191, but is approved as fulfilling WI. Students may not take both HIST 191 and HIST 191W for credit.

Variable

WI, GE-5, GE-7

Diverse Cultures - Purple

HIST 260 (4) Introduction to Traditional East Asian Civilization

A survey of traditional East Asian civilization — particularly China and Japan — from the beginning to the 19th century.

GE-5, GE-8

Diverse Cultures - Purple

HIST 260W (4) Introduction to Traditional East Asian Civilization

A survey of traditional East Asian civilization — particularly China and Japan — from the beginning to the 19th century.

WI, GE-5, GE-8

Diverse Cultures - Purple

HIST 302 (4) World History: An Overview

Review of World History as a field of study.

Fall, Spring

HIST 390 (1) Readings for Honors: United States History

Pre: 14 semester credits of History with minimum GPA of 3.5

Fall, Spring

HIST 391 (1) Reading for Honors: European History

Pre: 14 semester credits of History with minimum GPA of 3.5

Fall, Spring

HIST 392 (1) Reading for Honors: World History

Pre: 14 semester credits of History with minimum GPA of 3.5

Fall, Spring

HIST 401 (4) Classical World of Greece & Rome

The history of Greece and Rome stressing political, social and economic institutions and cultural and intellectual achievements.
Variable

HIST 402 (4) Foundations of Judaism, Christianity & 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.
Variable

HIST 403 (4) The Middle Ages

A history of the Middle Ages stressing political, social and economic interactions and cultural achievements.
Variable

HIST 406 (4) Social History of Renaissance and Reformation Europe

European history from the later Middle Ages to the end of the Thirty Years' War (c.1300-1648). Students will examine the intellectual, religious, and cultural developments in Western-Europe, with special attention given to social life and popular culture.
Variable

HIST 407 (4) The Age of Absolutism and Enlightenment

The history of Europe from the Treaty of Westphalia to the eve of the French Revolution (1648-1789). Course emphasizes absolutism and constitutionalism, the construction of European empires, the scientific revolution and Enlightenment, and social and economic changes.
Variable

HIST 408 (4) History of Women in Preindustrial Europe

A history of European women's experiences from Classical Greece and Rome to the French Revolution of 1789. An analysis of changing concepts of gender relations balanced with a study of women's expressions as individuals and as members of socio-economic, ethnic, kin, and religious groups.
Variable

HIST 409 (4) Social History of Preindustrial Europe

European culture and social life between 1400 and 1789. Topics include marriage and the family, sexuality, economic change, witchcraft, popular religion and Christianization, and the social history of political absolutism.
Variable

HIST 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.
Variable

HIST 414 (4) Early England to 1603

England from ancient times to the death of Elizabeth I.
Variable

HIST 415 (4) England since 1603

Political, social and economic development of England and Great Britain since the death of Elizabeth I.
Variable

HIST 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.
Variable

HIST 421 (4) Modern Russia

A history of Russia and surrounding areas from the fall of Tsarism in 1917 to the modern era.
Variable

HIST 424 (4) Scandinavian History

Political, economic, social, cultural, and 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.
Variable

HIST 427 (4) Eastern Europe

A history of Eastern Europe from the Middle Ages to the present.
Variable

HIST 430 (1-4) United States: Selected Topics

This seminar course will deal with a specific aspect of United States history as announced by the department.
Variable

HIST 431 (1-4) European History: Selected Topics

This seminar course will deal with a specific aspect of European history as announced by the department.
Variable

HIST 432 (1-4) World History: Selected Topics

This seminar course will deal with a specific aspect of World History as announced by the department.
Variable

HIST 434 (4) East Asian History: 1800-1945

A comparative history of the Chinese and Japanese nations from the 19th century to 1945.
Variable

HIST 435 (4) East Asian History: 1945 - The Present

A comparative history of the rise of the Chinese and Japanese nations from 1945 to the present.
Variable
Diverse Cultures - Purple

HIST 436 (4) History of East Asian Relations with the United States

History of relations of major East Asian countries with the United States from the late 18th century to the present.
Variable

HIST 437 (4) African History to 1800

Investigation of historical developments across the African continent from pre-history through the eighteenth century. Topics will include ancient empires of West Africa, the Swahili coast, the spread of Islam, the trans-Atlantic slave trade and the formation of South Africa's multi-racial society.
Variable
Diverse Cultures - Purple

HIST 438 (4) Modern Africa

Investigation of historical developments in Sub-Saharan Africa during the nineteenth and twentieth centuries. Topics will include trade with Europe and America, European colonization and African resistance, life in colonial Africa, independence movements, South Africa's apartheid state and the Rwanda genocide.
Diverse Cultures - Purple

HIST 442 (4) History of Latin America

Review of Latin American history from Ancient American Civilizations to the present.
Variable

HIST 452 (4) Minnesota History

This course will examine Minnesota's social, political, and economic development from the earliest human habitation to the present.

HIST 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.
Variable
Diverse Cultures - Purple

HIST 455 (4) Revolutionary & 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.
Variable
Diverse Cultures - Purple

HIST 458 (4) U.S. History 1820-1861

This course will discuss the social, economic, and political issues from the rise of Jackson through the beginning of the Civil War. Major issues to be covered include: Jacksonian Democracy, Industrialization, Reform, Westward Expansion, Slavery, and the 1850's.

Variable

Diverse Cultures - Purple

HIST 459 (4) U.S. History 1861-1900

This course will explore the immediate causes and consequences of the Civil War as well as the rise of an industrial/urban United States. Major issues to be covered include: causes of the Civil War, the war itself, Reconstruction, the Gilded Age, and Populism.

Variable

Diverse Cultures - Purple

HIST 462 (4) U.S. History, 1900-1945

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.

Variable

Diverse Cultures - Purple

HIST 463 (4) U.S. History, 1945-Present

Social, political and foreign affairs since World War II.

Variable

HIST 465 (4) History of U.S. Foreign Relations, 1775-1900

This course will explore the economic, strategic, and ideological factors shaping American foreign policy from 1775 to 1900. Students will examine how U.S. policy makers defined their goals and how their assumptions led the United States to pursue territorial and commercial expansion.

Variable

HIST 466 (4) History of U.S. Foreign Relations in the Twentieth Century

An examination of the major factors influencing U.S. diplomacy since 1900. Students will examine how influential policy makers defined their diplomatic goals, and how both domestic and external factors have contributed to America's reaction to wars and revolutions around the world.

Variable

Diverse Cultures - Purple

HIST 468 (4) U.S. Constitutional History to 1896

This course examines U.S. constitutional history from its English foundations to 1896. Students will read and analyze court decisions and discuss how legal history reflects American society, culture, politics, and economics during this period.

Variable

HIST 469 (4) U.S. Constitutional History from 1896

This course examines U.S. constitutional history from 1896 to the present. Students will read and analyze court decisions and discuss how legal history reflects American society, culture, politics, and economics during this period.

Variable

HIST 470 (4) American Frontier

Occupation of the area between the Mississippi and the Pacific from Spanish exploration to the late 19th century.

Variable

Diverse Cultures - Purple

HIST 471 (4) 20th Century American West

This course looks at the social, political, and economic developments that transformed the 20th Century American West.

Fall

Diverse Cultures - Purple

HIST 476 (4) Comparative Slavery and Emancipation

This course will discuss slavery and emancipation in the Atlantic World (Africa, Latin America, and the United States). Students will discover how slavery and emancipation differed in various regions and over time.

Variable

Diverse Cultures - Purple

HIST 477 (3) Advanced African-American History

A course which deals with the main themes in African-American history and their interpretations.

Variable

HIST 478 (4) America in Vietnam

This course will examine the Vietnam War. Students will discover how and why the U.S. became involved in Vietnam, examine the specific problems faced by American diplomats and military officials, and how the war affected American society.

Variable

Diverse Cultures - Purple

HIST 481 (4) U.S. Civil Rights Since 1945

This course will examine the Civil Rights Movement, broadly defined, from 1945 to the present, but focusing on the period from 1945 to 1970. We will also explore the way in which African Americans and their white supporters mobilized for equality in the face of massive white resistance and seeming federal indifference.

Variable

HIST 483 (4) American Social and Cultural History

Topics in intellectual history or popular and traditional culture.

Variable

HIST 484 (4) American 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.

Variable

HIST 485 (4) History of American Immigration and Ethnicity

A historical study of the immigration and ethnic experience in America. Includes an examination of political, social, and economic changes that resulted in population movements to the U.S. and of the development of immigration laws in response to the arrival of "outsiders." Attention is given to the rise of anti-immigrant movements at various times in American history.

Variable

HIST 486 (4) American Environmental History

This course will examine the interaction between humans and the American environment from pre-Columbus to the present.

Variable

HIST 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.

Variable

HIST 490 (1-4) Workshops

Specific titles to be announced in departmental course descriptions. P/N only.

Variable

HIST 495 (4) Senior Seminar

This seminar course will include a discussion of the history of the discipline of history, an introduction to research methodologies, and the nature of historical writing. Each student will write a research paper as part of the course. Required for history majors.

Fall, Spring

HIST 497 (1-12) Internship

Practical work experience in an historical agency.

P/N only

Variable

HIST 499 (1-3) Individual Study

Advanced independent study and research. P/N only.

Fall, Spring

Honors

College of Graduate Studies and Research

265 Morris Hall: 507-389-5191

Website: www.mnsu.edu/honors

Director: Anne Dahlman

Assistant Director: Giovanna Walters

Honors Program Faculty: Kellian Clink (Library Services); Christopher Corley (History); Kristen Cvancara (Communication Studies); Anne Dahlman (Honors); Julie Kerr-Berry (Theatre and Dance); Rosemary Krawczyk (Psychology); Teresa Kruienza (Educational Studies: K-12 and Secondary Programs); Justine Martin (Library Services); Martin Mitchell (Geography); Giovanna Walters (Honors)

Mission Statement: The mission of the Honors Program at Minnesota State Mankato is to encourage future leaders, researchers, and global citizens by providing high ability and motivated students with exceptional learning opportunities, mentoring relationships, and a community of scholars that foster their development as future leaders in a global society.

Program Overview: The Honors Program is dedicated to the development of three main competencies: leadership, research, and global citizenship. Students can choose between two honors designations. Students who enroll in a 14-credit Honors Program that includes 6 credits of Honors General Education courses and 8 honors credits will graduate with the designation: Honors Program Graduate with Distinction. Students who participate in an abbreviated 8-credit honors curriculum will graduate with the designation: Honors Program Graduate. As students move into courses within their major, they further develop their honors competencies through advanced honors seminars and individualized plans of study. Throughout their time at the University, students will participate in co-curricular activities which complement their plan of study. At the culmination of all coursework, seniors are required to demonstrate acquisitions of the leadership, research, and global citizenship competencies through a successful presentation and defense of an honors portfolio in HONR 475: Honors Portfolio.

POLICIES/INFORMATION

Admission to the Honors Program: The Honors Director, in consultation with the Honors Council, grants admission to the Honors Program. No predetermined test score or class rank guarantees or precludes admission. The selection committee considers the applicant's demonstrated academic excellence and inquisitiveness. Contact the Honors Program Director for application forms and procedures.

GPA Policy. Students must maintain a minimum overall 3.3 GPA to register for honors courses.

Pass/No Credit Policy. All of the Honors courses (including honors sections of general education courses and honors seminars) must be taken for a letter grade, except for HONR 475, which is only taken as pass/no credit.

Transfer Policy. Transfer students should contact the Honors Program Director to have their transfer credits reviewed when they submit the application for admission.

The Honors Program Graduate with Distinction track requires a core program of 14 credit hours. The Honors Program Graduate track requires 8 credit hours.

Required Courses (2 credits)

FYEX 100 First Year Seminar (1) **OR**

HONR 201 Introduction to Honors (1)

HONR 475 Honors Portfolio (1)

Required Honors Sections of General Education Courses* (6 credits)

Students must take at least 6 credits of designated Honors sections of General Education courses. Upon permission of the Director, students can substitute up to 6 credits of Honors General Education courses by taking upper-level credits beyond the 7 required credits.

Required Honors Seminars (6 credits)

Students must complete a total of 6 credit hours of HONR 401. Course may be repeated for credit for each new topic. Students can substitute up to 3 credits of HONR 401 with HONR 450, HONR 455, or HONR 499.

HONR 401 Honors Seminar (1-3)

* For students who pursue the Honors Program Graduate with Distinction track

Language Requirement. In addition to their coursework, all honors students will demonstrate competency in a second language according to the American Council on the Teaching of Foreign Languages "Intermediate Mid" level (for students continuing a language studied in high school) or "Intermediate Low" (for students studying a new language). Competency can be demonstrated through course completion or via examination.

COURSE DESCRIPTIONS

HONR 201 (1) Introduction to Honors

This course is required for students who transfer into the Honors program or who join without taking the FYEX course. This course provides an orientation to the mission and core competencies of the Honors Program. Students will analyze and categorize leadership, research, and global citizenship themes, identify appropriate learning goals, and develop an e-portfolio for their use in the Honors Program.

HONR 250 (1-6) Honors Service Learning

One way to meet Honors Program requirements is through Service-Learning. Students will develop meaningful Service-Learning activities which will involve an action and reflection dynamic. May be taken as traditional course or individually in consultation with the Honors Program Director.

HONR 255 (1-6) Honors Practicum

Honors students may engage in significant learning experiences outside of the traditional classroom setting. A practicum typically begins with student interest that turns into an educational activity. Practicums will be individually determined in consultation with the Honors Program Director.

HONR 401 (1-4) Honors Seminar

Seminars are offered by University faculty from a wide variety of disciplines. In addition, interdisciplinary seminars can be offered.

HONR 450 (1-6) Honors Service Learning

One way to meet Honors Program requirements is through Service-Learning. Students will develop meaningful Service-Learning activities which will involve an action and reflection dynamic. May be taken as traditional course or individually in consultation with the Honors Program Director.

HONR 455 (1-6) Honors Practicum

Honors students may engage in significant learning experiences outside of the traditional classroom setting. A practicum typically begins with student interest that turns into an educational activity. Practicums will be individually determined in consultation with the Honors Program Director.

HONR 475 (1) Honors Portfolio

This required course allows the student to articulate where and how he or she has met the Honors Program Learning Outcomes.

HONR 499 (1-6) Individual Study

To be arranged with Honors Program Director.

Humanities

College of Arts & Humanities

Humanities Program

230 Armstrong Hall • 507-389-5508 or 389-2117

Director: Gwen Westerman

The Humanities Program offers an interdisciplinary approach to examine the common issues, ideas, and themes that run throughout different cultures and throughout human history. The program uncovers the creative side of the human spirit and crosses the boundaries of the shared human experience--the places where dreams meet reality, art meets life and technology meets nature.

By studying literature, arts, and philosophical and religious traditions from ancient to contemporary times, students are able to understand their connections to each other and to the world. A Humanities degree provides the essential tools employers are looking for: communication, creativity, collaboration, and critical thinking.

The major and minor offered by the Humanities Programs help students to become deep thinkers, connection makers, and problem solvers. Students will improve their writing skills and expand their critical thinking skills, as well as sharpen their understanding of different human perspectives.

POLICIES/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 program for application procedures.

GPA Policy. Candidates for a major in Humanities must maintain a 2.5 grade-point average in the major.

P/N Grading Policy. Humanities core courses taken for a major or minor in Humanities may not be taken on a P/N basis.

HUMANITIES BA

Degree completion = 120 credits

Major Common Core

HUM 282W	Global Perspectives and Humanities Traditions (4)
HUM 350	Reading in Humanities (1-4)
HUM 380	Topics in Humanities (4)
HUM 450W	Humanities Seminar (4)
HUM 490	Senior Capstone Project (4)

Major Restrictive Electives (choose 15 credits)

ART 260	Art History Survey I (3)
ART 261	Art History Survey II (3)
ART 265W	Art As Politics (3)
ART 416	Art of Africa, the Americas, and the South Pacific (3)
ART 417	Medieval Art and Architecture (3)
ART 434	Arts Administration (3)
ART 460	Ancient Art (3)
ART 462	Renaissance Art (3)
ART 467	Art of the Islamic World (3)
ART 469	Asian Art (3)
ENG 318	Multicultural Literature (2-4)
ENG 433	Selected Studies in World Literature (4)
ENG 435	The World Novel (2-4)
ENG 436	Native American Literature (2-4)
ENG 438	African American Literature (2-4)
ENG 481	History of the English Language (4)
HUM 101W	Introduction to Humanities (4)
HUM 150	Western Humanities I: Beginnings through the Renaissance (4)

HUM 151	Western Humanities II: Renaissance through the Present (4)
HUM 155	Global Humanities I (4)
HUM 156	Global Humanities II (4)
HUM 250W	Perspectives in Humanities (4)
HUM 280W	Humanities Traditions (4)
HUM 281W	Human Diversity and Humanities Traditions (4)
HUM 498	Internship (1-4)
HUM 499	Individual Study (1-4)
MUS 321W	Music Literature and History I (3)
MUS 322W	Music Literature and History II (3)
PHIL 334W	History of Philosophy: Classical Philosophy (3)
PHIL 336W	History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 337	19th Century Philosophy (3)
PHIL 338	American Philosophy (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 361	Philosophy of Religion (3)
PHIL 460	Philosophy of the Arts (3)

Other Graduation Requirements:

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor. Any.

HUMANITIES MINOR

Required for Minor (20 credits)

(choose 1 course in each of the following categories for a total of 4 credits)

Western

HUM 150	Western Humanities I: Beginning through the Renaissance (4)
HUM 151	Western Humanities II: Renaissance through the Present (4)

Global

HUM 155	Global Humanities I (4)
HUM 156	Global Humanities II (4)

Perspectives and Traditions

HUM 250W	Perspectives in Humanities (4)
HUM 280W	Humanities Traditions (4)
HUM 281W	Human Diversity and Humanities Traditions (4)
HUM 282W	Global Perspectives and Humanities Traditions (4)

Comparative Studies

HUM 350	Reading in Humanities(1-4)
HUM 380	Topics in Humanities (4)

Capstone

HUM 450W	Humanities Seminar (4)
HUM 490	Senior Capstone Project (4)
HUM 498	Humanities Internship (1-4)

COURSE DESCRIPTIONS

HUM 101W (4) Introduction to Humanities and the Search for Meaning

An introduction to Humanities and its themes of study, including an exploration of the diversity of world cultures and multiple forms of creativity and expression, and aspects of interactions among peoples across the world. Students will think critically about and increase their understanding of diverse human perspectives and global relationships.

Variable

WI, GE-6, GE-8

HUM 150 (4) Western Humanities I: Beginnings through the Renaissance

An introduction to the interdisciplinary study of the Western Humanities, from ancient times through the Renaissance. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Fall

GE-6

HUM 151 (4) Western Humanities II: Renaissance through the Present

An introduction to the interdisciplinary study of the Western Humanities, from the Renaissance to the present. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Spring

GE-6

HUMANITIES CONTINUED

HUM 155 (4) Global Humanities I

An introduction to the interdisciplinary study of the humanities, as expressed through the cultures and traditions of the Middle East, North Africa, South Asia, and East Asia. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Fall
GE-6, GE-8

HUM 156 (4) Global Humanities II

An introduction to the interdisciplinary study of the humanities, as expressed through the cultures and traditions of sub-Saharan Africa, Latin America, and the Pacific region. Artistic, philosophical and religious forms of cultural expression are considered within their social and historical contexts.

ALT-Spring
GE-6, GE-8
Diverse Cultures - Purple

HUM 250 (2-4) Perspectives 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.

Variable
GE-6

HUM 250W (4) Perspectives 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.

Variable
WI, GE-6

HUM 280 (2-4) Humanities Traditions

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.

Variable
GE-6

HUM 280W (4) Humanities Traditions

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.

Variable
WI, GE-6

HUM 281W (4) Human Diversity and Humanities Traditions

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.

Variable
WI, GE-6, GE-7
Diverse Cultures - Purple

HUM 282W (4) Global Perspectives and Humanities Traditions

Historical or cultural periods, beliefs, or movements of one or 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.

Variable
WI, GE-6, GE-8
Diverse Cultures - Purple

HUM 350 (1-4) Reading for Humanities

Independent reading in the Humanities. Three options: 1) selected readings in Classical Humanities; 2) selected readings in Environmental Humanities; and 3) student-selected readings in Humanities. Requires permission of Humanities Program Director.

HUM 380 (4) Topics in Humanities

Topics in Humanities will be a variable-title course that explores special topics in common issues, ideas, and themes that run throughout different cultures and throughout human history. May be repeated with different topics.

HUM 450W (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.

Pre: HUM 282W
Fall (On-Demand), Spring (On-Demand)
WI

HUM 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

HUM 498 (1-4) Humanities Internship

An applied work and learning experience in the field of interdisciplinary Humanities.

Pre: HUM 282W, advanced standing in Humanities and consent of instructor.
On-Demand

HUM 499 (1-4) Individual Study

Interdisciplinary study in an area for which the student has basic preparation.
Pre: Approval of faculty.

HUMAN PERFORMANCE

Human Performance

College of Allied Health & Nursing
Department of Human Performance
1400 Highland Center • 507-389-6313
Website: www.mnsu.edu/dept/colahn/hp.html

Chair: Robert Pettitt

Suzannah Armentrout, Jedediah Blanton, Matthew Buns, Cindra Kamphoff, Jon Lim, Theresa Mackey, Cherie Pettitt, Bryan Romsa, Patrick Sexton, Mary Visser

POLICIES/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 2.5 ("C") or above.

Students are encouraged to consult with appropriate advisors for additional departmental requirements.

Candidates of the Health and Physical Education teaching degree and DAPE minor in the department must have a cumulative grade point average of 2.5 or above to be admitted to the Department of Human Performance and Professional

Education. A grade of "C" or better is required in all courses in the major and minor. Candidates may not take any course in the major and minor from the department as independent studies.

Students in the School Health and Physical Education program are required to complete 40 credits of General Education courses in 11 Goal Areas for graduation.

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 Shirley Murray, student relations coordinator, 124 Myers Field House, 507-389-6315.

HEALTH AND PHYSICAL EDUCATION BS

Degree completion = 120 credits

The Health and Physical Education teaching program meets national and state standards for the preparation of school health educators and physical educators. This program prepares future teachers for what they should know and be able to do in order to help their students' develop health-related knowledge and skill to engage in healthy behaviors including life-long physical activity.

Required General Education

CHEM	106	Chemistry of Life Process Part I (General) (3)
FCS	140	Introduction to Nutrition (3)
HLTH	212	Consumer Health (3)
HLTH	240	Drug Education (3)
HP	182	Aquatic Skills (1)
HP	291	Concepts of Fitness (2)
KSP	220W	Human Relations in a Multicultural Society (3)
PSYC	101	Introduction to Psychological Science (4)

Pre-requisites to the Major

BIOL	220	Human Anatomy (4)
BIOL	310	Basic of Human Physiology (4)

Major Common Core

HLTH	210	First Aid & CPR (3)
HLTH	311	Family Life & Sex Education (3)
HLTH	320	School Health Education (3)
HLTH	410	Current Health Issues (3)
HLTH	420W	Health Teaching Methods (3)
HLTH	451	Emotional Health and Stress (3)
HLTH	454	Chronic and Infectious Diseases (3)
HP	202	Introduction to Teaching PE & Health (1)
HP	203	Fundamentals of Indoor and Outdoor Team Sports (2)
HP	204	Fundamentals of Individual and Dual Sports (2)
HP	205	Fundamentals of Rhythm and Dance (2)
HP	348	Structural Kinesiology and Biomechanics (3)
HP	356	Methods of Elementary Physical Education (3)
HP	387	Methods of Secondary Physical Education (3)
HP	411	Developmental/Adapted Physical Education (3)
HP	413	Lifespan Motor Development (2)
HP	414	Physiology of Exercise (3)

Other Graduation Requirements

Secondary Education: Refer to the list of required professional education courses. KSP 220W Human Relations in a Multicultural Society is included in the required general education section. Therefore, total professional education credits counted in this section will be 27 instead of 30.

DEVELOPMENTAL ADAPTED PHYSICAL EDUCATION, TEACHING MINOR (DAPE)

Most school districts in Minnesota now require physical education teachers to have licensure in Developmental Adapted Physical Education (DAPE) to obtain or retain their teaching positions. In addition to DAPE licensure to teach students with disabilities, a DAPE minor makes prospective teachers better equipped to

teach students of all abilities in general physical education classes. Applicant for DAPE licensure must be a Health & Physical Education Teacher Education Major as DAPE licensure is an add-on license to the K-12 Health and Physical education teaching license. Students in related disciplines who foresee teaching students and individuals with disabilities may pursue the DAPE minor; however, pursuant to Minnesota teacher licensure requirements, only physical education majors can be granted the DAPE teaching licensure. Prospective teachers will be eligible for DAPE licensure in the State of Minnesota when all competencies have been met. See this link for more information <http://ahn.mnsu.edu/hp/undergraduate/dape.html>.

All courses in the minor must be taken for grade with the exception of HP 493 (Internship in DAPE) which must be taken as P/NC. HP 493 may be taken concurrently with student teaching with prior approval. Cooperating teacher for HP 493 must be a licensed DAPE teacher.

Candidates must pass the Minnesota Teacher Licensure Exam (MTLE) in Special Education: Core Skills to receive DAPE license.

Admission to Minor is granted by the department concurrent with or following admission to physical education major. Minimum department admissions requirements are:

- a minimum of 32 earned semester credit hours
- a minimum cumulative GPA of 2.5 or above

Required for Minor

HP	411	Developmental Adapted Physical Education (3)
HP	412	Assessment in Adapted Physical Education (2)
HP	413	Lifespan Motor Development (2)
HP	421	Teaching Sport to Individuals with Disabilities (2)
HP	422	Teaching Adapted Aquatics (2)
HP	445	Teaching Students with Cognitive & Emotional/Behavioral Disabilities (3)
HP	471	Consulting Techniques in Developmental Adapted Physical Education (3)
HP	493	Internship in Developmental Adapted Physical Education (2)

Required Support Courses for Minor (Special Education, 3 credits)

SPED	405	Individuals with Exceptional Needs (3)
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SPORT MEDICINE MINOR

Advisors: Patrick Sexton & Theresa Mackey

The Sports Medicine Minor at Minnesota State Mankato is intended for the non-athletic training major student who is interested in the broad field of Sports Medicine. It is intended for students in the following academic disciplines: exercise science, physical education, coaching, pre-physical therapy, psychology, pre-medicine, pre-chiropractic, nutrition, nursing, and pre-athletic training entry-level graduate education.

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
HLTH	210	Advanced First Aid and CPR (3)
HP	291	Concepts of Fitness (2)
HP	340	Prevention and Care (2)
HP	415	Advanced Sports Medicine (2)

Note: This minor is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and is not intended for Athletic Training Majors. The minor will not prepare students for the Athletic Training Board of Certification (BOC) examination.

COURSE DESCRIPTIONS

HP 101 (1) Adapted Exercise

For students with disabilities who will benefit from a guided program of individualized exercise.

Fall, Spring
GE-11

HP 102 (1) Individualized Exercise

This course provides small group personal training sessions (e.g., 1 to 4) ideal for sedentary students looking to begin a physical activity program in a non-competitive supportive environment. With the assistance of exercise science students enrolled in HP 486, participants will enhance their physical fitness and overall wellness.
Fall, Spring
GE-11

HP 103 (1) Fitness for Living

Concepts and development of lifelong healthy exercise and nutritional habits.
Fall, Spring
GE-11

HP 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.
On Demand
GE-11

HP 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, breaststroke, and sidestroke.
Fall
GE-11

HP 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

HP 114 (1) Billiards and Bowling

Theory and practice of billiards or bowling.
Fall, Spring
GE-11

HP 117 (1) Aerobic Conditioning

Theory and practice of aerobic conditioning.
Fall, Spring
GE-11

HP 130 (1) Self-Defense for Women

Includes street fighting techniques and personal safety tips.
Fall, Spring
GE-11

HP 138 (1) Beginning Horsemanship

Basic skills of horseback riding-western and English.
Fall, Spring
GE-11

HP 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
GE-11

HP 140 (2) Introduction to Athletic Training

Orientation to the profession of athletic training. Designed for students majoring in athletic training.
Fall, Spring

HP 141 (2) Introduction to Sport Management

This course is designed to introduce students to the vast array of fields within the sport management industry and the different job opportunities that are available as well as basic knowledge and skill sets needed to be a sport manager.
Fall, Spring

HP 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.
Fall, Spring
GE-11

HP 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.
On-Demand
GE-11

HP 146 (1) Intercollegiate Bowling

Pre: Bowling experience/averages.
On-Demand
GE-11

HP 147 (1) Intercollegiate Cross Country

Open for credit to those on the intercollegiate team.
Pre: Selection for team
Fall
GE-11

HP 148 (1) Intercollegiate Softball

Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Pre: Selection for team
Spring
GE-11

HP 149 (1) Intercollegiate Volleyball

Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Pre: Selection for team
Fall
GE-11

HP 150 (1) Intercollegiate Wrestling

Open for credit to those who make the wrestling team and complete the requirements.
Pre: Selection for team
Spring
GE-11

HP 152 (1) Intercollegiate Track and Field

Open for credit to those who make the team and complete the requirements.
Pre: Selection for team
Spring
GE-11

HP 153 (1) Intercollegiate Swimming

Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Pre: Selection for team
Spring
GE-11

HP 154 (1) Intercollegiate Football

Open for credit only for those students who make the Minnesota State Mankato team and who complete the requirements.
Pre: Selection for team
Fall
GE-11

HP 155 (1) Intercollegiate Basketball

Must be on intercollegiate roster.
Pre: Selection for team
Spring
GE-11

HP 156 (1) Intercollegiate Baseball

Class for only students on the intercollegiate baseball team. Need permission to register.

Pre: Selection for team

Spring
GE-11

HP 157 (1) Intercollegiate Golf

Open for credit to those who make the team and complete the requirements.

Pre: Selection for team

Spring
GE-11

HP 158 (1) Intercollegiate Tennis

Open for credit to those who make the team and complete the requirements.

Pre: Selection for team

Spring
GE-11

HP 159 (1) Intercollegiate Hockey

This course is admission by permission only. The course is limited to male students who are members of the Minnesota State Mankato intercollegiate hockey team.

Pre: Selection for team

Spring
GE-11

HP 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.

Fall, Spring

HP 161 (1) Intercollegiate Soccer

Participation in NCAA II soccer.

Pre: Selection for team

Fall
GE-11

HP 166 (1) Team Game Skills

Flag/Touch Football, Softball (fast and slow pitch), Soccer, Speedball, Ultimate, Volleyball, Basketball, Team handball.

Fall, Spring

GE-11

HP 174 (1) Individual Dual Activities

Participation and increase skill knowledge through activity in track and field or gymnastics.

Fall, Spring

GE-11

HP 175 (1) Fitness Activities

Participation and increase skill knowledge through activity in body building, physical conditioning, and aerobics.

Fall, Spring

GE-11

HP 176 (1) Lifetime Activities I

Acquaint student with the basic skills, strategy and rules of badminton, tennis, or racquetball.

Fall, Spring

GE-11

HP 177 (1) Lifetime Activities II

Basic skills and knowledge of terminology, rules, and strategy in archery or golf.

Fall, Spring

GE-11

HP 178 (1) Social, Folk and Square Dance Techniques

Techniques of traditional folk dance, square dance and fundamentals of a variety of social dances.

Fall, Spring

GE-11

HP 179 (1) Winter Activities

Skiing, cross-country skiing, ice skating, or snowboarding.

Spring

GE-11

HP 180 (1) Introduction to Handball

Acquaint student with basic skills, and rules of handball.

Fall, Spring

GE-11

HP 181 (1) Advanced Handball

Acquaint student with advanced skills, strategies, and rules of handball.

Fall, Spring

GE-11

HP 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.

Fall, Spring

GE-11

HP 190 (1) Sport Activities

Variable content based on demand.

Pre: Varies depending on activity

Fall, Spring

GE-11

HP 201 (3) Introduction to Teaching Physical Education

Introduction to physical education for teaching majors. An overview of history, physical education teaching profession, and opportunities and challenges in teaching.

Fall

HP 202 (1) Introduction to Teaching PE and Health

Introduction to physical education and health teaching majors. An overview of history, physical education and health teaching profession, and opportunities and challenges in teaching.

Spring

HP 203 (2) Fundamentals of Indoor and Outdoor Team Sports

This class is intended for students in Physical Education to learn the fundamentals of teaching indoor and outdoor team sports. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in both performing and teaching specific skills related to team sport (flag football, basketball, volleyball, soccer, ultimate Frisbee, team handball).

Fall

On-Demand

HP 204 (2) Fundamentals of Individual and Dual Sports

This class is intended for students in Physical Education to learn the fundamentals of teaching individual and dual sports. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in performance and analysis of fundamental movements and skills in individual and dual sports (bowling, golf, tennis, pickle ball, badminton) and leisure activities (disc golf, bocce ball).

On-Demand

HP 205 (2) Fundamentals of Rhythm and Dance

This class is intended for students in Physical Education to learn the fundamentals of teaching rhythm and dance. Students will use current teaching models to learn and evaluate age appropriate teaching progressions and assessment techniques. Students will become proficient in performance and analysis of fundamental movements and skills in rhythmic activities and dance (folk, square, line, and social).

On-Demand

HP 210 (2) Global Aspects of Sport

On-Demand

HP 241 (1) Sailing

Students must furnish Coast Guard approved wearable life preserver. Beginning and intermediate sailing techniques. Sailboat racing.

Pre: Swimming ability

On-Demand

GE-11

HP 242 (1) Canoeing

Paddling skills and safety/rescue techniques. Beginning white water skills. Students must provide their own personal flotation devices.

Pre: Swimming ability

On-Demand

GE-11

HP 245 (1) Intermediate Swimming

Advanced strokes: butterfly, overarm sidestroke, trudgen, 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.

Spring

GE-11

HP 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.

On-Demand

GE-11

HP 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

GE-11

HP 252 (2) 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.

On-Demand

GE-11

HP 255 (3) Development Movement

Designed to prepare teacher candidates to recognize, understand, apply, and analyze the skill theme approach to elementary children's physical education curriculum. Emphasis will be based on movement concepts, skill themes, rhythms and dance, and generic levels of skill proficiency.

Spring

HP 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

GE-11

HP 265 (2) 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.

Fall, Spring

HP 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.

On-Demand

HP 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

Fall, Spring

HP 291 (2) Concepts of Fitness

Adult fitness, from theory to practice.

Fall, Spring

GE-11

HP 301 (1) Swimming Theory

Methods, procedures, and philosophy of coaching competitive swimming.

Pre: Competitive swimming experience.

On-Demand

HP 302 (1) Wrestling Theory

Methods and procedures used in coaching.

Pre: Wrestling experience or wrestling class.

On-Demand

HP 303 (1) Volleyball Theory

Methods and procedures used in coaching volleyball.

Pre: Volleyball experience or consent.

On-Demand

HP 304 (1) Track & Field Theory

Methods and procedures used in coaching.

On-Demand

HP 305 (1) Baseball Theory

Methods and procedures used in coaching baseball.

On-Demand

HP 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.

Fall

HP 308 (1) Hockey Coaching Theory

The course is designed for those interested in coaching hockey at the youth and high school level.

On-Demand

HP 309 (1) Basketball Coaching Theory

Methods and procedures used in coaching.

Fall, Spring

HP 310 (1) Softball Theory

Methods and procedures used in coaching.

Pre: Softball experience or consent.

On-Demand

HP 311 (1) Cross Country Theory

Methods and procedures used in coaching.

On-Demand

HP 316 (1) Tennis Theory

Methods and procedures used in coaching.

On-Demand

HP 317 (1) Golf Coaching Theory

Methods and procedures used in coaching.

On-Demand

HP 318 (1) Soccer Theory

Methods and procedures used in coaching.

On-Demand

HP 320 (3) Foundations of Motor Learning

Analysis variables which affect the learning, performance, and retention of motor skills.

Pre: PSYC 101

Fall, Spring

HP 323 (2) Elementary Physical Education Methods

Methods and materials for teaching physical education in the elementary school.
Fall, Spring

HP 325 (3) Sport Ethics and Professional Development

This course will enable students to gain a deeper understanding of the moral reasoning processes of sport management professionals. Students will develop the knowledge, skills, and abilities to apply moral reasoning in dealing with ethical dilemmas in sport management.

Fall

HP 340 (2) Prevention and Care

Basic recognition, prevention, and care of injuries/illnesses suffered by athletes and other physically active individuals. Designed for coaching, physical education, and sports medicine minor students.

Pre: BIOL 220, HLTH 210

Fall, Spring

HP 341 (3) Athletic Training Techniques

Recognition, prevention, and care of injuries/illnesses incurred by athletes and other physically active individuals. Also, the proper selection, care, fitting, and maintenance of protective equipment and braces are emphasized. Designed for athletic training students.

Pre: Consent and BIOL 220, HP 140

Spring

HP 342 (3) Evaluation Techniques I

Principles of the etiology, pathology, assessment, recognition, and management of lower body injuries/illnesses suffered by athletes and physically active individuals. Designed for athletic training students.

Pre: Consent and HP 341

Fall

HP 343 (3) Evaluation Techniques II

Principles of the etiology, pathology, assessment, recognition, and management of upper body injuries/illnesses suffered by athletes and physically active individuals. Designed for athletic training students.

Pre: Consent, HP 341, HP 342

Spring

HP 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.

On-Demand

HP 346 (2) Evaluation Techniques I Clinical

The study and application of clinical assessment techniques used to evaluate lower body injuries incurred by physically active populations. The required clinical experience component will provide the student with the opportunity to apply these skills in the clinical environment.

Pre: HP 341 and HP 342 concurrent

Fall

HP 347 (2) Evaluation Techniques II Clinical

The study and application of clinical assessment techniques used to evaluate upper body injuries incurred by physically active populations. The required clinical experience component will provide the student with the opportunity to apply these skills in the clinical environment.

Pre: HP 341, HP 342, and HP 343 concurrent

Spring

HP 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

Fall, Spring

HP 354 (1) Coaches Physiology

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

HP 356 (3) Methods of Elementary Physical Education

Designed to prepare teacher candidates to recognize, understand, apply, and analyze the skill theme approach to elementary children's physical education curriculum. The emphasis will be based on movement concepts, skill themes, rhythms and dance, and generic levels of skill proficiency.

Spring

HP 360 (3) Foundations of Sport Management

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.

Fall

HP 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, PHYS 101

On-Demand

HP 372 (3) Exercise Science for Coaches

The purpose of this course is to acquaint the student with an understanding of basic scientific principles essential to working successfully with athletes as a coach.

Summer

HP 386 (4) Methods of Middle & Secondary Physical Education

Designed for teacher candidates to analyze, apply, and evaluate developmentally appropriate content development skills, develop lesson plans, and peer teach. Teacher candidates will apply the standards of effective practice in teaching middle and secondary level students in physical education.

Pre: HP 201, HP 255, HP 266, all Performance Courses.

Spring

HP 387 (3) Methods of Secondary Physical Education

This course is designed for teacher candidates to apply, analyze, and evaluate developmentally appropriate content skills, develop lesson plans, and peer teaching. Teacher candidates will apply the standards of effective practice in teaching K-12 level students in physical education.

Pre: KSP 330

Coreq: KSP 330

Fall

HP 392 (3) Group Exercise Instruction

The student will gain knowledge and skills that will allow them to take and pass a reputable group exercise instruction certification, develop/instruct a wide variety of group exercise formats and monitor and modify the exercise of participants in group exercise.

Variable

HP 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: HP 140 or HP141 or HP 160 or HP 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; Prerequisites may vary by program: HP 140 (AT), HP 141 (SM), HP160 (ES), HP 201 (PE/HLTH).

Fall, Spring, Summer

HP 403 (3) Research Methods & Statistics in Exercise Science

Provides an introduction to measurement and evaluation 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.

Pre: HP 290, HP 414

Fall, Spring

HP 403W (3) Research Methods & Statistics in Exercise Science

Provides an introduction to measurement and evaluation 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.

Pre: HP 290, HP 414

WI

Fall, Spring

HP 405 (3) Adapted Physical Activity

Course is designed for pre-professionals 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, Sport Management, and Athletic Training tracks, and students with majors from other departments who are interested in adapted physical activity for adult populations.

Fall

HP 411 (3) Developmental Adapted Physical Education

Legal and theoretical bases for teaching physical education to students with disabilities. First course in DAPE sequence.

Fall, Spring

HP 412 (2) Assessment in Adapted Physical Education

Evaluation of motor skills and fitness of students with disabilities.

Spring

HP 413 (2) Lifespan Motor Development

Study of lifespan motor development from prenatal through adulthood, including information on delayed development and the normal pattern of skill acquisition.

Fall

HP 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 330. BIOL 230 or BIOL 310 may be substituted for BIOL 330.

Fall, Spring

HP 415 (2) Advanced Sports Medicine

This course is designed for individuals interested in advanced study in the field of sports medicine. The course will provide advanced study or orthopaedic assessment techniques, application of therapeutic exercise and modalities, and rehabilitation techniques.

Pre: BIOL 220, HLTH 210, HP 340

Spring, Summer

HP 417 (3) Principles of Wellness Coaching

This course contains content associated with achieving entry-level certifications for wellness coaching. Health behavior change strategies are emphasized within the context of the health coaching theory, coaching relationship skills, well-being assessment, and goal setting.

Fall, Spring

HP 418 (3) Intercultural Competence for Allied Health Professionals

Studying abroad is a transformative experience that has the power to challenge our thinking and our perspective on the world. This experiential course will help you become a global citizen, develop intercultural competence, and enhance your abilities to work in health-related fields with diverse clients and patients. Specifically, we will be participating in intercultural activities before the study abroad and several cultural immersion activities while abroad (e.g., participating in a traditional cultural ceremony).

Spring

HP 419 (2) Teaching Dance to Individuals with Exceptional Needs

Adaptation of dance materials to facilitate learning of individuals with special needs through simulated and hands-on teaching experiences.

On-Demand

HP 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

Fall

HP 422 (2) Teaching Adapted Aquatics

Theory and practical experience in teaching swimming and other aquatic skills to individuals with disabilities.

Pre: HP 182 or HP 257

Spring

HP 424 (4) Methods of Elementary Physical Education

Designed for teacher candidates to analyze, apply, and evaluate developmentally appropriate content development skills, and develop lesson plans to teach elementary physical education.

Pre: HP 201, HP 255, HP 266, HP 386, All HP Performance

Fall

HP 432 (2) Elementary Teaching Field Experience

A field experience for teacher candidates to develop lesson plans and teach physical education to elementary students on-site prior to student teaching.

Fall, Spring

HP 435 (3) Planning Sport Facilities

This course provides students with information on the planning, development, and administration of sport facilities (i.e., physical education, athletics, recreation, fitness/wellness centers, etc.).

Spring, Summer

HP 437 (3) Sport Media, Sponsorship & Sales

An in-depth study of sport management theories, policies, objectives, and strategies applied to sport marketing through the functions and areas of sport sponsorships, sales and media.

Fall, Summer

HP 439 (3) Nutrition for Physical Activity and Sport

Provides in-depth exploration of the dietary needs of physically active individuals across the lifespan. Its laboratory component will focus on performance and interpretation of assessments commonly used to determine dietary and physiological status.

Fall, Spring

HP 440 (3) Medical Aspects of Athletic Training

Advanced study of general medical concepts related to injuries/illnesses incurred by athletes and physically active individuals. The course also includes concepts of medical pathology and pharmacology. Designed for athletic training students.

Pre: Consent and HP 341, HP 348

Fall

HP 441 (2) Organize & Administer

Planning, organizing, controlling, resource allocation, communication, marketing, public relations, and legal aspects of physical education and sport.

Fall, Spring

HP 442 (3) Therapeutic Modalities in Athletic Training

Theory and application of the use of therapeutic modalities in the treatment of injury/illnesses suffered by athletes and physically active individuals. This also includes the principles of tissue healing, pain and pain control. Designed for athletic training students.

Pre: Consent and HP 341, HP 342

Fall

HP 444 (3) Rehabilitation Techniques

Principles of rehabilitation and reconditioning of injuries/illnesses incurred by athletes and physically active individuals. This course also includes strategies to safely and expeditiously return patients/clients to functional activity.

Pre: HP 342 and concurrent HP 343

Spring

HP 445 (3) Teaching Students with Cognitive & Emotional/Behavioral Disabilities

Theory, strategies and best practices for teaching physical education to students with cognitive disabilities (including mental retardation, autism, and multiple disabilities accompanying mental retardation) and emotional/behavioral disorders.

Spring

HP 477 (3) Behavior Change Foundations and Strategies

Behavior Change Foundations and Strategies (3 semester credits) is a course that focuses upon the complexity of health behavior change and the skills necessary for a health promotion professional to assess, plan, and evaluate behavior change interventions for individuals and communities. Health behavior change theories and strategies will be discussed. Topics covered in class will include: behavior modification, goal setting, self-management, coping skills, and social support. Emphasis will also be given to the impact of policy and environmental influences on behavior.

Pre: HP 290, HP 414

Fall, Spring

HP 448 (3) Applied Sport Business

This course is designed to provide a rigorous, comprehensive hands-on learning experience for students majoring in Sport Management. This more closely supervised field experience requires a rigorous time and energy commitment from students.

Variable

HP 451 (3) Principles of Coaching

Basic understanding of the theoretical and practical applications of the sport science areas of physical education related to coaching. Current issues and topics addressing the principles and problems of the prospective interscholastic coach. Fall, Summer

HP 456 (2) Athletic Testing and Conditioning

Field testing, exercise instruction, and the periodization technique of exercise prescription for athletes and physically active individuals. Includes scientific strategies for enhancing strength, power, and endurance performance along with computer-aided program design.

Pre: HP 414

Fall, Spring

HP 459 (3) Financial Aspects of Sport

This course is designed to provide knowledge and understanding of the principles of economics, budgeting, and finance as it applies to the sport business industry.

Pre: ACCT 200 or consent of instructor

Spring

HP 462 (3) Sports Administration

This course provides student with fundamental theoretical and practical knowledge in management principles and techniques. Philosophy, leadership, communications, public relations, marketing, ethical and legal issues, finances and facilities are also studied.

Fall, Spring

HP 463 (3) Seminar in Sport Management

This course is designed to provide students with opportunities to apply the knowledge and skills obtained from sport management courses in order to solve problems that a sport manager is likely to encounter.

Spring, Summer

HP 464 (3) Analysis of Sport Data

The introduction of basic principles and procedures of measurement skills used by sport manager in applying and analyzing sport-related data such as sport marketing, operational, or financial data in a sport organizational setting.

Spring

HP 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.

Fall, Spring

HP 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 414

Fall, Spring

HP 466W (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 414

Fall, Spring

WI

HP 467 (3) Worksite Wellness Program Development

Reviews the contextual issues and health policies in the workplace. Efficacy of best practices in worksite wellness strategies, employee engagement, program design and implementation, and program assessment are explored.

Pre: HP 414

Spring

HP 468 (3) Sport Marketing

The study of marketing theory, research, strategies, and techniques in the areas of market segmentation, sport products, licensing and merchandising, market research, pricing, promotions, sales, public relations, electronic media, sponsorship and consumer behavior as it applies to the marketing sport or marketing products through sport.

Fall

HP 469 (3) Event Management in Sport

Techniques/principles of planning, funding and managing sport events. Collegiate championships, nonprofit events, benefits, professional events.

Fall

HP 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

Fall, Spring

HP 471 (3) Consulting Techniques in Dev. Adapted Physical Education

Study of techniques of consulting in D/APE with the spectrum of individuals involved in the IEP process, including but not limited to: students with disabilities, general physical education teachers, other school professionals and support service personnel, families/parents, peer tutors, and community agencies to enhance the learning of students with disabilities both within and outside the classroom setting.

Pre: HP 411, HP 412, HP 445

Spring

HP 472 (3) Psychology of Sport and Athletic Injury

This course provides understanding and application of the psychology of sport and injury. Topics include psychological concerns, psycho-social antecedents of injury, psychological skills to implement with patients who are injured as a result of participation in athletics and physical activity.

Variable

HP 475 (3) International Sport Management

The purposes of this course is to expand students' awareness of global sport management principles and obtain first-hand experience in international sport through studying abroad. The course will address ethics, marketing, event management, finance, and challenges/issues in international sport management.

On-Demand

HP 480 (3) Senior Seminar

Principles of organization and administration of athletic training service programs. Includes principles of research and evidence-based practice in athletic training.

Pre: Consent, HP 343, HP 422

Spring

HP 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

Fall, Spring

HP 482 (1) Coaching Practicum

Supervised experience in a public school varsity/junior varsity sport setting.

Pre: HP 340, HP372, HP 451

Fall, Spring

HP 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 HP 467 or equivalent

Fall, Spring

HP 484 (2) Clinical Techniques in Athletic Training I

The study and application of clinical techniques utilized in the care of patients suffering from injuries incurred through physically activity. The required clinical experience component will provide the student with the opportunity to apply these skills in the clinical environment.

Pre: HP 343, HP 442, HP 444, concurrent HP 456

Fall

HUMAN PERFORMANCE CONTINUED

HP 485 (2) Clinical Techniques in Athletic Training II

The study and application of clinical techniques utilized in the care of patients suffering from injuries incurred through physically activity. The required clinical experience component will provide the student with the opportunity to apply these skills in the clinical environment.

Pre: HP 343, HP 442, HP 444, and HP 484
Spring

HP 486 (3) Small Group Personal Training

This course will prepare exercise science students to lead personal training sessions in a professional environment. Each student will serve as a personal trainer for HP 102 students applying skills from HP 456 and HP 466. Students will further their personal training techniques using a client-centered approach.

Pre: HLTH 210, HP 456, HP 466
Fall, Spring

HP 490 (1-4) Workshop

Content is variable and based on special topic.
On-Demand

HP 491 (1-4) In-Service

Broad spectrum of foci available. Designed in consultation with requesting group.
On-Demand

HP 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: HP 414, HP 466
Fall, Spring

HP 493 (2) Internship in Developmental Adapted Physical Education

Supervised hands-on experience teaching physical education to students with disabilities.

Pre: HP 411 and HP 445
Fall, Spring

HP 496 (1-10) Internship

Designed as an intense practical experience in a selected area.

Pre: HP 414, HP 466
Fall, Spring

HP 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.

Fall, Spring

INFORMATION SYSTEMS

Information Systems

College of Science, Engineering & Technology
Department of Computer Information Science
273 Wissink Hall • 507-389-1412
Website: cset.mnsu.edu/cis

Chair: Leon Tietz

Faculty: Cyrus Azarbod, Lee Cornell, Allan Hart, Sarah Kruse, Guarionex Salivia, Mahbubur Syed, Christophe Veltsos, Michael Wells

The Bachelor of Science in Information Systems program provides students with in-depth knowledge of Information Technology concepts and applications, and prepares them to create innovative solutions for real-world problems. Students gain the ability to integrate hardware, software, and management skills to solve problems in a variety of IT areas.

The program's mission is to ensure that each graduate is exceptionally well qualified to undertake a successful information systems career in industry, business, education, or government. In support of this mission, the program is designed so that:

- Each student will gain a sound foundation in computing basics, analysis and design, programming, testing, software development, security, database, and human-computer interaction.
- Each student will learn the theory and practice of information technology and develop skills to apply this knowledge to analyze and solve information system problems.
- Each student will develop analytical, critical thinking, and interpersonal skills applicable to real-world problem solving.
- Each student will acquire basic business concepts to assist them in career paths where they are interfacing with and developing solutions for business professionals.
- Each student will develop effective oral and written communication skills.
- Each student will appreciate the social and ethical issues in information systems.

POLICIES/INFORMATION

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 MATH 181 or MATH 121 with a grade of "C" or better
- Completion of ENG 101 with a grade of "C" or better
- Completion of IT 210 and IT 214 with a grade of "C" or better in each, and a combined GPA of 2.5 in these courses (or their equivalents).

GPA Policy. The completion of any major or minor in the Department of Computer Information Science requires **both**:

- a GPA of 2.5 or higher for all **departmental** courses, or their substitutions, used to complete the major or minor, and
- a GPA of 2.5 or higher for **all** courses, or their substitutions, used to complete the major or minor. This includes all departmental courses, supporting courses, and General Education courses **required** for the major or minor.

It is recommended that students who cannot maintain a GPA of 3.0 in required 100 and 200 level course see their advisor for a program review.

Grade Policy. All coursework used to complete a departmental major or minor, including required courses, required supporting courses, and required General Education courses, must be taken for a letter grade except for courses offered only as P/N.

No course completed with a grade of "D" can be used to complete a departmental major or minor program, or to meet a departmental prerequisite.

Registration Hold Policy. The department will place a registration hold on any student who earns a "D" or "F" in any of its courses. The department will also place such a hold on any student who drops any of its courses after the first two weeks of the semester. A student with a registration hold cannot register for courses until the hold is released, which requires filling out an appeal form and taking it to the student's advisor for discussion. Appeal forms are available from the departmental office.

Dual Major Policy. Students can earn at most one undergraduate major from this department.

Incomplete Policy. The department gives incomplete grades for only two conditions. The first condition is illness, which requires a doctor's written recommendation. 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. The student must have a satisfactory grade ("C" or better) in the course at the time of the onset of the condition.

Internship Policy. An internship is required for all majors.

Residency Policy. Students must earn at least 50 percent of the credits required for a major in Information Systems at Minnesota State Mankato.

Advising Policy. Every semester, before registering for courses, each student majoring in Information Systems must meet with his/her advisor to obtain permission for registration. This meeting ensures that all students are making satisfactory progress toward their degrees.

Portfolio Policy. Each student majoring in Information Systems is required to keep a portfolio of work done in all major courses, and to make this portfolio available to faculty for review. Keeping a portfolio gives the student ownership over his or her education and helps to personalize the educational experience. The portfolio also provides a valuable showcase of work accomplished when interviewing prospective employers or applying to graduate school.

INFORMATION SYSTEMS BS

Degree completion = 120 credits

Required General Education

CMST 100 Fundamentals of Communication (3)

ENG 101 Composition (4)

IT 202W Computers in Society (4)

PHIL 224W Business Ethics (3)

Math

(choose 3-4 credits from the following MATH courses)

MATH 121 Calculus I (4)

MATH 181 Intuitive Calculus (3)

Communication Studies

(choose 3-4 credits from one of the following)

CMST 102 Public Speaking (3)

CMST 212 Professional Communication & Interviewing (4)

Major Common Core

ACCT 200 Financial Accounting (3)

ECON 207 Business Statistics (4)

ENG 271W Technical Communication (4)

IT 210 Fundamentals of Programming (4)

IT 214 Fundamentals of Software Development (4)

IT 311 Business Application Programming (4)

IT 340 Introduction to Database Systems (4)

IT 350 Information Security (4)

IT 380 Systems Analysis & Design (4)

IT 440 Database Management Systems II (4)

IT 480 Software Quality Assurance and Testing (4)

IT 482 Human Computer Interaction (4)

IT 484 Software Engineering (4)

IT 497 Internship (1-12)

Three credits of IT 497 are required for the major. Additional credits will be used to satisfy overall degree requirements.

Major Restricted Electives

Students must complete the requirements for ONE of the two clusters

Cluster 1: Integrated Business Experience (IBE) (15 credits)

IBE Curriculum (choose 12 credits)

Three credits of IT 499 must be taken concurrently with the IBE practicum to count towards this cluster. The four IBE courses are taken together in a single semester. Work with the College of Business Advising Center to register for the IBE curriculum.

FINA 362 Business Finance (3)

IT 499 Individual Study (1-4)

MGMT 330 Principles of Management (3)

MRKT 310 Principles of Marketing (3)

Cluster 1 Electives (choose 3 credits)

ACCT 210 Managerial Accounting (3)

BLAW 371 Computer and Technology Law (3)

MGMT 346 Production & Operations Management (3)

MGMT 473 Enterprise Resource Planning (ERP) (3)

Cluster 2: General Business (15 credits)

Business Core (choose 9 credits)

FINA 362 Business Finance (3)

MGMT 330 Principles of Management (3)

MRKT 310 Principles of Marketing (3)

Cluster 2 Electives (choose 6 credits)

ACCT 210 Managerial Accounting (3)

BLAW 371 Computer and Technology Law (3)

MGMT 346 Production & Operations Management (3)

MGMT 473 Enterprise Resource Planning (ERP) (3)

Major Unrestricted Electives (choose 4 credits)

ENG 469 Project Management in Technical Communication (4)

Or any upper-division course(s) not already used in the Major Common Core or in the selected cluster. IT 300-IT 499

Required Minor: None.

For IT course descriptions, please see Computer Information Technology.

INTEGRATED ENGINEERING

Integrated Engineering

Department of Integrated Engineering

College of Science, Engineering & Technology

131 Trafton Science Center N • 507-389-2744

Websites: cset.mnsu.edu/ie and www.ire.mnscu.edu

Chair: Rebecca Bates

Faculty: Rebecca Bates, Leslie Flemming, Cheol-Hong Min, Dean Kelley, Elizabeth Pluskwik, Robert Sleezer, Jacob Swanson

Affiliated Iron Range Faculty: Ronald Ulseth (Co-Director), Andy Lilleve

Accreditation. Iron Range Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. Twin Cities Engineering will apply for accreditation after the first students graduate from the program.

The Integrated Engineering major is offered through a novel engineering education program, unique to Minnesota State Mankato. **Iron Range Engineering** is offered in the Iron Range region of northeast Minnesota (Virginia, MN) and **Twin Cities Engineering** is offered in the Twin Cities metro area (Bloomington, MN).

These programs focus on the 3rd and 4th year of the undergraduate engineering program. Students transfer into the Bachelor of Science in Engineering program after two years of pre-engineering work elsewhere.

Students learn traditional engineering knowledge and skills in a project-based learning environment. The Iron Range Engineering (IRE) educational model is a project-based-learning model in which students work with industry and others on real-life design projects with a focus on producing graduates with integrated technical/professional knowledge and competencies. Learning is done in the context of the design projects.

The IRE educational model emphasizes innovation, creativity, design, experimental techniques, modeling techniques with an ultimate goal of regional economic development in the Iron Range region. The B.S. in Engineering program allows students to tailor their education to focus on a variety of engineering fields or to create a multidisciplinary experience. Successful completion of the program culminates in the Bachelor of Science in Engineering.

Graduates of the Minnesota State Mankato B.S. in Engineering Program will achieve at least 2 of the following program educational objectives, but will be capable of achieving all within one to four years of graduation:

INTEGRATED ENGINEERING CONTINUED

- Designing, implementing and integrating thermal, electrical, mechanical and computer-controlled systems, components, and processes that will serve the region, the nation, and the world;
- Continuing their education through technical or professional graduate programs, professional licensure, or certifications, and the wide variety of other types of life-long learning
- Creating, developing, leading, and managing in a wide range of enterprises that result in sustainable and enhanced economic regional development through their disciplinary expertise
- Demonstrating actions such as community service, professional ethics, professional responsibility and mentoring future engineers

POLICIES/INFORMATION

MINIMUM INTEGRATED ENGINEERING PROGRAM ENTRY REQUIREMENTS

Entry Requirements. A minimum of 49 semester credit hours including the following courses and credits must be completed before the student enters the engineering curriculum in the Fall of the junior year in full standing.

- Calculus and Differential Equations (16 credits)
- General Physics (calculus-based) (8 credits)
- Additional math and science courses, including chemistry, (8 credits)
- Intro engineering courses including programming or introduction to engineering, statics, dynamics and lab-based electric circuits (13 credits)
- English Composition (4 credits)

All courses and credits shown above must be completed before full enrollment in 300-level engineering courses, unless special permission is granted by the department chair. All of the above courses 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. Students may be admitted provisionally while these requirements are being satisfied.

Application to Program. To be considered for admission, the student must have a cumulative GPA of 2.5 for all science, math, and engineering courses. Admission to the Integrated Engineering Program is selective and subject to the approval of the Integrated Engineering program faculty. Admission to the Integrated Engineering Program also requires the completion of the application found at the following website: <http://cset.mnsu.edu/ie/apply.html>.

Each application will be evaluated individually and the decision of Integrated Engineering program faculty will be final. Failure to submit an application by stated deadline could result in the student being denied admission to the program. If a student is denied admission to the Integrated Engineering Program, he/she can reapply to the program for admission in subsequent years.

- Minnesota State Mankato students.**
This application form (<http://cset.mnsu.edu/ie/apply.html>) is submitted to the Integrated Engineering Program along with a copy of the student’s Minnesota State Mankato transcript and any transfer evaluations. Pre-engineering students at Minnesota State Mankato are not guaranteed admission to the program.
- Transfer Students.**
Transfer students must submit an application to Minnesota State Mankato and follow all transfer policies. Students may be able to complete the required pre-engineering curriculum at another college or university and have these courses and credits transferred to Minnesota State Mankato, when applying for admission to the Integrated Engineering Program.

GPA Policy. GPA Policy: Students graduating with a B.S. in Engineering degree must have:

1. A cumulative GPA of 2.5 or higher.
2. Grades of 1.67 (“C-”) or better for courses taken at Minnesota State Mankato to be accepted.

P/N Grading Policy. P/N credit will not be applied to any course used to meet the degree requirements.

All students must follow all Minnesota State Mankato policies.

INTEGRATED ENGINEERING BSE

Degree completion = 128 credits

Required General Education

Students who complete the Minnesota Transfer Curriculum will satisfy the Composition (ENG 101) and Communications requirements.

ENG	101	Composition (4)
MATH	121	Calculus I (4)
PHYS	221	General Physics I (4)
Economic Course (choose 3 credits)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
Communications (choose 3-4 credit)		
CMST	102	Public Speaking (3)
ENG	271W	Technical Communication (4)

Chemistry

 (choose 3-5 credits)

CHEM	191	Chemistry Applications (3)
CHEM	201	General Chemistry I (5)

Pre-requisites to the Major

An additional 3 credits of engineering design and programming are required. Circuit Analysis should be accompanied by a lab. Students need a total of 32 Math and Science credits comprised of courses from General Education and prerequisites to the major.

EE	230	Circuit Analysis I (3)
EE	240	Evaluation of Circuits (1)
ENGR	110	Introduction to Project-based Engineering (3)
MATH	122	Calculus II (4)
MATH	223	Calculus III (4)
MATH	321	Ordinary Differential Equations (4)
ME	212	Statics (3)
ME	214	Dynamics (3)
PHYS	222	General Physics II (3)
PHYS	232	General Physics II Laboratory (1)

CHOOSE 1 CLUSTER

Physics

PHYS	223	General Physics III (3)
PHYS	233	General Physics III Laboratory (1)

Chemistry

CHEM	202	General Chemistry II (5)
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Biology

 (choose 4 credits)

BIOL	105	General Biology I (4)
BIOL	106	General Biology II (4)

Major Common Core

All students must complete 6 credits of ENGR 370, 6 credits of ENGR 371, 2 credits of ENGR 320, 2 credits of ENGR 420 and 4 credits of ENGR 492.

ENGR	301	Design I (3)
ENGR	302	Design II (3)
ENGR	311	Professionalism I (3)
ENGR	312	Professionalism II (3)
ENGR	320	Engineering Core Competencies (1-2)
ENGR	370	Mechanical Core Competencies (1-8)
ENGR	371	Electrical Core Competencies (1-6)
ENGR	401	Capstone Design I (3)
ENGR	402	Capstone Design II (3)
ENGR	411	Professionalism III (3)
ENGR	412	Professionalism IV (3)
ENGR	420	Advanced Engineering Core Competencies (1-2)
ENGR	492	Seminar (1)

Major Restricted Electives

Choose 6-7 credits of approved Arts and Humanities courses and choose 6-7 credits of Social Science courses for a total of 13 credits. The Depth Requirement can be fulfilled by a sequence of courses in the same department (such as HIST 180 and HIST 181 or PHIL 101 and PHIL 321W). A list of approved courses can be found at the program website. Students should also meet the University’s Diverse Cultures requirement. Students who complete the Minnesota Transfer Curriculum will satisfy the Major Restricted Electives requirement.

Major Unrestricted Electives

(choose one group from the following)

Broad Focus (choose 16 credits)

Students choosing not to complete a focus area must complete 0-2 credits of ENGR 355 and 14-16 credits of ENGR 455, ENGR 470 or ENGR 471. The engineering field of these elective credits is unrestricted.

- ENGR 355 Elective Technical Competency (1-2)
- ENGR 455 Advanced Technical Competency (1-8)
- ENGR 470 Mechanical Advanced Competency (1-2)
- ENGR 471 Electrical Advanced Competency (1-2)

Mechanical Focus (choose 16 credits)

Students choosing a mechanical focus must complete 2 credits of ENGR 470, 0-2 credits of ENGR 355 and 12-14 credits of ENGR 455 or ENGR 471. At least 12 credits of ENGR 355 and ENGR 455 must be in the field of mechanical engineering. At least two of the four engineering projects must include design of mechanical systems.

- ENGR 355 Elective Technical Competency (1-2)
- ENGR 455 Advanced Technical Competency (1-8)
- ENGR 470 Mechanical Advanced Competency (1-2)
- ENGR 471 Electrical Advanced Competency (1-2)

Electrical Focus (choose 16 credits)

Students choosing an electrical focus must complete 2 credits of ENGR 471, 0-2 credits of ENGR 355 and 12-14 credits of ENGR 455 or ENGR 470. At least 12 credits of ENGR 355 and ENGR 455 must be in the field of electrical engineering. At least two of the four engineering projects must include design of electrical systems.

- ENGR 355 Elective Technical Competency (1-2)
- ENGR 455 Advanced Technical Competency (1-8)
- ENGR 470 Mechanical Advanced Competency (1-2)
- ENGR 471 Electrical Advanced Competency (1-2)

Other Focus Areas (choose 16 credits)

Students choosing a focus area other than mechanical or electrical must complete 0-2 credits of ENGR 355 and 14-16 credits of ENGR 455, ENGR 470 or ENGR 471. At least 14 credits of ENGR 355 and ENGR 455 must be in the field of focus. At least two of the four engineering projects must include design of focus-area systems.

- ENGR 355 Elective Technical Competency (1-2)
- ENGR 455 Advanced Technical Competency (1-8)
- ENGR 470 Mechanical Advanced Competency (1-2)
- ENGR 471 Electrical Advanced Competency (1-2)

COURSE DESCRIPTIONS

ENGR 110 (3) Introduction to Project-based Engineering

Introduction of the engineering design process, professional skills necessary for the modern engineer, learning strategies needed for academic success, and overview of engineering applications relevant to society. Students will use engineering tools to complete an engineering team project.

Fall, Spring

ENGR 293 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants.

Pre: Recipient of a MAX scholarship or instructor consent

Fall, Spring

ENGR 301 (3) Design I

Students learn and practice the essential elements of engineering design through industry project implementation: scoping, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, global/societal/environmental impacts.

Fall, Spring

ENGR 302 (3) Design II

Students further learn and practice the elements of engineering design through industry project implementation: scoping, modeling, experimentation, analysis, modern tools, design reviews, multi-disciplinary systems view, creativity, safety, business plans, global/societal/environmental impacts.

Pre: ENGR 301

Fall, Spring

ENGR 311W (3) Professionalism I

Students learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Topics include leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility.

Fall, Spring

WI

ENGR 312W (3) Professionalism II

Students further learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Topics include further examination of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility.

Pre: ENGR 311W

Fall, Spring

WI

ENGR 320 (1-2) Engineering Core Competencies

Students gain breadth across all objectives and depth in the areas of engineering statistics and either programming or mathematical modeling.

Pre: Admission to Program

Fall, Spring

ENGR 355 (1-2) Elective Technical Competency

In-depth study of an engineering area related to an engineering project or foundation topic in a focus area such as biomedical, chemical, combustion, computer, electrical, engineering management, environmental, mechanical, process, renewable energy, structural, systems or transportation engineering.

Pre: Admission to Program

Fall, Spring

ENGR 370 (1-6) Mechanical Core Competencies

Students gain breadth across all objectives and depth in an area of: dynamic systems, manufacturing processes, material science, mechanics of materials, thermodynamics, fluid mechanics.

Pre: Admission to program

Fall, Spring

ENGR 371 (1-6) Electrical Core Competencies

Students gain breadth across all objectives and depth in a focused area in these core competencies: instrumentation, AC circuits, signals and systems, electronics, digital logic, electric machines.

Pre: Admission to program

Fall, Spring

ENGR 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: MATH 223. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

ENGR 401 (3) Capstone Design I

The first in a two-semester sequence of capstone design. Students build on the experience gained in ENGR 301/ ENGR 302 to bring their implementation to that expected of contributing engineers in industry.

Pre: ENGR 302, ENGR 312W

Fall, Spring

ENGR 402 (3) Capstone Design II

This is the second capstone design course and fourth design course overall. Expectations include potential patent applications, entry in business plan competitions, or some similarly high level achievement.

Pre: ENGR 401, ENGR 411W

Fall, Spring

INTEGRATED ENGINEERING CONTINUED

ENGR 411W (3) Professionalism III

Students further learn and develop the elements of professionalism while operating in project teams interacting daily with clients from industry. Further development/practice of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility in project context.

Pre: ENGR 312W

Fall, Spring

WI

ENGR 412W (3) Professionalism IV

Students further learn/develop professionalism while interacting regularly with clients from industry. Topics include further development and practice of leadership, metacognition, teamwork, written and oral communication, ethics, and professional and personal responsibility, in project context, with reflection on education growth.

Pre: ENGR 411W

Fall, Spring

WI

ENGR 420 (1-2) Advanced Engineering Core Competencies

Students gain breadth across all objectives and depth in the areas of engineering economics and entrepreneurship.

Pre: Admission to Program

Fall, Spring

ENGR 455 (1-8) Advanced Technical Competency

In-depth study of an engineering area related to an engineering project or foundation topic in a focus area such as biomedical, chemical, combustion, computer, electrical, engineering management, environmental, mechanical, process, renewable energy, structural, systems or transportation engineering. Course may be repeated.

Coreq: ENGR 370, ENGR 371

Fall, Spring

ENGR 470 (1-2) Mechanical Advanced Competency

Students gain breadth across all objectives and depth in an area of: heat transfer, structural.

Pre: ENGR 370

Fall, Spring

ENGR 471 (1-2) Electrical Advanced Competency

Students gain breadth across all objectives and depth in an area of: 3-phase AC systems, control systems.

Pre: ENGR 371

Fall, Spring

ENGR 492 (1) Seminar

Students learn about engineering practice through seminars with practicing engineers from industry and are assisted in their development as learners through workshops. This course is repeated by General Engineering students every semester.

Fall, Spring

ENGR 493 (1) MAX Scholar Seminar

This class is for MAX scholars and covers topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members. Students will mentor lower division scholars and do presentations.

Pre: Recipient of a MAX scholarship or instructor consent.

Fall, Spring

ENGR 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.)

Variable

ENGR 496 (1-4) Selected Topics in Engineering

Special topics not covered in other courses. May be repeated for credit on each new topic.

Pre: Consent

Variable

INTERDISCIPLINARY STUDIES

Interdisciplinary Studies

College of Arts & Humanities

226 Armstrong Hall • 507-389-1712

Director: Kristen Treinen

The Interdisciplinary Studies baccalaureate major is designed to give highly-motivated, self-directed students an opportunity to work with the faculty to create their own program and earn an undergraduate degree. Interdisciplinary Studies is a liberal-education program designed for students who wish to major in an interdisciplinary area with coherency of design.

POLICIES/INFORMATION

Admission to Major: Admission will be granted to students who meet eligibility requirements and who complete a formal application to the Interdisciplinary Studies program. Eligibility requirements are as follows:

- Student must have a current, cumulative GPA of 2.0 or higher, according to the Minnesota State Mankato records.
- Student should apply after earning a minimum of 32 semester credits and before completing 80 semester credits, according to Minnesota State Mankato records. Students having more than 80 credits may still be considered for the Interdisciplinary Studies program if they are willing to

meet all requirements of the program.

- After meeting with the Director of Interdisciplinary Studies, the student must submit a formal application on a form provided by the director.

Areas of Concentration. Students seeking the Interdisciplinary Studies degree will select three academic areas in which to concentrate their work. A faculty in each of the three areas of study should be selected to help them arrange and oversee their course work.

Continuation in Program. The following rules explain the requirements for a student to continue in the Interdisciplinary Studies program and to receive a university degree. The Interdisciplinary Studies major must:

- Maintain a minimum 2.5 GPA overall for the three areas of study.
- Every course counted in the three areas must have a "C" or better, unless "P/NC" is specified for a course.
- Complete all university's graduation requirements.
- Complete a minimum of 15 credit hours in each of the three areas of study.
- Complete a capstone project synthesizing the areas of study in IDST 496.

INTERDISCIPLINARY STUDIES BS

Degree completion = 120 credits

Major Common Core

IDST 496 Capstone Experience (4)

Major Restricted Electives

Discipline One - (choose 15 credits)

Any Discipline 300-499
Discipline Two - (choose 15 credits)
 Any Discipline 300-499
Discipline Three - (choose 15 credits)
 Any Discipline 300-499

*Lower-division courses (100-200 level) may be included with approval of the program director.

Required Minor: None

COURSE DESCRIPTION

IDST 496 (4) Capstone Experience

Project synthesizing student's three academic areas of concentration, to be arranged in consultation with program director and academic advisor(s) after minimum nine credits earned in each academic area. Project will culminate in presentation to director and advisor(s).

INTERNATIONAL BUSINESS

International Business

College of Business
Department of Marketing & International Business
 150 Morris Hall • 507-389-2967

Chair: Juna (Gloria) Meng

Faculty: Turgut Guvenli, M. Anaam Hashmi

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.

The International Business 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, aviation management, finance, accounting, computer science, language, political science, history, geography, and other related areas.

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's junior year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

- Criteria Considered for Admission to the International Business Major
1. Cumulative (including Transfer) Grade Point Average: minimum 2.7.
 2. Credits and Courses: 33 completed credits of the 44 general education requirements.
 3. Completion of the following courses: IT 101, MATH 130, ACCT 200, ACCT 210, BLAW 200, MGMT 200, BUS 295, ECON 201, ECON 202, ECON 207. Complete one of the following courses: PHIL 120W, PHIL 205W, PHIL 222W, PHIL 224W, PHIL 226W, PHIL 240W

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Advising Center. When a student applies to the College of Business, he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, telephone: 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. Students must be admitted to a College of Business major to be granted a Bachelor of Science degree in any College of Business major.

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

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA 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.

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 nine 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.

INTERNATIONAL BUSINESS BS

Degree completion = 120 credits

Required General Education

- ECON 201 Principles of Macroeconomics (3)
- ECON 202 Principles of Microeconomics (3)
- MATH 130 Finite Mathematics and Introductory Calculus (4)

Pre-requisites to the Major

- ACCT 200 Financial Accounting (3)
- ACCT 210 Managerial Accounting (3)
- BLAW 200 Legal, Political, and Regulatory Environment of Business (3)
- BUS 295 Professional Preparation for Business Careers (2)
- ECON 207 Business Statistics (4)
- IT 101 Introduction to Information Systems (3)
- MGMT 200 Introduction to MIS (3)

Major Common Core

- Required of all College of Business Majors (18 credits)*
- FINA 362 Business Finance (3)
 - IBUS 380 Principles of International Business (3)
 - MGMT 330 Principles of Management (3)
 - MGMT 346 Production and Operations Management (3)
 - MGMT 481 Business Policy and Strategy (3)
 - MRKT 310 Principles of Marketing (3)

INTERNATIONAL BUSINESS CONTINUED

Required of all International Business Majors (15 credits)

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)

Major Restricted Electives

Choose two courses (6 credits) from one of the following business functional areas (Marketing, Finance, or Management).

OPTION A: Marketing

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)
MRKT	420	Sales Management (3)

OPTION B: Finance

ACCT	310	Management Accounting I (3)
FINA	460	Investments (3)
FINA	462	Strategic Financial Management (3)
FINA	463	Security Analysis (3)
FINA	464	Financial Institutions and Markets (3)
FINA	467	Insurance and Risk Management (3)

OPTION C: Management

MGMT	385	Introduction to Management Science (3)
MGMT	440	Human Resource Management (3)
MGMT	441	Staffing (3)
MGMT	444	Organization Design, Development, and Change (3)
MGMT	459	Management Information Systems (3)
MGMT	480	Human Behavior in Organizations (3)

Major Unrestricted Electives

(choose at least 6 credits from the following)

ECON	420	International Economics (3)
FREN	202	Intermediate French II (4)
GEOG	341	World Regional Geography (3)
GER	202	Intermediate German II (4)
IBUS	419	International Business Seminar (3)
IBUS	491	In-Service (1-4)
IBUS	492	Study Tour (1-3)
IBUS	498	Internship (1-3)
IBUS	499	Individual Study (1-3)
POL	231	World Politics (3)
SCAN	293	Intermediate Norwegian II (1-4)
SCAN	295	Intermediate Swedish II (1-4)
SPAN	202	Intermediate Spanish II (4)

Required Minor: None

INTERNATIONAL BUSINESS MINOR

Minor Core

IBUS	380	Principles of International Business (3)
MRKT	310	Principles of Marketing (3)

(choose four courses (12 credits) from the following)

IBUS	419	International Business Seminar (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)
IBUS	491	In-Service (1-4)
IBUS	492	Study Tours (1-3)

COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers

This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills.

Variable

BUS 295 (2) Professional Preparation for Business Careers

This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of COB majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation.

Fall, Spring

BUS 397 (3) IBE Practicum

An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students.

Pre: Must be admitted to the College of Business

Coreq: FINA 362, MGMT 330, MRKT 310

Fall, Spring

IBUS 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

Fall, Spring

IBUS 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: IBUS 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

IBUS 419 (3) International Business Seminar

Topics on current developments in international business, technology, and legislation.

Pre: IBUS 380

Fall

IBUS 428 (3) International Marketing

Managerial approach to marketing decision making in multicultural market situations.

Pre: MRKT 310, IBUS 380

Fall

IBUS 448 (3) International Business Management

This course examines cross-cultural differences in business practices. Among the topics covered are the differences in management styles, multiculturalism, international negotiations, as well as international human resource issues, social responsibility and ethics in a global context, international labor relations, cultural synergy and multicultural teams.

Pre: IBUS 380

Fall

IBUS 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

Spring

IBUS 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

Spring

IBUS 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, IBUS 448, IBUS 469
Spring

IBUS 491 (1-4) In-Service

Topics will vary across various hands-on practical experiences.
Pre: Consent
Variable

IBUS 492 (1-3) Study Tours

Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.
Variable

IBUS 497 (1-9) Internship

Supervised experience in business, industry, state or federal institutions. P/N only.
Pre: Consent
Fall, Spring

IBUS 498 (1-3) Internship

Supervised experience in business, industry, state or federal institutions. Taken for grade only.
Pre: Consent
Fall, Spring

IBUS 499 (1-3) Individual Study

Individual study of special topics.
Pre: Consent
Fall, Spring

INTERNATIONAL RELATIONS

International Relations

College of Social & Behavioral Sciences
Department of Government
109 Morris Hall • 507-389-2721
<http://sbs.mnsu/psle/relations/>

Program Director: Abdalla Battah, 507-389-1019
Email: abdalla.battah@mnsu.edu

Advisors: Abdalla Battah, Tom Inglot, Eiji Kawabata, Jackie Viececi

The International Relations Major consists of 42 credit hours plus a minimum of one year (8 credits) of a foreign language. (The 42 required credits may include experiential learning or study abroad, maximum of 15 credits. Students must always consult with their advisor for the final approval of all experiential learning/study abroad credits for the International Relations major.) The International Relations degree is designed to prepare students for employment in international organizations, governmental and charitable agencies in the international arena, and business and financial institutions with over seas interests, or to provide a broad liberal arts education.

POLICIES/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 2.5 ("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 Department of Government and the awarding of a degree will depend upon fulfillment of the program.

Admission Policy. Students seeking admission to the International Relations major must have a cumulative GPA of 2.5.

GPA Policy. Students must have a GPA of 2.5 to graduate with an International Relations major.

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.

Minimum Credit Requirement. All students (including transfer students) majoring in International Relations must take a minimum of 15 credits of International Relations courses at Minnesota State Mankato before graduation with BA in International Relations.

Minimum Credit Requirement. All students (including transfer students) minor-ing in International Relations must take a minimum of 9 credits of International Relations courses at Minnesota State Mankato before graduation.

With the consent of an International Relations advisor, the student may utilize credits in foreign language above and beyond the 100 level, from the approved course list.

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.

The International Relations major consists of a Major Common Core (12 credits), Major Electives (15 credits), a Major Emphasis (15 credits), and International Experiential Learning (6-15 credits).

No more than 6 credits taken for POL 491 (Internship) count toward the International Relations major.

No more than 6 credits taken toward completing the Political Science major or the Political Science minor can be counted toward the International Relations major.

INTERNATIONAL RELATIONS BA

Degree completion = 120 credits

Major Common Core

POL 231	World Politics (3)
POL 241	Introduction to Comparative Politics (3)
POL 431	International Relations (3)

Comparative Politics (choose 3 credits)

POL 435	Capitalism, Nationalism, and 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 & Neighboring States Politics (3)
POL 442	South Asia: Politics & Policy (3)
POL 443	Middle East Politics (3)
POL 444	Latin American Politics (3)
POL 445	Asian Pacific Rim: Politics & Policy (3)
POL 446	African Politics (3)
POL 447	European Democracies (3)
POL 448	Political Development & Change (3)

INTERNATIONAL RELATIONS CONTINUED

Major Restricted Electives (choose 15 credits)

Advisor approval is required for "Topics" courses other than POL 430 and POL 440.

ANTH	285	Special Topics (1-3)
ANTH	332	Anthropology of Religion (3)
ANTH	421W	Health, Culture, and Disease (3)
ANTH	430	Peoples and Cultures of Latin America (3)
ANTH	435	The Rise of City-States and Nations (3)
ANTH	485	Topics in Anthropology (1-3)
ART	413	Scandinavian Art (3)
ART	416	Art of Africa, the Americas, and the South Pacific (3)
ART	417	Medieval Art and Architecture (3)
ART	419	Gender in Art (3)
ART	462	Renaissance Art (3)
ART	463	Mannerism to Romanticism (3)
ART	466	Realism to Postmodernism (3)
ART	467	Art of the Islamic World (3)
ART	469	Asian Art (3)
ART	492	Art History Seminar (1-6)
BLAW	453	International Legal Environment of Business (3)
CMST	203	Intercultural Communication (3)
ECON	201	Principles of Macroeconomics (3)
ECON	420	International Economics (3)
ECON	450	Economic Development (3)
ENG	433	Selected Studies in World Literature (4)
ENG	435	The World Novel (2-4)
FREN	305	France Today (1-4)
FREN	350	Introduction to French Literature (3)
FREN	405	Business French I (2-4)
FREN	406	Business French II (2-4)
FREN	442	French Literature II (1-4)
GEOG	341	World Regional Geography (3)
GEOG	409	Selected Topics (1-4)
GEOG	425	Economic Geography (3)
GEOG	437	Political Geography (3)
GEOG	445	Latin America (3)
GEOG	446	Canada (3)
GEOG	450	Europe (3)
GEOG	454	Russian Realm (3)
GEOG	456	Africa (3)
GEOG	458	Geography of East Asia (3)
GER	442	German Literature (1-4)
GER	455	German Cinema (3)
GER	460	Topics in German Cinema (4)
HIST	302	World History: An Overview (4)
HIST	402	Foundations of Judaism, Christianity, & Islam (4)
HIST	412	Modern Germany since 1500 (4)
HIST	415	England since 1603 (4)
HIST	419	France since the Revolution in 1789 (4)
HIST	421	Modern Russia (4)
HIST	424	Scandinavian History (4)
HIST	427	Eastern Europe (4)
HIST	431	European History: Selected Topics (1-4)
HIST	434	East Asian History: 1800-1945 (4)
HIST	435	East Asian History: 1945 - The Present (4)
HIST	436	History of East Asian Relations with the United States (4)
HIST	437	African History to 1800 (4)
HIST	438	Modern Africa (4)
HIST	442	History of Latin America (4)
HIST	465	History of U.S. Foreign Relations, 1775-1900 (4)
HIST	466	History of U.S. Foreign Relations in the Twentieth Century (4)
HIST	476	Comparative Slavery and Emancipation (4)
HIST	478	America in Vietnam (4)
IBUS	380	Principles of International Business (3)
IBUS	419	International Business Seminar (3)
IBUS	428	International Marketing (3)
IBUS	448	International Business Management (3)
IBUS	469	International Business Finance (3)

IBUS	490	International Business Policy (3)
MRKT	428	International Marketing (3)
PHIL	321	Social & Political Philosophy (3)
PHIL	336W	History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL	337	19th Century Philosophy (3)
PHIL	358W	Eastern Philosophy (3)
PHIL	361	Philosophy of Religion (3)
POL	201	Issues in Politics (1-3)
POL	234	Model United Nations (3)
POL	311	Ancient & Medieval Political Philosophy (3)
POL	312	Early Modern Political Philosophy (3)
POL	313	Modern Political Philosophy (3)
POL	416	Nonwestern Political Philosophy (3)
POL	425	Terrorism & Political Violence (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	United States Foreign Policy (3)
POL	435	Capitalism, Nationalism, and Democracy (3)
POL	436	International Political Economy (3)
POL	437	International Conflict Resolution (3)
POL	438	International Relations of East Asia (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 & Neighboring States Politics (3)
POL	442	South Asia: Politics & Policy (3)
POL	443	Middle East Politics (3)
POL	444	Latin American Politics (3)
POL	445	Asian Pacific Rim: Politics & Policy (3)
POL	446	African Politics (3)
POL	447	European Democracies (3)
POL	448	Political Development & Change (3)
POL	449	Comparative Criminal Justice Systems (3)
SCAN	251W	Scandinavian Culture: The Sami (4)
SCAN	451	Scandinavian Crime Fiction (4)
SCAN	455	Topics in Scandinavian Film (4)
SOC	407	Population Dynamics (3)
SPAN	355	Spanish Civilization (1-4)
SPAN	356	Latin American Civilization (1-4)
SPAN	403	Topics in Spanish American Literature (1-4)

Major Emphasis: Security & Peace (S&P) (choose 15 credits)

Must take at least 2 of the following: POL 432, POL 433, POL 437.

CMST	203	Intercultural Communication (4)
GEOG	437	Political Geography (3)
HIST	436	History of East Asian Relations with the United States (4)
HIST	465	History of U.S. Foreign Relations, 1775-1900 (4)
HIST	466	History of U.S. Foreign Relations in the Twentieth Century (4)
HIST	478	America in Vietnam (4)
PHIL	358W	Eastern Philosophy (3)
POL	201	Issues in Politics (1-3)
POL	234	Model United Nations (3)
POL	425	Terrorism & Political Violence (3)
POL	430	Topics in International Relations (1-4)
POL	432	International Law (3)
POL	433	International Organization (3)
POL	434	United States Foreign Policy (3)
POL	435	Capitalism, Nationalism, and Democracy (3)
POL	437	International Conflict Resolution (3)
POL	438	International Relations of East Asia (3)
POL	440	Topics in Comparative Politics (1-4)
POL	441	Russia & Neighboring States Politics (3)
SCAN	451	Scandinavian Crime Fiction (4)
SOC	407	Population Dynamics (3)

Major Emphasis: International Political Economy (IPE)

Required 15 credits. Must take POL 436 and at least 2 of the following: ECON 420, IBUS 380, POL 433, POL 435, POL 448.

CMST 203	Intercultural Communication (4)
ECON 201	Principles of Macroeconomics (3)
ECON 420	International Economics (3)
ECON 450	Economic Development (3)
GEOG 425	Economic Geography (3)
GEOG 437	Political Geography (3)
IBUS 380	Principles of International Business (3)
IBUS 419	International Business Seminar (3)
IBUS 428	International Marketing (3)
IBUS 448	International Business Management (3)
IBUS 469	International Business Finance (3)
IBUS 490	International Business Policy (3)
MRKT 428	International Marketing (3)
PHIL 358W	Eastern Philosophy (3)
POL 201	Issues in Politics (1-3)
POL 234	Model United Nations (3)
POL 430	Topics in International Relations (1-4)
POL 432	International Law (3)
POL 433	International Organization (3)
POL 434	United States Foreign Policy (3)
POL 435	Capitalism, Nationalism, and Democracy (3)
POL 436	International Political Economy (3)
POL 438	International Relations of East Asia (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 & Neighboring States Politics (3)
POL 442	South Asia: Politics & Policy (3)
POL 444	Latin American Politics (3)
POL 445	Asian Pacific Rim: Politics & Policy (3)
POL 446	African Politics (3)
POL 447	European Democracies (3)
POL 448	Political Development & Change (3)
SCAN 451	Scandinavian Crime Fiction (4)
SOC 407	Population Dynamics (3)

Major Emphasis: International Norms & Institutions (INI)

Required 15 credits. Must take POL 433 and at least 2 of the following: POL 311, POL 312, POL 313, POL 416, POL 432.

ART 419	Gender in Art (3)
CMST 203	Intercultural Communication (4)
HIST 402	Foundations of Judaism, Christianity, & Islam (4)
PHIL 321W	Social & Political Philosophy (3)
PHIL 336W	History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 337	19th Century Philosophy (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 361	Philosophy of Religion (3)
POL 201	Issues in Politics (1-3)
POL 234	Model United Nations (3)
POL 311	Ancient & Medieval Political Philosophy (3)
POL 312	Early Modern Political Philosophy (3)
POL 313	Modern Political Philosophy (3)
POL 416	Nonwestern Political Philosophy (3)
POL 430	Topics in International Relations (1-4)
POL 432	International Law (3)
POL 433	International Organization (3)
POL 434	United States Foreign Policy (3)
POL 435	Capitalism, Nationalism, and Democracy (3)
POL 436	International Political Economy (3)
POL 437	International Conflict Resolution (3)
POL 438	International Relations of East Asia (3)
POL 439	Comparative Social Policy: The Welfare State in Europe and the Americas (3)
POL 440	Topics in Comparative Politics (1-4)
POL 447	European Democracies (3)

POL 448	Political Development & Change (3)
POL 449	Comparative Criminal Justice Systems (3)
SCAN 451	Scandinavian Crime Fiction (4)

Major Emphasis: Regional Studies (RS)

Choose 15 credits at least 6 credits must be from 300-400-level Political Science Courses.

ANTH 285	Special Topics (1-3)
ANTH 332	Anthropology of Religion (3)
ANTH 430	Peoples and Cultures of Latin America (3)
ANTH 432	Kinship, Marriage and Family (3)
ART 413	Scandinavian Art (3)
ART 416	Art of Africa, the Americas, and the South Pacific (3)
ART 417	Medieval Art and Architecture (3)
ART 462	Renaissance Art (3)
ART 463	Mannerism to Romanticism (3)
ART 466	Realism to Postmodernism (3)
ART 467	Art of the Islamic World (3)
ART 469	Asian Art (3)
ART 492	Art History Seminar (1-6)
CMST 203	Intercultural Communication (4)
ENG 321	British Literature: 1785-Present (4)
ENG 435	The World Novel (2-4)
FREN 217	Modern France (1-3)
FREN 305	France Today (1-4)
FREN 350	Introduction to French Literature (3)
FREN 402	French Civilization (3-4)
FREN 417	Modern France (1-3)
FREN 432	French Literature I (1-4)
FREN 442	French Literature II (1-4)
GEOG 341	World Regional Geography (3)
GEOG 425	Economic Geography (3)
GEOG 437	Political Geography (3)
GEOG 440	Field Studies (1-4)
GEOG 445	Latin America (3)
GEOG 446	Canada (3)
GEOG 450	Europe (3)
GEOG 454	Russian Realm (3)
GEOG 456	Africa (3)
GEOG 458	Geography of East Asia (3)
HIST 412	Modern Germany since 1500 (4)
HIST 415	England since 1603 (4)
HIST 419	France since the Revolution in 1789 (4)
HIST 421	Modern Russia (4)
HIST 424	Scandinavian History (4)
HIST 427	Eastern Europe (4)
HIST 431	European History: Selected Topics (1-4)
HIST 434	East Asian History: 1800-1945 (4)
HIST 435	East Asian History: 1945 - The Present (4)
HIST 437	African History to 1800 (4)
HIST 438	Modern Africa (4)
HIST 442	History of Latin America (4)
PHIL 358W	Eastern Philosophy (3)
POL 201	Issues in Politics (1-3)
POL 234	Model United Nations (3)
POL 416	Nonwestern Political Philosophy (3)
POL 435	Capitalism, Nationalism, and Democracy (3)
POL 438	International Relations of East Asia (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 & Neighboring States Politics (3)
POL 442	South Asia: Politics & Policy (3)
POL 443	Middle East Politics (3)
POL 444	Latin American Politics (3)
POL 445	Asian Pacific Rim: Politics & Policy (3)
POL 446	African Politics (3)
POL 447	European Democracies (3)
POL 448	Political Development & Change (3)

INTERNATIONAL RELATIONS CONTINUED

SCAN 251W	Scandinavian Culture: The Sami (4)
SCAN 451	Scandinavian Crime Fiction (4)
SCAN 455	Topics in Scandinavian Film (4)
SPAN 355	Spanish Civilization (1-4)
SPAN 356	Latin American Civilization (1-4)
SPAN 402	Topics in Spanish Peninsular Literature (1-4)
SPAN 403	Topics in Spanish American Literature (1-4)

International Experiential Learning (6-15 credits)

The International Experiential Learning component consists of a minimum of 6 credits and a maximum of 15 credits. Wherever possible, students are encouraged to satisfy this requirement by undertaking study at a university abroad. However, under exceptional circumstances, a student may be allowed to satisfy the requirement through an approved internship.

In consultation with their academic advisors, students will design the international experiential learning component of their major. The proposed study abroad or internship must be approved in advance by the advisor and by other relevant university authorities prior to undertaking the courses or internships in question, and students must earn the equivalent of a grade of "C" or better for these credits to be counted toward the International Relations major.

The credits earned under this requirement may not be used to satisfy the major common core requirements, which must be fulfilled at Minnesota State Mankato. However, they may be used to satisfy the student's chosen major concentration or as major elective credits. Note that the student may not use credits from language courses to satisfy his or her major concentration or as major elective credits and that no more than 6 credits taken for POL 491 (Internship) count toward the International Relations major.

Officially registered international students are exempt from the study abroad requirement.

Other Graduation Requirements

1. **Minor. Any.** Students are advised to consult with their advisor on the choice of a minor.
2. **Foreign Language.** The student may satisfy language requirement by completing a college level foreign language sequence of two courses (8 semester credits) with grades of "C" or above, or by demonstrating equivalent proficiency in a foreign language. Examples of the latter include scoring 3 or higher on an Advanced Placement Exam in a foreign language and graduating with a "C" average or better from a high school where the main classroom instruction was in a language other than English. Language credits do not count toward the International Relations degree. Talk to your advisor for full details.

INTERNATIONAL RELATIONS MINOR (18 credits)

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 Electives (6 credits)

Choose 6 credits of electives from the approved list of IR program courses at the 300 and 400 level only.

IRON RANGE ENGINEERING (see Integrated Engineering)

Iron Range Engineering (see Integrated Engineering)

Department of Integrated Engineering
College of Science, Engineering & Technology
141 Trafton Science Center N • 507-389-2744
Websites: cset.mnsu.edu/ie and www.ire.mnsu.edu

Chair: Rebecca Bates

Faculty: Rebecca Bates, Leslie Flemming, Cheol-Hong Min, Elizabeth Pulskwik
Affiliated Iron Range Faculty: Ronald Ulseth (Co-Director), Andy Lilleve

Location: Mesabi Range Community & Technology College, 1001 West Chestnut Street, Virginia, MN

This program provides upper division engineering coursework. Lower-division coursework is typically completed at a community college. Itasca Community College in Grand Rapids, MN is the primary partner for this program. Admission requires an application to Minnesota State Mankato and the Iron Range Engineering program. For more information, please see the description in the Integrated Engineering major.

JAPANESE

Japanese

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Gregory Taylor

Although Minnesota State Mankato does not offer a degree in Japanese, students may register for Japanese courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.

LATIN

Latin

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages
Chair: Gregory Taylor

Although Minnesota State Mankato does not offer a degree in Latin, students may register for Latin courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.

Latin American Studies

College of Social & Behavioral Sciences

Department of History

110 Armstrong Hall • 507-389-1619

Alfredo Duplat, James A. Grabowska, Kimberly E. Contag, Adriana Gordillo, Elizabeth Harsma, Tomasz Inglot, Marlene Medrano, Jose Lopez, Gregory Taylor, Enrique Torner

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 that contribute to the minor. When filing for graduation, Latin American studies minors should enter the code LATA in the column where minors are listed.

POLICIES/INFORMATION

GPA Policy. Minors must have a minimum GPA of 2.0 (“C”).

P/N Grading Policy. No more than one fourth of credits in minor may be taken P/N.

LATIN AMERICAN STUDIES MINOR

Required for Minor (16 credits)

(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	Individual Study Abroad: Topics in Spanish American Literature (1-6)
SPAN 496	Individual Study Abroad: Topics in Spanish American Culture (1-6)

(choose 9-13 credits from at least three department)

ANTH 412	Archaeology of Latin America (3)
ANTH 430	Peoples and Culture of Latin America (3)
GEOG 445	Latin America (3)
HIST 442	History of Latin America (4)
POL 444	Latin American Politics (3)

Other offerings may be substituted with permission of the Latin American Studies faculty. For course descriptions see the department listings.

LAW ENFORCEMENT

Law Enforcement

College of Social & Behavioral Sciences

Department of Government

109 Morris Hall • 507-389-2721

Website: www.mnsu.edu/psle

Director: Tamara Wilkins

Program Advisor: Gertrude Kunkel

Susan Burum, Collen Clarke, Christian Dobratz, Patricia Nelson, Ken Zimny

The law enforcement program is designed for individuals 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.

POLICIES/INFORMATION

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 Government Department Office for current admission requirements. Both academic and physical agility standards are course requirements, for which passing grades are necessary to graduate Option I (pre-professional).

Admission to Major. Option II is granted by the department. Contact the department for application procedures.

GPA Policy. Students seeking to graduate with a bachelor’s degree in law enforcement (either option) must have accrued a 2.6 grade-point average in their major and earn a grade of “C” or better in POL 111.

P/N Grading Policy. All law enforcement classes (both options and minor) except LAWE 492 must be taken for a grade.

Repeated Course Policy. Students majoring in law enforcement (either op-

tion) may not repeat a course more than once, and no more than three different LAWE classes (including those accepted as transfer credits) may be repeated within a five year period.

Minimum Courses Policy. All students (including transfer students) majoring in Law Enforcement (either option) must take a minimum of five (5) different LAWE classes at Minnesota State Mankato for a total of not less than fifteen (15) credit hours.

All students (including transfer students) seeking a minor in law enforcement must take a minimum of three (3) different LAWE classes at Minnesota State Mankato for a total of not less than nine (9) credit hours.

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 Mankato requirements before being approved to take the P.O.S.T. Board licensure examination. This includes being certified in first aid and CPR (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.**

LAW ENFORCEMENT BA

Degree completion = 120 credits

OPTION I: Minnesota P.O.S.T. Board Certification

Required General Education

POL 111	United States Government (3)
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Major Restricted Electives

(choose 12 credits)

Six of the 12 credits must be LAWE electives, of which 3 must be at the 300/400 level

CHEM 131	Forensic Science (3)
CHEM 134	Mind Altering Substances (3)
CMST 100-499	
CORR 100-499	
ETHN 100-499	

LAW ENFORCEMENT CONTINUED

GWS 100-499
HLTH 210 First Aid & CPR (3)
LAW 100-499
POL 100-499
PSYC 100-499
RPLS 100-499
SOC 100-499
SOWK 100-499
SPAN 100-499

Major Emphasis

Successfully apply for admission to Option I program before taking 300-400 level classes. See Law Enforcement Office for details.

LAW 131 Introduction to Law Enforcement (3)
LAW 231 Criminal Law & Procedures (3)
LAW 232 Victims/Survivors: Police Response (3)
LAW 233 Criminal Investigation (3)
LAW 234 Policing in a Diverse Society (3)
LAW 331 Police Stress (3)
LAW 332 Police Juvenile Justice Procedure (3)
LAW 335 Police and Community Relations (3)
LAW 343 Law Enforcement Mindset I (3)
LAW 430 Law Enforcement Mindset II (3)
LAW 431 Police Patrol: Theory/Practice (3)
LAW 432 Minnesota Criminal Code (3)
(criminal code and traffic law)
LAW 433 Senior Seminar (3)
(choose 3 credits)
POL 221 Introduction to Political Analysis (3)
POL 260 Introduction to Public Administration (3)
POL 371 State & Local Government (3)

OPTION II: Non-MN P.O.S.T. Board Certification

Required General Education

POL 111 United States Government (3)

Major Restricted Electives

(choose 12 LAWE credits at the 300-400 level)

LAW 300 - LAW 499

Major Emphasis: Option Non-MN P.O.S.T. Board Certification

LAW 131 Introduction to Law Enforcement (3)
LAW 231 Criminal Law & Procedures (3)
LAW 232 Victims/Survivors: Police Response (3)
LAW 233 Criminal Investigation (3)
LAW 234 Policing in a Diverse Society (3)
LAW 335 Police and Community Relations (3)
POL 221 Introduction to Political Analysis (3)
(choose 3 credits)
LAW 331 Police Stress (3)
LAW 438 Terrorism and Political Violence (3)
POL 371 State & Local Government (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Minor. Any.

LAW ENFORCEMENT BS

Degree completion = 120 credits

OPTION I: Minnesota P.O.S.T. Board Certification

Required General Education

POL 111 United States Government (3)

Major Restricted Electives (choose 12 credits)

Six of the 12 must be LAWE elective credits, of which 3 must be at the 300-400 level.

CHEM 131 Forensic Science (3)
CHEM 134 Mind Altering Substances (3)
CMST 100 - CMST 499
CORR 100 - CORR 499
ETHN 100 - ETHN 499
GWS 100 - GWS 499
HLTH 210 First Aid & CPR (3)
LAW 100 - LAW 499
POL 100 - POL 499
PSYC 100 - PSYC 499
RPLS 100 - RPLS 499
SOC 100 - SOC 499
SOWK 100 - SOWK 499
SPAN 100 - SPAN 499

Major Emphasis: Option I MN P.O.S.T. Board Certification

Successfully apply for admissions to Option I program before taking 300-400 level classes. See Law Enforcement Office for details

LAW 131 Introduction to Law Enforcement (3)
LAW 231 Criminal Law & Procedures (3)
LAW 232 Victims/Survivors: Police Response (3)
LAW 233 Criminal Investigation (3)
LAW 234 Policing in a Diverse Society (3)
LAW 331 Police Stress (3)
LAW 332 Police Juvenile Justice Procedure (3)
LAW 335 Police and Community Relations (3)
LAW 343 Law Enforcement Mindset I (3)
LAW 430 Law Enforcement Mindset II (3)
LAW 431 Police Patrol: Theory/Practice (3)
LAW 432 Minnesota Criminal Code(criminal code and traffic law) (3)
LAW 433 Senior Seminar (3)
(choose 3 credits)
POL 221 Introduction to Political Analysis (3)
POL 260 Introduction to Public Administration (3)
POL 371 State & Local Government (3)

OPTION II: Non-MN P.O.S.T. Board Certification

Required General Education

POL 111 United States Government (3)

Major Restricted Electives (choose 9 credits)

Three of the 9 credits must be LAWE electives

CHEM 131 Forensic Science (3)
CHEM 134 Mind Altering Substances (3)
CMST 100-499
CORR 100-499
ETHN 100-499
GWS 100-499
HLTH 210 First Aid & CPR (3)
LAW 100-499
POL 100-499
PSYC 100-499
RPLS 100-499
SOC 100-499
SOWK 100-499
SPAN 100-499

Major Emphasis

LAW 131 Introduction to Law Enforcement (3)
LAW 231 Criminal Law & Procedures (3)
LAW 232 Victims/Survivors: Police Response (3)
LAW 233 Criminal Investigation (3)
LAW 331 Police Stress (3)
LAW 335 Police and Community Relations (3)
POL 221 Introduction to Political Analysis (3)

(choose 3 credits)

ETHN 100 American Racial Minorities (3)
LAW 234 Policing in a Diverse Society (3)

(choose 3 credits)

POL 371 State & Local Government (3)
POL 451 Administrative Law (3)
POL 452 Jurisprudence (3)
POL 454 Civil Liberties (3)
POL 475 Judicial Process (3)

LAW ENFORCEMENT MINOR**Required for Minor**

All students, including transfer students, must complete a minimum of 9 credits in Law Enforcement from Minnesota State Mankato to receive a minor in the Law Enforcement program.

LAW 131 Introduction to Law Enforcement (3)
LAW 231 Criminal Law and Procedures (3)
POL 111 United States Government (3)

Required for Minor

(choose 12 credits from the following)

LAW 232 Victims/Survivors: Police Response (3)
LAW 233 Criminal Investigation (3)
LAW 234 Policing in a Diverse Society (3)
LAW 235 Women in Law Enforcement (3)
LAW 332 Police Juvenile Justice Procedure (3)
LAW 335 Police and Community Relations (3)
LAW 393 Issues in Law Enforcement (1-4)
LAW 434 Comparative Criminal Justice System (3)
LAW 435 Jurisprudence (3)
LAW 436 Civil Liberties (3)
LAW 437 Judicial Process (3)
LAW 438 Terrorism & Political Violence (3)
LAW 491 Topics in Law Enforcement (1-5)
LAW 493 Individual Study (1-3)

All required classes in the minor must be taken for a grade.

LAW ENFORCEMENT MANAGEMENT CERTIFICATE**Required for Certificate**

LAW 393 Issues in Law Enforcement (3)
LAW 439 Police Administration and Planning (3)
LAW 491 Topics in Law Enforcement: Crim. & Civil Lib. (3)
POL 361 Public Budgeting (3)
POL 462 Collective Bargaining: Public Sector (3)
POL 463 Public Personnel Administration (3)

COURSE DESCRIPTIONS**LAW 131 (3) Introduction to Law Enforcement**

The course provides a survey of the institutions and processes of the criminal justice system with an emphasis on the role of law enforcement agencies in a free society. Political theories of justice are explored with theories of crime causation.
Fall, Spring

LAW 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.
Variable
GE-5

LAW 231 (3) Criminal Law & Procedures

The history and development of criminal law procedures and their application by law enforcement.
Pre: LAW 131
Fall, Spring

LAW 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.
Fall, Spring

LAW 233 (3) Criminal Investigation

Procedures of crime investigations, procurement and preservation of evidence, interrogation and courtroom testimony.
Fall, Spring

LAW 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.
Fall, Spring

LAW 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.
Variable

LAW 331 (3) Police Stress

This course will cover the sources of intrapersonal and interpersonal 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.
Fall, Spring

LAW 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.
Pre: ENG 101, POL 111, LAW 131, LAW 231, LAW 232, LAW 233, LAW 234
Fall, Spring

LAW 332W (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.
Pre: ENG 101, POL 111, LAW 131, LAW 231, LAW 232, LAW 233, LAW 234
Fall, Spring
WI

LAW 333 (3) Criminal Forensics

Criminal forensics will include the history and development of the crime lab. Contemporary and historical cases will be discussed to provide the background and application of forensics. Also, discussion of crime lab examination of physical evidence and utilization of medico-legal specialists in investigations will be included in the course.
Fall, Spring, Summer

LAW 335 (3) Police and Community Relations

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.
Fall, Spring

LAW 336 (3) Advanced Criminal Investigation

A survey of methods and techniques for the investigation of major crimes.
Pre: LAW 233
Variable

LAWE 337W (3) Police Writing

This course stresses the importance of solid fundamental writing in both the professional and academic setting. The overall objective is to teach students high quality writing skills. Half of the semester will be devoted to writing professional police reports. Students will have several opportunities to write and proofread reports. The second half of the semester will cover academic writing including the steps of academic writing, research, and APA format-among others. Again students will have the opportunity to complete a research paper which will be peer-reviewed and then graded by the professor. Feedback will be provided to each student.

Fall, Spring, Summer
WI

LAWE 343 (3) Law Enforcement Mindset I

The course covers crisis intervention from an officer safety perspective, communications, persuasion, problem solving and interpersonal relations. It starts with the fundamentals and builds skills in: working with emotionally distraught individuals, death notifications, suicide, dispute intervention, and interpersonal problem solving.

Fall, Spring

LAWE 343W (3) Law Enforcement Mindset I

This course covers crisis intervention from an officer safety perspective, communications, persuasion, problem solving and interpersonal relations. It starts with the fundamentals and builds skills in: working with emotionally distraught individuals, death notifications, suicide, dispute intervention, and interpersonal problem solving.

Fall, Spring
WI

LAWE 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
Variable

LAWE 430 (3) Law Enforcement Mindset II

This course integrates officer safety and street communications. The class includes elements of fitness, use and legalities of force, theory and structured communication. Themes and skills are then integrated into law enforcement scenarios.

Pre: LAWE 343
Fall, Spring

LAWE 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
Fall, Spring

LAWE 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
Fall, Spring

LAWE 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.

Fall, Spring

LAWE 434 (3) Comparative Criminal Justice System

A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as POL 449.

Variable

LAWE 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.

Fall

LAWE 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 its 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.

Variable

LAWE 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.

Variable

LAWE 438 (3) Terrorism & 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 425.

Variable

LAWE 439 (3) Police Administration & Planning

An examination of emerging administrative and management concepts and the processes related to their implementation.

Variable

LAWE 441 (3) Federal Law Enforcement & Homeland Security

Explores history and development of federal law enforcement in the United States; the current make-up and jurisdictions of various federal law enforcement agencies; homeland security efforts, including current legal, policy, and law enforcement strategies at the federal level.

On-Demand

LAWE 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.

Variable

LAWE 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.

Variable

LAWE 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.

Variable

Liberal Studies

College of Arts & Humanities
 Liberal Studies Program
 226 Armstrong Hall • 507-389-1712
 Coordinator: 507-389-1712

This Associate of Arts (AA) degree is intended for those students who wish to pursue a two-year balanced program of liberal education.

POLICIES/INFORMATION

Students should complete the general education requirements for the BS degree, plus 16 credits of lower division electives for a total of 60 semester credits.

GPA Policy. A minimum GPA of 2.0 is required.

P/N Grading Policy. No more than one-fourth of the credits in the degree program may be taken P/N.

MANAGEMENT

Management

College of Business
 Department of Management
 150 Morris Hall • 507-389-2966
 Website: www.mgmt.mnsu.edu

Chair: Miles Smayling

Queen Booker, Kathy Dale, Marilyn Fox, Jon Kalinowski, John Kaliski, Rakesh Kawatra, Sung Kim, Chris Brown Mahoney, Howard Miller, Claudia Pragman, Buddhadev Roychoudhury, Paul Schumann, Dooyoung Shin, Cheryl Trahms

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 future professionals of the private and public sectors. The program 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 both of the following emphases: general management or human resource management.

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's junior year. The student may choose to pursue a degree in one or more of the following COB majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Management Major

1. Cumulative (Including Transfer) Grade Point Average: minimum 2.7.
2. Credits and Courses: 33 completed credits of the 44 general education requirements
3. Completion of the following courses: IT 101, MATH 130, ACCT 200, ACCT 210, BLAW 200, MGMT 200, BUS 295, ECON 201, ECON 202, AND ECON 207. Complete one of the following courses: PHIL120W, PHIL 205W, PHIL 222W, PHIL 224W, PHIL 226W, or PHIL 240W.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Advising Center. When a student applies to the College of Business, he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, telephone: 507-389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. Students must be admitted to a College of Business to be granted a Bachelor of Science degree in any College of Business major.

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

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA 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.

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

Student Organizations. Delta Sigma Pi is a national 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.

Mavericks for SHRM is an accredited member of the Society for Human Resource Management and is in direct contact with human resource executives through conferences, meetings and social events. All majors are welcome.

The Enactus Team is a national, student organization within the College of Business that welcomes students from any major with an interest in starting a business.

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of the student 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.

MANAGEMENT BS

Degree completion = 120 credits

Required General Education

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
MATH 130	Finite Mathematics and Introductory Calculus (4)

Pre-requisites to the Major

ACCT 200	Financial Accounting (3)
ACCT 210	Managerial Accounting (3)
BLAW 200	Legal, Political, and Regulatory Environment of Business (3)
BUS 295	Professional Preparation for Business Careers (2)

MANAGEMENT CONTINUED

ECON	207	Business Statistics (4)
IT	101	Introduction to Information Systems (3)
MGMT	200	Introduction to MIS (3)

Major Common Core

Required of all College of Business majors (choose 18 credits)

FINA	362	Business Finance (3)
IBUS	380	Principles of International Business (3)
MGMT	330	Principles of Management (3)
MGMT	346	Production & Operations Management (3)
MGMT	481	Business Policy & Strategy (3)
MRKT	310	Principles of Marketing (3)

Major Emphasis: BUSINESS MANAGEMENT

MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	444	Organizational Design, Development, and Change (3)
MGMT	459	Management Information Systems (3)
MGMT	472	Project Management (3)

Electives

(choose 9 credits at least three courses from the following)

ACCT	310	Management Accounting I (3)
BLAW	477	Negotiation and Conflict Resolution (3)
BUS	397	IBE Practicum (3)
MGMT	385	Introduction to Management Science (3)
MGMT	443	Entrepreneurship (3)
MGMT	447	Management: Special Topics (3)
MGMT	449	Quality Management (3)
MGMT	473	Enterprise Resource Planning (ERP) (3)
MGMT	482	Business, Society, & Ethics (3)
MGMT	484	Leadership (3)
MGMT	497	Internship (3)

Major Emphasis: HUMAN RESOURCE MANAGEMENT

BLAW	452	Employment and Labor Law (3)
MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training & Development (3)
MGMT	486	Strategic Human Resource Management (3)

Electives

(choose at least 3 credits from the following)

ACCT	310	Management Accounting I (3)
BUS	397	IBE Practicum (3)
ECON	403	Labor Economics (3)
FINA	466	Employee Benefit Planning (3)
HLTH	488	Worksite Health Promotion (3)
MET	423	Ergonomics & Work Measurement (3)
MGMT	498	Internship (3)

Required Minor: None.

HUMAN RESOURCE MANAGEMENT MINOR

Requirement for the Human Resource Management Minor:

1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.7 or higher when starting the Human Resources Management minor

Required for Minor

MGMT	330	Principles of Management (3)
MGMT	340	Human Resource Management (3)
MGMT	380	Human Behavior in Organizations (3)
MGMT	441	Staffing (3)
MGMT	442	Compensation Management (3)
MGMT	445	Training and Development (3)

ENTREPRENEURSHIP AND INNOVATION MINOR

The Entrepreneurial studies minor is designed to expose, engage and support students in thinking and experiencing the processes, challenges, and opportunities associated with the interdisciplinary and team-based nature of beginning a new venture.

Core

The core for the Entrepreneurship Minor consists of the required Integrated Business Experience (12 hours) and an additional two courses (6 credits) which include MGMT 332 Creativity and Innovation and Entrepreneurship (MGMT 443). The Entrepreneurship course involves a major project that requires the development of a business plan related to the students major.

FINA	362	Business Finance (3)
MGMT	330	Principles of Management (3)
MGMT	332	Creativity and Innovation (3)
MGMT	443	Entrepreneurship (3)
MGMT	499	Independent Study/Practicum for IBE (3)
MRKT	310	Principles of Marketing (3)

COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers

This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills. Variable

BUS 295 (2) Professional Preparation for Business Careers

This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of College of Business majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation. Fall, Spring

BUS 397 (3) IBE Practicum

BUS 397 is an applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students.

Pre: Must be admitted to the College of Business

Coreq: FINA 362, MGMT 330, MRKT 310

Fall, Spring

MGMT 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: IT 101

Fall, Spring

MGMT 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

Fall, Spring

MGMT 332 (3) Creativity and Innovation

This course is designed to develop a student's personal creativity and help a student identify the process of organizational innovation. The course is comprised of a combination of short lecture, in-class discussion of readings and videos, writing assignments, an elevator pitch and group activities.

Pre: MGMT 330

Variable

MGMT 340 (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.

Fall, Spring

MGMT 346 (3) Production & 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

Fall, Spring

MGMT 380 (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

Fall, Spring

MGMT 385 (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.

Variable

MGMT 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: MGMT 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

MGMT 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 340

Fall, Spring

MGMT 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 340

Fall, Spring

MGMT 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.

Variable

MGMT 444 (3) Organization Design, Development, and Change

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

Fall, Spring

MGMT 445 (3) Training & Development

Students design and deliver training by assessing client needs, defining learning outcomes, choosing effective methods, training, and evaluating results.

Pre: MGMT 340

Fall, Spring

MGMT 447 (3) Management: Special Topics

Special topics as requested by students.

Pre: MGMT 330

Variable

MGMT 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.

Pre: ECON 207 or equivalent

Variable

MGMT 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.

Variable

MGMT 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

Fall, Spring

MGMT 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-base communication services including geostationary satellites, LEOS, MEOS and specialized satellite services, 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

Variable

MGMT 472 (3) Project Management

Students will develop skills needed to initiate, plan, execute, control and close projects. The course will cover theories, techniques, group activities, and use of computer tools like Microsoft Project for managing projects.

MGMT 473 (3) Enterprise Resource Planning (ERP)

This course covers ERP software in general and how it helps integrate information used by an organization's many different functions and departments into a unified computing system. How to use an ERP system to improve the business functions of an organization by streamlining its operations will also be covered. Students will learn how to document business processes using different tools including EPC charts. In addition, the course also covers managerial issues associated with an ERP project and how to manage those issues.

Pre: MGMT 200

Variable

MANAGEMENT CONTINUED

MGMT 476 (3) Decision Support System

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 385

Variable

MGMT 481 (3) Business Policy & Strategy

An integrative course for COB majors. Its emphasis is on understanding the role of a general manager, which should include an operations and international component.

Pre: MGMT 330, MGMT 346, MRKT 310, FINA 362 and IBUS 380

Fall, Spring

MGMT 482 (3) Business, Society & 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.

Variable

MGMT 484 (3) Leadership

The course provides a foundation for leadership development by offering theoretical background, practical information, and an opportunity for self-assessment that permits students to begin or continue the development of their leadership talent. The underlying theme upon which the course is based is that the ability to lead begins with reflection and self-awareness.

MGMT 486 (3) Strategic Human Resource Management

This capstone course examines how the strategic management of the human resources of an organization can enhance organizational success. The course investigates how to achieve strategic congruence between an organization's strategy and HR management. Topics covered include the interrelationships among the HR disciplines, ethics, sustainability, social responsibility, the role of the HR professional, managing workforce changes, achieving competitive advantage through HR, HR performance metrics, and organizational effectiveness.

Pre: MGMT 441, MGMT 442, MGMT 445

Fall, Spring

MGMT 491 (1-3) In-Service

Variable

MGMT 497 (3) Internship

Supervised experience in business, industry, state or federal institutions. P/N only.

Pre: COB Junior Standing and GPA of 2.7 or higher

Fall, Spring

MGMT 498 (3) Internship

Supervised experience in business, industry, state or federal institutions. Grade only.

Pre: COB Junior Standing and GPA of 2.7 or higher

Fall, Spring

MGMT 499 (1-4) Individual Study

Fall, Spring

MANUFACTURING ENGINEERING TECHNOLOGY

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: www.cset.mnsu.edu/met

Chair: Dr. Bruce E. Jones, Ph.D.

Faculty: Kuldeep Agarwal, Ph.D., Craig Evers, Ph.D., P.E., David Guerra-Zubia-ga, Ph.D., Gary Mead, Ph.D., Harry Petersen, Ph.D., P.E., Winston Sealy, Ph.D.

Accreditation. The Manufacturing Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, 415 N. Charles Street, Baltimore, MD 21201, 410.347.7700, www.ABET.org

The mission of the Manufacturing Engineering Technology (MET) degree program at Minnesota State Mankato, is to provide a broad-based education to enable graduates to enter a variety of globally competitive manufacturing careers to serve the needs of the citizens of Minnesota, and the world by:

- providing the highest quality education to prepare application-oriented graduates for career opportunities in both traditional and computer-automated manufacturing environments;
- encouraging and supporting faculty, and students to engage in scholarly activities and research that support effective and ethical transfer of technology;
- providing access to state of the art equipment, facilities, and methodologies, along with faculty expertise to benefit MET students; and
- engaging in partnerships with area industry and other constituencies to broaden access to the program for traditional and diverse populations, while supporting K-12 pipeline development.

Program Description. Manufacturing Engineering Technology (MET) degree program awards a Bachelor of Science degree (BS) to successful students through a four-year curriculum.

"Engineering Technology" is the profession in which knowledge of the applied mathematical and natural sciences gained by higher education, practical experience, and competence developed in a specific field, is devoted to application of engineering principles and the implementation of technological advances for the benefit of humanity through its focus on product improvement, manufacturing, and automation of technological processes and operational functions. - Engineering Technology Council of the American Society of Engineering Education (ASEE).

"Modern manufacturing activities have become exceedingly complex because of rapidly increasing technology and expanded environmental involvement. This, coupled with increasing social, political, and economic pressures, has increased the demand for highly skilled manufacturing technologists, engineers, and managers." – Society of Manufacturing Engineers Fundamentals of Manufacturing 2005.

Students use major study areas of applied mathematics, engineering sciences and materials, product design, manufacturing processes, automated systems and controls, quality, manufacturing management and personal and professional effectiveness to perform in careers requiring the application of scientific and engineering knowledge and methods. Combined with technical skills in support of engineering activities; student careers often fit in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer. Engineering technology is oriented less toward theory and more toward practical applications. (ASEE).

Manufacturing involves plans, materials, personnel, and equipment which are transformed in some way that adds value. Students acquire leadership and managerial skills necessary to enter careers in process and systems design, manufacturing operations, maintenance, technical sales or service functions. The curriculum concentrates on the study of individual subsystems and their overall optimization of cost, quality, speed, and flexibility goals for the success of a manufacturing enterprise. Students from the program are currently employed in a wide variety of industries including medical, electronics, power systems, defense, and automotive. A list of companies and industry sectors employing MET graduates may be obtained from the Department Chair.

MANUFACTURING ENGINEERING TECHNOLOGY CONTINUED

The Society of Manufacturing Engineers (sme.org) is the lead professional society used in developing program criteria used for guiding program relevance and continuous improvement. Students are encouraged to take the Certified Manufacturing Technologist (CMfgT) exam in their senior year and pursue other certifications as their experience broadens.

The primary goal of the MET program is to provide all graduates with the solid technical foundation necessary to insure their success in a wide variety of employment opportunities. To accomplish this goal, program outcomes and objectives are defined and assessed for continuous improvement. These are consistent with the mission of the university and college and reviewed by the Industrial Advisory Board on an annual basis. They are as follows:

Program Outcomes. Students at the time of graduation are prepared to:

1. apply knowledge, problem solving techniques, and hands-on skills in the assessment, design, application, and continuous improvement of manufacturing systems, including automated manufacturing, processes, process controls, manufacturing operations, management, and systems integration.
2. specify and implement hard and soft technologies to solve manufacturing system problems using creativity in design.
3. demonstrate the application of their knowledge of mathematics, statistics, science, engineering and technology.
4. conduct, analyze and interpret experiments and apply results to improve processes and systems.
5. recognize the need and develop the skills for life-long learning.
6. communicate effectively across all design and management interface levels of an organization.
7. function effectively in a team and or leadership environment.
8. implement accepted professional standards of integrity and ethical conduct.
9. understand and engage in behavior which respects diversity and global cultures.
10. practice timeliness and quality with regard to work requirements.

Program Objectives. Graduates two to three years into their careers should have the foundation to:

1. deliver products, services, and support to both internal and external organizations by applying technical knowledge, problem solving techniques and hands-on skills in traditional and emerging areas of manufacturing.
2. actively participate in on-going professional development, professional growth and increasing professional responsibility.
3. effectively communicate ideas to technical and non-technical people.
4. perform, lead, and manage in cross-functional teams.
5. work within the accepted standards of professional integrity and conduct.
6. design, analyze, build, and test virtual or real models in product development and continuous improvement environments.
7. implement, and continuously improve cost, quality, time, and flexibility goals using world class management methodologies.

POLICIES/INFORMATION

Admission to the MET Major is granted by the AMET Department. Admission to the major is required to register for 300-level courses. Minimum requirements for acceptance into the MET major include a cumulative GPA of 2.0 or higher and the completion of the following courses with a grade of "C" (2.0) or higher: CHEM 104, CMST 100 or CMST 102, EET 133, ENG 101, MET 104, MET 142, MET 144, MET 177, MATH 121, MATH 127, STAT 154, PHYS 211, PHYS 212.

GPA Policy. A minimum GPA of 2.0 is required.

Refer to the College regarding required advising for students on academic probation.

Department Grade Policy. All courses in the MET Major, and the required Communications, Basic Science, and Mathematics courses must be completed with a grade of "C" or better.

P/N Grading Policy. No more than 1/4 of all undergraduate credits may be P/N, except those courses offered P/N 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 Mankato.

Pre-requisites and co-requisites must be observed unless written permission is obtained from the instructor and the Department of AMET. A flow chart of pre-requisites is available in the Department Office.

The scheduling of all department courses is done annually, based on enrollment and staffing. To obtain a current class schedule, contact the Department.

MANUFACTURING ENGINEERING TECHNOLOGY BS

Degree completion = 128 credits

Required General Education

ENG 271W Technical Communication (4)
MATH 115 Precalculus Mathematics (4)

Pre-requisites to the Major

CHEM 104 Introduction to Chemistry (3)
EET 113 DC Circuits (3)
ENG 101 Composition (4)
MATH 121 Calculus I (4)
MET 104 Introduction to Manufacturing Engineering Technology (1)
MET 142 Introduction to Parametric Modeling (3)
MET 144 Product Development and Design (3)
MET 177 Materials Processing Metallurgy (4)
PHYS 211 Principles of Physics I (4)
STAT 154 Elementary Statistics (3)
(choose 3 credits)
CMST 100 Fundamentals of Communication (3)
CMST 102 Public Speaking (3)

Major Common Core

AET 334 Fluid Power (3)
AET 378 Composite Materials (3)
MATH 122 Calculus II (4)
MET 277 Manufacturing Processing (3)
MET 323 Statics (3)
MET 324 Strength of Materials and Dynamics (4)
MET 341 Advanced Parametric Modeling (3)
MET 347 Manufacturing Automation (3)
MET 386 Metrology for Engineering Technologist (3)
MET 407 Manufacturing Resource Planning and Control (3)
MET 423 Ergonomics and Work Measurement (3)
MET 424 Industrial Safety (2)
MET 425 Project Valuation, Justification and Management (3)
MET 426 Logistics and Transportation (3)
MET 427 Quality Management Systems (3)
MET 428 Lean Manufacturing (3)
MET 448 Computer Integrated Manufacturing (3)
MET 488W Senior Design Project I (2)
MET 489W Senior Design Project II (2)
PHYS 212 Principles of Physics II (4)

Minor Required: None.

MANUFACTURING ENGINEERING TECHNOLOGY MINOR

Required for Minor

MET 104 Introduction to Manufacturing Engineering Technology (1)
MET 142 Introduction to Parametric Modeling (3)
MET 177 Materials Processing and Metallurgy (4)

Electives

(choose 8 additional credits of MET courses)

COURSE DESCRIPTIONS

MET 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.
 Fall

MET 142 (3) Introduction to Parametric Modeling
 The course covers a process of developing and analyzing solid parametric models for mechanical applications. Course includes solving technical design problems based on real-world applications as well as creating technical documentation: working and assembly drawings.
 Fall, Spring

MET 144 (3) Product Development and Design
 Analysis and application of key steps in the product realization process. External and internal factors affecting strategic product life-cycle management are emphasized along with the relationship of design to marketing and manufacturing activities and product development cost implications. Students work individually and in teams on competitive design projects assessing customer needs, product specifications, generation and selection of concepts, prototype development, test and product production planning. Concentrates on development of verbal, written and e-communication skills. Provides knowledge and practice in conducting effective project management.
 Fall, Spring

MET 177 (4) Materials Processing 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. Extra lab time is required.
 Pre: MATH 113 or MATH 115 or higher
 Fall, Spring

MET 277 (3) Manufacturing Processes
 A study of the principles of manufacturing technologies and equipment used in the processing of an end product. Advanced manufacturing processes including casting, forging, sheet metal forming, material removal, and powder metals are discussed. Topics also include materials treatment, preparation, and design for manufacture. Extra lab time is required.
 Pre: MET 177
 Fall

MET 323 (3) Statics
 This course covers principles of statics, force equilibrium, analysis of structures, friction, centroid, centers of gravity, and moment of inertia.
 Pre: PHYS 211 and MATH 121
 Fall, Spring

MET 324 (4) Strength of Materials and Dynamics
 This course covers stress and strain, torsion, bending of beams, shearing stresses in beams, compound stresses, principal stresses, deflections of beams, columns, connections, and pressure vessels. Topics also include kinematics and kinetics of rigid bodies, work, energy and power.
 Pre: MET 323
 Fall, Spring

MET 341 (3) Advanced Parametric Modeling
 The course emphasizes the use of parametric modeling in design, analysis and manufacturing. Topics include component design, assembly, mechanism, animation, EFX and rapid prototyping using computer technology.
 Pre: MET 142
 Fall, Spring

MET 347 (3) Manufacturing Automation
 CNC programming, computer-aided manufacturing (CAM), flexible automations, machining centers, robotics, programmable logic controllers, tooling systems. Extra lab time is required.
 Pre: EET 113, MET 277, MET 341
 Spring

MET 386 (3) Metrology for Engineering Technologist
 Quality and its continuous improvement is supported by metrology, statistical process control, and geometric dimensioning and tolerancing. This course presents these topics and their integration into operations.
 Pre: MATH 121, MET 341, STAT 154. Admission to AET/MET major.
 Fall

MET 398 (0) CPT: Co-Operative Experience
 Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
 Pre: MET 104. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
 Fall, Spring, Summer

MET 407 (3) Manufacturing Resource Planning and Control
 Strategic plant resource management for global manufacturing. Approaches examine and practice continuous improvements to the value stream related to design integration, production scheduling, staffing, facilities planning, and material flow.
 Fall

MET 423 (3) Ergonomics & Work Measurement
 Investigates work design and automated and manual operations. Measurement, and development of design-based solutions for reduction of environmental stresses to the human body through worker-machine systems analysis are applied. Regulatory, legal, and ethical issues are reviewed in the context of global manufacturing applications.
 Pre: STAT 154
 Spring

MET 424 (2) Industrial 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.
 Fall, Spring

MET 425 (3) Project and Value Management
 Planning, management, and economic justification of projects are supported by computer tools for scheduling, staffing, and economic analysis.
 Pre: STAT 154
 Fall

MET 426 (3) Logistics and Transportation
 Fundamentals of logistics and supply chain management: control of materials, WIP, finished goods, costs of logistics. Theory and step-by-step procedures are used to analyze logistic systems, material handling, packaging, and transportation, including global logistics.
 Pre: MET 407
 Spring

MET 427 (3) Quality Management Systems
 This course is focused on quality assurance systems, management philosophies, methodology, function and impact of quality systems in manufacturing operations. Development and application of statistical process control tools.
 Pre: STAT 154
 Fall

MET 428 (3) Lean Manufacturing
 Basics of Lean Manufacturing in industry, with emphasis on application of concepts. Students will learn the principles of Lean Manufacturing and how they can benefit a business.
 Pre: MET 427 or similar quality control course
 Spring

MET 448 (3) Computer Integrated Manufacturing
 This course covers the following topics: manufacturing systems integration techniques, Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM), Computer-Aided Process Planning (CAPP), Direct Numerical Control (DNC), Flexible Machining Systems (FMS), Automated Storage and Retrieval Systems (ASRS), Automated Guided Vehicles (AGV) and Robotics.
 Pre: MET 347, PHYS 212
 Fall

MET 488 (2) Senior Design Project I

An examination of manufacturing design and research. Students refine their design proposal and begin their senior design projects. 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 should be taken in the fall semester of the senior year.
Pre: ENG 271W, MET 277, MET 425, 10 AET or MET 300/400 level credits

MET 488W (2) Senior Design Project I

An examination of manufacturing design and research. Students refine their design proposal and begin their senior design projects. 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 should be taken in the fall semester of the senior year.
Pre: ENG 271W, MET 277, MET 425, 10 AET or MET 300/400 level credits

MET 489 (2) Senior Design Project II

Completion of the capstone design project; a continuation of MET 488.
On-Demand
Pre: MET 488, Permission Required

MET 489W (2) Senior Design Project II

Completion of the capstone design project; a continuation of MET 488.
On-Demand
Pre: MET 488, Permission Required

MET 492 (1-4) Seminar: Manufacturing

Selected manufacturing topics.

MET 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

MET 499 (1-4) Individual Study

Pre: Permission Required

MARKETING

Marketing

College of Business

Department of Marketing and International Business

150 Morris Hall • 507-389-2967

Website: www.business.mnsu.edu/marketing

Chair: Juan (Gloria) Meng

Kevin Elliott, Mark Hall, Jianwei Hou, Ann Kuzma, John R. Kuzma, Kristin Scott

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.

POLICIES/INFORMATION

Admission to a Major in the College of Business. Admission to a major in the College of Business typically occurs at the beginning of the student's junior year. Once admitted, students may choose to pursue a degree in one or more of the following majors: Accounting, Finance, International Business, Management, or Marketing. Multiple criteria will be considered for admission to a major in the College of Business. Admission is competitive; meeting minimum requirements does not guarantee admission. Deadlines for application are: October 1 for Spring Semester and March 1 for Fall Semester.

Criteria Considered for Admission to the Marketing Major

1. Cumulative (including Transfer) Grade Point Average: minimum 2.7
2. Credits and Courses: 33 completed credits of the 44 general education requirements.
3. Completion of the following courses: IT 101, MATH 130, ACCT 200, ACCT 210, BLAW 200, MGMT 200, BUS 295, ECON 201, ECON 202, ECON 207. Complete one of the following courses: PHIL 120W, PHIL, 205W, PHIL 222W, PHIL 224W, PHIL 226W, PHIL 240W

Requirements for the Marketing Minor

1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.7 or higher when starting the Marketing minor.

Academic Advising. Students will initially receive their advising from the professional advisors in the College of Business Advising Center. When a student applies to the College of Business, he/she will be assigned a faculty advisor in the major area of study. Questions regarding the assignment of advisors can be answered in the College of Business Advising Center, 151 Morris Hall, telephone: 389-2963.

College of Business Policies. Students who are business minors, non-business majors or those who are not seeking a four year degree may take up to 24 credits in the College of Business. Students must be admitted to a College of Business major to be granted a Bachelor of Science degree in any College of Business major.

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

Transfer students pursuing a major or minor in the College of Business must complete at least 50% (one-half) of their major or minor coursework at Minnesota State Mankato.

GPA Policy. Students must earn a minimum grade point average of 2.0 ("C") on the total courses taken in the College of Business and a 2.25 overall GPA 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.

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

Student Organizations. The Marketing Club 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.

MARKETING CONTINUED

The Council of Student Business Organizations (COSBO) which is comprised of the presidents of nine 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.

MARKETING BS

Degree completion = 120 credits

Required General Education

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
MATH	130	Finite Mathematics and Introductory Calculus (4)
(choose 3 credits from the following)		
PHIL	120W	Introduction to Ethics (3)
PHIL	205W	Culture, Identity, and Diversity (3)
PHIL	222W	Medical Ethics (3)
PHIL	224W	Business Ethics (3)
PHIL	226W	Environmental Ethics (3)
PHIL	240W	Law, Justice & Society (3)

Pre-requisites to the Major

ACCT	200	Financial Accounting (3)
ACCT	210	Managerial Accounting (3)
BLAW	200	Legal, Political, and Regulatory Environment of Business (3)
BUS	295	Professional Preparation for Business Careers (2)
ECON	207	Business Statistics (4)
IT	101	Introduction to Information Systems (3)
MGMT	200	Introduction to MIS (3)

Major Common Core

Required of all College of Business Majors

FINA	362	Business Finance (3)
IBUS	380	Principles of International Business (3)
MGMT	330	Principles of Management (3)
MGMT	346	Production & Operations Management (3)
MGMT	481	Business Policy & Strategy (3)
MRKT	310	Principles of Marketing (3)

Required for Marketing Major

MRKT	316	Consumer Behavior (3)
MRKT	317	Product and Pricing Strategy (3)
MRKT	318	Promotional Strategy (3)
MRKT	324	Marketing Research & Analysis (3)
MRKT	339	Distribution Strategy (3)
MRKT	412	Professional Selling (3)
MRKT	490	Marketing Management (3)

Major Unrestricted Electives

(choose a minimum of two courses (6 credits) from the following)

BUS	397	IBE Practicum (3)
MRKT	413	Industrial Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	416	Internet Marketing (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	480	Seminar (3)
MRKT	491	In-Service (1-4)
MRKT	492	Study Tour (1-3)
MRKT	494	Fair Trade Study Abroad in Belize (3)
MRKT	498	Internship (1-3)

Required Minor: None.

MARKETING MINOR

Requirements for the Marketing Minor

1. Students must be admitted to a major at Minnesota State Mankato, and
2. Students must have a cumulative GPA of 2.7 or higher when starting the Marketing minor.

Required Courses for **COB Majors**: (choose 6 credits)

MRKT	310	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

Elective Courses for **COB Majors**: (choose 12 credits)

(Take four of the following courses)

MRKT	317	Product and Pricing Strategy (3)
MRKT	318	Promotional Strategy (3)
MRKT	324	Marketing Research & Analysis (3)
MRKT	339	Distribution Strategy (3)
MRKT	412	Professional Selling (3)
MRKT	413	Industrial Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	416	Internet Marketing (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	492	Study Tour (1-3)
MRKT	494	Fair Trade Study Abroad in Belize (3)

Required Courses for **Non-COB Majors**: (choose 9 credits)

MRKT	100	Global Business Concepts (3)
MRKT	310	Principles of Marketing (3)
MRKT	316	Consumer Behavior (3)

Elective Courses for **Non-COB Majors**: (choose 9 credits)

(Take three of the following courses)

MRKT	317	Product and Pricing Strategy (3)
MRKT	318	Promotional Strategy (3)
MRKT	324	Marketing Research & Analysis (3)
MRKT	339	Distribution Strategy (3)
MRKT	412	Professional Selling (3)
MRKT	413	Industrial Marketing (3)
MRKT	415	Retailing Management (3)
MRKT	416	Internet Marketing (3)
MRKT	420	Sales Management (3)
MRKT	428	International Marketing (3)
MRKT	492	Study Tour (1-3)
MRKT	494	Fair Trade Study Abroad in Belize (3)

COURSE DESCRIPTIONS

BUS 100 (3) Introduction to Business and Business Careers

This course prepares students for success by exposing them to the requirements, expectation, resources and opportunities of the College of Business. Students will have business experiences and will develop professional skills. Variable

BUS 295 (2) Professional Preparation for Business Careers

This course is required for admission to the College of Business for all business majors. The purpose of the course is to provide students with an overview of COB majors, allow students to create an academic plan for graduation, and develop professional skills needed for future job placement. Topics include cover letter and resume writing, interviewing skills, the process of networking, the internship program, etiquette skills, and requirements for graduation. Fall, Spring

BUS 397 (3) IBE Practicum

An applied course that entails developing, launching, managing, and closing a business with the cohort of students enrolled in the class. Students write and present a business plan as they seek financing for their start-up company. The business start-up experience creates a real-world context in which students can practice the concepts introduced in MGMT 330, MRKT 310, and FINA 362. BUS 397 is part of the United Prairie Bank Integrated Business Experience, and students must enroll concurrently in BUS 397 and sections of FINA 362, MGMT 330, and MRKT 310 that are designated for IBE students.

Pre: Must be admitted to the College of Business

Coreq: FINA 362, MGMT 330, MRKT 310

Fall, Spring

MRKT 100 (3) Global Business Concepts

Focuses on the basic business functions of Accounting, Finance, Management, and Marketing in global context.

Fall, Spring

GE-5

MRKT 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. Fall, Spring

MRKT 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.

Coreq: MRKT 310

Fall, Spring

MRKT 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

Fall, Spring

MRKT 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

Fall, Spring

MRKT 324 (3) Marketing Research & 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

Fall, Spring

MRKT 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

Fall, Spring

MRKT 398 (0) CPT: CO-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: MRKT 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

MRKT 412 (3) Professional Selling

The course is designed to provide basic human motivation 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

Fall, Spring

MRKT 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

Variable

MRKT 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

Variable

MRKT 416 (3) Internet Marketing

This course is an examination of the role of the internet in contemporary marketing strategy and its impact on business decision making and consumer behavior.

Pre: MRKT 310

Variable

MRKT 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

Variable

MRKT 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

Fall

MRKT 480 (3) Seminar

Topics covered are specialized topics not covered in other courses and will be announced.

Pre: MRKT 310

Variable

MRKT 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, MRKT 316, MRKT 317, MRKT 318, MRKT 324, and MRKT 339

Fall, Spring

MRKT 491 (1-4) In-Service

Topics will vary across various hands-on practical experience.

Pre: Consent

Variable

MRKT 492 (1-3) Study Tour

Study tours are led by Minnesota State University, Mankato faculty and provide students with opportunities to visit companies and attend lectures by renowned experts from key sectors of economy, government, and business.

Variable

MRKT 494 (3) Fair Trade Study Abroad in Belize

The curriculum focuses on Fair Trade, sustainability, and international business principles. Students will spend 9 days in Belize and learn about diverse populations, engage in a service learning project, and visit businesses who produce goods that are Fair Trade certified.

Spring

Diverse Cultures - Gold

MRKT 497 (1-9) Internship

Individual, supervised experience in a business firm or government agency.

Taken for P/N only.

Pre: Consent

Fall, Spring

MRKT 498 (1-3) Internship

Individual, supervised experience in a business firm or government agency.

Taken for grade only.

Pre: Consent

Fall, Spring

MRKT 499 (1-4) Individual Study

Individual study of special topics.

Pre: Consent

Fall, Spring

Mass Media

College of Arts & Humanities

Department of Mass Media

136 Nelson Hall • 507-389-6417

Website: www.mnsu.edu/masscom

Chair: Amy Lauters

Chuck Lewis, Jane S. McConnell, Ellen M. Mrja, Mavis Richardson

The mission of the Department of Mass Media is to foster the public good by advancing socially responsible mass media through education, research and service. The department strives to prepare students for careers as ethical and responsible public communicators, innovative creators of media texts, and competent professionals in such fields as news, public relations, and other media-related fields.

POLICIES/INFORMATION

Admission to Major or Minor is granted by the department. Contact the department for application procedures.

Proficiency in English grammar, spelling, composition and keyboarding is essential for admission to the major or minor. A diagnostic test in English usage is required to determine student's preparation for the major or minor. The department requires that students complete with a cumulative GPA of 3.0 or better these courses (or their equivalents): ENG 101 and MASS 110. 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 Media program may take courses beyond MASS 110, MASS 112 & MASS 260 unless he/she has met the stated requirements. Students seeking entry into the department's major or minor must present evidence of their satisfactory fulfillment of these requirements.

In preparation for undertaking a major in Mass Media, students should consider taking these courses (or their equivalents): ECON 100, GEOG 103, ETHN 100, POL 371, PSYC 101, SOC 150 and SOC 101.

GPA Policy. Majors must earn a cumulative GPA of 2.5 or better in all mass media 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 Media majors are required to take department courses for a letter grade, except for MASS 498, which must be taken P/N.

Transferring into Mass Media. Students considering transferring into the mass media program at Minnesota State Mankato need to be aware of department admission requirements, including prerequisite courses, GPA and diagnostic examination. They should contact the department as early as possible for information that will assure a smooth transfer. Failure to plan ahead may delay or preclude admission to the program.

Transfer Credit. The department accepts no more than 13 credits from other colleges and universities as transfer credits to be applied toward the major. 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.

Internships. Opportunities for mass media internships exist on and off campus for junior and senior majors who want to work in professional settings. The internship must be done under professional supervision and is taken only after the student has (1) completed all prerequisite courses; (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 programs of study that are complementary to their major in mass media. Students interested in news writing are encouraged to minor in courses in liberal arts, such as art, English, literature, modern language, history, humanities, philosophy or political science. Students interested in public relations are encouraged to minor in courses in business administration, art, communication studies, marketing, English, psychology, or sociology.

Communication Facilities. In addition to fully equipped modern computerized classrooms, the Department of Mass Media has access to a broad range of on-campus facilities that provide students practical experience. Students majoring in mass media may contribute to producing a student-oriented campus newspaper, *The Reporter*, and programming for KMSU-FM radio.

Counseling and Guidance. The key to the department's selective approach to mass media 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.

All policies pertaining to mass media majors also apply to mass media minors, including standards for granting admission to the minor, GPA and P/N Grading policies.

MASS MEDIA BA

Degree completion = 120 credits

Prerequisites to the Major

ENG	101	Composition (4)
MASS	110	Introduction to Mass Media (4)

Major Common Core

MASS	221W	Basic Writing for Mass Media (4)
MASS	312	Mass Media Law (4)
MASS	411	Mass Media Ethics and Criticism (4)
MASS	498	Mass Media Internship (2-4)

Major Restricted Electives

All Mass Media majors must complete at least one of the following five courses (4 or more credits). Majors may take MASS 233 and MASS 312 concurrently with, but not before, MASS 221.

MASS	233	Public Relations Principles (4)
MASS	260	Principles of Visual Mass Media (4)
MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	340	Mass Media Research (4)

Writing Intensive (choose 4 credits)

One of the Major Restricted Electives must also be a writing course. Choose one from the following:

MASS	325W	Media Reporting and Editing (4)
MASS	330W	Writing for Digital Multimedia (4)
MASS	334W	Writing and Speaking for Broadcast (4)
MASS	431W	Freelancing for Mass Media (4)
MASS	434W	Public Relations Writing (4)
MASS	436W	Specialized Writing (4)

Major Unrestricted Electives

All majors must choose additional courses from the following courses to reach at least 36 credits in the major. MASS 112 has no pre-requisites.

MASS	112	Mass Media and Children (2)
MASS	290	Selected Topics in Mass Media (1-4)
MASS	351	Digital Imaging for Mass Media (4)
MASS	360	Digital Design for Mass Media (4)
MASS	412	Mass Media History (4)

MASS 450	Strategic Communication Case Studies (4)
MASS 499	Individual Study in Mass Media (1-2)

Other Graduation Requirements:

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

MASS MEDIA BS

Degree completion = 120 credits

Pre-requisites to the Major

ENG 101	Composition (4)
MASS 110	Introduction to Mass Media (4)

Major Common Core

MASS 221W	Basic Media Writing (4)
MASS 312	Mass Media Law (4)
MASS 411	Mass Media Ethics and Criticism (4)
MASS 498	Mass Media Internship (2-4)

Major Restricted Electives

All Mass Media majors must complete at least one of the following five courses (4 or more credits). Majors may take MASS 233 and MASS 312 concurrently with, but not before, MASS 221.

MASS 233	Public Relations Principles (4)
MASS 260	Principles of Visual Mass Media (4)
MASS 325W	Media Reporting and Editing (4)
MASS 330W	Writing for Digital Multimedia (4)
MASS 340	Mass Media Research (4)

Writing Intensive (choose 4 credits)

One of the Major Restricted Electives must be a writing course. Choose from the following:

MASS 325W	Media Reporting and Editing (4)
MASS 330W	Writing for Digital Multimedia (4)
MASS 334W	Writing and Speaking for Broadcast (4)
MASS 431W	Freelancing for Mass Media (4)
MASS 434W	Public Relations Writing (4)
MASS 436W	Specialized Writing (4)

Major Unrestricted Electives

All majors must choose additional courses from the following courses to reach at least 36 credits in the major. MASS 112 has no pre-requisites.

MASS 112	Mass Media and Children (2)
MASS 290	Selected Topics in Mass Media (1-4)
MASS 351	Digital Imaging for Mass Media (4)
MASS 360	Digital Design for Mass Media (4)
MASS 412	Mass Media History (4)
MASS 450	Strategic Communication Case Studies (4)
MASS 499	Individual Study in Mass Media (1-2)

Required Minor: Yes. Any.

MASS MEDIA MINOR

The mass media minor is for students who are interested in building skills in writing and media production in conjunction with their chosen majors. Students completing the minor will gain a solid understanding of the production and evaluation of media messages, ethics and law, and they will also gain skills needed to create media messages in a variety of formats suitable for numerous careers.

Pre-requisites: Students must complete and have a 3.0 GPA in ENG 101 and MASS 110 and must take the diagnostic exam prior to entering MASS 221.

Minor Core

ENG 101	Composition (4)
MASS 110	Introduction to Mass Media (4)
MASS 221	Basic Writing for Mass Media (4)
MASS 312	Mass Media Law (4)

MASS 411	Mass Media Ethics and Criticism (4)
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Minor Elective (choose 8 credits)

MASS 233	Public Relations Principles (4)
MASS 260	Principles of Visual Mass Media (4)
MASS 290	Selected Topics in Mass Media (1-3)
MASS 325	Media Reporting and Editing (4)
MASS 330	Writing for Digital Multimedia (4)
MASS 334	Writing & Speaking for Broadcast (4)
MASS 340	Mass Media Research (4)
MASS 351	Digital Imaging for Mass Media (4)
MASS 360	Digital Design for Mass Media (4)
MASS 398	CPT: Co-Operative Experience (0)
MASS 412	Mass Media History (4)
MASS 431	Freelancing for Mass Media (4)
MASS 434	Public Relations Writing (4)
MASS 436	Specialized Writing (4)
MASS 450	Strategic Communications Case Studies (4)
MASS 499	Individual Study in Mass Media (1-2)

COURSE DESCRIPTIONS

MASS 110 (4) Introduction to Mass Media

Nature, functions, responsibilities and effects of the media in contemporary society.

GE-9

Diverse Cultures- Purple

MASS 112 (2) Mass Media and Children

Course will examine the role of mass media in children's lives. Media will be examined as educator, image-maker, entertainer and messenger of violence.

Summer

MASS 221 (4) Basic Writing for Mass Media

Basic techniques of gathering information and writing readable and accurate media stories.

Pre: ENG 101, MASS 110

Fall, Spring

MASS 221W (4) Basic Writing for Mass Media

Basic techniques of gathering information and writing readable and accurate media stories.

Pre: ENG 101, MASS 110

Fall, Spring

MASS 233 (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

Variable

MASS 260 (4) Principles of Visual Mass Media

Exploration of the basic principles of visual media design, stressing the significance of images in a mass media society. Special focus on contextualizing historical and technological changes affecting image production for mass media.

Variable

GE-6, GE-7

Diverse Cultures - Purple

MASS 290 (1-3) Selected Topics in Mass Media

Selected topics in mass media

Pre: MASS 221 or consent

Variable

MASS 312 (4) Mass Media Law

Principles of the First Amendment, libel, fair trial, privacy, access to news, pornography, and regulation of radio and television.

Pre: MASS 221

Fall, Spring

MASS MEDIA CONTINUED

MASS 325 (4) Media Reporting and Editing

Discussion of and practice in reporting about public affairs and social issues, plus examination of copy editing and headline writing for traditional and new media.

Pre: MASS 221

Variable

MASS 325W (4) Media Reporting and Editing

Discussion of and practice in reporting about public affairs and social issues, plus examination of copy editing and headline writing for traditional and new media.

Pre: MASS 221

Variable

WI

MASS 330 (4) Writing for Digital Multimedia

Reporting, writing and packaging news for online audiences with an emphasis on multimedia platforms; includes evaluation of news sites and critical consideration of best practices, and economic, ethical and legal issues.

Pre: MASS 221

Variable

MASS 330W (4) Writing for Digital Multimedia

Reporting, writing and packaging news for online audiences with an emphasis on multimedia platforms; includes evaluation of news sites and critical consideration of best practices, and economic, ethical and legal issues.

Pre: MASS 221

Variable

WI

MASS 334 (4) Writing & Speaking for Broadcast

Planning, writing and delivering of broadcast news.

Pre: MASS 221

Variable

MASS 340 (4) Mass Media Research

This course introduces students to the concepts, approaches and tools for gathering and analyzing information in mass media research. Students will become acquainted with and effectively use the terminology and concepts used in mass media research.

Pre: MASS 221

Variable

MASS 351 (4) Digital Imaging for Mass Media

Instruction in the fundamental concepts, terminology, techniques and applications of digital imaging in mass media. Development of the basic skills necessary to design, create, manage and distribute photographic and video digital images in mass media communication. Students must provide own camera equipment.

Pre: MASS 221

Variable

MASS 360 (4) Digital Design for Mass Media

Practicum in typography, design, layout and production processes, including job budgeting and estimating, for newspapers, magazines, newsletters, brochures, posters, annual reports, direct mail and related print materials used public relations and journalism. Emphasis on graphic design software.

Pre: MASS 221

MASS 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and an adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: MASS 221. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

MASS 411 (4) Mass Media Ethics and Criticism

Study, analysis and criticism of the mass media, their ethics and performance.

Pre: MASS 221

Fall, Spring

MASS 412 (4) Mass Media History

Survey of the social, cultural, intellectual and technological development of advertising, public relations and print, broadcast and electronic journalism in the United States. Open to non-major/minors.

Pre: MASS 221

MASS 431 (4) Freelancing for Mass Media

Marketing and writing of non-fiction articles for contemporary print and electronic magazines.

Pre: MASS 221

MASS 431W (4) Freelancing for Mass Media

Marketing and writing of non-fiction articles for contemporary print and electronic magazines.

Pre: MASS 221

WI

MASS 434 (4) Public Relations Writing

Practical skill in the development of public relations writing including news releases, brochures, PSA's, pitch letters, annual reports.

Pre: MASS 233

Variable

MASS 434W (4) Public Relations Writing

Practical skill in the development of public relations writing including news releases, brochures, PSA's, pitch letters, annual reports.

Pre: MASS 233

Variable

WI

MASS 436 (4) Specialized Writing

Techniques and practicum in writing of features, reviews, editorials, opinion columns and other specialized fields for print and electronic media.

Pre: MASS 221

Variable

MASS 436W (4) Specialized Writing

Techniques and practicum in writing of features, reviews, editorials, opinion columns and other specialized fields for print and electronic media.

Pre: MASS 221

Variable

WI

MASS 450 (4) Strategic Communications Case Studies

Exploration of historic and contemporary examples of strategic public relations successes and failures. Analysis of public relations practices related to these cases, including planning, communication, evaluation exercises and management responsibilities.

Pre: MASS 233

Variable

MASS 498 (2-4) Mass Media Internship

Practical mass media experience in a professional setting.

Pre MASS 221, MASS 312, and MASS 411, plus two additional 300/400 level MASS courses, one of which must be MASS 325, MASS 330, MASS 334, MASS 431, MASS 434 or MASS 436

Fall, Spring

MASS 499 (1-2) Individual Study in Mass Media

Directed research on a mass media topic chosen by the student.

Pre: MASS 221

Fall, Spring

Mathematics

College of Science, Engineering & Technology
 Department of Mathematics and Statistics
 273 Wissink • 507-389-1453
 Website: www.cset.mnsu.edu/dept/mathstat/

Chair: Charles Waters

Faculty: Francis T. Hannick, Jonathan Harper, In-Jae Kim, Namyong Lee, Hyekyung Min, Mezbahur Rahman, Brandon Rowekamp, Deepak Sanjel, Soo Yeon Shin, Dan Singer, Yea-Ling Tsao, Chia-Chi Tung, Hongxia Yin, Han Wu, Ruijun Zhao, Mark Zuiker

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 Department offers three mathematics majors and two minors. The primary focus of the B.S. Mathematics Teaching program is to prepare students to teach mathematics at the middle and secondary levels. The B.A. Mathematics and B.S. Mathematics programs are intended to prepare students for advanced study in mathematics or to work in business, industry, or government. The mathematics minor is intended for non-mathematics majors who desire a stronger background in mathematics. The Actuarial Science Minor combines finance, statistics, and mathematics to analyze risk and ensure financial security for individuals, corporations and society at large.

POLICIES/INFORMATION

Admission to Major is required to enroll in 300 and 400 level courses. Admission is granted by the Department. Admission requirements are:

- A minimum of 32 earned semester credit hours and a 2.0 minimum cumulative GPA.
- Completion of 8 credits of mathematics in courses numbered MATH 121 or higher
- A minimum 2.5 cumulative GPA in mathematics courses.

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

Accelerated Combined Degree (BS and MA/MS) Program. Students intending to complete their Bachelor's and Master's degree at MSU may be granted permission to take classes that count toward their graduate program during their undergraduate studies. Admission to the program is conducted through the department. Upon being accepted, students will be assigned an advisor to aid in the design of an accelerated program of study (generally 5 years). Students must maintain a minimum 3.0 GPA overall and a 3.6 in major (as an undergraduate) to continue in the program. Please contact the Department Graduate Coordinator for detailed information.

Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

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 MATH 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, MATH 498, and MATH 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, MATH 112, MATH 113, MATH 115, or MATH 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 or STAT 354 after completing MATH 455 or STAT 455.

Placement Information for Mathematics Course Enrollment. Students seeking enrollment in MATH 112: College Algebra, MATH 113: Trigonometry, MATH 115: Precalculus Mathematics, MATH 121: Calculus I, MATH 130: Finite Mathematics and Introductory Calculus, MATH 201: Elements of Mathematics I, or STAT 154: Elementary Statistics must demonstrate readiness to succeed in the course by satisfying the corresponding requirement in the table in this section.

Course	Minimum ACT Math Subscore		Minimum Accuplacer Elementary Algebra Score		Minimum Accuplacer College Level Math Score		Minimum Accuplacer Calculus Readiness Score		Course Prerequisites
Math 112	22	Or	76	AND	50		N/A	Or	Successful Completion of Math 098
Math 113	22	Or	N/A		63	Or	16	Or	Math 112 with "C" or better
Math 115	23	Or	N/A		86	Or	19	Or	Math 098 and Permission from dept. chair
Math 121	24	Or	N/A		103	Or	22	Or	Math 115 or both Math 112 and 113 with "C" or better
Math 130	23	Or	N/A		86	Or	19	Or	Math 112 or 115 with "C" or better
Math 201	22	Or	76	AND	50		N/A	Or	Successful completion of Math 098
Stat 154	19	Or	76	AND	50		N/A	Or	Successful completion of Math 098

NOTE 1: The Calculus Readiness test may be taken in addition to the ACCUPLACER instrument by students seeking to enroll in courses above MATH 112.

NOTE 2: Documented ACCUPLACER scores from any Minnesota State Colleges and Universities (MNSCU) institution taken within two calendar years will be accepted.

NOTE 3: ACT scores and ACCUPLACER scores that are more than two years old will not be accepted for mathematics placement.

Procedures. Students may substitute for the above requirements based on documentation of:

1. equivalent or higher scores on standardized college admissions tests, such as SAT quantitative scores, that report a separate mathematics sub-score within two calendar years;
2. successful completion of equivalent prior post-secondary education, such as course transfer evaluations or Cambridge International Examinations; or

MATHEMATICS CONTINUED

- enrollment exclusively in non-credit courses or programs. Students requesting such substitutions should submit the documentation to the Chair of the Department of Mathematics and Statistics for evaluation. The evaluation will be based on nationally accepted concordances between the testing instruments and/or courses. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

Procedure for Waiver.

- Students not meeting the requirements for enrollment in MATH 112, MATH 201 or STAT 154 may request a waiver to this policy.
- Written requests for waivers to the policy must be submitted to the Chair of the Department of Mathematics and Statistics, and should include evidence of alternate means of demonstrating readiness, including but not limited to:
 - High school or recent post-secondary coursework which would indicate adequate preparation (transcripts or other records which include course titles, levels and grades are acceptable), or
 - Verification of extenuating circumstances which may have affected performance on previous exams.
- Requests for waivers should be submitted by the following deadlines:
 - August 5th for fall semester enrollment,
 - December 1st for spring semester enrollment, and
 - May 1st for summer session enrollment.
- The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.
- Students whose initial requests are denied may submit a written appeal to the Dean of the College of Science, Engineering and Technology. The Dean should respond in writing, with a copy to the Chair of the Department of Mathematics and Statistics.
- The Dean's decision is the final step in this appeal process.

Policy Rationale. The purpose of the policy is to place students in a course that is developmentally appropriate to help ensure their long term success. Data suggests students not meeting these guidelines have a higher likelihood of having to repeat a course.

New transfer students may base their course enrollment on achievement in previously completed pre-requisite courses in mathematics. For further information about placement and mathematics course pre-requisites, students may contact the Department of Mathematics and Statistics or the College's Student Relations Coordinator.

MATH BA

Degree completion = 120 credits

Required General Education

MATH 121 Calculus I (4)

Major Common Core

MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 290 Foundations of Mathematics (4)
MATH 492 Mathematics Capstone Experience (3) **OR**
MATH 492W Mathematics Capstone Experience (3)

Major Restricted Electives

(choose two from the following) (7-8 credits)

MATH 316 Intermediate Analysis (3)
MATH 345 Abstract Algebra I (4)
MATH 375 Introduction to Discrete Mathematics (4)

Major Unrestricted Electives

(choose a minimum of 12 credits from the following; at least three (3) credits must be at the 400 level)

MATH 316 Intermediate Analysis (3)
MATH 321 Ordinary Differential Equations (4)
MATH 328 Linear Optimization Methods (4)
MATH 332 College Geometry (4)

MATH 345 Abstract Algebra I (4)
MATH 354 Concepts of Probability & Statistics (3)
MATH 375 Introduction to Discrete Mathematics (4)
MATH 392 Topology of Euclidean Spaces (4)
MATH 411 Introduction to Complex Variables (4)
MATH 417 Real Analysis I (4)
MATH 418 Real Analysis II (3)
MATH 422 Partial Differential Equations (4)
MATH 425 Mathematical Modeling (4)
MATH 435 Modern Geometry (4)
MATH 442 Theory of Numbers (4)
MATH 446 Abstract Algebra II (4)
MATH 447 Linear Algebra II (3)
MATH 455 Theory of Statistics I (4)
MATH 456 Theory of Statistics II (4)
MATH 470 Numerical Analysis I (4)
MATH 471 Numerical Analysis II (4)
MATH 480 History of Mathematics (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)
Required Minor. Yes. Any.

MATH BS

Degree completion = 120 credits

Required General Education

MATH 121 Calculus I (4)

Major Common Core

MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 290 Foundations of Mathematics (4)
MATH 492 Mathematics Capstone Experience (3) **OR**
MATH 492W Mathematics Capstone Experience (3)

Major Restricted Electives

(choose two from the following) (7-8 credits)

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MATH 345 Abstract Algebra I (4)
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(choose a minimum of 12 credits from the following; at least three (3) credits must be at the 400 level)

MATH 316 Intermediate Analysis (3)
MATH 321 Ordinary Differential Equations (4)
MATH 328 Linear Optimization Methods (4)
MATH 332 College Geometry (4)
MATH 345 Abstract Algebra I (4)
MATH 354 Concepts of Probability & Statistics (3)
MATH 375 Introduction to Discrete Mathematics (4)
MATH 392 Topology of Euclidean Spaces (4)
MATH 411 Introduction to Complex Variables (4)
MATH 417 Real Analysis I (4)
MATH 418 Real Analysis II (3)
MATH 422 Partial Differential Equations (4)
MATH 425 Mathematical Modeling (4)
MATH 435 Modern Geometry (4)
MATH 442 Theory of Numbers (4)
MATH 446 Abstract Algebra II (4)
MATH 447 Linear Algebra II (3)
MATH 455 Theory of Statistics I (4)
MATH 456 Theory of Statistics II (4)
MATH 470 Numerical Analysis I (4)
MATH 471 Numerical Analysis II (4)
MATH 480 History of Mathematics (3)

Required Minor. Yes. Any.

MATH BS TEACHING

Degree completion = 120 credits

Required for General Education

HLTH 240 Drug Education (3)
MATH 121 Calculus I (4)

Major Common Core

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 Introduction to Discrete Mathematics (4)
MATH 483 Advanced Viewpoint of 5-8 School Mathematics (3)
MATH 484 Technology in 5-12 School Mathematics (3)
MATH 485 Teaching Secondary School Mathematics (3)
MATH 492 Mathematics Capstone Experience (3) **OR**
MATH 492W Mathematics Capstone Experience (3)

Other Graduation Requirements

(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: No.

MATH BA, BS MINOR

Required for Minor

MATH 121 Calculus I (4)
MATH 122 Calculus II (4)
MATH 247 Linear Algebra I (4)

Required for Minor (Electives, 7 credits)

(choose 7 credits from any courses listed for the BA and BS major)

ACTUARIAL MINOR

Minor Core

Mathematics (choose 8 credits)

MATH 121 Calculus I (4)
MATH 122 Calculus II (4)

Statistics (choose 6-7 credits)

(Select 2 courses from the following)

STAT 354 Concepts of Probability & Statistics (3)
STAT 450 Regression Analysis (3)
STAT 455 Theory of Statistics I (4)

Finance (choose 6 credits)

FINA 362 Business Finance (3)
FINA 460 Investments (3)

Elective

Finance Electives (choose 3 credits)

FINA 467 Insurance and Risk Management (3)
FINA 480 Options and Futures (3)

Recommended Courses

Along with the above courses, the following courses satisfy aspects the VEE (Validation of Educational Experience) of the professional societies associated to actuarial science. Students taking these additional courses may apply them towards becoming certified in the three areas of the VEE: economics, applied statistical methods and corporate finance.

ECON 201 Principles of Macroeconomics (3)
ECON 202 Principles of Microeconomics (3)
MATH 223 Calculus III (4)
STAT 458 Categorical Data Analysis (3)

COURSE DESCRIPTIONS

MATH 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.
Summer

MATH 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
Fall, Spring, Summer

MATH 110 (3) Perspectives in Mathematics

A survey of mathematics and its relationship to society, showing its development and evolution to meet the needs of humankind.
Pre: Three years high school algebra/geometry or MATH 098
Fall, Spring, Summer
GE-4

MATH 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: See chart in this section, or successful completion of Math 098.
Fall, Spring, Summer
GE-4

MATH 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: See chart in this section, or MATH 112 with "C" (2.0) or better.
Fall, Spring, Summer
GE-4

MATH 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, matrixed, trigonometric functions, circular functions, vectors and complex numbers, induction, series, and probability.
Pre: See chart in this section, must successfully complete Math 098 and receive permission from the department chair.
Fall, Spring
GE-4

MATH 121 (4) Calculus I

Limits, continuity, the derivative and applications, and the integral and applications.
Pre: MATH 115 or both MATH 112 and MATH 113 with "C" (2.0) or see chart in this section.
Fall, Spring, Summer
GE-4

MATH 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" (2.0) or better or consent
Fall, Spring, Summer

MATH 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" (2.0) or better or consent
Fall

MATH 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" (2.0) or better or consent
Variable

MATH 130 (4) Finite Mathematics and Introductory Calculus

This course develops concepts and skills in algebra and introductory calculus needed to model applications in business, economics, social sciences and life sciences, using polynomials, exponentials, logarithms, linear systems, linear programming, sequences, series, derivatives and integrals. Pre: Knowledge of college algebra including exponentials and logarithms. Satisfy one of the following three conditions: (1) Pass MATH 112 or MATH 115 with grade of "C" (2.0) or better; (2) have an ACT Math Subscore of 23 or better; or (3) Score 86 or better on the College Level Math Test, or score 19 or better on the Calculus Readiness Test. Fall, Spring, Summer
GE-4

MATH 170 (3) Introduction to Mathematical Software Programming

Students will learn the rudiments of algorithmic processes such as iteration and recursion and implement simple mathematical algorithms in a commonly used mathematical software package. Applications may include graphing, equation solving, numerical approximation, recurrence relations, and generation of mathematical objects such as sets, lists, permutations and trees. Pre: MATH 121
Fall (On-Demand), Spring (On-Demand)

MATH 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, with "C" (2.0) or better, or consent
Spring
GE-4

MATH 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. Credit for both MATH 181 and MATH 121 is not allowed. Pre: MATH 112 with "C" (2.0) or better or consent
Fall
GE-4

MATH 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: See chart in this section, or successful completion of MATH 098. Fall, Spring
GE-4

MATH 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, with "C" (2.0) or better or consent
Fall, Spring

MATH 203 (3) Elements of Math III

Transformational and Euclidean geometry, coordinate geometry and applications of discrete mathematics. Pre: MATH 202 with "C" (2.0) or better or consent
Spring

MATH 223 (4) Calculus III

Surfaces, vector-valued functions, partial differentiation, multiple integration, and vector calculus. Pre: MATH 122 with "C" (2.0) or better, or consent
Fall, Spring

MATH 247 (4) Linear Algebra I

Matrices, determinants, systems of linear equations, vector spaces, linear transformations, and characteristic value problems. Pre: MATH 122 with "C" (2.0) or better or consent
Fall, Spring, Summer

MATH 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 122
Fall, Spring
GE-2

MATH 293 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Cannot be used towards a math major. Pre: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

MATH 316 (3) Intermediate Analysis

Limits, sequences, continuity, and differentiation of a real valued function of a real variable. Pre: MATH 223 and MATH 290 with "C" (2.0) or better or consent
Spring

MATH 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 with "C" (2.0) or better or consent
Fall, Spring, Summer

MATH 328 (4) Linear Optimization Methods

Simplex method and its variants, duality, sensitivity analysis, interior-point methods, quadratic programming and linear complementarity problems. Applications such as classification problems and game theory with linear optimization software. Pre: MATH 122, MATH 247
Variable

MATH 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 with "C" (2.0) or better or consent
Fall

MATH 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 with "C" (2.0) or better or consent
Fall

MATH 354 (3) Concepts of Probability & 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 with "C" (2.0) or better or consent
Fall, Spring, Summer

MATH 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 247 with "C" (2.0) or better or consent
Fall, Spring

MATH 392 (4) Topology of Euclidean Spaces

Metric spaces, topology of metric spaces, continuity, compactness in metric spaces, and Euclidean n-space.

Pre: MATH 290 with "C" (2.0) or better or consent

MATH 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other pre-requisites may also apply.
Fall, Spring, Summer

MATH 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 MATH 290 with "C" (2.0) or better or consent
Spring (Odd Years)

MATH 417 (4) Real Analysis I

The topology of Euclidean spaces, norms, classical inequalities, local and global properties of continuous functions, preservation of compactness and connectedness, sequences in Euclidean space and sequences of functions.

Pre: MATH 223 and MATH 290 with "C" (2.0) or better or consent
Fall

MATH 418 (3) Real Analysis II

A continuation of MATH 417. The course may include topics from metric spaces, Riemann-Stieltjes integration, differentiation in Euclidean space, sequences and series of functions, approximation theorems, implicit and inverse function theorems, equicontinuity, and mapping theorems.

Pre: MATH 417 with "C" (2.0) or better or consent

MATH 422 (4) Partial Differential Equations

This course presents the theory, computations, and applications of partial differential equations and Fourier series.

Pre: MATH 223 and MATH 321 with "C" (2.0) or better or consent
Spring (Even Years)

MATH 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 MATH 247 with "C" (2.0) or better or consent
Spring (Odd Years)

MATH 435 (4) Modern Geometry

Geometry of spaces including Euclidean and non-Euclidean and applications of contemporary geometry.

Pre: MATH 332 with "C" (2.0) or better or consent
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 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 with "C" (2.0) or better or consent

MATH 446 (4) Abstract Algebra II

A continuation of MATH 345. The course will include topics from groups, rings, and fields.

Pre: MATH 345 with "C" (2.0) or better or consent
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 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 with "C" (2.0) or better or consent
Spring

MATH 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 with "C" (2.0) or better or consent
Fall

MATH 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 455 / STAT 455 with "C" (2.0) or better or consent
Spring

MATH 460 (3) Actuarial Applications in Probability

This course applies probabilistic methods to problems encountered in actuarial science that prepares students for the Society of Actuaries Exam P/1.

Pre: MATH 354, STATS 354 and MATH 223 or MATH 455, STAT 455
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 461 (4) Mathematical Theory of Interest

This course covers the theory of interest portion of Exam FM/2 of the Society of Actuaries. Topics include time value of money, measurement of interest, annuities certain, arithmetic and geometric annuities, amortization schedules and sinking fund, bonds and other securities, yield rates, and interest rate immunization.

Pre: MATH 223
Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 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, MATH 247 with "C" (2.0) or better or consent
Fall

MATH 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 non-linear equations, numerical solutions of ordinary differential equations.

Pre: MATH 470 and MATH 223 with "C" (2.0) or better or consent

MATH 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 180W is beneficial.

Pre: MATH 345 with "C" (2.0) or better or consent
Spring (Odd Years)

MATH 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 with "C" (2.0) or better or consent
Spring

MATH 484 (3) Technology in 5-12 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 with "C" (2.0) or better or consent
Fall

MATHEMATICS CONTINUED

MATH 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 with "C" (2.0) or better or consent

Fall

MATH 487 (1) Teaching Experiences in Mathematics

Student will work with an experienced member of the faculty in teaching a college mathematics course.

MATH 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.

MATH 490 (1-4) Workshop

A short course devoted to a specific mathematical topic. May be repeated for credit on each new topic.

MATH 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.

MATH 492 (3) Mathematics Capstone Experience

This course is designed to allow undergraduate students an opportunity to integrate their undergraduate mathematics experiences by engaging each student in working on a problem in applied or theoretical mathematics. Content will vary by semester. Because of the breadth of mathematics topics needed for successful completion of the course, students need to have senior standing.

Pre: Two of the following: MATH 316, MATH 345, MATH 375 and senior standing (or permission of the instructor). Course also can be taken as an independent study with permission of a cooperating faculty member.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 492W (3) Mathematics Capstone Experience

This course is designed to allow undergraduate students an opportunity to integrate their undergraduate mathematics experiences by engaging each student in working on a problem in applied or theoretical mathematics. Content will vary by semester. Because of the breadth of mathematics topics needed for successful completion of the course, students need to have senior standing.

Pre: Two of the following: MATH 316, MATH 345, MATH 375 and senior standing (or permission of the instructor). Course also can be taken as an independent study with permission of a cooperating faculty member.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

MATH 493 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester.

Pre: Recipient of a MAX scholarship or instructor consent

Fall, Spring

MATH 495 (1-4) Selected Topics

A course in an area of mathematics not regularly offered. May be repeated for credit on each new topic.

MATH 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.

MATH 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

Mechanical Engineering

College of Science, Engineering & Technology
Department of Mechanical and Civil Engineering
205 Trafton Science Center E • 507-389-6383

Fax: 507-389-5002

Website: me.mnsu.edu

Chair: Patrick Tebbe, Ph.D., P.E.

Faculty: Aaron S. Budge, Ph.D., P.E.; Shaobiao Cai, Ph.D.; Stephen J. Druschel, Ph.D., P.E.; Charles W. Johnson, Ph.D., P.E.; Sungwon Kim, Ph.D.; Saeed Moaveni, Ph.D., P.E.; Vojin Nikolic, Ph.D.; Deborah K. Nykanen, Ph.D., P.E.; Jin Park, Ph.D.; Farhad Reza, Ph.D., P.E.; Patrick A. Tebbe, Ph.D., P.E.; W. James Wilde, Ph.D., P.E.

Accreditation. The Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.ABET.org

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.

Program Objectives. The Mission of the Mechanical Engineering program at Minnesota State Mankato is to provide a broad-based education that will enable graduates to enter practice in the mechanical engineering profession, serving the needs of the State of Minnesota and the Nation.

Within 3-6 years of graduation, graduates of the mechanical engineering program at Minnesota State University, Mankato are expected to contribute to the profession and to society as a whole by achieving a combination of the following milestones.

1. Based on their strong technical foundation in mechanical engineering, they have advanced professionally to increased levels of responsibility, have successfully transitioned into business or management, or have successfully completed an advanced degree.
2. They have demonstrated an ability to communicate technical information through internal and external technical reports or proposals, patent applications, published papers and articles, or conference presentations.
3. They have participated in, or served as an officer of, a local, regional, or national professional engineering society, standards committee, or state/local board.
4. They have participated in continuing education or pursued additional industry certification.
5. They have become a registered professional engineer.

The program mission and educational objectives are fully compatible with the mission of Minnesota State Mankato and the College of Science, Engineering, and Technology. Program objectives are monitored by the constituencies (mechanical engineering profession through the program's Industrial Advisory Board and employers, alumni, students, and faculty of the program).

Other important features of the mechanical engineering program at Minnesota State Mankato include the following:

- Students are required 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.

Preparation. Recommended high school preparation is one year each of precalculus (or equivalent), physics and chemistry. Engineering drafting and a computer language are also recommended. Without this background it may take longer than four years to earn the degree.

POLICIES/INFORMATION

Program Admission. Admission to the Mechanical Engineering Program is granted by the department, and is necessary before enrolling in 300- and 400-level courses. Near the end of the sophomore year, students must submit an application for admission to the mechanical engineering program. Applications to the program may be obtained from the Department of Mechanical and Civil Engineering or downloaded from the department homepage.

Before being admitted to upper division mechanical engineering courses, a student must complete a minimum of 48 credits, for grade, including the following courses applicable to the degree: General Physics (calculus based) 8 credits; Calculus and Differential Equations 16 credits; Introduction to Engineering 2 credits; Computer Graphics Communication 1 credit; Geometric Dimensioning and Tolerancing in Engineering Design 2 credits; Introduction to Problem Solving and Engineering Design 2 credits; Engineering Mechanics (Statics and Dynamics) 6 credits; Electrical Engineering (Circuits, including lab) 4 credits; Chemistry 3 credits; and English Composition 4 credits.

To be admitted to the mechanical engineering program, a student must earn a grade of "C" (2.00) or better and a cumulative GPA of 2.50 in the courses listed above. All core course grades (including those for repeated courses) will be considered in the computation of the GPA for admission to the program. Provisional admission to the program for one semester may be granted in limited cases.

All admitted students are required to take a department-administered diagnostic test early in their junior year.

Transfer Students. 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. Generally, no transfer credits are allowed for upper division mechanical engineering courses. Transfer students must complete a minimum of 12 credits at Minnesota State Mankato prior to being considered for full admission to the program.

Satisfactory Progress. Once admitted to the mechanical engineering program, a student must demonstrate satisfactory progress by maintaining a cumulative GPA of at least 2.30 in all upper-division engineering courses (including repeated courses).

P/N Grading Policy. P/N credit is not allowed for any course used to meet mechanical engineering degree requirements.

Probation Policy. An admitted student who does not maintain satisfactory progress as defined above will be placed on program probationary status for a maximum of one semester. During the probationary period, the student must complete at least 8 credits, approved by the department, of upper division engineering courses for grade from the prescribed Mechanical Engineering curriculum. Students may not receive a degree without first conforming to the satisfactory progress criteria. A student who fails to meet satisfactory progress for a second semester (consecutive or non-consecutive) will not be allowed to continue in the program.

Appeals. A student may appeal any departmental decision in writing. The department will consider such appeals individually.

MECHANICAL ENGINEERING BSME

Degree completion = 128 credits

Required General Education

Required Special General Education (23 credits)

The Bachelor of Science in Mechanical Engineering degree does not adhere to the standard general education program required by other majors. Rather, it requires a special distribution of communication, humanities, and social science courses. Courses may be chosen to satisfy the university cultural diversity requirement concurrently.

Required Humanities and Social Science Courses (minimum of 16 credits).

To satisfy this requirement, the courses selected must provide both breadth and depth and not be limited to a selection of unrelated introductory courses. Each student should discuss with his/her mechanical engineering advisor the selection of courses to meet this requirement early in their academic career. A current list of acceptable courses is posted in the department office and on the department web site. 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 as a course at the 100 or 200 level.

- ENG 101 Composition (4)
(choose 3-4 credits)
- CMST 102 Public Speaking (3)
- ENG 271W Technical Communication (4)

Pre-requisites to the Major

- CHEM 191 Chemistry for Engineers (3)
- MATH 121 Calculus I (4)
- MATH 122 Calculus II (4)
- MATH 223 Calculus III (4)
- MATH 321 Ordinary Differential Equations (4)
- PHYS 221 General Physics I (4)
- PHYS 222 General Physics II (3)
- PHYS 232 General Physics II Laboratory (1)

Major Common Core

- EE 230 Circuit Analysis I (3)
- EE 240 Evaluation of Circuits (1)
- EE 244 Introduction to Digital Systems (2)
- ME 101 Introduction to Engineering - Mechanical (2)
- ME 103 Computer Graphics Communication (1)
- ME 201 Introduction to Problem Solving and Engineering Design (2)
- ME 203 GD&T in Engineering Design (2)
- ME 206 Materials Science (3)
- ME 212 Statics (3)
- ME 214 Dynamics (3)
- ME 223 Mechanics of Materials (3)
- ME 241 Thermodynamics (3)
- ME 291 Engineering Analysis (3)
- ME 321 Fluid Mechanics (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 (3)
- ME 428 Design Project I (3)
- ME 436W Mechanical Engineering Experimentation II (2)
- ME 438W Design Project II (3)
- ME 463 Automatic Controls (3)
- ME 466 Mechanical Engineering Experimentation III (2)
- ME 492 Mechanical Engineering Seminar (1)

MECHANICAL ENGINEERING CONTINUED

Major Restricted Electives

Consult with your advisor for selection of mechanical engineering electives.

Mechanical Engineering Electives (choose 6 credits)

Science Electives (choose 4 credits)

BIOL	105	General Biology I (4)
BIOL	105W	General Biology I (4)
CHEM	202	General Chemistry II (5)
ENVR	101	Perspectives in Environmental Science (4)
MATH	247	Linear Algebra I (4)
MATH	422	Partial Differential Equations (4)
PHYS	223	General Physics III (3)
PHYS	233	General Physics III Laboratory (1)

Required Minor: None.

COURSE DESCRIPTIONS

ME 100 (1) Explorations in Engineering

This course offers an introduction to the various disciplines of engineering and their relationship to the principles of physics and mathematics. Students are prepared for academic success and the transition into an engineering program.

Fall
GE-12

ME 101 (2) Introduction to Engineering - Mechanical

To prepare students for a career in engineering with emphasis on mechanical; introduce the engineering fundamentals and the skills necessary to have a successful learning experience; and to prepare students for engineering education and profession through interactions with upper-class engineering students and practitioners.

Pre: MATH 113 or MATH 115 or MATH 121

ME 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.

Variable

ME 103 (1) Computer Graphics Communication

Standards of graphics communication. Orthographic projections, dimensioning, tolerancing, section views. Extensive use of modern software to create engineering drawings. Introduction to solid modeling of parts and assemblies. This course includes laboratory component.

ME 203 (2) Geometric Dimensioning and Tolerancing in Engineering Design

This course is intended to provide the students with an understanding of the principles and methodologies of geometric dimensioning and tolerancing. Topics include: Datums, Material condition symbols, Tolerances of Form and profile, Tolerances of orientation and runout, location tolerances, and Virtual condition. This course includes laboratory component.

Pre: ME 103, ME 201

ME 201 (2) Introduction to Problem Solving and Engineering Design

This course has two main parts. Part one covers problem solving and fundamentals of programming including data types, decision making, repetitive loops, and arrays. Engineering applications requiring programming are included. Part two covers engineering design philosophy and methodology, communication skills, and teamwork. A design project is also included.

Pre: ME 101

Coreq: ME 103, MATH 121

Fall, Spring

ME 206 (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.

Coreq: ME 223

Fall

ME 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

Fall, Spring

ME 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

Fall, Spring

ME 223 (3) Mechanics of Materials

Load deformation, stress, strain, stress-strain relationship, buckling, energy concepts, stress analysis of structural and machine elements.

Pre: ME 212

Fall, Spring

ME 241 (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 221

Fall

ME 291 (3) Engineering Analysis

Probability and statistics. Uncertainty, distributions. Numerical solution of algebraic, transcendental and differential equations. Numerical integration and differentiation. Structured programming language required.

Pre: CIVE 201 or ME 201

Coreq: MATH 321

Fall, Spring

ME 293 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements.

Pre: Recipient of a MAX scholarship or instructor consent.

Fall, Spring

ME 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 221, MATH 321

Spring

ME 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 241 or ME 299

Fall

ME 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. Includes significant design component.

Pre: ME 241, ME 321

Spring

ME 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. Includes significant design component.

Pre: ME 241

Spring

ME 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. Includes significant design component.

Pre: ME 206, ME 223

Spring

ME 336 (2) Mechanical Engineering Experimentation I

Experiments in Mechanical Engineering, load-deformation, load-failure, fatigue, impact, hardness. Introduction to traditional machining and material processing. This course includes laboratory.

Coreq: ME 333

Spring

ME 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 291

Fall

ME 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: ME 201. At least 60 credits earned; in good standing; instructor permission; co-op contract; other pre-requisites may also apply.

Fall, Spring, Summer

ME 415 (3) Structural Analysis

Minimum design loads for buildings using ASCE 7 guidelines and load distribution. Analysis of determinate structural systems including the case of moving loads. Analysis of indeterminate structures using the flexibility and moment distribution methods. Use of software to enhance the analysis.

Pre: ME 223

Fall

ME 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

Variable

ME 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 223

Spring

ME 418 (3) Mechanical Systems Design

The application of mechanics to the design and analysis of motion and force transmitting systems. Optimum design. Includes significant design component.

Pre: ME 417

Variable

ME 420 (3) Computer Aided Engineering

This course provides the students with sound understanding of both solid modeling techniques and finite element analysis. It covers the major features as well as feature manipulation techniques. It also provides a background in deriving, understanding and applying the stiffness matrices and finite element equations for various types of finite elements and systems. Static stress analyses, sensitivity studies and optimization studies are covered. Includes significant design component.

Pre: ME 417, ME 324

Coreq: Senior standing in ME.

Fall

ME 422 (3) Mechanics of Composite Materials

Introduce anisotropic mechanics theories, engineering application of various composite materials, mechanical behaviors and fabrication of composites, experimental and theoretical approach for composite designs, contemporary issues such as nano/microcomposites. Includes significant design component.

Pre: ME 223

ME 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. Includes significant design component.

Pre: ME 324

Variable

ME 426 (3) Aerosol Theory and Technology

Introduction to the theory of aerosols and particulate systems. Properties, behavior, and physical principles of aerosols; including particle size statistics, Brownian motion and diffusion, and coagulation. Application in areas such as environmental systems, respiratory deposition, bioterrorism, and materials processing.

ME 428 (3) Design Project I

The first course in a two semester sequence that provides a complete design experience under professional guidance. The course 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 438W.

Pre: ME 324, ME 329, ME 333, ME 336, ME 341, ME 417

Fall

ME 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

Variable

ME 436W (2) Mechanical Engineering Experimentation II

Experimental and analytical studies of phenomena and performance of fluid flow, heat transfer, thermodynamics, refrigeration and mechanical power systems. This course includes laboratory component. Extensive writing component.

Pre: ME 291, ME 324, ME 329

Fall

WI

ME 438W (3) Design Project II

The second course of a two semester sequence providing a complete design experience and introduction to professional practice. This course includes: completion of the design project, design presentations, and the final design report. Students will prepare for and complete the Fundamentals of Engineering exam.

Pre: ME 428

Spring

WI

ME 439 (3) Air Conditioning & 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. Includes significant design component.

Pre: ME 324, ME 329

Variable

ME 447 (3) Design of Machine Elements II

Application of principles of mechanics of materials and of material failure theories to the design and analysis of shafts, journal bearings, helical, bevel and worm gears, clutches, brakes, couplings, and flexible mechanical elements. Statistical consideration.

Pre: ME 417

Spring

ME 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. Includes significant design component.

Pre: ME 223 and ME 324 or instructor consent

Variable

MECHANICAL ENGINEERING CONTINUED

ME 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. Includes significant design component.

Pre: ME 341
Fall

ME 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. Includes significant design component.

Pre: ME 417, ME 463
Spring

ME 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. This course includes laboratory. Extensive writing component.

Pre: ME 463
Spring

ME 466W (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. This course includes laboratory. Extensive writing component.

Pre: ME 463
Spring
WI

ME 491 (1-4) In-Service

Variable

ME 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
Coreq: ME 428
Spring

ME 493 (1) MAX Scholar Seminar

This class provides MAX scholars with an opportunity to explore a set of topics related to achieving success in academic, professional and personal realms. Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Students will be required to participate in mentoring of lower division MAX scholarship recipients and provide written and oral presentations of various topics during the semester. This course may be repeated and will not count towards graduation requirements.

Pre: Recipient of a MAX scholarship or instructor consent.
Fall, Spring

ME 494 (1) Global Experience in Engineering and Technology

This class provides students pursuing a minor in "Global Solutions in Engineering and Technology" with an opportunity to explore a set of topics related to achieving success in advance of and following an international experience (internship, study abroad, etc.). Speakers will include faculty, graduate students, visiting researchers and industry members as well as student participants. Returning students will be required to participate in mentoring of students preparing for their international experience and provide written and/or oral presentations of various topics during the semester. This course is required both before and after participation in the international experience (min. 2 cr.).

Variable

ME 497 (1-6) Internship

Variable

ME 499 (1-6) Individual Study

Variable

MEDICAL LABORATORY SCIENCE

Medical Laboratory Science

College of Science, Engineering & Technology

Department of Biological Sciences

246 Trafton Science Center S • 507-389-2417

Website: www.mnsu.edu/dept/biology

Director: Lois Anderson, MA, MT (ASCP)

The four-year medical laboratory science curriculum leads to the degree of Bachelor of Science in medical laboratory science. The first three years are spent at the University. The fourth year is spent at one of the affiliated hospital schools of medical laboratory science. Upon successful completion of this year, the BS degree is awarded by the University and graduates are then eligible to take a certifying examination.

Because the medical laboratory science curriculum closely parallels that of other majors, such as biology, students from other majors are encouraged to apply.

POLICIES/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.

Students should contact the Department of Medical Laboratory Science 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.

Students majoring in Medical Laboratory Science 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 Ken Adams, SRC, 125 Trafton Science Center, telephone 507-389-1521.

GPA Policy. A GPA of 2.0 is required in both sciences courses and cumulative coursework.

Probation. 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 and clinical site adjunct faculty participating in the Medical Laboratory Science program include, but not limited to: Hennepin County Medical Center, Minneapolis, MN, John T. Crosssen, M.D., Roberta Montgomery, BS, MLS, MT (ASCP); Mercy College of Health Sciences CLS Program, Des Moines, IA, Kyla Dippold, MS, MT (ASCP), CLS (NCA); St. Luke's Hospital, Cedar Rapids, IA, Carol Collingsworth, MT (ASCP) SC; Lindsey Mullenbach, MLS (ASCP); Lileah Harris, M.D., University of Minnesota, Minneapolis, MN, Janice Conway-Klaasen, Ph.D., MT(ASCP) SM; New York Methodist Hospital, Brooklyn, NY, Lori Burkard, MS, MT (ASCP), Lynn Jones, MT (ASCP), Rabia Mir, M.D.; Mercy Medical Cen-

ter, Sioux City, IA, Mary Smith, MS, MLS (ASCP), Askar Qalbani, M.D.; Sanford USD Medical Center, Sioux Falls, SD, DesiRae M. Muirhead, M.D., Renee Rydell, MBA, MS, MT (ASCP); St. Luke's College, Sioux City, IA, James Quesenberry, MD, Pamela Briese, MS, MT (ASCP), SC. Students accepted into the clinical internship will be responsible for: Proof of Medical/Hospitalization/Health Insurance; Health Physical Exam; Tuberculosis (TB) testing; and Proof of Immunization which may include the following: Hepatitis B, Measles, Mumps, Rubella, Tetanus, Chickenpox (Varicella), and Influenza. Students may also be required to submit to Drug Screen Testing. Internship sites are required by law to do Background Checks on all students admitted to their medical laboratory science programs.

MEDICAL LABORATORY SCIENCES BS

Degree completion = 120 credits

Required General Education

BIOL	270	Microbiology (4)
CHEM	201	General Chemistry I (5)
(choose 4 credits)		
MATH	112	College Algebra (4)
MATH	115	Precalculus Mathematics (4)
MATH	121	Calculus I (4)
(choose 4 credits)		
BIOL	105	General Biology I (4)
BIOL	105W	General Biology I (4)

Major Common Core

BIOL	106	General Biology II (4)
BIOL	175	Orientation to Clinical Laboratory Science (1)
BIOL	211	Genetics (4)
BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
BIOL	430	Hematology/Introduction to Immunology (4)
CHEM	202	General Chemistry II (5)
CHEM	320	Organic Chemistry I (5)
CHEM	360	Principles of Biochemistry (4)

Major Restricted Electives

(choose 3 credits)		
HLTH	475	Biostatistics (3)
STAT	154	Elementary Statistics (3)

(choose 30-39 credits)

Internship credits are determined in consultation with advisor.

MEDT	410	Clinical Hematology I (1-10)
MEDT	411	Clinical Immunochemistry I (1-10)
MEDT	412	Clinical Immunology I (1-10)
MEDT	413	Clinical Chemistry I (1-10)
MEDT	414	Clinical Microbiology I (1-10)
MEDT	415	Clinical Microscopy I (1-10)
MEDT	416	Clinical Hematology II (1-10)
MEDT	417	Clinical Immunochemistry II (1-10)
MEDT	418	Clinical Chemistry II (1-10)
MEDT	419	Clinical Microbiology II (1-10)
MEDT	420	Clinical Microscopy II (1-10)
MEDT	499	Individual Study (1-6)

CHOOSE 1 CLUSTER

Hennepin County Medical Center, Minneapolis, MN		
BIOL	380	Blood Banking/Urinalysis (3)
BIOL	475	Medical Microbiology (4)

St. Luke's Hospital, Cedar Rapids, IA / St. Luke's College, Sioux City, IA / Mercy College of Health Science, Des Moines, IA / Sanford USD Medical Center, Sioux Falls, SD / New York Methodist Hospital, Brooklyn, NY / Mercy Medical Center, Sioux City, IA

BIOL	475	Medical Microbiology (4)
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University of Minnesota, Minneapolis, MN and Rochester, MN		
CHEM	321	Organic Chemistry II (3)
CHEM	331	Organic Chemistry II Lab (1)
(choose 4 credits)		
MATH	121	Calculus I (4)

Required Minor: None.

COURSE DESCRIPTIONS

MEDT 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.

MEDT 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.

MEDT 412 (1-10) Clinical Immunology I

Antigen/antibody structure function and interaction; basic principles and procedures of humoral and cellular immunology; performance and clinical correlation of serological testing; quality control.

MEDT 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.

MEDT 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, asepsis; environmental monitoring; quality control.

MEDT 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.

MEDT 416 (1-10) Clinical Hematology II

A continuation of Clinical Hematology I

MEDT 417 (1-10) Clinical Immunochemistry II

A continuation of Clinical Immunochemistry I.

MEDT 418 (1-10) Clinical Chemistry II

A continuation of Clinical Chemistry I.

MEDT 419 (1-10) Clinical Microbiology II

A continuation of Clinical Microbiology I.

MEDT 420 (1-10) Clinical Microscopy II

A continuation of Clinical Microscopy I.

MEDT 499 (1-6) Individual Study

Related topics in medical technology.

Military Science and Leadership/ Army ROTC

College of Education

Department of Military Science and Leadership/

Reserve Officers' Training Corps (Army ROTC)

316 Wiecking Center c 507-389-6226/6229

Website: <http://ed.mnsu.edu/armyrotc>

Chair: LTC Dennis Murphy

SFC James Delong, CPT Joe Sullivan, CPT Robert Steward, Jerry Bohl, CPT John Dart

The Military Science and Leadership Department offers either a two- or four-year program enabling students/cadets to compete for a commission as an officer in the United States Army, Army Reserve, 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.

An academic minor in military science is available; however, the minor is limited to ROTC cadets who have contracted with the United States Army.

POLICIES/INFORMATION

GPA Policy. Students must earn a minimum GPA of 2.0 ("C") in the courses taken from the Military Science and Leadership department in order to meet graduation and/or commissioning requirements.

P/N Grading Policy. No classes offered by the military science and leadership department consist of P/N grades.

Leadership Laboratories. All contracted cadets are required to attend (1) two-hour leadership laboratory each week. Specifics are outlined in each course syllabus. A weekend field training exercise is also conducted each semester.

Leader's Training Course. During the summer between the sophomore and junior years, students who have **NOT** completed the first two years of ROTC or have not previously completed military basic training may attend this four-week internship at Fort Knox, KY. This qualifies the student to enter the ROTC Advanced Course. A stipend is paid for attendance and students receive travel, room, board, uniforms, and medical care.

Leader Development and Assessment Course. During the summer between the junior and senior years, cadets attend a five week leadership course at Fort Lewis, WA. Cadets receive a stipend for this training; travel, room, board, uniforms, and medical care are also included. Students experience leadership positions, lead other ROTC cadets through a number of challenging situations, and build both stamina and self-confidence.

MILITARY SCIENCE MINOR

Required for Minor

CMST 102	Public Speaking (3)
HIST 478	American in Vietnam (4) OR
MSL 252	The Evolution of American Warfare (3)
MSL 210	Army Physical Fitness (1)
MSL 311	Leadership and Problem Solving (3)
MSL 312	Leadership and Ethics (3)
MSL 366	Leader Development and Assessment Course (LDAC) (3)
MSL 403	Application of Physical Conditioning (1)
MSL 411	Leadership and Management (3)
MSL 412	Officership (3)
POL 111	United States Government (3)

The four-year Army ROTC curriculum develops the student's leadership, managerial and organizational abilities. 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.

The program consists of two parts: the basic course and the advanced course. The basic course usually occurs the first year and sophomore year and students incur no military obligation. After completing the basic course, students may enroll in the advanced course. In order to enroll, students must also execute a contract with the United States Army. Additionally, students with military basic training experience may 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 at least \$300 each academic month of the school year.

MILITARY SCIENCE/ARMY ROTC

4-YEAR PROGRAM

Required for Program

HIST 478	American in Vietnam (4) OR
MSL 252	The Evolution of American Warfare (3)
MSL 111	Foundations of Officership (1)
MSL 112	Basic Leadership (1)
MSL 211	Individual Leadership Studies (2)
MSL 212	Leadership and Teamwork (2)
MSL 311	Leadership and Problem Solving (3)
MSL 312	Leadership and Ethics (3)
MSL 411	Leadership and Management (3)
MSL 412	Officership (3)

2-YEAR PROGRAM

Required for Program

HIST 478	American in Vietnam (4) OR
MSL 252	The Evolution of American Warfare (3)
MSL 311	Leadership and Problem Solving (3)
MSL 312	Leadership and Ethics (3)
MSL 411	Leadership and Management (3)
MSL 412	Officership (3)

COURSE DESCRIPTIONS

MSL 111 (1) Foundations of Officership

Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Establishes framework for understanding officership, leadership, Army values, as well as skills such as physical fitness and time management.

Fall

MSL 112 (1) Basic Leadership

Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefings and effective writing, goal setting, techniques for improving listening and speaking skills, and an introduction to counseling.

Spring

MSL 150 (1) Leadership Lab

This class is the associated leadership lab for the MSL classes. It is the hands-on portion where individual and collective military tasks are practiced and leadership lessons are applied. Students must be enrolled in ROTC to take this course. Coreq: MSL 111, MSL 112, MSL 211, MSL 212, MSL 299, MSL 311, MSL 312, MSL 411, MSL 412, MSL 499

Fall, Spring

MSL 210 (1) Army Physical Fitness

This class is open to all students. Please note, this is a physically demanding class. It is a comprehensive fitness program based on the latest military fitness techniques and principles. Students participate in and learn the components of an effective physical fitness program, with emphasis on the development of an individual fitness program and the role of exercise and fitness in one's life. In addition, students will achieve the highest standards of physical fitness in preparation for the Army Physical Fitness Test. This class is a pre-requisite for MSL 403. Fall, Spring
GE-11

MSL 211 (2) Individual Leadership Studies

Students identify successful leadership characteristics through observation of others and self through experiential learning exercises. Students record observed traits (good and bad) in a dimensional leadership journal and discuss observations in small group settings. Fall

MSL 212 (2) Leadership and Teamwork

Study examines how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing decisions, creativity in the problem solving process, and obtaining team buy-in through immediate feedback. Spring

MSL 252 (3) The Evolution of American Warfare

This course is designed to provide an overview of American Military history from the Revolutionary War to the present, with emphasis on the post World War I era. It examines the cause, conduct, consequences, and historical threads of military conflict. GE-5

MSL 277 (3) Cadet Professional Development Training (CPDT)

This course is devoted to the study and practical application of the Army profession and Army leadership development through first-hand service with real Army units on actual Army installations. Qualified cadets compete for selection to attend one of 23 separate Army courses. Note: selection is very competitive and each Army-sanctioned course is very rigorous. Once selected, cadets hone their leadership and individual skills during two to four weeks of training and education. Possible courses include Airborne school, Air Assault school, Leader's Training Course, and Cadet Troop Leader Training. Pre: Limited to cadets enrolled in Army ROTC

MSL 299 (1-8) Individual Study

Department chair approval required. Fall, Spring

MSL 311 (3) Leadership and Problem Solving

Students conduct self-assessment of leadership style, develop personal fitness regimens, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem-solving techniques. Students receive direct feedback on leadership abilities. Limited to ROTC cadets who executed a contract with the U.S. Army. Fall

MSL 312 (3) Leadership and Ethics

Examines the role communications, values, and ethics play in effective leadership. Topics include ethical decision-making, consideration of others, spirituality in the military, and a survey of Army leadership doctrine. Emphasis is on improving oral and written communication abilities. Limited to ROTC cadets who executed a contract with the U.S. Army. Pre: MSL 311
Spring

MSL 366 (3) Leader Development and Assessment Course (LDAC)

This course is a rigorous and demanding 32-day internship held at Fort Lewis, WA and is designed to develop and evaluate leadership ability and determine preparedness to become commissioned Army officers. Cadets train in physically and mentally challenging situations and undergo testing on a variety of skills and topics. Pre: Limited to cadets contracted with the US Army

MSL 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. MSL 403 students also administer fitness tests to underclassmen which measure the cardiovascular endurance and upper and lower body strengths. MSL 403 students are required to successfully pass the Army Physical Fitness Test prior to the end of the semester. Limited to ROTC cadets who executed an enlistment contract with the U.S. Army. Pre: MSL 210
Fall, Spring

MSL 411 (3) Leadership and Management

Develops student proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore training management, methods of effective staff collaboration, and developmental counseling techniques. Limited to ROTC cadets who executed a contract with the U.S. Army. Pre: MSL 311, MSL 312
Fall

MSL 412 (3) Officership

Study includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a semester-long senior leadership project that requires them to plan, organize, collaborate, analyze, and demonstrate their leadership skills. Limited to ROTC cadets who executed a contract with the U.S. Army. Pre: MSL 311, MSL 312, MSL 411
Spring

MSL 499 (1-8) Individual Study

Department chair approval required. Limited to ROTC cadets who executed an enlistment contract with the U.S. Army. Fall, Spring

MUSIC

Music

College of Arts & Humanities

Department of Music

202 Earley Center for Performing Arts • 507-389-2118

Website: www.intech.mnsu.edu/music/

Chair: John Lindberg

Faculty: Gerard Aloisio, Tonya Butler, David Dickau, Dale Haefner, Kimm Julian, John Lindberg, Joseph Rodgers, Amy Roisum Foley, Doug Snapp, Stephanie Thorpe, Michael Thursby, David Viscoli

Accreditation. National Association of Schools of Music (NASM)

Music at Minnesota State Mankato

We are passionate about music and the people who make music happen. We work with each student individually to reach beyond expectation, creatively and academically, through hands-on experience in real life settings. Faculty, students and ensembles are warm and welcoming to majors and non-majors alike.

Our Commitment:

We offer the education, experience and personal attention you need to succeed in today's professional marketplace.

MUSIC CONTINUED

POLICIES/INFORMATION

Admission to Major is granted by the department in a two-step process.

Step One: Be accepted as a music major: Every new and transfer student will:

- perform a successful audition in their primary instrument or voice;
- pass diagnostic tests in music fundamentals/theory and aural skills.

Step Two: Be accepted to pursue a specific degree program offered by the Department of Music. This normally occurs by the end of the second semester of music study; in unusual circumstances, exceptions may be made to extend the time of acceptance upon approval of the music faculty.

University admission requirements for the major are:

- Complete a minimum of 32 earned semester credit hours
- Achieve a minimum cumulative GPA of 2.00 ("C")

Department of Music for admission to a specific degree program in music are:

- Good progress at a sufficient level in the private studio
- A successful performance jury at the end of the first semester of private study
- Completion of Theory I, Aural Skills I, and Class Piano I with a final grade of at least "C"
- Participate in a music ensemble at a capable level of contribution and skill
- For the BA or BM, a letter of recommendation from the student's private studio teacher at Minnesota State Mankato (note that performance standards for the BM are significantly higher than for the BA or BS degrees in music)

Required for All Majors:

- MUS 100 Recital Class (0 credits) according to degree requirements
- MUS 1xx, Ensemble each semester in residence
- MUS 2xx or 3xx, Private Lessons (1-3 credits) according to degree requirements.

For details on these requirements, see the *Undergraduate Music Handbook* or a Department of Music Advisor.

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 Mankato.

Prospective music majors and minors must audition in their major performing area prior to registration.

All student taking private lessons will pay a fee for the lessons each semester.

Students interested in pursuing a major in music must contact the department for an advising appointment and audition.

MUS	231	Music Theory III (2)
MUS	232	Music Theory IV (2)
MUS	233	Aural Skills III (1-2)
MUS	234	Aural Skills IV (1-2)
MUS	299	Sophomore Review (0)
MUS	321W	Music Literature and History I (3)
MUS	322W	Music Literature and History II (3)
MUS	328	Music of the World (3)
MUS	434	Form and Analysis (3)

Major Restricted Electives

Music Tech (choose 2 credits)

MUS	181	Music Technology for Music Industry (2)
MUS	245	Music Tech for Music Educators (2)

Pop Music USA (choose 3 credits)

MUS	325	Pop Music USA 1 (Music Industry) (3)
MUS	326	Pop Music USA 2 (Music Industry) (3)

Private Lessons, Lower Division (choose 4 credits)

All lessons must be on same instrument/voice.

MUS	251	Private Voice I (1-3)
MUS	261	Private Piano I (1-3)
MUS	262	Private Harpsichord I (1-3)
MUS	265	Private Organ I (1-3)
MUS	271	Private Brass Instruments (1-3)
MUS	272	Private Reed and Other Instruments (1-3)
MUS	273	Private String Instruments (1-3)
MUS	274	Private Percussion I (1-3)
MUS	275	Private Classical Guitar I (1-3)
MUS	278	Private Instrument I (1-3)

Private Lessons, Upper Division (choose 2 credits)

Must be on same instrument/voice as lower division lessons.

MUS	351	Private Voice II (1-3)
MUS	361	Private Piano II (1-3)
MUS	362	Private Harpsichord II (1-3)
MUS	365	Private Organ II (1-3)
MUS	369	Piano Accompanying (1)
MUS	371	Private Brass (1-3)
MUS	372	Private Reed and Other Instruments (1-3)
MUS	373	Private String Instruments (1-3)
MUS	374	Private Percussion II (1-3)
MUS	375	Private Classical Guitar II (1-3)
MUS	378	Private Instrument II (1-3)

Large Ensemble (lower division) (choose 4 credits)

Choose ensemble according to performance area. May be repeated for credit.

MUS	101	Concert Choir (0-1)
MUS	102	University Chorale (0-1)
MUS	111	Wind Ensemble (0-1)
MUS	112	Symphonic Band (0-1)
MUS	116	University Orchestra (0-1)

Large Ensemble (upper division) (choose 4 credits)

Choose Ensemble according to performance area. May be repeated for credit

MUS	301	Concert Choir (0-1)
MUS	302	University Chorale (0-1)
MUS	311	Wind Ensemble (0-1)
MUS	312	Symphonic Band (0-1)
MUS	316	University Orchestra (0-1)

Secondary Ensemble (choose 4 credits)

Choose Ensemble according to performance area. May be repeated for credit.

MUS	103	Chamber Singers (0-1)
MUS	104	Opera (0-2)
MUS	106	Vocal Jazz Ensemble (0-1)
MUS	113	Maverick Athletic Bands (1)
MUS	114	Drum Corp (1)
MUS	115	Jazz Ensemble (0-1)
MUS	116	University Orchestra (0-1)
MUS	118	Jazz Combo (0-1)
MUS	119	Ensemble (0-1)
MUS	303	Chamber Singers (0-1)
MUS	304	Opera (0-2)

MUSIC BA

Degree completion = 120 credits

Major Common Core

MUS	131	Music Theory I (2)
MUS	132	Music Theory II (2)
MUS	133	Aural Skills I (2)
MUS	134	Aural Skills II (2)
MUS	160	Class Piano I (1)
MUS	161	Class Piano II (1)
MUS	162	Advance Class Piano Proficiency (0)

MUS 306	Vocal Jazz Ensemble (1)
MUS 307	Opera Workshop (2)
MUS 308	Maverick Men's Chorus (0-1)
MUS 315	Jazz Ensemble (0-1)
MUS 316	University Orchestra (0-1)
MUS 318	Jazz Combo (0-1)
MUS 319	Ensemble (0-1)
<u>Capstone</u> (choose 1-4 credits) (choose one)	
MUS 495	Senior Project (1-4)
MUS 496	Senior Recital (0-1)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits-take one series)

Required Minor. None.

MUSIC B.MUS in Performance (Option: Voice)**Required General Education**

Pop Music (choose 3 credits)

MUS 125 Pop Music USA: Jazz to Country to Blues (3)

MUS 126 Pop Music USA: R & B to MTV (3)

Concert Choir (choose 3 credits: 3 semesters)

MUS 101 Concert Choir (0-1)

(choose 1 Language)

French

FREN 101 Elementary French I (5)

FREN 102 Elementary French II (5)

German

GER 101 Elementary German I (4)

GER 102 Elementary German II (4)

Norwegian

SCAN 101 Elementary Norwegian I (4)

SCAN 102 Elementary Norwegian II (4)

Spanish

SPAN 101 Elementary Spanish I (4)

SPAN 102 Elementary Spanish II (4)

Swedish

SCAN 111 Elementary Swedish I (4)

SCAN 112 Elementary Swedish II (4)

Major Common Core

MUS 131 Music Theory I (2)

MUS 132 Music Theory II (2)

MUS 133 Aural Skills I (2)

MUS 134 Aural Skills II (2)

MUS 162 Advance Class Piano Proficiency (0)

MUS 181 Music Technology for Music Industry (2)

MUS 201 Introduction to Conducting (2)

MUS 231 Music Theory III (2)

MUS 232 Music Theory IV (2)

MUS 233 Aural Skills III (1-2)

MUS 234 Aural Skills IV (1-2)

MUS 299 Sophomore Review (0)

MUS 321W Music Literature and History I (3)

MUS 322W Music Literature and History II (3)

MUS 434 Form and Analysis (3)

Recital Class (choose 0 credits - 8 semesters)

MUS 100 Recital Class (0)

Major Restricted Electives

Upper Level Music (choose 4 credits)

MUS 325 Pop Music USA 1 (Music Industry) (3)

MUS 326 Pop Music USA 2 (Music Industry) (3)

MUS 401 Choral Musicianship I (3)

MUS 402 Choral Musicianship II (3)

MUS 411 Instrument Musicianship I (3)

MUS 412 Instrument Musicianship II (3)

MUS 420 European Music Travel Tour (3)

MUS 422	Music of the Renaissance (3)
MUS 423	Music of the Baroque Era (3)
MUS 424	Music of the Classic Period (3)
MUS 425	Music of the 19th Century (3)
MUS 426	Music of the Modern Era (3)
MUS 431	Composition (1-3)
MUS 432	Contemporary Theory (3)
MUS 433	Contrapuntal Techniques (3)
MUS 435	Orchestration (3)

Major Emphasis: Voice

MUS 101 Concert Choir (0-1)

MUS 451 Vocal Pedagogy and Literature (3)

MUS 455 Diction for Singers (2)

MUS 459 The Art Song (2)

MUS 496 Senior Recital (0-1)

Lessons--Upper Division (choose 12 credits)

MUS 351 Private Voice II (1-3)

Voice Lessons, Lower Level (choose 8-12 credits)

MUS 251 Private Voice I (1-3)

Ensemble (choose 4 credits)

MUS 301 Concert Choir (0-1)

Piano (choose 4 credits)

MUS 261 Private Piano I (1-3)

Secondary Ensemble (choose 4 credits)

MUS 101 Concert Choir (0-1)

MUS 102 University Chorale (0-1)

MUS 103 Chamber Singers (0-1)

MUS 104 Opera (0-2)

MUS 106 Vocal Jazz Ensemble (0-1)

MUS 302 University Chorale (0-1)

MUS 303 Chamber Singers (0-1)

MUS 304 Opera (0-2)

MUS 306 Vocal Jazz Ensemble (1)

MUS 307 Opera Workshop (2)

MUS 308 Maverick Men's Chorus (0-1)

Required Minor. None.

MUSIC B.MUS in Performance (Option: Piano)**Major Common Core**

MUS 131 Music Theory I (2)

MUS 132 Music Theory II (2)

MUS 133 Aural Skills I (2)

MUS 134 Aural Skills II (2)

MUS 162 Advance Class Piano Proficiency (0)

MUS 181 Music Technology for Music Industry (2)

MUS 201 Introduction to Conducting (2)

MUS 231 Music Theory III (2)

MUS 232 Music Theory IV (2)

MUS 233 Aural Skills III (1-2)

MUS 234 Aural Skills IV (1-2)

MUS 299 Sophomore Review (0)

MUS 321W Music Literature and History I (3)

MUS 322W Music Literature and History II (3)

MUS 434 Form and Analysis (3)

Recital Class (choose 0 credits - 8 semesters)

MUS 100 Recital Class (0)

Pop Music (choose 3 credits) (choose 1 from the following)

MUS 325 Pop Music USA 1 (Music Industry) (3)

MUS 326 Pop Music USA 2 (Music Industry) (3)

Major Restricted Electives

Upper Level Music (choose 9 credits)

MUS 325 Pop Music USA 1 (Music Industry) (3)

MUS 326 Pop Music USA 2 (Music Industry) (3)

MUS 401 Choral Musicianship I (3)

MUS 402 Choral Musicianship II (3)

MUS 411 Instrument Musicianship I (3)

MUSIC CONTINUED

MUS 412	Instrument Musicianship II (3)
MUS 420	European Music Travel Tour (3)
MUS 422	Music of the Renaissance (3)
MUS 423	Music of the Baroque Era (3)
MUS 424	Music of the Classic Period (3)
MUS 425	Music of the 19th Century (3)
MUS 426	Music of the Modern Era (3)
MUS 431	Composition (1-3)
MUS 432	Contemporary Theory (3)
MUS 433	Contrapuntal Techniques (3)
MUS 434	Form and Analysis (3)
MUS 435	Orchestration (3)

Major Emphasis

Piano

MUS 396	Junior Recital (0-1)
MUS 461	Piano Pedagogy (1)
MUS 462	Piano Literature (3)
MUS 496	Senior Recital (0-1)

Lessons--Upper Division (choose 12 credits)

MUS 361	Private Piano II (1-3)
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Ensemble (choose 2 credits)

MUS 101	Concert Choir (0-1)
MUS 102	University Chorale (0-1)
MUS 111	Wind Ensemble (0-1)
MUS 112	Symphonic Band (0-1)
MUS 116	University Orchestra (0-1)

Upper Division Ensemble (choose 2 credits)

MUS 301	Concert Choir (0-1)
MUS 302	University Chorale (0-1)
MUS 311	Wind Ensemble (0-1)
MUS 312	Symphonic Band (0-1)
MUS 316	University Orchestra (0-1)

Ensemble/Accompanying (choose 8 credits)

MUS 101	Concert Choir (0-1)
MUS 102	University Chorale (0-1)
MUS 103	Chamber Singers (0-1)
MUS 104	Opera (0-2)
MUS 106	Vocal Jazz Ensemble (0-1)
MUS 111	Wind Ensemble (0-1)
MUS 112	Symphonic Band (0-1)
MUS 113	Pep Band I (1)
MUS 114	Drum Corp (1)
MUS 115	Jazz Ensemble (0-1)
MUS 116	University Orchestra (0-1)
MUS 117	Theatre Orchestra (1)
MUS 118	Jazz Combo (0-1)
MUS 119	Ensemble (0-1)
MUS 219	Piano Accompanying (1)
MUS 301	Concert Choir (0-1)
MUS 302	University Chorale (0-1)
MUS 303	Chamber Singers (0-1)
MUS 304	Opera (0-2)
MUS 306	Vocal Jazz Ensemble (1)
MUS 307	Opera Workshop (2)
MUS 308	Maverick Men's Chorus (0-1)
MUS 311	Wind Ensemble (0-1)
MUS 312	Symphonic Band (0-1)
MUS 315	Jazz Ensemble (0-1)
MUS 316	University Orchestra (0-1)
MUS 318	Jazz Combo (0-1)
MUS 319	Ensemble (0-1)

Lessons--Lower Division (choose 8-12 credits)

MUS 261	Private Piano I (1-3)
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Required Minor: None.

MUSIC B.MUS in Performance (Option: Instrumental)

Major Common Core

MUS 131	Music Theory I (2)
MUS 132	Music Theory II (2)
MUS 133	Aural Skills I (2)
MUS 134	Aural Skills II (2)
MUS 160	Class Piano I (1)
MUS 161	Class Piano II (1)
MUS 162	Advance Class Piano Proficiency (0)
MUS 181	Music Technology for Music Industry (2)
MUS 201	Introduction to Conducting (2)
MUS 231	Music Theory III (2)
MUS 232	Music Theory IV (2)
MUS 233	Aural Skills III (1-2)
MUS 234	Aural Skills IV (1-2)
MUS 321W	Music Literature and History I (3)
MUS 322W	Music Literature and History II (3)
MUS 434	Form and Analysis (3)

Recital Class (choose 0 credits) (8 semesters)

MUS 100	Recital Class (0)
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Pop Music (choose 3 credits)

MUS 325	Pop Music USA 1 (Music Industry) (3)
MUS 326	Pop Music USA 2 (Music Industry) (3)

Major Restricted Electives

Upper Level Music (choose 9 credits)

MUS 325	Pop Music USA 1 (Music Industry) (3)
MUS 326	Pop Music USA 2 (Music Industry) (3)
MUS 401	Choral Musicianship I (3)
MUS 402	Choral Musicianship II (3)
MUS 411	Instrument Musicianship I (3)
MUS 412	Instrument Musicianship II (3)
MUS 420	European Music Travel Tour (3)
MUS 422	Music of the Renaissance (3)
MUS 423	Music of the Baroque Era (3)
MUS 424	Music of the Classic Period (3)
MUS 425	Music of the 19th Century (3)
MUS 426	Music of the Modern Era (3)
MUS 431	Composition (1-3)
MUS 432	Contemporary Theory (3)
MUS 433	Contrapuntal Techniques (3)
MUS 435	Orchestration (3)

Major Emphasis: Instrumental

MUS 299	Sophomore Review (0)
MUS 379	Instrument Literature & Pedagogy (2)
MUS 496	Senior Recital (0-1)

Ensemble (choose 4 credits) **See advisor**

MUS 111	Wind Ensemble (0-1)
MUS 112	Symphonic Band (0-1)
MUS 115	Jazz Ensemble (0-1)
MUS 116	University Orchestra (0-1)

Upper Level Ensemble (choose 4 credits) **See advisor**

MUS 311	Wind Ensemble (0-1)
MUS 312	Symphonic Band (0-1)
MUS 315	Jazz Ensemble (0-1)
MUS 316	University Orchestra (0-1)

Secondary Ensemble (choose 4 credits) **See advisor**

MUS 101	Concert Choir (0-1)
MUS 102	University Chorale (0-1)
MUS 103	Chamber Singers (0-1)
MUS 104	Opera (0-2)
MUS 106	Vocal Jazz Ensemble (0-1)
MUS 111	Wind Ensemble (0-1)
MUS 112	Symphonic Band (0-1)
MUS 113	Pep Band I (1)
MUS 114	Drum Corp (1)

MUS 115	Jazz Ensemble (0-1)	KSP 202	Technology Integration in the Classroom (2)
MUS 116	University Orchestra (0-1)	KSP 222	Introduction to the Learner and Learning (2)
MUS 117	Theatre Orchestra (1)	KSP 330	Planning, Instruction, and Evaluation in the Classroom (5)
MUS 118	Jazz Combo (0-1)	KSP 440	Creating Learning Environments to Engage Children, Families, and Community (3)
MUS 119	Ensemble (0-1)		
MUS 301	Concert Choir (0-1)	KSP 442	Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms (3)
MUS 302	University Chorale (0-1)		
MUS 303	Chamber Singers (0-1)	KSP 464	Professional Seminar (1)
MUS 304	Opera (0-2)	KSP 476	K-12 Student Teaching (11)
MUS 306	Vocal Jazz Ensemble (1)	MUS 131	Music Theory I (2)
MUS 307	Opera Workshop (2)	MUS 132	Music Theory II (2)
MUS 308	Maverick Men's Chorus (0-1)	MUS 133	Aural Skills I (2)
MUS 311	Wind Ensemble (0-1)	MUS 134	Aural Skills II (2)
MUS 312	Symphonic Band (0-1)	MUS 140	Intro to Music Education (2)
MUS 315	Jazz Ensemble (0-1)	MUS 160	Class Piano I (1)
MUS 316	University Orchestra (0-1)	MUS 161	Class Piano II (1)
MUS 318	Jazz Combo (0-1)	MUS 162	Advance Class Piano Proficiency (0)
MUS 319	Ensemble (0-1)	MUS 175	Class Instruction in Guitar (1)

CHOOSE 1 CLUSTER

Lower Level Private Lessons--All lessons must be on the same instrument.

Brass (choose 8-12 credits)

MUS 271 Private Brass Instruments (1-3)

Woodwind (choose 8-12 credits)

MUS 272 Private Reed and Other Instruments (1-3)

Strings (choose 8-12 credits)

MUS 273 Private String Instruments (1-3)

Percussion (choose 8-12 credits)

MUS 274 Private Percussion I (1-3)

Guitar (choose 8-12 credits)

MUS 275 Private Classical Guitar I (1-3)

CHOOSE 1 CLUSTER

Upper Level Private Lessons--All lessons must be on the same instrument.

Brass (choose 12 credits)

MUS 371 Private Brass (1-3)

Woodwind (choose 12 credits)

MUS 372 Private Reed and Other Instruments (1-3)

Strings (choose 12 credits)

MUS 373 Private String Instruments (1-3)

Percussion (choose 12 credits)

MUS 374 Private Percussion II (1-3)

Guitar (choose 12 credits)

MUS 375 Private Classical Guitar II (1-3)

Required Minor. None.

MUSIC EDUCATION BS, TEACHING

Degree completion = 136 credits

Required for Major (Options)

Students should choose either Vocal/General Music (K-12) or Instrumental/General Music (K-12) as an area of specialization.

MUSIC EDUCATION BS, TEACHING

(Option: Vocal/General Music (K-12))

Required General Education

HLTH 240 Drug Education (3)

KSP 220W Human Relations in a Multicultural Society (3)

MUS 328 Music of the World (3)

Pop Music (choose 3 credits)

MUS 125 Pop Music USA: Jazz to Country to Blues (3)

MUS 126 Pop Music USA: R & B to MTV (3)

Primary Ensemble (choose 2 credits)

2 Semesters; MUS 101 and MUS 102 can be repeated

MUS 101 Concert Choir (0-1)

MUS 102 University Chorale (0-1)

Major Common Core

KSP 202	Technology Integration in the Classroom (2)
KSP 222	Introduction to the Learner and Learning (2)
KSP 330	Planning, Instruction, and Evaluation in the Classroom (5)
KSP 440	Creating Learning Environments to Engage Children, Families, and Community (3)
KSP 442	Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms (3)
KSP 464	Professional Seminar (1)
KSP 476	K-12 Student Teaching (11)
MUS 131	Music Theory I (2)
MUS 132	Music Theory II (2)
MUS 133	Aural Skills I (2)
MUS 134	Aural Skills II (2)
MUS 140	Intro to Music Education (2)
MUS 160	Class Piano I (1)
MUS 161	Class Piano II (1)
MUS 162	Advance Class Piano Proficiency (0)
MUS 175	Class Instruction in Guitar (1)
MUS 201	Introduction to Conducting (2)
MUS 231	Music Theory III (2)
MUS 232	Music Theory IV (2)
MUS 233	Aural Skills III (1)
MUS 234	Aural Skills IV (1)
MUS 235	Jazz Pedagogy and Improvisation (1)
MUS 245	Music Technology for Music Education (2)
MUS 299	Sophomore Review (0)
MUS 341	General Music K-5 (2)
MUS 342	General Music 6-12 (2)
MUS 496	Senior Recital (0-1)
	<u>Recital Class</u> (choose 0 credits)
	7 semesters of Recital Class at 0 credits per semester
MUS 100	Recital Class (0)

Major Restricted Electives

Music History 1 (choose 2-3 credits)

MUS 321W Music Literature and History I (3)

MUS 323 Music Styles before 1820 for the Music Educator (2)

Music History 2 (choose 2-3 credits)

MUS 322W Music Literature and History II (3)

MUS 324 Music Styles after 1820 for the Music Educator (2)

Major Emphasis: Vocal/General K-12 License

MUS 411 Instrument Musicianship I (3)

MUS 412 Instrument Musicianship II (3)

MUS 451 Vocal Pedagogy and Literature (3)

MUS 455 Diction for Singers (2)

Instrumental Techniques (choose 1 credit)

MUS 171 Class Instruction in Brass Instruments (1)

MUS 172 Class Instruction in Woodwinds (1)

MUS 173 Class Instruction in Strings (1)

MUS 174 Class Instruction in Percussion (1)

Primary Ensemble (choose 5 credits)

In addition to 2 credits earned to fill General Education requirements; MUS 101, MUS 102, MUS 301 and MUS 302 can be repeated.

MUS 101 Concert Choir (0-1)

MUS 102 University Chorale (0-1)

MUS 301 Concert Choir (0-1)

MUS 302 University Chorale (0-1)

Secondary Ensemble (choose 4 credits)

All ensembles can be repeated.

MUS 103 Chamber Singers (0-1)

MUS 104 Opera (0-2)

MUS 106 Vocal Jazz Ensemble (0-1)

MUS 303 Chamber Singers (0-1)

MUS 304 Opera (0-2)

MUS 306 Vocal Jazz Ensemble (1)

MUS 307 Opera Workshop (2)

MUS 308 Maverick Men's Chorus (0-1)

Accompanying (choose 2 credits)

MUSIC CONTINUED

1 semester large ensemble accompanying; 1 semester solo/small ensemble accompanying; MUS 219 can be repeated.

MUS 219 Piano Accompanying (1)

CHOOSE 1 CLUSTER

Lessons--Choose Cluster according to Primary Performance Area (9 credits in each cluster); lessons can be repeated.

Voice (choose 4 credits)

MUS 251 Private Voice I (1-3)

(choose 3 credits)

MUS 351 Private Voice II (1-3)

(choose 2 credits)

MUS 261 Private Piano I (1-3)

Piano (choose 4 credits)

MUS 261 Private Piano I (1-3)

(choose 2 credits)

MUS 361 Private Piano II (1-3)

(choose 2 credits)

MUS 251 Private Voice I (1-3)

Guitar (choose 4 credits)

MUS 275 Private Classical Guitar I (1-3)

(choose 2 credits)

MUS 375 Private Classical Guitar II (1-3)

(choose 3 credits)

MUS 251 Private Voice I (1-3)

(choose 1-2 credits)

MUS 261 Private Piano I (1-3)

MUSIC EDUCATION BS. TEACHING

(Option: INSTRUMENTAL (BAND/ORCH) AND CLASSROOM MUSIC, K-12)

Required General Education

HLTH 240 Drug Education (3)

KSP 220W Human Relations in a Multicultural Society (3)

MUS 328 Music of the World (3)

Pop Music (choose 3 credits)

MUS 125 Pop Music USA: Jazz to Country to Blues (3)

MUS 126 Pop Music USA: R & B to MTV (3)

Primary Ensemble (choose 2 credits)

Please see your advisor if you have questions; ensembles can be repeated.

MUS 111 Wind Ensemble (0-1)

MUS 112 Symphonic Band (0-1)

MUS 116 University Orchestra (0-1)

Major Common Core

KSP 202 Technology Integration in the Classroom (2)

KSP 222 Introduction to the Learner and Learning (2)

KSP 330 Planning, Instruction, and Evaluation in the Classroom (5)

KSP 440 Creating Learning Environments to Engage Children, Families, and Community (3)

KSP 442 Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms (3)

KSP 464 Professional Seminar (1)

KSP 476 K-12 Student Teaching (11)

MUS 131 Music Theory I (2)

MUS 132 Music Theory II (2)

MUS 133 Aural Skills I (2)

MUS 134 Aural Skills II (2)

MUS 140 Intro to Music Education (2)

MUS 160 Class Piano I (1)

MUS 161 Class Piano II (1)

MUS 162 Advance Class Piano Proficiency (0)

MUS 175 Class Instruction in Guitar (1)

MUS 201 Introduction to Conducting (2)

MUS 231 Music Theory III (2)

MUS 232 Music Theory IV (2)

MUS 233 Aural Skills III (1)

MUS 234 Aural Skills IV (1)

MUS 235 Jazz Pedagogy and Improvisation (1)

MUS 245 Music Technology for Music Education (2)

MUS 299 Sophomore Review (0)

MUS 341 General Music K-5 (2)

MUS 342 General Music 6-12 (2)

MUS 496 Senior Recital (0-1)

Major Restricted Electives

Music History 1 (choose 2-3 credits)

MUS 321W Music Literature and History I (3)

MUS 323 Music before 1820 for Music Educators (2)

Music History 2 (choose 2-3 credits)

MUS 322W Music Literature and History II (3)

MUS 324 Music after 1820 for Music Educators (2)

Recital Class (choose 0 credits)

7 semesters of Recital Class at 0 credits per semester.

MUS 100 Recital Class (0)

Major Emphasis: Instrumental/General K-12 License

MUS 151 Class Instruction in Singing I (1)

MUS 171 Class Instruction in Brass Instruments (1)

MUS 172 Class Instruction in Woodwinds (1)

MUS 173 Class Instruction in Strings (1)

MUS 174 Class Instruction in Percussion (1)

MUS 411 Instrument Musicianship I (3)

MUS 412 Instrument Musicianship II (3)

Secondary Private Lessons (choose 4 credits)

It is recommended that one secondary instrument be studied for at least two semesters; lessons can be repeated for credit.

MUS 271 Private Brass Instruments (1-3)

MUS 272 Private Reed and Other Instruments (1-3)

MUS 273 Private String Instruments (1-3)

MUS 274 Private Percussion I (1-3)

MUS 275 Private Classical Guitar I (1-3)

Primary Ensemble: Lower Division (choose 2 credits)

In addition to ensembles fulfilling General Education requirements; ensembles can be repeated.

MUS 111 Wind Ensemble (0-1)

MUS 112 Symphonic Band (0-1)

MUS 116 University Orchestra (0-1)

Secondary Ensemble (choose 4 credits)

Ensembles can be repeated for credit.

MUS 111 Wind Ensemble (0-1)

MUS 112 Symphonic Band (0-1)

MUS 113 Pep Band I (1)

MUS 114 Drum Corp (1)

MUS 115 Jazz Ensemble (0-1)

MUS 116 University Orchestra (0-1)

MUS 117 Theatre Orchestra (1)

MUS 118 Jazz Combo (0-1)

MUS 119 Ensemble (0-1)

MUS 311 Wind Ensemble (0-1)

MUS 312 Symphonic Band (0-1)

MUS 315 Jazz Ensemble (0-1)

MUS 316 University Orchestra (0-1)

MUS 318 Jazz Combo (0-1)

MUS 319 Ensemble (0-1)

Primary Ensemble: Upper Division (choose 3 credits)

Ensembles can be repeated for credit.

MUS 311 Wind Ensemble (0-1)

MUS 312 Symphonic Band (0-1)

MUS 316 University Orchestra (0-1)

CHOOSE 1 CLUSTER

Private Lessons--Primary Instrument; each cluster totals 7 credits.

Keyboard (choose 4 credits)

MUS 261 Private Piano I (1-3)

(choose 3 credits)

MUS 361 Private Piano II (1-3)

Brass

All lessons must be on the same instrument.

(choose 4 credits)

MUS 271 Private Brass Instruments (1-3)

(choose 3 credits)

MUS 371 Private Brass (1-3)

Woodwinds

All lessons must be on the same instrument.

(choose 4 credits)

MUS 272 Private Reed and Other Instruments (1-3)

(choose 3 credits)

MUS 372 Private Reed and Other Instruments (1-3)

Strings

All lessons must be on the same instrument.

(choose 4 credits)

MUS 273 Private String Instruments (1-3)

(choose 3 credits)

MUS 373 Private String Instruments (1-3)

Percussion

(choose 4 credits)

MUS 274 Private Percussion I (1-3)

(choose 3 credits)

MUS 374 Private Percussion II (1-3)

Guitar

(choose 4 credits)

MUS 275 Private Classical Guitar I (1-3)

(choose 3 credits)

MUS 375 Private Classical Guitar II (1-3)

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.**MUSIC INDUSTRY BS**

Degree completion = 120 credits

Required General Education

MUS 120 Introduction to Music (3)

Music Ensembles (choose 2 credits)

2 semesters of participation; Singers participate in choral ensembles. Percussion, wind, and string instrument players participate in bands or orchestra. Guitar and piano players should consult their advisors.

MUS 101 Concert Choir (1)

MUS 102 University Chorale (1)

MUS 103 Chamber Singers (1)

MUS 104 Opera (2)

MUS 106 Vocal Jazz Ensemble (1)

MUS 111 Wind Ensemble (1)

MUS 112 Symphonic Band (1)

MUS 115 Jazz Ensemble (1)

MUS 116 University Orchestra (1)

MUS 117 Theatre Orchestra (1)

MUS 118 Jazz Combo (1)

Major Common Core

ENG 272W Business Communication (4)

MUS 131 Music Theory I (2)

MUS 132 Music Theory II (2)

MUS 133 Aural Skills I (2)

MUS 134 Aural Skills II (2)

MUS 181 Music Technology for Music Industry (2)

MUS 185 Foundations in Music Industry (2)

MUS 284 Social Media in Music Industry (2)

MUS 285 Critical Listening in Music Industry 1 (1)

MUS 286 Critical Listening in Music Industry 2 (1)

MUS 298 Sophomore Review for Music Industry (0)

MUS 325 Pop Music USA 1 (Music Industry) (3)

MUS 381 Music Management and Concert Production (3)

MUS 450 Projects in Music Industry (3)

MUS 481 Digital Audio Theory and Techniques (2)

MUS 482 Music Promotion (3)

MUS 483 Music in the Marketplace (3)

Activity in Music Industry (choose 2 credits) 2 semesters

MUS 282 Activity in Music Industry (1)

Practicum in Music Industry (choose 2 credits) 2 semesters

MUS 382 Practicum in Music Industry (1)

Recital Class (choose 0 credits) Seven Semesters of Recital Class are required

MUS 100 Recital Class (0)

Internship (choose 5-16 credits)

5 credits minimum; additional credits may be needed to meet 40 credit minimum of upper division credits. See music advisor for more information.

MUS 497 Internship (1-16)

Major Restricted Electives

Private Lessons (choose 4 credits)

4 semesters of study of one course number; Requires audition for admission to studio; Please see Department of Music advisor.

MUS 251 Private Voice I (1-3)

MUS 261 Private Piano I (1-3)

MUS 262 Private Harpsichord I (1-3)

MUS 265 Private Organ I (1-3)

MUS 271 Private Brass Instruments (1-3)

MUS 272 Private Reed and Other Instruments (1-3)

MUS 273 Private String Instruments (1-3)

MUS 274 Private Percussion I (1-3)

MUS 275 Private Classical Guitar I (1-3)

MUS 278 Private Instrument I (1-3)

Lower Division Ensembles (choose 2 credits)

2 semesters of participation; Singers participate in choral ensembles. Percussion, wind, and string instrument players participate in bands or orchestra. Guitar and piano players should consult their advisors.

MUS 101 Concert Choir (1)

MUS 102 University Chorale (1)

MUS 103 Chamber Singers (1)

MUS 104 Opera (2)

MUS 106 Vocal Jazz Ensemble (1)

MUS 111 Wind Ensemble (1)

MUS 112 Symphonic Band (1)

MUS 114 Drum Corp (1)

MUS 115 Jazz Ensemble (1)

MUS 116 University Orchestra (1)

MUS 117 Theatre Orchestra (1)

MUS 118 Jazz Combo (1)

MUS 119 Ensemble (1)

Upper Division Ensembles (choose 3 credits)

3 semesters of participation; Singers participate in choral ensembles. Percussion, wind, and string instrument players participate in bands or orchestra. Guitar and piano players should consult their advisors.

MUS 301 Concert Choir (1)

MUS 302 University Chorale (1)

MUS 303 Chamber Singers (1)

MUS 304 Opera (2)

MUS 306 Vocal Jazz Ensemble (1)

MUS 307 Opera Workshop (2)

MUS 308 Maverick Men's Chorus (1)

MUS 311 Wind Ensemble (1)

MUS 312 Symphonic Band (1)

MUS 315 Jazz Ensemble (1)

MUS 316 University Orchestra (1)

MUS 318 Jazz Combo (1)

MUS 319 Ensemble (1)

MUSIC CONTINUED

Minor

Choose one of the following required minors: Business Administration, Business Law, International Business, Marketing, or Mass Media is required for this degree.

MUSIC INDUSTRY BS AUDIO PRODUCTION SPECIALIST

Note: Please see Department of Music Advisor about this degree.

Degree completion = 120 credits

Required General Education

- MUS 120 Introduction to Music (3)
MUS 125 Pop Music USA: Jazz to Country to Blues (3)
Ensembles (upper division) (choose 2 credits) 2 semesters of participation
MUS 301 Concert Choir (1)
MUS 302 University Chorale (1)
MUS 303 Chamber Singers (1)
MUS 306 Vocal Jazz Ensemble (1)
MUS 308 Maverick Men's Chorus (1)
MUS 311 Wind Ensemble (1)
MUS 312 Symphonic Band (1)
MUS 315 Jazz Ensemble (1)
MUS 316 University Orchestra (1)
MUS 318 Jazz Combo (1)

Major Common Core

- MUS 131 Music Theory I (2)
MUS 132 Music Theory II (2)
MUS 133 Aural Skills I (2)
MUS 134 Aural Skills II (2)
MUS 160 Class Piano I (1)
MUS 162 Advance Class Piano Proficiency (0)
MUS 326 Pop Music USA 2 (Music Industry) (3)
MUS 381 Music Management and Concert Production (3)
MUS 382 Practicum in Music Industry (2 sem. @ 1 cr.) (2)
MUS 450 Projects in Music Industry (3)
MUS 482 Music Promotion (3)
MUS 483 Music in the Marketplace (3)
MUS 497 Internship (1-16)

Recital Class (choose 0 credits) 4 semesters

- MUS 100 Recital Class (0)

CHOOSE 1 CLUSTER

Private Lessons (choose 4 credits)

Either 4 semesters of lessons, or 2 semesters of MUS 151 and 2 semesters of MUS 251.

- MUS 271 Private Brass Instruments (1-3)
MUS 272 Private Reed and Other Instruments (1-3)
MUS 273 Private String Instruments (1-3)
MUS 274 Private Percussion I (1-3)
MUS 275 Private Classical Guitar I (1-3)

Class Voice/Lessons (choose 2 credits)

- MUS 151 Class Instruction in Singing I (1)
(choose 2 credits)
MUS 251 Private Voice I (1-3)

Required Minor. Yes. See Advisor.

MUSIC MINOR

Required for Minor (21 credits)

- MUS 120 Introduction to Music (3) **OR**
MUS 125 Pop Music USA: Jazz to Country to Blues (3) **OR**
MUS 126 Pop Music USA: R & B to MTV (3)
MUS 131 Music Theory I (2)
MUS 132 Music Theory II (2)
MUS 133 Aural Skills I (2)
MUS 134 Aural Skills II (2)
MUS 1xx Ensemble (1) (2 semesters at 1 credit)
MUS 2xx Private Lessons (1-3) (2 semesters at 1 credit)
MUS 321W Music Literature and History I (3)
MUS 322W Music Literature and History II (3)

COURSE DESCRIPTIONS

MUS 100 (0) Recital Class

Required for all music majors each semester in residence. May be repeated. P/N only.

MUS 101 (0-1) Concert Choir

Select ensemble which performs on and off campus.

Pre: Audition Required

GE-11

MUS 102 (0-1) University Chorale

Large chorus. Open to all qualified students.

Previous singing experience desirable but not required. No audition.

GE-11

MUS 103 (0-1) 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

GE-11

MUS 104 (0-2) Opera

Solo and ensemble experience specializing in the performance of opera and opera repertoire.

Pre: Audition Required

Fall, Spring

GE-11

MUS 106 (0-1) Vocal Jazz Ensemble

Ensemble specializing in the performance of vocal jazz literature. Admission by audition only.

Fall, Spring

GE-11

MUS 111 (0-1) 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

GE-11

MUS 112 (0-1) Symphonic Band

Open to all students who play a band instrument. No audition required.

GE-11

MUS 113 (1) Maverick Athletic Bands

Open to any qualified student who plays a band instrument. Plays for hockey and basketball games.

Pre: Audition Required

GE-11

MUS 114 (1) Drum Corps

Open to students who play a band instrument.

Pre: Audition required.

Fall

GE-11

MUS 115 (0-1) Jazz Ensemble

Select ensemble which performs music from the jazz repertoire. Audition required.

GE-11

MUS 116 (0-1) University Orchestra

Open to all qualified students who play an orchestral instrument.

Pre: Audition Required

GE-11

MUS 117 (1) Theatre Orchestra

Plays for theatre productions.

Pre: Audition Required

GE-11

MUS 118 (0-1) Jazz Combo

Instruction in a small select jazz combo which demonstrates the student's ability to read and improvise.

Pre: Audition required.

Fall, Spring

GE-11

MUS 119 (0-1) Ensemble

GE-11

MUS 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.

GE-6

MUS 125 (3) Pop Music USA: Jazz to Country to Blues

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.

GE-6, GE-7

Diverse Cultures - Purple

MUS 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 Blues in the 40's, and through to the present, minority groups have had a major influence on the music.

GE-6, GE-7

Diverse Cultures - Purple

MUS 127 (3) Survey of American Popular Music

A survey of commercially successful popular music from roughly 1900 to the present--what was the music? Who were the artists? When was it first heard, and what were the factors that contributed to its success?

Variable

GE-6

MUS 130 (3) Fundamentals of Music

Notation, basic keyboard skills.

MUS 131 (2) Music Theory I

Part I of a four semester sequence in Music Theory focusing on written music notation skills including scales, tonality, key modes, intervals, transposition, chords, cadences, non-harmonic tones and melodic organization.

MUS 132 (2) Music Theory II

Part II of a four semester sequence in Music Theory focusing on written music notation skills including scales, tonality, key, modes, intervals, transposition, chords, cadences, non-harmonic tones and melodic organization.

Pre: MUS 131

MUS 133 (2) Aural Skills I

Part I of the four semester sequence focusing on sight-singing and ear training.

MUS 134 (2) Aural Skills II

Part II of the four semester sequence focusing on sight-singing and ear training.

Pre: MUS 133

MUS 140 (2) Introduction to Music Education

The course provides an opportunity to gain a basic understanding of the nature of professional work in K-12 education. Clinical experiences and classroom observations are included.

Fall

MUS 151 (1) Class Instruction in Singing I

Two semester sequence. Fundamentals of posture, tone production, breathing, diction, and expressiveness.

Fall

MUS 160 (1) Class Piano I

Class instruction in preparation for piano proficiency exam.

MUS 161 (1) Class Piano II

Class instruction in preparation for piano proficiency exam.

MUS 162 (0) Advance Class Piano Proficiency

Required of all music majors. P/N only.

Pre: Class piano or Piano lessons.

MUS 171 (1) Class Instruction in Brass Instruments

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

MUS 172 (1) Class Instruction in Woodwinds

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

MUS 173 (1) Class Instruction in Strings

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments. May be repeated.

MUS 174 (1) Class Instruction in Percussion

Instrumental music education majors only. Emphasis on pedagogical methods and techniques of individual instruments.

MUS 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.

MUS 181 (2) Music Technology for Music Industry

Perspectives on and applications in the use of technology in Music Industry.

Spring

MUS 185 (2) Foundations in Music Industry

A survey of career opportunities in Music Industry.

MUS 186 (3) Introduction to the Music Industry

This online course is designed to provide an introduction of the organizational structures and current practices of the modern music industry with historical perspective for the music business and recording technology student. Required for Undergraduate Certificate in Music Business.

Variable

MUS 201 (2) Introduction to Conducting

This course is a prerequisite for Choral Musicianship (MUS 401 / MUS 402) and Instrumental Musicianship (MUS 411 / MUS 412). The course will develop basic conducting technique, acquaint the student with appropriate terminology, develop interpretive skills and gesture vocabulary.

MUS 219 (1) Piano Accompanying

Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated.

Pre: Consent

MUS 231 (2) Music Theory III

Part III of a four semester sequence in Music Theory focusing on written music notation skills.

Pre: MUS 132

MUS 232 (2) Music Theory IV

Part IV of a four semester sequence in Music Theory focusing on written music notation skills.

Pre: MUS 231

MUS 233 (1-2) Aural Skills III

Part III of the four semester sequence focusing on sight-singing and ear training.

Pre: MUS 134

MUSIC CONTINUED

MUS 234 (1) Aural Skills IV

Part IV of the four semester sequence focusing on sight-singing and ear training.
Pre: MUS 233

MUS 235 (1) Jazz Pedagogy and Improvisation

Introduction to the basic concepts of jazz pedagogy/theory and improvisation used in teaching and playing jazz and contemporary music.
Pre: MUS 131, MUS 133
Fall, Spring

MUS 245 (2) Music Technology for Music Education

Technology applications for the K-12 music educator.
Pre: MUS 131 or permission of instructor.
Spring

MUS 251 (1-3) Private Voice I

Private lessons: 1 credit=1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 261 (1-3) Private Piano I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 262 (1-3) Private Harpsichord I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 265 (1-3) Private Organ I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 271 (1-3) Private Brass Instruments

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 272 (1-3) Private Reed and Other Instruments

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 273 (1-3) Private String Instruments

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 274 (1-3) Private Percussion I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 275 (1-3) Private Classical Guitar I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 278 (1-3) Private Instrument I

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Consent

MUS 282 (1) Activity in Music Industry

This course will allow students to gain experience working in the Music Industry area. This course must be taken for two semesters to receive proper credit.

MUS 284 (2) Social Media in the Music Industry

This course will examine current and potential professional marketing uses of social media in the music industry, including fan-base communication/building, concert promotion, and sales of music and merchandise.
Fall

MUS 285 (1) Critical Listening for Music Industry Professionals 1: Basic Skills

This course trains students to evaluate and critique music compositions, lyrics, and performances from various perspectives, and to increase their ability to function as music business professionals. The first semester focuses on foundational skills.
Pre: MUS 120, MUS 125 or MUS 325, these courses can be taken concurrently with MUS285
Fall

MUS 286 (1) Critical Listening for Music Industry Professionals 2:

Applications

This course trains students to evaluate and critique music and is a continuation of MUS 285. The second semester focuses on developing skills through case studies.
Pre: MUS 285
Spring

MUS 298 (0) Sophomore Review for Music Industry

Successful completion required for admission to upper-division Music Industry courses. Normally taken in the fourth semester of study. See advisor for more information.
Fall, Spring

MUS 299 (0) Sophomore Review

The Sophomore Review is the jury for private lessons at the end of the fourth semester of study. The Sophomore Review must be passed for admission to 300 level music study.
Pre: MUS 2xx, Private Lessons

MUS 301 (0-1) Concert Choir

Select ensemble which performs on and off campus. Audition required.
Pre: MUS 299
Fall, Spring

MUS 302 (0-1) University Chorale

Large Chorus. Open to all qualified students. Previous singing experience desirable but not required. No auditions.
Pre: MUS 299. Permission
Fall, Spring

MUS 303 (0-1) Chamber Singers

Select ensemble of approximately 20 singers who perform works for small ensemble. The group tours the state and region. Auditions required.
Pre: MUS 299
Fall, Spring

MUS 304 (0-2) Opera

Solo and ensemble experience specializing in the performance of opera and opera repertoire. Audition required.
Pre: MUS 299
Fall, Spring

MUS 306 (1) Vocal Jazz Ensemble

Ensemble specializing in the performance of vocal jazz literature. Audition required.
Pre: MUS 299, Sophomore Review. Permission of instructor.
Fall, Spring

MUS 307 (2) Opera Workshop

Performance of solo and ensemble vocal operatic repertoire.
Pre: Consent

MUS 308 (0-1) Maverick Men's Chorus

Ensemble dedicated to performing fine music from a wide repertoire. No audition required.
Pre: MUS 299

MUS 311 (0-1) Wind Ensemble

A select group of wind and percussion players. Audition required.
Pre: MUS 299, Sophomore Review. Permission of instructor
Fall, Spring

MUS 312 (0-1) Symphonic Band

Open to all students who play a band instrument. Audition required.
Pre: MUS 299
Fall, Spring

MUS 315 (0-1) Jazz Ensemble

Select ensemble which performs music from the jazz repertoire. Audition required.
Pre: MUS 299, Sophomore Review. Permission of instructor
Fall, Spring

MUS 316 (0-1) University Orchestra

Ensemble specializing in the performance of orchestral literature. Audition required.
Pre: MUS 299, Sophomore Review. Permission of instructor
Fall, Spring

MUS 318 (0-1) Jazz Combo

Instruction in a small select jazz combo which demonstrates the student's ability to read and improvise. Audition required.
Pre: MUS 299, Permission
Fall, Spring

MUS 319 (0-1) Ensemble

Small select ensembles performing chamber music repertoire. Audition required.
Pre: MUS 299, Sophomore Review. Permission of instructor
Fall, Spring

MUS 321W (3) Music Literature and History I

An overview of music of the western world from ancient Greece to 1800.
Pre: ENG 101, MUS 131
WI, GE-2
Fall

MUS 322W (3) Music Literature and History II

An overview of music of the western world from 1800 to the present.
Pre: ENG 101, MUS 131
WI, GE-2
Spring

MUS 323 (2) Music Styles before 1820 for the Music Educator

Musical styles of Western culture prior to 1820. There is a particular focus on developing the skills for teaching the content in K-12 teaching.
Pre: MUS 231, MUS 232, ENG 101
Fall

MUS 324 (2) Music Styles after 1820 for the Music Educator

Musical styles of Western culture after 1820. There is a particular focus on developing the skills for teaching the content in K-12 teaching.
Pre: MUS 231, MUS 232, ENG 101
Spring

MUS 325 (3) Pop Music USA 1 (Music Industry)

An overview of the origins of American popular music into the 1950's. For Music Industry majors.
Pre: Permission
Fall

MUS 326 (3) Pop Music USA 2 (Music Industry)

An overview of the origins of American popular music from the 1950's to the present. For Music Industry majors.
Pre: Permission
Spring, Summer

MUS 328 (3) Music of the World

Explore the musics of the world and the cultures that they came from. Participation in off-campus musical events (concert/celebration/festival) required.
Variable
GE-6, GE-8
Diverse Cultures - Gold

MUS 329 (3) Women in Music

This course explores the role of women composers, performers, educators and administrators in Western art music.
Diverse Cultures - Purple

MUS 340 (2) Materials and Methods of Teaching Music

Kindergarten and elementary grades. For elementary education majors only.

MUS 341 (2) General Music K-5

Required of all music education majors. Techniques and methods leading to licensure to teach General Music K-5. Music majors only.
Pre: MUS 232

MUS 342 (2) General Music 6-12

Required of all music education majors. Techniques and methods leading to licensure to teach General Music in grades 6-12. Music majors only.
Pre: MUS 131, MUS 132
Variable

MUS 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

MUS 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

MUS 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

MUS 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

MUS 369 (1) Piano Accompanying

Experience in accompanying. Advanced pianists may participate in chamber ensembles. May be repeated.
Pre: Approval of Instructor
Fall, Spring

MUS 371 (1-3) Private Brass

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Upper Level Jury, and consent

MUS 372 (1-3) Private Reed and Other Instruments

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Upper Level Jury, and consent

MUS 373 (1-3) Private String Instruments

Private lessons: 1 credit = 1/2 hour per week, 3 credits = 1 hour per week.
Pre: Upper Level Jury, and consent

MUS 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

MUS 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

MUS 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

MUS 379 (2) Instrument Literature & Pedagogy

Topics to be discussed are methods, literature, and teaching techniques for specific wind, percussion, and stringed instruments.

MUS 381 (3) Music Management and Concert Production

This course is designed to acquaint and give specific knowledge with regards to managing a concert production, working with promoters, finding artists, and creating and negotiating contracts.

MUS 382 (1) Practicum in Music Industry

This course will allow students to gain experience in working in the Music Industry field in a supervisory or administrative role. This course must be taken for two semesters to receive proper credit.

MUS 390 (1-6) Study for Honors

Instruction for students in honors program.
Pre: Honors Program Status

MUSIC CONTINUED

MUS 396 (0-1) Junior Recital

MUS 401 (3) Choral Musicianship I

Choral conducting and the administration of school choral programs.

MUS 402 (3) Choral Musicianship II

A continuation of Choral Musicianship I.
Pre: MUS 401

MUS 411 (3) Instrument Musicianship I

Instrumental conducting and the administration of school band and orchestra programs.

MUS 412 (3) Instrument Musicianship II

A continuation of Instrumental Musicianship I.
Pre: MUS 411

MUS 420 (3) European Music Travel Tour

Learn how to arrange a trip to Europe with a small group: housing, travel to and within Europe, living skills., etc. Class includes a 10-16 day trip to Europe.

MUS 422 (3) Music of the Renaissance

An intensive examination of the music of Western Civilization from 1450-1600.
Pre: MUS 321W

MUS 423 (3) Music of the Baroque Era

An intensive investigation of the music written from 1600-1750.
Pre: MUS 321W

MUS 424 (3) Music of the Classic Period

Music of the age of Haydn, Mozart, and Beethoven.
Pre: MUS 322W

MUS 425 (3) Music of the 19th Century

An intensive study of Romanticism in music.
Pre: MUS 322W

MUS 426 (3) Music of the Modern Era

Music since 1900.
Pre: MUS 322W

MUS 431 (1-3) Composition

An independent study in compositional techniques.
Pre: Consent

MUS 432 (3) Contemporary Theory

Twentieth-century harmonic, melody, and contrapuntal practices.
Pre: MUS 232

MUS 433 (3) Contrapuntal Techniques

Writing and analyzing 2-part, 3-part, and 4-part counterpoint.
Pre: MUS 232

MUS 434 (3) Form and Analysis

Significant musical forms, past and present.
Pre: MUS 232

MUS 435 (3) Orchestration

Writing techniques for instrumental groups of various types.
Pre: MUS 411

MUS 436 (2) Choral Arranging

Arranging music for choral ensembles.

MUS 441 (2) Music in Early Childhood

Learning characteristics, teaching strategies, and materials for ages 2-6.

MUS 450 (3) Project Development in the Music Industry

Class and/or individual projects for music industry majors only.

MUS 451 (3) Vocal Pedagogy and Literature

Principles of applied voice instruction and an overview of vocal literature.

MUS 455 (2) Diction for Singers

Application of the International Phonetic Alphabet to song texts in English, French, Italian, and German.

MUS 459 (2) The Art Song

Accompanied solo vocal repertory, with special emphasis on the 19th and 20th centuries.

MUS 461 (1) Piano Pedagogy

Technical problems in relationship to different styles.

MUS 462 (3) Piano Literature

A survey of literature for the keyboard from the early baroque to the present.

MUS 465 (2) Service Playing

For organists: playing hymns, improvising, conducting from the console, and arranging piano accompaniments for organ.

MUS 466 (1) Organ Pedagogy

Pedagogy and methods for organ.

MUS 467 (3) Organ Literature

Literature from the 15th century to the present day.

MUS 479 (2) Instrument Repair and Maintenance

Basic techniques.

MUS 481 (2) Digital Audio Theory and Techniques

This course will allow students to gain experience working in the Music Industry area.

MUS 482 (3) Music Promotion

This course is designed to acquaint the student with the areas of promoting and marketing of themselves, someone else as a performer, and their company.

MUS 483 (3) Music in the Marketplace

This course is interdisciplinary in nature and designed to give students an overview of many aspects of the Music Industry including music publishing, copyright, public relations, audience development, financial management, fundraising, donor development, and grant writing.

MUS 484 (2) Legal Aspects of the Music Industry

This class will cover the legal systems, legal reasoning statutes and contracts that impact the music industry. Emphasis will be on copyright, publishing and recording agreements.

Pre: MUS 298

Spring

MUS 485 (1-4) Selected Topics

MUS 491 (1) In-Service

MUS 494 (1-4) Workshop

MUS 495 (1-4) Senior Project

Capstone experience for the BA in Music. The Senior Project may be a composition, a major paper, or a performance. Work on the Senior Project is coordinated with the student's academic advisor.

Pre: Permission of Instructor

MUS 496 (0-1) Senior Recital

Required of Bachelor of Music majors.

MUS 497 (1-16) Internship

MUS 499 (1-4) Independent Study

Nonprofit Leadership

College of Social and Behavioral Science
113 Armstrong Hall • 507-389-1561

Program Coordinator: Keith Luebke, 507-389-5396

The undergraduate **Nonprofit Leadership Certificate** is a cooperative educational program between the College of Social and Behavioral Science and the College of Allied Health and Nursing. Within these two colleges five departments have a leadership role: Gender and Women's Studies, Recreation, Parks and Leisure Services; Sociology and Corrections; Social Work; and the Urban and Regional Studies Institute.

This 18-credit certificate is specifically designed to respond to the employment needs and opportunities within one of the fastest growing sectors of the United States economy. The nonprofit leadership certificate is a multidisciplinary program for undergraduate students and nonprofit practitioners interested in gaining knowledge and skills for success and advancement in nonprofit leadership. The certificate is designed to address the following entry-level nonprofit competencies:

- Communication skills;
- Computer/technology literacy skills;
- Historical and philosophical foundations in nonprofit leadership;
- Nonprofit marketing;
- Public policy;
- Fundraising principles and practices;
- Human resource development and nonprofit management; and
- Program planning

These competencies are achieved through the following program requirements.

NONPROFIT LEADERSHIP CERTIFICATE

Major Common Core

NPL 273	Introduction to Nonprofit Sector (3)
NPL 473	Advanced Workshop in Nonprofit Leadership (3)

Major Restricted Electives

Program Planning and Evaluation (choose 3 credits)

GWS 330	Feminist Research and Action (4)
RPLS 376	Program Planning in Rec., Parks, and Leisure Services (3)
SOC 466	Program Planning (3)
SOWK 469	Applied Social Work Research (3)
URBS 413	Urban Program Evaluation (3)

Financial Management and Development (choose 3 credits)

NPL 486	Fundraising for Nonprofits (3)
NPL 488	Financial Management for Nonprofits (3)
RPLS 465	Event Management (3)
URBS 453	Grants Administration (3)

Program Administration (choose 3 credits)

ART 434	Arts Administration (3)
RPLS 473	Administration of Leisure Time Programs (3)
SOC 417	Program Administration (3)
URBS 230	Community Leadership (3)
URBS 230W	Community Leadership (3)

Internship (choose 3 credits)

GWS 498	Internship: Community (1-8)
RPLS 497	Internship (3)
SOC 497	Internship: Sociology (1-12)
SOWK 497	Internship (1-10)
URBS 497	Internship (1-12)

Internship Experience

The student desiring a certificate is required to successfully complete a three (3) credit internship in a qualifying not-for-profit organization. The internship will be administered through one of the five sponsoring departments.

NONPROFIT LEADERSHIP MINOR

Minor Common Core

NPL 273	Introduction to Nonprofit Sector (3)
NPL 473	Advanced Workshop in Nonprofit Leadership (3)

Electives

Students choose one course from each of the three following categories and one additional course of their choice to complete the 21 credits requirement of this minor.

Program Planning and Evaluation (choose 3-6 credits)

GWS 330	Feminist Research and Action (4)
RPLS 376	Program Planning in Rec., Parks, and Leisure Services (3)
SOC 466	Program Planning (3)
SOWK 469	Applied Social Work Research (3)
URBS 413	Urban Program Evaluation (3)

Program Administration (choose 3-6 credits)

ART 434	Arts Administration (3)
RPLS 473	Administration of Leisure Time Programs (3)
SOC 417	Program Administration (3)
URBS 230	Community Leadership (3)
URBS 230W	Community Leadership (3)

Financial Management and Development (choose 3-6 credits)

NPL 486	Fundraising for Nonprofits (3)
NPL 488	Financial Management for Nonprofits (3)
RPLS 465	Event Management (3)
URBS 453	Grants Administration (3)

Internship (choose 3 credits) with a nonprofit organization

ART 497	Internship (1-6)
GWS 498	Internship: Community (1-8)
RPLS 497	Internship (3)
SOC 497	Internship: Sociology (1-12)
SOWK 497	Internship (1-10)
URBS 497	Internship (1-12)

COURSE DESCRIPTIONS

NPL 273 (3) Introduction to the Nonprofit Sector

Designed as an introduction to the nonprofit sector, this course provides the foundation for students working toward a certificate in Nonprofit Leadership. This workshop addresses the historical and philosophical foundations in nonprofit leadership as well as exploring key leadership issues.
GE-9

NPL 473 (3) Advanced Workshop in Nonprofit Leadership

Designed as the sequel to NPL 273, this course addresses managing operations, developing and managing financial services, and managing people. This course will include a Service-Learning component.

NPL 486 (3) Fundraising for Nonprofits

Designed as an overview to fundraising and development for nonprofit organizations, this course addresses the development of a fundraising plan and attracting donors. There will be an emphasis on organizational outreach using both traditional and new media.
Variable

NPL 488 (3) Financial Management for Nonprofits

Designed as an overview of financial management for nonprofit organizations, this course addresses the integration of mission-driven planning and financial management with an emphasis on tax exemption, accounting systems, financial statements, budgets, and regulatory reporting.
Variable

Norwegian

College of Arts and Humanities
Department of World Languages and Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Please go to Scandinavian Studies to see course descriptions.

SCAN 101	Elementary Norwegian I (4)
SCAN 102	Elementary Norwegian II (4)
SCAN 292	Intermediate Norwegian I (1-4)
SCAN 293	Intermediate Norwegian II (1-4)

NURSING

Nursing

College of Allied Health & Nursing
School of Nursing
360 Wissink Hall • 507-389-6022
Website: <http://ahn.mnsu.edu/nursing/>

Chair: Julie Hebenstreit

Faculty: Kristen Abbott-Anderson, Sue Ellen Bell, Rhonda Cornell, Barbara Dahlen, Sandra Eggenberger, Tai Gilbert, Kelly Krumwiede, Norma Krumwiede, Nancyruth Leibold, Nancy McLoone, Nancy Miller, Linda Rossow, Hans-Peter de Ruiter, Colleen Royle, Laura Schwarz, Nicole Schmitz, Marilyn Swan, Debra Topham, Stacey Van Gelderen, Diane Witt, Patricia Young

Pre-Nursing & RN Baccalaureate Student Advisor: Kasi Johnson

Accreditation. The program is approved by the Minnesota Board of Nursing, the Commission on Collegiate Nursing Education (CCNE). Inquiries can be made by contacting, CCNE, One Dupont Circle NW, Suite 530, Washington, DC 20036.

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.

Graduates of the program are prepared 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 nurse and licensure as school nurses in Minnesota.

POLICIES/INFORMATION FOR MAJOR BASIC NURSING PROGRAM

Admission to Major, Basic Nursing Program. Application for admission to the School of Nursing is a separate process and in addition to being admitted to the University. Requirements for application to the nursing major are:

1. completion of at least 30 semester credits
2. a minimum career grade point average of 2.8 on a 4.0 scale
3. minimum grade of “C” in all required prerequisite and support courses

All prerequisite and support courses must be taken for a letter grade; P/N is not acceptable. A pre-nursing student may repeat a prerequisite class for admission to the School of Nursing once and only once for the purpose of improving a “C” or lower grade.

Students in the applicant pool are rank ordered according to a pre-nursing GPA figured using grades earned in English Composition, Introduction to Cultural Geography, Human Anatomy, Human Physiology, Chemistry of Life Processes, Courage, Caring, and Teambuilding, Elementary Statistics, and Human Development. All eight of these courses must be completed at the time of application.

Students are considered for admission into program based on GPA for the eight core prerequisite courses as well as composite score on the Evolve Reach Admission Assessment Exam. The Evolve Reach Admission Assessment Exam includes math, grammar, reading comprehension, vocabulary, anatomy & physiology, and chemistry and must be completed at the time of application.

Applicants must also successfully complete the following support courses prior to admission into the nursing program: Microbiology, Pathophysiology for Healthcare Professionals, Pharmacology for Healthcare Professionals, Relationship-based Care in Nursing Practice, Nutrition for Allied Health Professionals, and Psychology. A grade of “C” or better must be achieved in these courses for admission.

In addition to the above criteria, an interview may be required in the application process.

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 “major” courses must be taken for a letter grade; P/N is not acceptable. A grade of “C” must be achieved.

The School of Nursing utilizes a variety of health-care agencies for students’ clinical experiences including the Twin Cities. 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 Minnesota State Mankato. Basic Nursing Program 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; health insurance, malpractice insurance coverage, and CPR certification. In the case of accidental exposure to blood and body fluids, students are responsible for testing and follow-up care costs.

GENERAL EDUCATION REQUIREMENTS FOR BASIC NURSING PROGRAM

Students in the Basic Nursing Program are required to complete 40 credits of General Education courses in 11 Goal Areas for graduation.

NURSING BS

Degree completion = 120 credits

Required General Education

BIOL	270	Microbiology (4)
CHEM	111	Chemistry of Life Process Part II (Organic & Biochemistry) (5)
ENG	101	Composition (4)
GEOG	103	Introductory Cultural Geography (3)
KSP	235	Human Development (3)
NURS	101W	Courage, Caring, and Team Building (3)
PSYC	101	Introduction to Psychological Science (4)
STAT	154	Elementary Statistics (3)

Pre-requisite to the Major

BIOL	220	Human Anatomy (4)
BIOL	330	Principles of Human Physiology (4)
FCS	242	Nutrition for Healthcare Professionals (3)
NURS	282	Pathophysiology for Healthcare Professionals (3)
NURS	284	Pharmacology for Healthcare Professionals (3)
NURS	286	Relationship-based Care in Nursing Practice (3)

Major Emphasis

NURS	333	Professional Nursing (3)
NURS	334	Physiologic Integrity I (4)
NURS	335	Family and Societal Nursing Inquiry (3)
NURS	336	Assessment and Nursing Procedures (5)
NURS	363	Critical Inquiry in Nursing (2)
NURS	364	Physiologic Integrity II (4)
NURS	365	Nursing Care of Families in Transition I (7)
NURS	366	Quality, Safety, and Informatics in Nursing Practice (3)
NURS	433	Community Oriented Nursing Inquiry (4)
NURS	434	Physiologic Integrity III (4)
NURS	435	Nursing Care of Families in Transition II (3)
NURS	436	Psychosocial Integrity (5)
NURS	463	Nursing Leadership and Management (3)
NURS	464	Physiologic Integrity IV (3)
NURS	465	Nursing Care of Families in Crisis (2)
NURS	466	Professional Role Integration (4)

RN BACCALAUREATE COMPLETION

Pre-requisites to the Major

Transfer Credits: In accordance with the statewide MN Articulation Agreement, 30 semester nursing credits and 30 semester non-nursing credits are transferred for RNs.

Admission to RN Baccalaureate Completion Program. Requirements for admission to the RN Baccalaureate Completion Program are:

1. Proof of active unrestricted RN license,
2. Completion of at least 30 college semester credits,
3. A minimum career grade point average (GPA) of 2.8 on a 4.0 scale,
4. Minimum grade of "C" in all previous courses,
5. College Statistics Course.

Other requirements:

1. Completion of RN Baccalaureate Completion Program Application
2. Completion of Student Health Form
3. CPR certification
4. Health insurance coverage

Students must be admitted into the School of Nursing prior to taking any nursing courses. RNs accepted during the fall and spring semester. The application for RN Baccalaureate Completion Program admission may be obtained from the School of Nursing website at <http://ahn.mnsu.edu/nursing>.

Major Common Core

NURS	320	Critical Inquiry and Evidence-based Practice for RNs (4)
NURS	362	Family and Societal Nursing for RNs (4)
NURS	382	Provider of Care for RNs (4)
NURS	402	Psychosocial and Interprofessional Communication for RNs (4)
NURS	412	Leadership and Management Principles for RNs (4)
NURS	420	Informatics, Quality, and Safety in Nursing Practice for RNs (4)
NURS	482	Provider of Care II for RNs (6)

Major Unrestricted Electives

None are required. May be taken to earn additional credits.

NURS	300	Transition into Professional Nursing Practice for RNs (3)
NURS	342	Gerontological Nursing for RN's (4)
NURS	352	Altered Human Functioning for RNs (3)
NURS	401	Cultural Immersion in Nursing Practice for RNs (3)
NURS	452	Advanced Health Assessment for RNs (3)

LPN OPTION

The LPN option for completing the BS Degree in Nursing is available only with a sufficient number of applications. Please call the School of Nursing for specific information.

Required Minor: None.

COURSE DESCRIPTIONS

NURS 101W (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 Minnesota State Mankato 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. Variable
WI, GE-11

NURS 282 (3) Pathophysiology for Healthcare Professionals

A holistic perspective of pathophysiologic processes and their impact on body systems and overall human functioning. Focuses on the risk factors, pathophysiology and clinical manifestations of physiologic disease processes in humans. Pre: BIOL 220, BIOL 330
Fall, Spring

NURS 284 (3) Pharmacology for Healthcare Professionals

Introduction to basic pharmacologic concepts with an emphasis on implications of drug therapy. Pre: BIOL 220, BIOL 330, CHEM 111
Coreq: BIOL 270
Fall, Spring

NURS 286 (3) Relationship-Based Care in Nursing Practice

Provides an introduction to the profession of nursing and explores relationship-based care in nursing practice. Provides an overview of concepts related to establishing caring and healing environments, developing therapeutic and professional relationships, and promoting patient and family-centered care. Fall, Spring, Summer

NURS 300 (3) Transition into Professional Nursing Practice for RNs

Introduces fundamental professional nursing concepts: roles of professional nurse and the interprofessional team, nursing's impact on the delivery of healthcare, and accountability for behaviors. Theoretical perspectives on professional nursing and the concepts of lifelong learning, professional development and self-renewal. Variable

NURS 320 (4) Critical Inquiry and Evidence-based Practice for RNs

Introduction to fundamental theories, concepts, evidence, and competencies pertaining to scientific inquiry, development of nursing knowledge, evidence-based and informed practice, and research utilization in nursing practice. Pre: RN Licensure, completion of general education requirement. Fall, Spring, Summer

NURS 333 (3) Professional Nursing

Introduces concepts fundamental to professional nursing: roles of professional nurse and interprofessional team members, regulatory guidelines, standards of practice, therapeutic communication, and cultural sensitivity. Theoretical perspectives on professional nursing and the concepts of persons, health and environment are introduced.
Fall, Spring

NURS 334 (4) Physiologic Integrity I

Focuses on global health concerns and related health promotion and prevention and early detection of alterations in physiological integrity. Includes didactic, simulation, and experiential learning components.
Fall, Spring

NURS 335 (3) Family and Societal Nursing Inquiry

Critical inquiry into the nursing care of family and society in the context of diverse cultures. Explores concepts related to family and society as clients, the family and societal health experience, and nursing strategies to foster family and societal care.
Fall, Spring

NURS 336 (5) Assessment and Nursing Procedures

A focus on assessment of the healthy family and the relationship of health assessment to prevention and early detection of disease, incorporating the processes of interviewing, history-taking, and physical assessment. A laboratory component integrating nursing skills and procedures is included.
Fall, Spring

NURS 342 (4) Gerontological Nursing for RNs

Examines society and aging, focusing on the political, social, economic, ethical and moral issues that have implications for an aging society and on the nurse's role in assisting older adults in realizing their potential for continued growth and better health.
Fall, Spring, Summer

NURS 352 (3) Altered Human Functioning for RNs

Explores pathophysiology concepts to enhance the RN student's understanding of illness and health. Identifies rational for clinical judgment and therapeutic intervention in disease conditions. Analyzes psychosocial and family concepts that emerge with pathophysiologic alterations.
Fall, Spring

NURS 362 (4) Family and Societal Nursing for RNs

Examination of family level approaches that promote health while exploring concepts of family as client, family health experience, and nurse-family relationships. Nursing strategies to enhance family level care during acute, chronic and critical illnesses are analyzed.
Pre: RN Licensure
Fall, Spring, Summer

NURS 363 (2) Critical Inquiry in Nursing

Introduction to fundamental theories, concepts, evidence, and competencies pertaining to scientific inquiry, development of nursing knowledge, evidence-based and informed practice, and research utilization in nursing practice.
Fall, Spring

NURS 364 (4) Physiologic Integrity II

Focuses on nursing management of acute alterations in physiological integrity. Includes didactic, simulation, and experiential learning components.
Pre: NURS 333, NURS 334, NURS 335, NURS 336
Fall, Spring

NURS 365 (7) Nursing Care of Families in Transition I

Focuses on the critical inquiry of the physiological and psychosocial changes occurring with families during the childbearing/childrearing period. Includes didactic and experiential learning designed to promote family centered nursing care during the childbearing/childrearing period.
Pre: NURS 333, NURS 334, NURS 335, NURS 336
Fall, Spring

NURS 366 (3) Quality, Safety, and Informatics in Nursing Practice

Focus on identification, implementation, and evaluation of patient/family quality and safety measures. Includes quality movement history and evolution, current quality of care issues, research and innovations, intervention strategies, and instruments; with an analysis of health care quality management system models.
Fall, Spring

NURS 382 (4) Provider of Care I for RNs

Explores the nurse's role in interacting with and providing care to families of diverse religious, ethnic and cultural backgrounds across the lifespan. Examines spirituality and the integration of complementary and alternative therapies with conventional practices to provide holistic care.
Pre: RN Licensure
Fall, Spring

NURS 401 (3) Cultural Immersion in Nursing Practice for RNs

An experiential immersion into the healthcare needs of the client and family within another culture with a focus on nursing interventions to promote health. An intense induction into cultural humility will enhance awareness and promote an appreciation for global health.
Variable

NURS 402 (4) Psychosocial and Interprofessional Communication for RNs

Communication is an essential skill for professional RNs. This course will cover professional communication strategies, including patient and family interactions, dealing with mental-health issues, effective inter-professional communication, and issues unique utilizing technology and information systems.
Pre: RN Licensure
Fall, Spring, Summer

NURS 412 (4) Leadership and Management Principles for RNs

This course explores leadership and management principles and concepts necessary for the professional nurse to function effectively in a changing health care system incorporating collaborative strategies, technology, financial issues, and the complexity of care.
Pre: RN Licensure
Fall, Spring, Summer

NURS 420 (4) Informatic, Quality, and Safety in Nursing Practice for RNs

Enhance the role of the nurse in the promotion of quality and safety and the use of national guidelines, technology, and informatics to create a culture of quality and safety, prevent and reduce medical errors, and support health care reimbursement.
Fall, Spring, Summer

NURS 428 (2) Nursing Elective

Several sections on various topics not included in the 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.
Variable

NURS 433 (4) Community Oriented Nursing Inquiry

Think critically about the roles and responsibilities of the community oriented nurse in the context of disease prevention, health promotion, protection, maintenance, restoration, and surveillance. Examine foundational pillars of assurance, assessment and policy development to support relationship based nursing care.
Pre: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 434 (4) Physiologic Integrity III

Focuses on nursing management of chronic alterations in physiological integrity. Includes didactic, simulation, and experiential learning components.
Pre: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 435 (3) Nursing Care of Families in Transition II

Focuses on the critical inquiry of families' health and illness experiences. Includes didactic and experiential learning designed to promote family centered nursing care during transitions within child, teenage, adult and older adult family transitions.
Pre: NURS 363, NURS 364, NURS 365, NURS 366
Fall, Spring

NURS 436 (5) Psychosocial Integrity

Emphasizes the function and responsibility of nursing in promoting and maintaining the psychosocial integrity of all people. Application of communication and caring through therapeutic relationship and evidence based nursing actions in the care and treatment of common clinical conditions.

Pre: NURS 363, NURS 364, NURS 365, NURS 366, PSYC 101
Fall, Spring

NURS 452 (3) Advanced Health Assessment for RNs

This course offers theoretical and simulated clinical practice to develop advanced skills in obtaining a health history and physical assessment throughout the life span, inclusive of specific topics including culture, aging, and caring for the health care needs of individuals.

Fall, Spring

NURS 463 (3) Nursing Leadership and Management

Focuses on nursing leadership and management skills, organizational structure, care processes; health policy and regulatory processes, quality improvement; and patient/family and consumer advocacy.

Pre: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 464 (3) Physiologic Integrity IV

Focuses on nursing management of multi-system alterations in physiologic integrity. Includes didactic, simulation, and experiential learning components.

Pre: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 465 (2) Nursing Care of Families in Crisis

An examination of family dynamics during crisis and the role of the nurse in caring for families in crisis who are experiencing complex alterations in physiologic integrity.

Pre: NURS 433, NURS 434, NURS 435, NURS 436
Fall, Spring

NURS 466 (4) Professional Role Integration

Focuses on experiential learning which promotes the integration of previous learning and the greater development of the roles of the baccalaureate generalist nurse as a provider of care, designer/manager/coordinator of care, and member of a profession.

Pre: NURS 433, NURS 434, NURS 435, NURS 436
Coreq: NURS 463, NURS 464, NURS 465
Fall, Spring

NURS 472 (5) Provider of Care II

This capstone course focuses on the community as the client and integrates previously learned theory and principles of nursing.

Pre: NURS 382
Spring

NURS 473 (4) Provider of Care II Clinical

Health promotion, disease prevention, and health education are operationalized as principal interventions within the context of community health.

Pre: NURS 472 or concurrent
Spring

NURS 482 (6) Provider of Care II for RNs

Synthesis of nursing and public health practice within the community. Nursing care of individuals, families, and groups is addressed within context of promoting, maintaining, and restoring health. Health promotion, disease prevention and health education are interventions to reduce health disparities.

Pre: NURS 382, RN Licensure
Fall, Spring, Summer

NURS 490 (1-3) Workshop

Workshop(s) with various topics and titles.
Variable

NURS 491 (1-5) In-Service

Workshop(s) with various topics and titles.
Variable

NURS 497 (1) Summer Internship

This course provides clinical based learning opportunities to encourage application of theory and research based knowledge in clinical practice. Students will engage in experiences to enhance the development of their professional nursing role.

NURS 499 (1-5) Individual Study

Individual study according to outcomes developed by faculty and student(s).
Variable

PHILOSOPHY

Philosophy

College of Arts & Humanities

Department of Philosophy

227 Armstrong Hall • 507-389-2012

Chair: Brandon Cooke

Brandon Cooke, John Humphrey, Richard Liebendorfer, Joshua Preiss, Julie Wulpemeyer, Sun Yu

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 analytical 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 Mankato'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.

POLICIES/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.

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.

PHILOSOPHY CONTINUED

PHILOSOPHY BA

Degree completion = 120 credits

Major Common Core

- PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance & Modern Philosophy (3)
PHIL 495 Senior Thesis I (2)
PHIL 496 Senior Thesis II (1)

Logic Requirement (choose 3 credits)

- PHIL 110 Logic and Critical Thinking (3)
PHIL 311 Symbolic Logic (3)

Major Restricted Electives

Historical Period (choose 3 credits from the following)

- PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Eastern Philosophy (3)
PHIL 400 Philosophy of Kant (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)

Values (choose 3 credits from the following)

- PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 440 Philosophy of Law (3)
PHIL 460 Philosophy of the Arts (3)

Major Unrestricted Electives (choose 15 credits)

Choose 15 credits from the following list. At least 12 credits must be upper division (300-400 level).

- PHIL 100W Introduction to Philosophy (3)
PHIL 101W Philosophical Problem: The Mind-Body Problem (3)
PHIL 112 Logic of Scientific Method (3)
PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 361 Philosophy of Religion (3)
PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 445 Feminist Philosophy (3)
PHIL 450 Special Topics (3)
PHIL 465 Philosophy of Film (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 490 Workshop (1-6)
PHIL 491 In-Service (1-6)
PHIL 499 Individual Study (1-6)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

Required Minor: Yes. Any.

PHILOSOPHY BS

Degree completion = 120 credits

Major Common Core

- PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance & Modern Philosophy (3)
PHIL 495 Senior Thesis I (2)
PHIL 496 Senior Thesis II (1)

Logic Requirement (choose 3 credits)

- PHIL 110 Logic and Critical Thinking (3)
PHIL 311 Symbolic Logic (3)

Major Restricted Electives

Historical Period (choose 3 credits from the following)

- PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Eastern Philosophy (3)
PHIL 400 Philosophy of Kant (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)

Values (choose 3 credits from the following)

- PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 440 Philosophy of Law (3)
PHIL 460 Philosophy of the Arts (3)

Major Unrestricted Electives

(choose 15 credits from the following list)

At least 12 credits must be upper division (300-400 level).

- PHIL 100W Introduction to Philosophy (3)
PHIL 101W Philosophical Problem: The Mind-Body Problem (3)
PHIL 112 Logic of Scientific Method (3)
PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 361 Philosophy of Religion (3)
PHIL 410 Philosophy of Language (3)
PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 445 Feminist Philosophy (3)
PHIL 450 Special Topics (3)
PHIL 465 Philosophy of Film (3)
PHIL 473 Knowledge and Reality (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)
PHIL 490 Workshop (1-6)
PHIL 491 In-Service (1-6)
PHIL 499 Individual Study (1-6)

CRITICAL THINKING CERTIFICATE

The Critical Thinking certificate program is a non-degree program targeted to students enrolled in Minnesota State Mankato. The Program provides students with the training in critical thinking skills and issues them Critical Thinking Certificates which will prove to be useful credentials for their active roles in a wide variety of academic, professional and commercial workplaces. This undergraduate program is intended for those interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history. Upon completion of the 12 unit program an Undergraduate Certificate will be awarded. The program is open to currently enrolled students as well as those who are not currently enrolled but meet undergraduate admission requirements.

Major Common Core (choose 3 credits)

- PHIL 110 Logic and Critical Thinking (3)
PHIL 112 Logic of Scientific Method (3)

Major Restricted Electives

Students must take two courses (6 credits) from one of the following five areas.

(Substitution may be made for the following requirements with permission of the chair or the undergraduate advisor of the Philosophy Department.)

AREA 1: For those interested in the critical, analytical and philosophical dimensions of natural science. (choose 6 credits)

PHIL 101W	Philosophical Problem: The Mind-Body Problem (3)
PHIL 420	Epistemology (3)
PHIL 430	Metaphysics (3)
PHIL 474	Philosophy of the Mind (3)
PHIL 475	Philosophical Issues in Cognitive Science (3)
PHIL 476	Philosophy of Perception (3)
PHIL 480	Philosophy of Science (3)
PHIL 481	Philosophy of Biology (3)

AREA 2: For those interested in the critical, analytical and philosophical dimensions of the humanities. (choose 6 credits)

PHIL 115W	Philosophy of Race, Class and Gender (3)
PHIL 120W	Introduction to Ethics (3)
PHIL 205W	Culture, Identity, and Diversity (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 361	Philosophy of Religion (3)
PHIL 445	Feminist Philosophy (3)
PHIL 455	Existentialism & Phenomenology (3)
PHIL 460	Philosophy of the Arts (3)
PHIL 465	Philosophy of Film (3)
PHIL 476	Philosophy of Perception (3)
PHIL 482	Philosophy of Social Science (3)

AREA 3: For those interested in the critical, analytical and philosophical dimensions of social science. (choose 6 credits)

PHIL 115W	Philosophy of Race, Class and Gender (3)
PHIL 205W	Culture, Identity, and Diversity (3)
PHIL 240W	Law, Justice & Society (3)
PHIL 321W	Social & Political Philosophy (3)
PHIL 322W	Ethical Theory (3)
PHIL 323W	Philosophy of Economics (3)
PHIL 420	Epistemology (3)
PHIL 440	Philosophy of Law (3)
PHIL 445	Feminist Philosophy (3)
PHIL 455	Existentialism & Phenomenology (3)
PHIL 476	Philosophy of Perception (3)
PHIL 482	Philosophy of Social Science (3)

AREA 4: For those interested in the critical, analytical and philosophical dimensions of history. (choose 6 credits)

PHIL 323W	Philosophy of Economics (3)
PHIL 334W	History of Philosophy: Classical Philosophy (3)
PHIL 336W	History of Philosophy: Renaissance & Modern Philosophy (3)
PHIL 337	19th Century Philosophy (3)
PHIL 338	American Philosophy (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 437	Contemporary Philosophy (3)
PHIL 440	Philosophy of Law (3)
PHIL 455	Existentialism & Phenomenology (3)
PHIL 482	Philosophy of Social Science (3)

AREA 5: For those interested in the critical, analytical and philosophical dimensions of business (choose 6 credits)

PHIL 120W	Introduction to Ethics (3)
PHIL 222W	Medical Ethics (3)
PHIL 224W	Business Ethics (3)
PHIL 226W	Environmental Ethics (3)
PHIL 321W	Social & Political Philosophy (3)
PHIL 322W	Ethical Theory (3)
PHIL 323W	Philosophy of Economics (3)
PHIL 440	Philosophy of Law (3)

Major Unrestricted Electives

Students must take one course (3 credits) from any courses that the Philosophy Department offers.

PHILOSOPHY MINOR (18 credits)

Required for Minor

PHIL 334W	History of Philosophy: Classical Philosophy (3)
PHIL 336W	History of Philosophy: Renaissance & Modern Philosophy (3)
(choose one course from the following)	
PHIL 337	19th Century Philosophy (3)
PHIL 338	American Philosophy (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 437	Contemporary Philosophy (3)
PHIL 455	Existentialism and Phenomenology (3)

Required Electives

(choose a minimum of 9 additional Philosophy credits from the following)

PHIL 100W	Introduction to Philosophy (3)
PHIL 110	Logic and Critical Thinking (3)
PHIL 112	Logic of Scientific Method (3)
PHIL 115W	Philosophy of Race, Class and Gender (3)
PHIL 120W	Introduction to Ethics (3)
PHIL 205W	Culture, Identity, and Diversity (3)
PHIL 222W	Medical Ethics (3)
PHIL 224W	Business Ethics (3)
PHIL 226W	Environmental Ethics (3)
PHIL 240W	Law, Justice & Society (3)
PHIL 311	Symbolic Logic (3)
PHIL 321W	Social & Political Philosophy (3)
PHIL 322W	Ethical Theory (3)
PHIL 337	19th Century Philosophy (3)
PHIL 338	American Philosophy (3)
PHIL 358W	Eastern Philosophy (3)
PHIL 361	Philosophy of Religion (3)
PHIL 410	Philosophy of Language (3)
PHIL 437	Contemporary Philosophy (3)
PHIL 440	Philosophy of Law (3)
PHIL 450	Special Topics (1-3)
PHIL 455	Existentialism & Phenomenology (3)
PHIL 460	Philosophy of the Arts (3)
PHIL 474	Philosophy of the Mind (3)
PHIL 480	Philosophy of Science (3)
PHIL 490	Workshop (1-6)
PHIL 491	In-Service (1-6)
PHIL 499	Individual Study (1-6)

CRITICAL THINKING MINOR

Critical thinking skill is the ability to construct, evaluate and explain our thoughts and our views of the world in a logical and rational manner. This skill assists us to analyze, understand, and respond others' thoughts correctly and efficiently. The Critical Thinking Minor is intended for students interested in the critical, analytical and philosophical dimensions of business, social science, natural science, arts, humanities or history. The program provides them with the training in critical and philosophical thinking skills so as to enable each of them to play an active role in a wide variety of academic, professional or commercial workplaces.

Core (choose 3 credits)

PHIL 110	Logic and Critical Thinking (3)
PHIL 112	Logic of Scientific Method (3)

Elective

Students must take one course (3 Credits) from any courses that the Philosophy Department offers.

In addition, students must take four courses (12 Credits) from one of the following five areas. (Substitution may be made for the following requirements with permission of the chair or the undergraduate advisor of the Philosophy Department.)

AREA 1: For those interested in the critical, analytical and philosophical dimensions of natural science (choose 12 credits from the following)

PHIL 101W	Philosophical Problem: The Mind-Body Problem (3)
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PHILOSOPHY CONTINUED

- PHIL 420 Epistemology (3)
PHIL 430 Metaphysics (3)
PHIL 474 Philosophy of the Mind (3)
PHIL 475 Philosophical Issues in Cognitive Science (3)
PHIL 476 Philosophy of Perception (3)
PHIL 480 Philosophy of Science (3)
PHIL 481 Philosophy of Biology (3)

AREA 2: For those interested in the critical, analytical and philosophical dimensions of the humanities

(choose 12 credits from the following list). At least 9 credits must be upper division (300-400 level).

- PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 120W Introduction to Ethics (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 358W Eastern Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 445 Feminist Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 460 Philosophy of the Arts (3)
PHIL 465 Philosophy of Film (3)
PHIL 476 Philosophy of Perception (3)
PHIL 482 Philosophy of Social Science (3)

AREA 3: For those interested in the critical, analytical and philosophical dimensions of social science

(choose 12 credits from the following list). At least 9 credits must be upper division (300-400 level).

- PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 240W Law, Justice & Society (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 420 Epistemology (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 476 Philosophy of Perception (3)
PHIL 482 Philosophy of Social Science (3)

AREA 4: For those interested in the critical, analytical and philosophical dimensions of history

(choose 12 credits from the following)

- PHIL 323W Philosophy of Economics (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 338 American Philosophy (3)
PHIL 358W Eastern Philosophy (3)
PHIL 437 Contemporary Philosophy (3)
PHIL 440 Philosophy of Law (3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 482 Philosophy of Social Science (3)

AREA 5: For those interested in the critical, analytical and philosophical dimensions of business

(choose 12 credits from the following list). At least 9 credits must be upper division (300-400 level).

- PHIL 120W Introduction to Ethics (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 322W Ethical Theory (3)
PHIL 323W Philosophy of Economics (3)
PHIL 440 Philosophy of Law (3)

ETHICS MINOR

Ethics is concerned with some of our deepest values and commitments. Considerations of right and wrong, of good and bad, permeate our public and private lives. The Ethics Minor provides the opportunity to investigate theoretical and applied ethics in a rigorous and deep way. This minor will be of special interest

to students planning careers in the professions, including business, medicine, law, and others. Students completing the minor will develop a deeper reflective understanding of ethical values, an awareness of the history of ethical thought, an enhanced sense of our shared human values, and the ability to understand and critically evaluate the complex ethical issues of our time.

Required Core

- PHIL 120 Introduction to Ethics (3)
PHIL 322 Ethical Theory (3)

(choose one from the following 3 credits)

- PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 205W Culture, Identity and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 240W Law, Justice & Society (3)

(choose two of the following 6 credits)

- PHIL 321W Social & Political Philosophy (3)
PHIL 334 History of Philosophy: Classical Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 358 Eastern Philosophy (3)
PHIL 361 Philosophy of Religions (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 450 Special Topics (1-3)
PHIL 460 Philosophy of the Arts (3)

(choose one elective from list below)

- PHIL 115W Philosophy of Race, Class and Gender (3)
PHIL 205W Culture, Identity, and Diversity (3)
PHIL 222W Medical Ethics (3)
PHIL 224W Business Ethics (3)
PHIL 226W Environmental Ethics (3)
PHIL 321W Social & Political Philosophy (3)
PHIL 334W History of Philosophy: Classical Philosophy (3)
PHIL 337 19th Century Philosophy (3)
PHIL 358W Eastern Philosophy (3)
PHIL 361 Philosophy of Religion (3)
PHIL 440 Philosophy of Law (3)
PHIL 445 Feminist Philosophy (3)
PHIL 450 Special Topics (1-3)
PHIL 455 Existentialism & Phenomenology (3)
PHIL 460 Philosophy of the Arts (3)

COURSE DESCRIPTIONS

PHIL 100W (3) Introduction to Philosophy

Introduction to the nature of philosophy and specific, basic problems.
Fall, Spring
WI, GE-6

PHIL 101W (3) Philosophical Problem: the Mind-Body Problem

This course considers historical and contemporary analyses of the mind in relation to the body and the connection of the mind-body problem to other issues concerning both religion and science.

Fall, Spring
WI, GE-6

PHIL 110 (3) Logic and Critical Thinking

Traditional syllogistic logic and an introduction to the elements of modern symbolic logic.

Fall, Spring
GE-2, GE-4

PHIL 112 (3) Logic of Scientific Method

Inductive logic, formation of hypotheses, scientific explanation, definition, classification, probability, analogy.

Variable
GE-2, GE-4

PHIL 115W (3) Philosophy of 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?

Variable

WI, GE-6, GE-7

PHIL 120W (3) Introduction to Ethics

Discussion of theories of value and obligation.

Variable

WI, GE-6, GE-9

PHIL 205W (3) Culture, Identity, and Diversity

Discussion of 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 traditions.

Variable

WI, GE-6, GE-8

PHIL 222W (3) Medical Ethics

Ethical perspectives relevant to issues such as euthanasia, genetic engineering, organ transplant, patients' rights, abortion, etc.

Variable

WI, GE-6, GE-9

PHIL 224W (3) Business Ethics

Introduction to ethical theories and concepts and their application to specific cases in the world of business.

Variable

WI, GE-6, GE-9

PHIL 226W (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.

Variable

WI, GE-9, GE-10

PHIL 240W (3) Law, Justice & Society

Consideration of the basic philosophical approaches to the idea of justice and how this idea relates to other fundamental ideas in political philosophy, ethics, and law.

Variable

WI, GE-6, GE-9

PHIL 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.

Spring

GE-2, GE-4

PHIL 321W (3) Social & Political Philosophy

Human rights and responsibilities in relation to the organization of society and government.

Variable

WI, GE-6, GE-9

PHIL 322W (3) Ethical Theory

Topics in normative, meta-ethical and applied ethical theory.

WI, GE-6, GE-9

PHIL 323W (3) Philosophy of Economics

This course will introduce students to important texts in moral and social philosophy that provide the foundation for modern economics. In addition, we will discuss philosophical accounts of rationality, well being, and freedom and their relevance to economic analysis.

Variable

WI, GE-6, GE-9

PHIL 334W (3) History of Philosophy: Classical Philosophy

Philosophers of Ancient Greece, Rome and the early middle ages: The presocratics, Plato, Aristotle, Hellenistic and Roman philosophers, St. Augustine.

WI, GE-6

PHIL 336W (3) History of Philosophy: Renaissance and Modern Philosophy

Late Medieval Philosophy and its influence on the Renaissance, Descartes, Spinoza, Leibnitz and Continental Rationalism, Locke, Berkeley, Hume and British Empiricism, and Kant.

WI, GE-6

PHIL 337 (3) 19th Century Philosophy

Philosophers and philosophies of the 19th century.

Variable

GE-6

PHIL 338 (3) American Philosophy

Colonial times to the present.

Variable

PHIL 358W (3) Eastern Philosophy

Survey of principle philosophical doctrines of ancient Chinese philosophers and a survey of Indian philosophical speculation.

Variable

WI, GE-6, GE-8

Diverse Cultures - Purple

PHIL 361 (3) Philosophy of Religion

Structure and logic of religious belief. Problems such as the existence of God, evil, immortality, miracles, and religious language.

Fall

PHIL 400 (3) The Philosophy of Immanuel Kant

This course will undertake a close reading and study of Immanuel Kant's Critique of Pure Reason and other texts.

Variable

PHIL 405 (3) The Philosophy of Ludwig Wittgenstein

A study of the philosophy of Ludwig Wittgenstein.

Variable

PHIL 410 (3) Philosophy of Language

Theories of meaning, speech acts and semantics, relation of language to the world.

Variable

PHIL 420 (3) Epistemology

Theories of knowledge and justification, skeptical attacks on the possibility of knowledge, and anti-skeptical defenses.

Variable

PHIL 430 (3) Metaphysics

An investigation of the most fundamental concepts of reality, including the nature of things, identity over time, modality, causation, free will, space and time, and universals and particulars.

Variable

PHIL 437 (3) Contemporary Philosophy

Major philosophers and philosophies of the late 20th Century.

Variable

PHIL 440 (3) Philosophy of Law

Discussion of philosophical issues in law by way of connecting legal problems to well-developed and traditional problems in philosophy, e.g., in ethics, political philosophy, and epistemology, and investigates the philosophical underpinnings of the development of law. The course takes an analytical approach to law (as opposed to historical sociological, political, or legalistic approaches) and devotes a substantial part of the semester to a major work on law written by a philosopher.

PHIL 445 (3) Feminist Philosophy

Study of philosophy done from a feminist perspective in areas such as metaphysics, epistemology or ethics.

Fall

PHILOSOPHY CONTINUED

PHIL 450 (1-3) Special Topics

Intensive study of a single philosopher or topic.
Variable

PHIL 455 (3) Existentialism & Phenomenology

In-depth analysis of major European existentialists such as Kierkegaard, Heidegger, and Sartre.
Variable

PHIL 460 (3) Philosophy of the Arts

Aesthetic principles, theories, and the creative process. Theories of visual arts, music, literature, dance, etc.
Spring

PHIL 465 (3) Philosophy of Film

This course investigates some of the central philosophical issues in our thinking about film, including questions about narrative, ontology, ethical criticism of film, the role of artistic intentions in interpretation, artistic medium, and the art/entertainment distinction.
Spring

PHIL 474 (3) Philosophy of the Mind

The nature of consciousness, mind and body relations, freedom of action.
Variable

PHIL 475 (3) Philosophical Issues in Cognitive Science

This course examines the conceptual and philosophical complexities of efforts to understand the mind in science. Topics include the differences and similarities between humans and other animals, the nature of psychological explanation, and reductive strategies for explaining consciousness, intentionality and language.
Fall

PHIL 476 (3) Philosophy of Perception

Cognitive and epistemic issues surrounding sensory perception, including the nature of perception, its immediate objects, and its ability to deliver knowledge of the world.
Variable

PHIL 480 (3) Philosophy of Science

Nature of explanations, causality, theoretical entities, and selected problems.
Variable

PHIL 481 (3) Philosophy of Biology

The course examines conceptual and philosophical issues in biology, the nature and scope of biological explanation and conflicts between evolutionary and religious explanations for the origin of life.

PHIL 482 (3) Philosophy of Social Science

Examines the nature and methods of alternative strategies of theory construction in the social sciences and the metaphysical and epistemological assumptions and implications of such strategies. For example can people, their behavior and norms of rationality be understood in naturalistic terms or must they be understood only in culturally local terms?
Variable

PHIL 490 (1-6) Workshop

Special event of less than semester duration.
Variable

PHIL 491 (1-6) In-Service

Variable

PHIL 495 (2) Senior Thesis I

The nature of the topic of the senior thesis is jointly determined by the student and Philosophy Department faculty members. Philosophy majors should enroll in this course in the first semester of their final year of undergraduate studies. By the end of the first semester of the final year, the student will have completed a substantive draft of their senior thesis. The thesis will be completed during the final semester of the student's undergraduate studies.

PHIL 496 (1) Senior Thesis II

The senior thesis begun in Philosophy 495 will be completed. A core goal of the philosophy major is that students be able to engage in sustained development and analysis of an important philosophical topic. The senior thesis serves as a culminating exercise in a student's undergraduate career that hones those skills central to the subject of philosophy. The senior thesis will also serve as a tool for assessing the major.

PHIL 499 (1-6) Individual Study

Individual study of a philosopher or problem.
Variable

PHILOSOPHY, POLITICS & ECONOMICS (PPE)

Philosophy, Politics & Economics (PPE)

College of Arts & Humanities

Department of Philosophy

227 Armstrong Hall • 507-389-2012

Director & Advisor for Philosophy: Craig Matarrese

Advisor for Political Science: Joe Kunkel

Advisor for Economics: Ved Sharma

The PPE major integrates the historical, methodological, theoretical, and practical foci of Philosophy, Political Science, and Economics to form a single course of study. The focus of the major is on the dynamic relationships between the economic, political, and legal systems of our society, relationships that require the analytical methods of all three disciplines to be understood fully. For example, the best way to understand our competitive market economy, certainly a fundamental institution of our society, is to explore its empirical, historical, political, and ethical dimensions. Indeed, if one considers the most influential historical figures in each of the three fields, e.g., John Locke, Adam Smith, David Hume, John Stuart Mill, G.W.F. Hegel, and Karl Marx, it is immediately clear that they recognized no rigid disciplinary boundaries between philosophy, political science, and economics, and that the strength of their views lies precisely in their grasp of the dynamic relationships between the systems that these disciplines study. Admittedly, the coherence of the major is expressed at a fairly abstract and analytical level; the content of the major can be broad and diverse, but all students who work through the major's curriculum will develop an appreciation

of the complexity of our society's central institutions and problems at the same time that they acquire the analytical facility to engage and critically evaluate them. Students in the major take a number of required core courses in Philosophy, Political Science, and Economics, (9 credits from each of the three departments, a total of 27 credits). Majors must also choose which department they will focus in, their "concentration" (so specifically, one is "a PPE major with a concentration in Philosophy," or "a PPE major with a concentration in Political Science," etc.) Students then take 5 more upper-level courses in the concentration (15 credits), and two more upper-level courses from each of the other two departments (12 credits). Majors must also take a statistics course (3 credits), and a senior thesis or independent study course (3 credits). The total required number of credits then is 60, and 43 of them must be in upper-division courses. The PPE major, then, qualifies as a "broad major" that does not require a minor.

POLICIES/INFORMATION

Admission to Major is granted by the Director of the PPE Program. Minimum university admission requirements are:

- a minimum of 32 earned semester credit hours.
- a minimum cumulative GPA of 2.0 ("C").

Contact the director of the program for application procedures.

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.

PHILOSOPHY, POLITICS & ECONOMICS BA

Degree completion = 120 credits

Major Common Core

- ECON 201 Principles of Macroeconomics (3)
- ECON 202 Principles of Microeconomics (3)
- ECON 355 Intermediate Microeconomics (3)
- PHIL 120W Introduction to Ethics (3)
- POL 111 United States Government (3)
(choose 3 credits)
- PHIL 224W Business Ethics (3)
- PHIL 240W Law, Justice & Society (3)
(choose 3 credits)
- PHIL 323W Philosophy of Economics (3)
- PHIL 440 Philosophy of Law (3)
(choose 3 credits)
- POL 231 World Politics (3)
- POL 241 Introduction to Comparative Politics (3)
(choose 3 credits)
- POL 311 Ancient & Medieval Political Philosophy (3)
- POL 312 Early Modern Political Philosophy (3)
- POL 313 Modern Political Philosophy (3)
- POL 410 Topics in Political Philosophy (1-4)
- POL 414 Early United States Political Thought (3)
- POL 415 Recent United States Political Thought (3)
- POL 416 Nonwestern Political Philosophy (3)
(choose 3-4 credits)
- ECON 207 Business Statistics (4)
- MATH 354 Concepts of Probability & Statistics (3)
- POL 221 Introduction to Political Analysis (3)
- PSYC 201 Statistics for Psychology (4)
- SOC 202 Introductory Social Statistics (3)
- STAT 154 Elementary Statistics (3)

Major Emphasis: Philosophy

- PHIL 495 Senior Thesis I (2)
- PHIL 496 Senior Thesis II (1)
(choose 15 credits)
- PHIL 321 Social & Political Philosophy (3)
- PHIL 322W Ethical Theory (3)
- PHIL 323W Philosophy of Economics (3)
- PHIL 334W History of Philosophy: Classical Philosophy (3)
- PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
- PHIL 337 19th Century Philosophy (3)
- PHIL 338 American Philosophy (3)
- PHIL 358W Eastern Philosophy (3)
- PHIL 437 Contemporary Philosophy (3)
- PHIL 440 Philosophy of Law (3)
- PHIL 450 Special Topics (1-3)
- PHIL 455 Existentialism & Phenomenology (3)
- PHIL 474 Philosophy of the Mind (3)
- PHIL 480 Philosophy of Science (3)
- PHIL 499 Individual Study (1-6)
(choose 6 credits)
- POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.
(choose 6 credits)
- ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.

Major Emphasis: Economics (choose 15 credits)

- ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.
(choose 6 credits)
- PHIL 321 Social & Political Philosophy (3)
- PHIL 322W Ethical Theory (3)
- PHIL 323W Philosophy of Economics (3)
- PHIL 334W History of Philosophy: Classical Philosophy (3)
- PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
- PHIL 337 19th Century Philosophy (3)
- PHIL 338 American Philosophy (3)
- PHIL 358W Eastern Philosophy (3)

- PHIL 437 Contemporary Philosophy (3)
- PHIL 440 Philosophy of Law (3)
- PHIL 450 Special Topics (1-3)
- PHIL 455 Existentialism & Phenomenology (3)
- PHIL 474 Philosophy of the Mind (3)
- PHIL 480 Philosophy of Science (3)
- PHIL 499 Individual Study (1-6)
(choose 6 credits)
- POL 3xx to POL 4xx, except POL 490, POL 491, POL 492.
(choose 3 credits)
- ECON 499 Individual Study (1-3)

Major Emphasis: Political Science (choose 3 credits)

- POL 231 World Politics (3)
- POL 241 Introduction to Comparative Politics (3)
- POL 311 Ancient & Medieval Political Philosophy (3)
- POL 312 Early Modern Political Philosophy (3)
- POL 313 Modern Political Philosophy (3)
- POL 410 Topics in Political Philosophy (1-4)
- POL 414 Early United States Political Thought (3)
- POL 415 Recent United States Political Thought (3)
- POL 416 Nonwestern Political Philosophy (3)
(choose 3 credits)
- 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)
- POL 455 American Legal Philosophy (3)
(choose 9 credits)
- POL 3xx to POL 4xx, except POL 490, POL 491.
(choose 3 credits)
- POL 492 Individual Study (1-5)
(choose 6 credits)
- PHIL 321 Social & Political Philosophy (3)
- PHIL 322W Ethical Theory (3)
- PHIL 323W Philosophy of Economics (3)
- PHIL 334W History of Philosophy: Classical Philosophy (3)
- PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
- PHIL 337 19th Century Philosophy (3)
- PHIL 338 American Philosophy (3)
- PHIL 358W Eastern Philosophy (3)
- PHIL 437 Contemporary Philosophy (3)
- PHIL 440 Philosophy of Law (3)
- PHIL 450 Special Topics (1-3)
- PHIL 455 Existentialism & Phenomenology (3)
- PHIL 474 Philosophy of the Mind (3)
- PHIL 480 Philosophy of Science (3)
- PHIL 499 Individual Study (1-6)
(choose 6 credits)
- ECON 301 Quantitative Methods in Economics (3)
- ECON 305 Money and Banking (3)
- ECON 314W Current Economic Issues (3)
- ECON 355 Intermediate Microeconomics (3)
- ECON 356 Intermediate Macroeconomics (3)
- ECON 403 Labor Economics (3)
- ECON 405 Central Banking (3)
- ECON 406 Economics of Unions (3)
- ECON 411 Urban Economics (3)
- ECON 412 Resource and Environmental Economics (3)
- ECON 416 Sports Economics (3)
- ECON 420 International Economics (3)
- ECON 429 Economic Education (3)
- ECON 440 Public Finance (3)
- ECON 450 Economic Development (3)
- ECON 462 Econometrics (3)
- ECON 463 Applied Econometrics of Financial Markets (3)
- ECON 472 Industrial Organization (3)

Other Graduation Requirements

Requirement for Bachelor of Arts (BA) degree: Language (8 credits)

PHILOSOPHY, POLITICS & ECONOMICS (PPE) CONTINUED

PHILOSOPHY, POLITICS & ECONOMICS BS

Degree completion = 120 credits

Major Common Core

ECON 201 Principles of Macroeconomics (3)
 ECON 202 Principles of Microeconomics (3)
 ECON 355 Intermediate Microeconomics (3)
 PHIL 120W Introduction to Ethics (3)
 POL 111 United States Government (3)
 (choose 3 credits)
 PHIL 224W Business Ethics (3)
 PHIL 240W Law, Justice & Society (3)
 (choose 3 credits)
 PHIL 323W Philosophy of Economics (3)
 PHIL 440 Philosophy of Law (3)
 (choose 3 credits)
 POL 231 World Politics (3)
 POL 241 Introduction to Comparative Politics (3)
 (choose 3 credits)
 POL 311 Ancient & Medieval Political Philosophy (3)
 POL 312 Early Modern Political Philosophy (3)
 POL 313 Modern Political Philosophy (3)
 POL 410 Topics in Political Philosophy (1-4)
 POL 414 Early United States Political Thought (3)
 POL 415 Recent United States Political Thought (3)
 POL 416 Nonwestern Political Philosophy (3)
 (choose 3-4 credits)
 ECON 207 Business Statistics (4)
 MATH 354 Concepts of Probability & Statistics (3)
 POL 221 Introduction to Political Analysis (3)
 PSYC 201 Statistics for Psychology (4)
 SOC 202 Introductory Social Statistics (3)
 STAT 154 Elementary Statistics (3)

Major Emphasis: Philosophy

PHIL 495 Senior Thesis I (2)
 PHIL 496 Senior Thesis II (1)
 (choose 15 credits)
 PHIL 321 Social & Political Philosophy (3)
 PHIL 322W Ethical Theory (3)
 PHIL 323W Philosophy of Economics (3)
 PHIL 334W History of Philosophy: Classical Philosophy (3)
 PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
 PHIL 337 19th Century Philosophy (3)
 PHIL 338 American Philosophy (3)
 PHIL 358W Eastern Philosophy (3)
 PHIL 437 Contemporary Philosophy (3)
 PHIL 440 Philosophy of Law (3)
 PHIL 450 Special Topics (1-3)
 PHIL 455 Existentialism & Phenomenology (3)
 PHIL 474 Philosophy of the Mind (3)
 PHIL 480 Philosophy of Science (3)
 PHIL 499 Individual Study (1-6)
 (choose 6 credits)
 POL 3xx to POL 4xx, except POL 490, POL 491 and POL 492.
 (choose 6 credits)
 ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.

Major Emphasis: Economics (choose 15 credits)

ECON 3xx to ECON 4xx, except ECON 480, ECON 481, ECON 482, ECON 491, ECON 498 and ECON 499.
 (choose 6 credits)
 PHIL 321 Social & Political Philosophy (3)
 PHIL 322W Ethical Theory (3)
 PHIL 323W Philosophy of Economics (3)
 PHIL 334W History of Philosophy: Classical Philosophy (3)
 PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
 PHIL 337 19th Century Philosophy (3)
 PHIL 338 American Philosophy (3)

PHIL 358W Eastern Philosophy (3)
 PHIL 437 Contemporary Philosophy (3)
 PHIL 440 Philosophy of Law (3)
 PHIL 450 Special Topics (1-3)
 PHIL 455 Existentialism & Phenomenology (3)
 PHIL 474 Philosophy of the Mind (3)
 PHIL 480 Philosophy of Science (3)
 PHIL 499 Individual Study (1-6)
 (choose 6 credits)
 POL 3xx to POL 4xx, except POL 490, POL 491, POL 492.
 (choose 3 credits)
 ECON 499 Individual Study (1-3)

Major Emphasis: Political Science (choose 3 credits)

POL 231 World Politics (3)
 POL 241 Introduction to Comparative Politics (3)
 POL 311 Ancient & Medieval Political Philosophy (3)
 POL 312 Early Modern Political Philosophy (3)
 POL 313 Modern Political Philosophy (3)
 POL 410 Topics in Political Philosophy (1-4)
 POL 414 Early United States Political Thought (3)
 POL 415 Recent United States Political Thought (3)
 POL 416 Nonwestern Political Philosophy (3)
 (choose 3 credits)
 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)
 POL 455 American Legal Philosophy (3)
 (choose 9 credits)
 POL 3xx to POL 4xx, except POL 490, POL 491.
 (choose 3 credits)
 POL 492 Individual Study (1-5)
 (choose 6 credits)
 PHIL 321 Social & Political Philosophy (3)
 PHIL 322W Ethical Theory (3)
 PHIL 323W Philosophy of Economics (3)
 PHIL 334W History of Philosophy: Classical Philosophy (3)
 PHIL 336W History of Philosophy: Renaissance and Modern Philosophy (3)
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 PHIL 455 Existentialism & Phenomenology (3)
 PHIL 474 Philosophy of the Mind (3)
 PHIL 480 Philosophy of Science (3)
 PHIL 499 Individual Study (1-6)
 (choose 6 credits)
 ECON 301 Quantitative Methods in Economics (3)
 ECON 305 Money and Banking (3)
 ECON 314W Current Economic Issues (3)
 ECON 355 Intermediate Microeconomics (3)
 ECON 356 Intermediate Macroeconomics (3)
 ECON 403 Labor Economics (3)
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 ECON 411 Urban Economics (3)
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 ECON 420 International Economics (3)
 ECON 429 Economic Education (3)
 ECON 440 Public Finance (3)
 ECON 450 Economic Development (3)
 ECON 462 Econometrics (3)
 ECON 463 Applied Econometrics of Financial Markets (3)
 ECON 472 Industrial Organization (3)

Physics

College of Science, Engineering & Technology
Department of Physics & Astronomy
141 Trafton Science Center N • 507-389-5743
Website: cset.mnsu.edu/pa/

Chair: Youwen Xu

Thomas R. Brown, Analia Dall'Asen, Igor Kogoutiok, Russell L. Palma, Mark A. Pickar, Andrew D. Roberts, Hai-Sheng Wu

Physics is a science concerned with understanding the fundamental laws of nature. It explains motion heat, electricity, magnetism and light in everyday life; it ranges from studies of the origin of the universe to the behavior of atoms and subatomic particles that involves relativity and quantum mechanics. Physics is the foundation of all fields of science and engineering.

The physics curriculum consists of sequences of interrelated courses that must be taken in the appropriate order. Well prepared students should complete the physics major in four years. The physics B.S. program prepares students for advanced study in physics or engineering, or to work in the public or private sectors. The B.S. physics teaching program prepares students to teach physics in high school. Training in physics gives students a strong ability in problem solving that will serve them well in any occupations.

POLICIES/INFORMATION

Admission to the major is granted by the department. To be admitted to the major, a student must have a minimum of 32 earned credit hours and a minimum cumulative GPA of 2.00 ("C").

Contact the College of Science, Engineering and Technology Advising Center for application procedures.

GPA policy. A minimum GPA of 2.0 in physics courses is required for graduation.
P/N grading policy. All physics courses except PHYS 105 and PHYS 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 except where P/N grading is mandatory.

A minimum of 25 percent of the required credits in physics must be taken at Minnesota State University, Mankato for both the major and the minor. Testing for credit by examination is available on a case-by-case basis as determined by the chairperson of the Physics and Astronomy department.

BS degree, Double major. Students majoring in physics often find a second major in mathematics to be an attractive option. If the BS degree in physics is combined with a BS degree in mathematics, then the following math courses are recommended: MATH 345, MATH 422, MATH 425, and MATH 447.

PHYSICS BS

Degree completion = 120 credits

Students interested in physics preparation leading to professional opportunities or graduate study are encouraged to select this major.

Required General Education

MATH 121 Calculus I (4)
PHYS 221 General Physics I (4)

Major Common Core

CS 110 Computer Science I (4)
EE 230 Circuit Analysis I (3)
EE 240 Evaluation of Circuits (1)
MATH 122 Calculus II (4)
MATH 223 Calculus III (4)
MATH 247 Linear Algebra I (4)
MATH 321 Ordinary Differential Equations (4)
PHYS 150 Explorations in Physics (1)
PHYS 222 General Physics II (3)

PHYS 223 General Physics III (3)
PHYS 232 General Physics II Laboratory (1)
PHYS 233 General Physics III Laboratory (1)
PHYS 335 Modern Physics I (3)
PHYS 336 Modern Physics II (3)
PHYS 441 Mechanics (4)
PHYS 447 Electricity & Magnetism I (3)
PHYS 448 Electricity & Magnetism II (3)
PHYS 457 Optics (3)
PHYS 461 Quantum Mechanics (4)
PHYS 465 Computer Applications in Physics (3)
PHYS 473 Statistical Physics (3)
PHYS 475W Advanced Laboratory (3)
PHYS 492 Seminar (1)

Major Unrestricted Electives

Required Electives (choose 4 credits)

AST 351 Telescope Operations (2)
AST 353 Photometry I (2)
AST 355 Astrometry (2)
AST 357 Spectroscopy (2)
AST 420 Stellar Astrophysics (3)
AST 430 Galactic Structure (3)
EE 303 Introduction to Solid State Devices (3)
EE 304 Lab: Introduction to Solid State Devices (1)
MATH 354 Concepts of Probability & Statistics (3)
MATH 411 Introduction to Complex Variables (4)
MATH 422 Partial Differential Equations (4)
MATH 470 Numerical Analysis I (4)
PHYS 417 Biophysics (2)
PHYS 453 Solid State Physics (3)
PHYS 493 Undergraduate Research (1-6)
PHYS 499 Individual Study (1-8)
STAT 354 Concepts of Probability & Statistics (3)

Required Minor: None.

PHYSICS MINOR

Required General Education

MATH 121 Calculus I (4)
PHYS 221 General Physics I (4)

Required Support Course

MATH 122 Calculus II (4)

Required for Minor

PHYS 222 General Physics II (3)
PHYS 223 General Physics III (3)
PHYS 335 Modern Physics I (3)
PHYS 336 Modern Physics II (3)

Required Elective (2-4 credits)

Choose a minimum of one course from the following courses:

PHYS 441 Mechanics (4)
PHYS 447 Electricity & Magnetism I (3)
PHYS 457 Optics (3)
PHYS 465 Computer Applications in Physics (3)
PHYS 473 Statistical Physics (3)
PHYS 475 Advanced Laboratory (3)

PHYSICS SCIENCE TEACHING BS

Degree completion = 120 credits

General requirements for programs in teaching the sciences can be found in the SCIENCE TEACHING section of this catalog.

Required General Education (3 credits)

Recommended General Education (22-23 credits)

Including MATH 121

Required General Science Core (31-33 credits)

PHYSICS CONTINUED

Required Professional Education (30 credits)

Required for Major

MATH	122	Calculus II (4)
PHYS	335	Modern Physics I (3)
PHYS	336	Modern Physics II (3)
PHYS	381	Tutoring Physics (2)
PHYS	465	Computer Applications in Physics (3)
PHYS	482	Teaching Methods & Materials in Physical Science (4)
PHYS	493	Undergraduate Research (1-6) (2 credits required)

Electives (Minimum of 8 Credits)*

Students may use PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 to fulfill their Physics Electives requirement **only if** PHYS 211 and PHYS 212 are completed successfully.

Alternatively, students with a strong interest in applying advanced mathematical skills to problems in physics are encouraged to choose a minimum of 8 credits* of higher level Physics or Mathematics as approved by the student's advisor to fulfill the Physics Elective requirement.

*This is reduced to 4 credits if PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 have been taken in place of PHYS 211 and PHYS 212 in partial fulfillment of the General Science Core requirements.

Students intending to teach physics in states other than Minnesota are advised to select the BS Physics major and use elective credits to satisfy the professional education course requirements. For additional information confer with the science teaching advisor.

COURSE DESCRIPTIONS

PHYS 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. Lab included.

Fall, Spring
GE-3

PHYS 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.

Fall, Spring
GE-3

PHYS 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.

Variable
GE-3

PHYS 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.

Fall, Spring
GE-3

PHYS 150 (1) Explorations in Physics

This course offers an introduction to the field of physics, and prepares students for academic success in the program. Students will become familiar with current topics of physics research within the department, and better understand the career paths available with a physics major.

Fall

PHYS 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 MATH 113, or MATH 115; and high school physics or PHYS 101.

Fall, Spring
GE-2, GE-3

PHYS 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
Fall, Spring

PHYS 221 (4) General Physics I

Designed for science and engineering students. Calculus-based physics. Covers elementary mechanics including kinematics, statics, equilibrium and dynamics of particles, work and energy, rotational motion, gravitation, and oscillation. Lecture and laboratory.

Pre: MATH 121 with a "C" or better; and high school physics or PHYS 101
Fall, Spring
GE-2, GE-3

PHYS 222 (3) General Physics II

Designed for science and engineering students. Calculus-based physics. Covers electrical charge and field; magnetic field and its sources; current and resistance; simple DC and AC circuits; and electromagnetic induction. Lecture only. (Associated laboratory course is PHYS 232.)

Pre: MATH 122 with a "C" or better; and PHYS 221 with a "C" or better.
Fall, Spring

PHYS 223 (3) General Physics III

Designed for science and engineering students. Calculus-based physics. Covers fluids, thermodynamics, mechanical and sound waves, geometrical optics, physical optics, and modern physics. Lecture only. (Associated laboratory course is PHYS 233.)

Pre: MATH 122 with a "C" or better; and PHYS 221 with a "C" or better.
Spring

PHYS 232 (1) General Physics II Laboratory

Designed for science and engineering students. Laboratory course accompanying PHYS 222. Experiments involving electric and magnetic fields, electric potential, electric and magnetic forces, and simple circuits. Laboratory only.

Pre: PHYS 221 with a "C" or better; and PHYS 222 or concurrent.
Fall, Spring

PHYS 233 (1) General Physics III Laboratory

Designed for science and engineering students. Laboratory course accompanying PHYS 223. Experiments involving fluids, thermodynamics, mechanical waves, geometrical optics, and physical optics. Laboratory only.

Pre: PHYS 221 with a "C" or better; and PHYS 223 or concurrent.
Spring

PHYS 335 (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: MATH 122; (PHYS 222 and concurrently with PHYS 223) or PHYS 212.
Spring

PHYS 336 (3) Modern Physics II

Topics include the basics of molecular structure and spectra, classical and quantum statistical physics, solid state physics, nuclear physics, and particle physics. The lab component will teach the operation of various radiation detectors, and use them to study the interaction of radiation with matter.

Pre: PHYS 335
Fall

PHYS 381 (1-3) Tutoring Physics

Supervised experience as an instructional assistant. Must demonstrate ability in basic physics.

Pre: Consent

Variable

PHYS 417 (2) Biophysics

This course bridges the gap between introductory physics and its application to the life and biomedical sciences. Topics include fluid flow, membrane transport, nerve conduction, imaging methods including MRI, CT, and nuclear imaging, radiotherapy, and health physics.

Pre: MATH 121, PHYS 212 or PHYS 222

Variable

PHYS 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 of particles, rigid body motion, Lagrangian and Hamiltonian mechanics, normal coordinates.

Pre: PHYS 222 or PHYS 223; and MATH 321 or consent.

Fall

PHYS 447 (3) Electricity & Magnetism I

Electrostatic fields, magnetostatic fields, steady currents, electromagnetic induction. Review of vector algebra.

Pre: MATH 223 and MATH 321 and PHYS 222

Fall

PHYS 448 (3) Electricity & Magnetism II

Electromagnetic waves, propagation and radiation of waves, electrodynamics and relativity.

Pre: PHYS 223 and PHYS 447

Spring

PHYS 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 335

Variable

PHYS 457 (3) Optics

Geometric optics, wave optics, properties of light and matter, optics of transformations, and quantum optics. Lecture and laboratory.

Pre: MATH 122 and PHYS 223

ODD-Spring

PHYS 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 335, PHYS 441, MATH 247, MATH 321

Fall

PHYS 465 (3) Computer Applications in Physics

Numerical solutions of physics problems and computer simulations of physical systems. Lecture and laboratory.

Pre: MATH 122, CS 110 and PHYS 222 or PHYS 223.

Fall

PHYS 473 (3) Statistical Physics

Fundamental principles of statistical physics, including theory of probability, kinetic theory of transport process, entropy, classical and quantum statistical ensembles, Bose and Fermi systems. Applications to thermodynamics and magnetic properties of solids.

Pre: MATH 321 and PHYS 223

Alt-Spring

PHYS 475 (3) Advanced Laboratory

Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories.

Pre: PHYS 336 or consent

Spring

PHYS 475W (3) Advanced Laboratory

Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories.

Pre: PHYS 336 or consent

Spring

WI

PHYS 480 (3) Lab 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.

Fall, Spring

PHYS 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: one year of chemistry and one year of physics, or consent

Spring

PHYS 490 (2-4) Workshop

A short course devoted to a specific topic in physics. May be repeated for credit on each new topic.

Variable

PHYS 491 (1-8) In-Service

A course designed to upgrade the qualifications of persons on-the-job.

Variable

PHYS 492 (1) Seminar

Students will attend research seminars presented by faculty in the department, or speakers from other institutions. Students also make and critique presentations made by themselves and other students. May be repeated for credit.

Pre: Completed at least two upper division physics courses.

Spring

PHYS 493 (1-6) Undergraduate Research

Pre: Consent

Variable

PHYS 495 (1-2) Selected Topics

A course in an area of physics not regularly offered. Topic and credit assigned by department each time offered.

Pre: PHYS 335 and PHYS 336

Variable

PHYS 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

Variable

PHYS 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

Variable

Political Science

College of Social & Behavioral Sciences
 Department of Government
 109 Morris Hall • 507-389-2721
 Website: www.mnsu.edu/psle/

Chair: Scott Granberg-Rademacker

Abdalla Battah, Susan Burum, Reggie Edwards, Scott Granberg-Rademacker, Tomasz Inglot, Avra Johnson, Eiji Kawabata, Joseph Kunkel, Kevin Parsneau, Fred Slocum, Jackie Viecele

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 last century. 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.

POLICIES/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.

Students must consult with the program advisor who will approve and file the program of courses selected and approve changes in the program.

The combination of a Political Science major and Public Administration minor is not allowed. The combination of a Public Administration minor and Political Science major is not allowed.

Minimum Credit Requirement. All students (including transfer students) majoring in Political Science must take a minimum of 15 credits of Political Science courses at Minnesota State Mankato before graduation with BA in Political Science.

Minimum Credit Requirement. All students (including transfer students) majoring in Political Science must take a minimum of 15 credits of Political Science courses at Minnesota State Mankato before graduation with BS in Political Science.

Minimum Credit Requirement. All students (including transfer students) minoring in Political Science must take a minimum of 9 credits of Political Science courses at Minnesota State Mankato before graduation.

Minimum Credit Requirement. All students (including transfer students) minoring in Public Administration must take a minimum of 9 credits of Political Science courses at Minnesota State Mankato before graduation.

No more than six (6) credit hours of POL 491 (Internship) may be counted (as Unrestricted Elective credit) toward completing the Political Science major.

No more than six (6) credit hours taken toward completing the Political Science minor can be counted toward completing the International Relations major.

No more than six (6) credit hours taken toward completing the International Relations major can be counted toward completing the Political Science major.

GPA Policy. Students must maintain an overall GPA of 2.0 in the Political Science major AND must earn a “C-” or better for all courses 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.

POLITICAL SCIENCE BA

Degree completion = 120 credits

Major Common Core

POL 111	United States Government (3)
POL 221	Introduction to Political Analysis (3)
POL 241	Introduction to Comparative Politics (3)

Major Restricted Electives

Choose Area 1, Area 2 or Area 3 as your concentration area. Within your chosen concentration area, complete at least 15 credit hours (concentration requirement: minimum 15 credit hours). Within the other two (non-concentration) areas, complete at least 3 credit hours each (distribution requirement: minimum 6 credit hours total).

Area 1: American Politics and Policy

POL 260	Introduction to Public Administration (3)
POL 321	Democracy and Citizenship (2)
POL 322	In-Service: Public Achievement (1-2)
POL 361	Public Budgeting (3)
POL 371	State & Local Government (3)
POL 420	Topics in Participation and Behavior (3)
POL 422	Campaigns & Elections (3)
POL 423	Political Parties (3)
POL 424	Women & Politics (3)
POL 425	Terrorism & Political Violence (3)
POL 426	Racial and Ethnic Politics (3)
POL 427	Political Psychology (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 470	Topics in Institutions & Process (1-4)
POL 471	Public Opinion and Polling Methods (3)
POL 472	Urban Government (3)
POL 473	Legislative Process (3)
POL 474	Executive Process (3)
POL 475	Judicial Process (3)
POL 476	Southern Politics (3)

Area 2: International Relations and Comparative Politics

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	United States Foreign Policy (3)
POL 435	Capitalism, Nationalism, and Democracy (3)
POL 436	International Political Economy (3)
POL 437	International Conflict Resolution (3)
POL 438	International Relations of East Asia (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 & Neighboring States Politics (3)
POL 442	South Asia: Politics & Policy (3)

- POL 443 Middle East Politics (3)
- POL 444 Latin American Politics (3)
- POL 445 Asian Pacific Rim: Politics & Policy (3)
- POL 446 African Politics (3)
- POL 447 European Democracies (3)
- POL 448 Political Development & Change (3)
- POL 449 Comparative Criminal Justice Systems (3)

Area 3: Theory and Public Law

- POL 311 Ancient & Medieval Political Philosophy (3)
- POL 312 Early Modern Political Philosophy (3)
- POL 313 Modern Political Philosophy (3)
- POL 410 Topics in Political Philosophy (1-4)
- POL 414 Early United States Political Thought (3)
- POL 415 Recent United States Political Thought (3)
- POL 416 Nonwestern Political Philosophy (3)
- POL 450 Topics in Public Law (1-4)
- POL 451 Administrative Law (3)
- POL 453 Constitutional Law (3)
- POL 454 Civil Liberties (3)
- POL 455 American Legal Philosophy (3)

Other Course Choices

With permission of advisor, any of the following courses may substitute for courses in the three areas above. No more than 6 credits of POL 491 Internship, can be counted toward completing the Political Science major.

- POL 391 Colloquium (1-4)
- POL 480 Topics in Political Methods (3)
- POL 490 Workshop (1-6)
- POL 491 Internship (1-12)
- POL 492 Individual Study (1-5)

Major Unrestricted Electives

From the list below, complete at least 6 credit hours of courses at any (100 through 400) level, and at least 6 additional credit hours of courses at the 300 or 400 level (electives requirement: at least 12 credit hours total). The twelve credit hours of Political Science Major Unrestricted Electives must be different courses than those taken as Major Restricted Electives.

Political Science Electives

- POL 100 Introduction to Politics (3)
- POL 101 Introduction to Public Life (3)
- POL 103W Thinking About Politics (3)
- POL 104 Understanding the U.S. Constitution (3)
- POL 106 Politics in the World Community (3)
- POL 201 Issues in Politics (1-3)
- POL 231 World Politics (3)
- POL 234 Model United Nations (3)
- POL 260 Introduction to Public Administration (3)
- POL 311 Ancient & Medieval Political Philosophy (3)
- POL 312 Early Modern Political Philosophy (3)
- POL 313 Modern Political Philosophy (3)
- POL 321 Democracy and Citizenship (2)
- POL 322 In-Service: Public Achievement (1-2)
- POL 361 Public Budgeting (3)
- POL 371 State & Local Government (3)
- POL 410 Topics in Political Philosophy (1-4)
- POL 414 Early United States Political Thought (3)
- POL 415 Recent United States Political Thought (3)
- POL 416 Nonwestern Political Philosophy (3)
- POL 420 Topics in Participation and Behavior (3)
- POL 422 Campaigns & Elections (3)
- POL 423 Political Parties (3)
- POL 424 Women & Politics (3)
- POL 425 Terrorism & Political Violence (3)
- POL 426 Racial and Ethnic Politics (3)
- POL 427 Political Psychology (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 United States Foreign Policy (3)
- POL 435 Capitalism, Nationalism, and Democracy (3)
- POL 436 International Political Economy (3)
- POL 437 International Conflict Resolution (3)
- POL 438 International Relations of East Asia (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 & Neighboring States Politics (3)
- POL 442 South Asia: Politics & Policy (3)
- POL 443 Middle East Politics (3)
- POL 444 Latin American Politics (3)
- POL 445 Asian Pacific Rim: Politics & Policy (3)
- POL 446 African Politics (3)
- POL 447 European Democracies (3)
- POL 448 Political Development & Change (3)
- POL 449 Comparative Criminal Justice Systems (3)
- POL 450 Topics in Public Law (1-4)
- POL 451 Administrative Law (3)
- POL 453 Constitutional Law (3)
- POL 454 Civil Liberties (3)
- POL 455 American Legal Philosophy (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 470 Topics in Institutions & Process (1-4)
- POL 471 Public Opinion and Polling Methods (3)
- POL 472 Urban Government (3)
- POL 473 Legislative Process (3)
- POL 474 Executive Process (3)
- POL 475 Judicial Process (3)
- POL 476 Southern Politics (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

POLITICAL SCIENCE BS

Degree completion = 120 credits

Major Common Core

- POL 111 United States Government (3)
- POL 221 Introduction to Political Analysis (3)
- POL 241 Introduction to Comparative Politics (3)

Major Restricted Electives

Choose Area 1, Area 2 or Area 3 as your concentration area. Within your chosen concentration area, complete at least 15 credit hours (concentration requirement: minimum 15 credit hours). Within the other two (non-concentration) areas, complete at least 3 credit hours each (distribution requirement: minimum 6 credit hours total).

Area 1: American Politics and Policy

- POL 260 Introduction to Public Administration (3)
- POL 321 Democracy and Citizenship (2)
- POL 322 In-Service: Public Achievement (1-2)
- POL 361 Public Budgeting (3)
- POL 371 State & Local Government (3)
- POL 420 Topics in Participation and Behavior (3)
- POL 422 Campaigns & Elections (3)
- POL 423 Political Parties (3)
- POL 424 Women & Politics (3)
- POL 425 Terrorism & Political Violence (3)
- POL 426 Racial and Ethnic Politics (3)
- POL 427 Political Psychology (3)
- POL 460 Topics in Public Policy/Administration (1-4)

POLITICAL SCIENCE CONTINUED

POL 461 Environmental Politics (3)
 POL 462 Collective Bargaining: Public Sector (3)
 POL 463 Public Personnel Administration (3)
 POL 470 Topics in Institutions & Process (1-4)
 POL 471 Public Opinion and Polling Methods (3)
 POL 472 Urban Government (3)
 POL 473 Legislative Process (3)
 POL 474 Executive Process (3)
 POL 475 Judicial Process (3)
 POL 476 Southern Politics (3)

Area 2: International Relations and Comparative Politics

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 United States Foreign Policy (3)
 POL 435 Capitalism, Nationalism, and Democracy (3)
 POL 436 International Political Economy (3)
 POL 437 International Conflict Resolution (3)
 POL 438 International Relations of East Asia (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 & Neighboring States Politics (3)
 POL 442 South Asia: Politics & Policy (3)
 POL 443 Middle East Politics (3)
 POL 444 Latin American Politics (3)
 POL 445 Asian Pacific Rim: Politics & Policy (3)
 POL 446 African Politics (3)
 POL 447 European Democracies (3)
 POL 448 Political Development & Change (3)
 POL 449 Comparative Criminal Justice Systems (3)

Area 3: Theory and Public Law

POL 311 Ancient & Medieval Political Philosophy (3)
 POL 312 Early Modern Political Philosophy (3)
 POL 313 Modern Political Philosophy (3)
 POL 410 Topics in Political Philosophy (1-4)
 POL 414 Early United States Political Thought (3)
 POL 415 Recent United States Political Thought (3)
 POL 416 Nonwestern Political Philosophy (3)
 POL 450 Topics in Public Law (1-4)
 POL 451 Administrative Law (3)
 POL 453 Constitutional Law (3)
 POL 454 Civil Liberties (3)
 POL 455 American Legal Philosophy (3)

Other Course Choices

With permission of advisor, any of the following courses may substitute for courses in the three areas above. No more than 6 credits of POL 491, Internship, can be counted toward completing the Political Science major.

POL 391 Colloquium (1-4)
 POL 480 Topics in Political Methods (3)
 POL 490 Workshop (1-6)
 POL 491 Internship (1-12)
 POL 492 Individual Study (1-5)

Major Unrestricted Electives

From the list below, complete at least 6 credit hours of courses at any (100 through 400) level, and at least 6 additional credit hours of courses at the 300 or 400 level (electives requirement: at least 12 credit hours total). The twelve credit hours of Political Science Major Unrestricted Electives must be different courses than those taken as Major Restricted Electives.

Political Science Electives

POL 100 Introduction to Politics (3)
 POL 101 Introduction to Public Life (3)
 POL 103W Thinking About Politics (3)
 POL 104 Understanding the U.S. Constitution (3)
 POL 106 Politics in the World Community (3)

POL 201 Issues in Politics (1-3)
 POL 231 World Politics (3)
 POL 234 Model United Nations (3)
 POL 260 Introduction to Public Administration (3)
 POL 311 Ancient & Medieval Political Philosophy (3)
 POL 312 Early Modern Political Philosophy (3)
 POL 313 Modern Political Philosophy (3)
 POL 321 Democracy and Citizenship (2)
 POL 322 In-Service: Public Achievement (1-2)
 POL 361 Public Budgeting (3)
 POL 371 State & Local Government (3)
 POL 410 Topics in Political Philosophy (1-4)
 POL 414 Early United States Political Thought (3)
 POL 415 Recent United States Political Thought (3)
 POL 416 Nonwestern Political Philosophy (3)
 POL 420 Topics in Participation and Behavior (3)
 POL 422 Campaigns & Elections (3)
 POL 423 Political Parties (3)
 POL 424 Women & Politics (3)
 POL 425 Terrorism & Political Violence (3)
 POL 426 Racial and Ethnic Politics (3)
 POL 427 Political Psychology (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 United States Foreign Policy (3)
 POL 435 Capitalism, Nationalism, and Democracy (3)
 POL 436 International Political Economy (3)
 POL 437 International Conflict Resolution (3)
 POL 438 International Relations of East Asia (3)
 POL 439 Comparative Social Policy: The Welfare State in Europe and the Americas (3)

POL 440 Topics in Comparative Politics (1-4)
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 POL 442 South Asia: Politics & Policy (3)
 POL 443 Middle East Politics (3)
 POL 444 Latin American Politics (3)
 POL 445 Asian Pacific Rim: Politics & Policy (3)
 POL 446 African Politics (3)
 POL 447 European Democracies (3)
 POL 448 Political Development & Change (3)
 POL 449 Comparative Criminal Justice Systems (3)
 POL 450 Topics in Public Law (1-4)
 POL 451 Administrative Law (3)
 POL 453 Constitutional Law (3)
 POL 454 Civil Liberties (3)
 POL 455 American Legal Philosophy (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 470 Topics in Institutions & Process (1-4)
 POL 471 Public Opinion and Polling Methods (3)
 POL 472 Urban Government (3)
 POL 473 Legislative Process (3)
 POL 474 Executive Process (3)
 POL 475 Judicial Process (3)
 POL 476 Southern Politics (3)

Required Minor: Yes. Any.

POLITICAL SCIENCE MINOR

Required for Minor (18 credits)

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

PUBLIC ADMINISTRATION MINOR

The study of Public Administration provides students with the skills needed to succeed in public-sector management. Skills include leadership and management, data and policy analysis, budgeting and finance, human resources as well as a working knowledge of public-sector governments and political environments.

Minor Core

(The following courses are required)

- POL 111 United States Government (3)
 POL 221 Introduction to Political Analysis (3)
 POL 260 Introduction to Public Administration (3)
 POL 371 State & Local Government (3)

Elective (6 credits)

Choose up to six credits from the courses listed below. At least three of the six credits must come from the Restricted Electives category.

Restricted Electives (choose 3-6 credits)

At least three of the six elective credits must come from these courses.

- POL 361 Public Budgeting (3)
 POL 451 Administrative Law (3)
 POL 460 Topics in Public Policy/Administration (1-4)
 POL 462 Collective Bargaining: Public Sector (3)
 POL 463 Public Personnel Administration (3)

Unrestricted Electives (choose 0-3 credits)

- POL 471 Public Opinion and Polling Methods (3)
 POL 472 Urban Government (3)
 POL 474 Executive Process (3)
 POL 491 Internship (1-12)

COURSE DESCRIPTIONS**POL 100 (3) Introduction to Politics**

Study of the nature of politics and government and their influence on society and human behavior.

Fall, Spring
 GE-5

POL 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.

GE-9, GE-11

POL 103W (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 develop your research and writing skills.

WI, GE-2

POL 104 (3) Understanding the U.S. 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.

GE-5

POL 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.

GE-8

POL 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.

GE-5, GE-9

POL 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.

Fall, Spring

POL 221 (3) Introduction to Political Analysis

Elementary analytical concepts and basic techniques for understanding and doing research in political science.

Fall, Spring

POL 231 (3) World Politics

An introduction to the dynamics of interactions among sovereign states and other global actors.

Fall, Spring

POL 234 (3) Model United Nations

The course is intended to prepare students to participate in the model UN. Students learn about issues before the UN and acquire a variety of communication and negotiating skills as they model the role of ambassadors.

Variable

GE-1B, GE-8

POL 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.

Fall, Spring

POL 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.

Fall, Spring

POL 311 (3) Ancient & 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.

Fall

POL 312 (3) Early 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.

Spring

POL 313 (3) Modern 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.

Variable

POL 321 (3) Democracy and Citizenship

Students learn about active citizenship from readings and discussions on the theory and practice of democracy. Students should become more motivated to participate, feel a greater sense of empowerment, improve political skills, and better understand and appreciate democracy.

Coreq: POL 322

Fall, Spring

POL 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.

Variable

POL 371 (3) State & Local Government

Institutions, processes, intergovernmental relations, and politics of U.S. state and local governments.

Fall, Spring

POL 391 (1-4) Colloquium

Topics will vary. Typically each session of this colloquium is led 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

Variable

POL 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.

Variable

POL 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, women's rights, state's rights, abolitionism, proslavery.

Variable

POL 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, Socialism, Progressivism. Women's Rights, suffrage movement and contemporary feminism; African American political thought: liberalism; conservatism.

Variable

POL 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.

Variable

POL 420 (3) Topics: 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 field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

POL 422 (3) Campaigns & 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.

Fall

POL 423 (3) Political Parties

Political parties at United States, state, local levels. Cross-national comparisons. Decline and revival of parties. What parties do. Is the two party system the best? Are third parties the answer? Party organization. Voting behavior. Legislative, executive parties. Minnesota focus.

POL 424 (3) Women & Politics

Politics impact on women: women's impact on politics and governance; primary focus on United States but some comparative considerations.

Variable

POL 425 (3) Terrorism & 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

Variable

POL 426 (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).

POL 427 (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.

POL 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.

Pre: POL 231

Variable

POL 431 (3) International Relations

An advanced theoretical survey of the dynamics of politics and political change at the global level.

Pre: POL 231

Spring

POL 432 (3) International Law

A study of the legal norms and institutions which influence international and transnational relations.

Pre: POL 231

Variable

POL 433 (3) International Organization

Study of the function and process of the United Nations and other international organizations.

Pre: POL 231

Spring

POL 434 (3) United States Foreign Policy

This course is a general overview of US foreign policy institutions, processes, and politics. U.S. foreign policy is examined in historical, global and domestic contexts.

Pre: POL 231

Variable

POL 435 (3) Capitalism, Nationalism, and Democracy

This course explores the interaction of the three complex 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.

Pre: POL 241

POL 436 (3) International Political Economy

Focusing on patterns, processes, and problems of international trade, monetary, technological, and investment relations, this course examines the roles played by key government organizations in managing conflict and cooperation among states.
Pre: POL 231

POL 437 (3) International Conflict Resolution

This interdisciplinary proseminar focuses on conflict resolution in the international arena. We will discuss causes of conflict, examine approaches to the study of conflict resolution, and analyze the varieties of nonviolent strategies of conflict resolution, emphasizing third party mediation.
Pre: POL 231

POL 438 (3) International Relations of East Asia

An overview of the international relations of East Asia, the course examines cooperation and conflict among major powers in the area: China, Japan and the United States. Topics include Japan's pre-WWII expansionism, China's political transformation and North Korea's nuclear controversy.
Fall, Spring

POL 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 work in different ways to produce collective or social choices.
Pre: POL 241

POL 440 (1-4) Topics 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.
Pre: POL 241
Variable

POL 441 (3) Russia & 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 post communist transformation in Russia and other former Soviet republics.
Pre: POL 241
Variable

POL 442 (3) South Asia: Politics & 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.
Pre: POL 241
Variable

POL 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.
Pre: POL 241
Fall

POL 444 (3) Latin American 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.
Pre: POL 241
Variable

POL 445 (3) Asia Pacific Rim: Politics & 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
Pre: POL 241
Variable

POL 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.
Pre: POL 241
Spring

POL 447 (3) European Democracies

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.
Pre: POL 241

POL 448 (3) Political Development & 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.
Pre: POL 241
Fall

POL 449 (3) Comparative Criminal Justice Systems

A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world.
Same as LAWE 434
Variable

POL 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.
Variable

POL 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.
Fall

POL 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.
Fall

POL 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.
Variable

POL 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
Variable

POLITICAL SCIENCE CONTINUED

POL 455 (3) American Legal Philosophy

This course examines major schools in American legal thought from the dawn of the 20th century to the present day. Our focus will lie with turn-of-the century formalism; legal realism; the legal process school; law and economics; and critical legal studies. We will apply legal reasoning from these schools to selected controversial 20th-century Supreme Court cases on church-state issues, gay and lesbian rights, privacy rights, criminal defendants' rights and other issues as appropriate.

POL 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.

Variable

POL 461 (3) Environmental Politics

Politics of the natural environment (U.S. focus). Environmental and opposition values; roles of public opinion, Congress, presidency and courts in environmental policymaking. Policy areas include: air/water pollution, climate change, hazardous/nuclear waste, sustainable development, and common problems like overfishing.

Variable

POL 462 (3) Collective Bargaining: Public Sector

A broadly based introduction to the issues, processes, and techniques of public sector labor relations.

Variable

POL 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.

Fall

POL 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.

Spring

POL 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.

Variable

POL 471 (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.

POL 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.

Variable

POL 473 (3) 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.

Spring

POL 474 (3) 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.

Variable

POL 475 (3) 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.

Variable

POL 476 (3) Southern Politics

The course examines politics in the American South. It examines the historical and cultural roots of Southern distinctiveness, traditionalistic political culture, racial conflicts, hostility toward organized labor, religious fundamentalism, tolerance of state violence, and social and moral conservatism. Major attention is paid to the realignment of white Southerners toward the Republican Party.

POL 480 (3) 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.

Variable

POL 490 (1-6) Workshop

Selected topics. May be repeated with change of topic.

Variable

POL 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

Variable

POL 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.

Variable

PORTUGUESE

Portuguese

College of Arts and Humanities

Department of World Languages and Cultures

227 Armstrong Hall • 507-389-2116

Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Please go to World Languages and Cultures to see course descriptions.

WLC 310 Portuguese for Spanish Speakers (4)

Psychology

College of Social & Behavioral Sciences

Department of Psychology

23 Armstrong Hall • 507-389-2724

Website: www.mnsu.edu/psych/

Chair: Andrea Lassiter

Dawn Albertson, Bradley Arsznov, Kathy Bertsch, Jeffrey Buchanan, Kristie Campana, Kevin Filter, Daniel Houlihan, Rosemary Krawczyk, Moses Langley, Karla Lassonde, Carlos Panahon, Lisa Perez, Shawna Petersen-Brown, Daniel Sachau, Sarah Sifers, Eric Sprankle, Emily Stark

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.

POLICIES/INFORMATION

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 2.7
- completion of PSYC 201 (Statistics) with a grade of "C-" or better.

Contact the department for application procedures.

Residency Requirement. All majors must complete 28 of the required 40 credits within the Department of Psychology at Minnesota State University, Mankato. The department will not accept transfer courses at the 200-level for our major restricted electives, except in a case by case basis.

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 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 BS (teaching) program as described in the Social Studies section of this catalog.

PSYCHOLOGY BA

Degree completion = 120 credits

Pre-requisites to the Major

PSYC 101 Introduction to Psychological Science (4)

Major Common Core

PSYC 201 Statistics for Psychology (4)
 PSYC 211W Research Methods and Design (4)
 PSYC 409 History and Systems (4)

Major Restricted Electives

(choose one course from each of the four areas)

Biological (choose 4 credits)

PSYC 321 Brain and Behavior (4)
 PSYC 413 Sensation & Perception (4)
 PSYC 420 Psychopharmacology (4)
 PSYC 421 Behavior Neuroscience (4)
 PSYC 425W Behavior Genetics (4)

Cognition (choose 4 credits)

PSYC 325 Introduction to Cognitive Psychology (4)
 PSYC 414 Learning (4)
 PSYC 415 Human Memory (4)
 PSYC 423 Cognitive Neuroscience (4)

Developmental (choose 4 credits)

PSYC 433 Child Psychology (4)
 PSYC 436 Adolescent Psychology (4)
 PSYC 466 Psychology of Aging (4)

Personality/Social (choose 3-4 credits)

PSYC 340 Social Psychology (4)
 PSYC 455 Abnormal Psychology (4)
 PSYC 456 Personality Theories (3)
 PSYC 458 Cultural Psychology (4)

Major Unrestricted Electives

(choose 12-13 credits from the following psychology courses)

PSYC 103W Psychology Today (3)
 PSYC 202 Careers in Psychology (1)
 PSYC 206 The Human Mind (4)
 PSYC 230 Child Care Psychology (3)
 PSYC 240 Personal Adjustment (3)
 PSYC 289 Psychology and the Law (3)
 PSYC 291 Tutoring Psychology (1-4)
 PSYC 303 Introduction to Clinical Psychology (3)
 PSYC 304 Introduction to School Psychology (2)
 PSYC 321 Brain and Behavior (4)
 PSYC 325 Introduction to Cognitive Psychology (4)
 PSYC 333 Psychology of Sexual Health (3)
 PSYC 340 Social Psychology (4)
 PSYC 358 Cultural Psychology (4)
 PSYC 398 CPT: Co-Operative Experience (0)
 PSYC 405 Motivation (4)
 PSYC 413 Sensation & Perception (4)
 PSYC 414 Learning (4)
 PSYC 415 Human Memory (4)
 PSYC 419 Psychometric Theory (4)
 PSYC 420 Psychopharmacology (4)
 PSYC 421 Behavior Neuroscience (4)
 PSYC 423 Cognitive Neuroscience (4)
 PSYC 425W Behavior Genetics (4)
 PSYC 433 Child Psychology (4)
 PSYC 436 Adolescent Psychology (4)
 PSYC 442 Group Psychology (3)
 PSYC 443 Advanced Social Psychology (3)
 PSYC 455 Abnormal Psychology (4)
 PSYC 456 Personality Theories (3)
 PSYC 460W Psychology of Women (3)
 PSYC 461 Marketing Psychology (3)
 PSYC 463 Survey of Industrial/Organizational Psychology (4)
 PSYC 466 Psychology of Aging (4)
 PSYC 476 Applied Behavior Analysis (4)
 PSYC 478 Health Psychology (4)
 PSYC 489 Advanced Topics (1-5)
 PSYC 490 Workshop (1-3)
 PSYC 491 In-Service: Issues in Behavior Therapy (1)
 PSYC 497 Field Experience (1-8)
 PSYC 499 Individual Study (1-4)

Required Minor. Any.

Other Graduation Requirements

Required for Bachelor of Arts (BA) degree ONLY: Language (8 credits)

PSYCHOLOGY BS

Degree completion = 120 credits

Pre-requisites to the Major

PSYC 101 Introduction to Psychological Science (4)

PSYCHOLOGY CONTINUED

Major Common Core

PSYC 201	Statistics for Psychology (4)
PSYC 211W	Research Methods and Design (4)
PSYC 409	History and Systems (4)

Major Restricted Electives

(choose one course from each of the four areas)

Biological (choose 4 credits)

PSYC 321	Brain and Behavior (4)
PSYC 413	Sensation & Perception (4)
PSYC 420	Psychopharmacology (4)
PSYC 421	Behavior Neuroscience (4)
PSYC 425W	Behavior Genetics (4)

Cognition (choose 4 credits)

PSYC 325	Introduction to Cognitive Psychology (4)
PSYC 414	Learning (4)
PSYC 415	Human Memory (4)
PSYC 423	Cognitive Neuroscience (4)

Developmental (choose 3-4 credits)

PSYC 433	Child Psychology (4)
PSYC 436	Adolescent Psychology (4)
PSYC 466	Psychology of Aging (4)

Personality/Social (choose 3-4 credits)

PSYC 340	Social Psychology (4)
PSYC 455	Abnormal Psychology (4)
PSYC 456	Personality Theories (3)
PSYC 458	Cultural Psychology (4)

Major Unrestricted Electives

(choose 12-13 credits from the following courses)

PSYC 103W	Psychology Today (3)
PSYC 202	Careers in Psychology (1)
PSYC 206	The Human Mind (4)
PSYC 207	Introduction to Behavior Analysis (4)
PSYC 230	Child Care Psychology (3)
PSYC 240	Personal Adjustment (3)
PSYC 289	Psychology and the Law (3)
PSYC 291	Tutoring Psychology (1-4)
PSYC 303	Introduction to Clinical Psychology (3)
PSYC 304	Introduction to School Psychology (2)
PSYC 321	Brain and Behavior (4)
PSYC 333	Psychology of Sexual Health (3)
PSYC 340	Social Psychology (4)
PSYC 398	CPT: Co-Operative Experience (0)
PSYC 405	Motivation (4)
PSYC 407	Advanced Behavior Analysis (4)
PSYC 413	Sensation & Perception (4)
PSYC 414	Learning (4)
PSYC 415	Human Memory (4)
PSYC 416	Cognitive Psychology (4)
PSYC 419	Psychometric Theory (4)
PSYC 420	Psychopharmacology (4)
PSYC 421	Behavior Neuroscience (4)
PSYC 422	Neuropsychology (4)
PSYC 423	Cognitive Neuroscience (4)
PSYC 424	Physiology Psychology Laboratory (4)
PSYC 425W	Behavior Genetics (4)
PSYC 429	Drug Dependence (3)
PSYC 433	Child Psychology (4)
PSYC 436	Adolescent Psychology (4)
PSYC 441	Attitudes (3)
PSYC 442	Group Psychology (3)
PSYC 443	Advanced Social Psychology (3)
PSYC 450	Advanced Cognitive Psychology (4)
PSYC 451	Methods of Enhancing Performance (3)
PSYC 453	Human Factors (3)
PSYC 455	Abnormal Psychology (4)
PSYC 456	Personality Theories (3)
PSYC 458	Cultural Psychology (3)
PSYC 460W	Psychology of Women (3)

PSYC 461	Marketing Psychology (3)
PSYC 462	Management Psychology (3)
PSYC 463	Survey of Industrial/Organizational Psychology (4)
PSYC 466	Psychology of Aging (4)
PSYC 476	Applied Behavior Analysis (4)
PSYC 478	Health Psychology (4)
PSYC 489	Advanced Topics (1-5)
PSYC 490	Workshop (1-3)
PSYC 491	In-Service: Issues in Behavior Therapy (1)
PSYC 495	Honors Seminar in Psychology (2)
PSYC 496	Laboratory Research in Psychology (2)
PSYC 497	Field Experience (1-8)
PSYC 499	Individual Study (1-4)

Required Minor: Yes. Any.

PSYCHOLOGY MINOR

Required for Minor (General Education)

PSYC 101	Introduction to Psychological Science (4)
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

COURSE DESCRIPTIONS

PSYC 101 (4) Introduction to Psychological Science

This course is designed to provide a thorough introduction to the broad spectrum of theories and applications that make up the field of psychology.

Fall, Spring

GE-5

PSYC 103W (3) Psychology Today

Introduces students to major issues in society that impact their lives, behaviors, and the way they think. Course requires student to critically address controversial and non-controversial issues through clear argumentations, intensive writings, research and presentations.

Spring

WI, GE-2

PSYC 201 (4) Statistics for Psychology

1.) Learn the importance of statistics for understanding human behavior. 2.) Apply basic statistical concepts to questions about human behavior. 3.) Conduct basic statistical tests and make inferences about human behavior. 4.) Prepare students in the psychology major to take PSYC 211-Research Methods and Design.

Pre: MATH 112

Fall, Spring

PSYC 202 (1) Careers in Psychology

Exploration of various degrees and types of careers available in psychology, and what psychologists do.

Fall, Spring

PSYC 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.

Spring

GE-5

PSYC 211 (4) Research Methods and Design

An introduction to the major components of research methodology in psychology. This is a writing intensive course and involves the processing, interpretation, and exposition of behavioral data.

Pre: PSYC 201

Fall, Spring

PSYC 211W (4) Research Methods and Design

An introduction to the major components of research methodology in psychology. This is a writing intensive course and involves the processing, interpretation, and exposition of behavioral data.

Pre: PSYC 201

Fall, Spring

WI

PSYC 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.

Fall, Spring

Diverse Cultures - Gold

PSYC 240 (3) Personal Adjustment

Understanding oneself and increasing one's satisfaction in living.

Fall, Spring

PSYC 289 (3) Psychology and the Law

This course will introduce you to specific psychological theories and research that have been applied to the United States legal system. Course topics include eyewitness testimony and memory, false confessions, lie detection, gender and ethnicity, and jury processes, among others.

Variable

PSYC 291 (1-4) Tutoring Psychology

Application of the principles of learning to the instruction of students.

Permission required. Pre: PSYC 101

Fall, Spring

PSYC 303 (3) Introduction to Clinical 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

Fall

PSYC 304 (2) Introduction to School Psychology

This course is designed to introduce students to school psychology. The course will broadly address prominent topics in the field as well as assist students in deciding on graduate school and career objectives.

Spring

PSYC 321 (4) Brain and Behavior

This course will introduce students to the relationship between the structure and function of the nervous system to the underlying biological processes of behavior.

Pre: PSYC 201, PSYC 211W

Fall, Spring

PSYC 325 (4) Introduction to Cognitive Psychology

Explores the scientific study of human cognition and provides students with broad coverage of the mental processes used to acquire, process, and retain knowledge. Students will examine basic concepts and research findings in topics of human cognition such as perception, attention, memory, reading, and problem solving. Concepts in Cognitive Psychology will be related to everyday behaviors and experiences.

Pre: PSYC 201 & PSYC 211

Fall, Spring

PSYC 333 (3) Psychology of Sexual Health

An overview of the psychological aspects of sexuality including the assessment and treatment of sexual disorders, gender development and identity, sexual orientation, behavioral effects on sexual health, and sexual offending and trauma.

Variable

PSYC 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

Fall, Spring

PSYC 358 (4) Cultural Psychology

Cultural psychology is an interdisciplinary field that unites psychologists, anthropologists, linguists and philosophers to study how cultural meanings, practices and institutions influence and reflect individual human psychologies. Cultural influences on cognition, perception, emotion, motivation, moral reasoning, and well-being will be discussed with a view towards understanding divergent mentalities by drawing primarily from studies comparing Eastern and Western cultures, as well as some ethnic group companions within the United States. Students should come out of this course with an appreciation for the capacity for humans to create psychological diversity.

Spring

PSYC 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: PSYC 101. At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

PSYC 405 (4) Motivation

Major concepts of human motivation and emotion, presentation of learned cognitive and biological influences on sustained behavior.

Pre: PSYC 201, PSYC 207 or PSYC 211, or consent

Fall

PSYC 409 (4) History and Systems

Examination of the historical origins of the principal contemporary psychological theories.

Fall, Spring

PSYC 413 (4) Sensation & 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 as also considered.

Pre: PSYC 101, PSYC 201, PSYC 207 or PSYC 211

Fall, Spring

PSYC 414 (4) Learning

This course provides a broad overview and analysis of the major theories of human and animal learning.

Pre: PSYC 101

Fall

PSYC 415 (4) Human Memory

This course covers experimental and behavioral studies of human memory including long- and short-term memory, memory for text, pictures, spatial information, and autobiographical events. Emphasis on real-world situations, including education, in which memory and learning play a role.

Pre: PSYC 201 & PSYC 211

Fall

PSYC 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

Fall

PSYC 420 (4) Psychopharmacology

Biological foundations of the actions of psychoactive drugs. Neuroanatomy structure and function, neurophysiology, pharmacokinetics and pharmacodynamics will be covered in detail. Relevant classes of drugs will be highlighted with an eye toward their history, mechanisms of action, effects, and treatments.

Pre: PSYC 211

Spring

PSYC 421 (4) Behavior Neuroscience

Biological basis of psychological processes and behavior. Neuroanatomy, neural function, and laboratory methods of investigation will be explored in relation to topics such as sleep, memory, language, intelligence and psychological disorders. Pre: PSYC 201, and either PSYC 207 or PSYC 211
Fall, Spring

PSYC 423 (4) Cognitive Neuroscience

The goal of neuroscience is to understand the human mind. This goal is approached by revealing the brain processes involved in how we perceive, think, remember, and move. Brain development, communication, and plasticity at the neural level are all described. Pre: PSYC 421
Spring

PSYC 425 (4) Behavior Genetics

This writing intensive course provides an overview of the application of genetics methods to the study of behavior. We will examine the basic concepts in genetics with an emphasis on behavioral phenotypes, evolution and evolutionary psychology and the genetics of the individual differences. Pre: PSYC 211
Variable

PSYC 425W (4) Behavior Genetics

This writing intensive course provides an overview of the application of genetics methods to the study of behavior. We will examine the basic concepts in genetics with an emphasis on behavioral phenotypes, evolution and evolutionary psychology and the genetics of the individual differences. Pre: PSYC 211
Variable
WI

PSYC 430 (4) Advanced Topics in Biological Psychology

This course provides students with an overview of the fundamental principles and current research on selected topics in biological psychology through critical evaluation and discussion. Pre: PSYC 201, PSYC 211W
Fall, Spring

PSYC 433 (4) Child Psychology

Physical, social, emotional, intellectual, and personality development from conception to preadolescence. Focus on interplay between maturation and experience. Pre: PSYC 101
Fall, Spring

PSYC 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. Fall, Spring

PSYC 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
Variable

PSYC 443 (3) Advanced Social Psychology

An in-depth examination of social psychological research in laboratory and field settings. Pre: PSYC 211W, PSYC 340 or PSYC 458
ALT

PSYC 450 (4) Advanced Cognitive Psychology

Advanced Cognitive Psychology introduces students to key research papers in the field of human cognition. Through reading, writing, and the study of experimental design, students will advance their understanding of cognitive psychology and develop their ability to critically review and evaluate research. Pre: PSYC 325 or PSYC 414 or PSYC 415
Fall (On-Demand), Spring (On-Demand)

PSYC 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
Fall, Spring

PSYC 456 (3) Personality Theories

Major theories of normal personality formation, organization, and structure. Pre: 8 PSYC credits
Fall, Spring

PSYC 460W (3) Psychology of Women

A critical examination of current psychological approaches to the study of women's behavior and experience. The course will emphasize empirical ways of knowing and address psychological questions of central concern to women. Development of gender differences also will be explored. Pre: PSYC 101
Spring
WI
Diverse Cultures - Purple

PSYC 461 (3) Marketing Psychology

Analysis of product marketing and consumer purchasing strategies and their determinants. Pre: 8 PSYC credits
Fall

PSYC 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, PSYC 211
Variable

PSYC 466 (4) 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
Spring

PSYC 476 (4) Applied Behavior Analysis

This course provides an overview of the procedures and processes of behavior change in applied contexts. Topics include functional assessment, behavioral intervention planning, and specific applied behavioral analytic interventions with an emphasis on non-aversive options. Pre: PSYC 207 or PSYC 211
Spring

PSYC 478 (4) Health Psychology

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
Spring

PSYC 489 (1-5) Advanced Topics

Application of psychology to topics of current interest. May be retaken for credit. Variable

PSYC 490 (1-3) Workshop

Topics to be announced. May be retaken for credit. Fall, Spring

PSYC 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. Fall, Spring

PSYC 496 (2) Laboratory Research in Psychology

Individualized research experience with a faculty mentor in the psychology department. You will gain specific research experience as designed by a faculty mentor. To register for this course, you must first apply and be accepted to join a psychology faculty members' research team. Pre: PSYC 211W Fall, Spring

PSYC 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 Fall, Spring

PSYC 499 (1-4) Individual Study

Individualized learning under faculty supervision. Fall, Spring

RECREATION, PARKS & LEISURE SERVICES

Recreation, Parks & Leisure Services

*College of Allied Health & Nursing
Department of Recreation, Parks And Leisure Services
213 Highland North • 507-389-2127
Website: <http://ahn.mnsu.edu/rpls/>*

Chair: Rachele Hodges

Brooke Burk, Joseph Flood, Kristi Montandon, Robyn Ceurvost, Rachele Hodges, James Wise

Accreditations. Council on Accreditation of Parks, Recreation, Tourism and Related Professions. (COAPRT).

This program prepares a graduate to become a professional leader, supervisor and/or administrator within the private for profit, private nonprofit, and the public sectors 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 Council on Accreditation of Parks, Recreation, Tourism, and Related Professions (COAPRT) with three career tracks: Leisure Planning and Management, Therapeutic Recreation, and Resource Management.

POLICIES/INFORMATION

To be admitted to the major, students need:

- A minimum of 32 semester credit hours
- A minimum cumulative GPA (Minnesota State Mankato and Transfer) of 2.5 or better
- Completion of IT 100 (Introduction to Computing and Applications)
- Completion of RPLS 272 (Introduction to Recreation, Parks and Leisure Services) with a "C" or better or departmental permission
- An advisor in the department
- Completion of an application for admission that includes an essay and an evaluation from the student's RPLS 272 (Introduction to Recreation, Parks and Leisure Services) instructor.

Students who have earned fewer than 32 semester credits and/or have a minimum cumulative GPA less than 2.5 can declare as Pre-RPLS. This enables them to select an advisor. Once students meet the entrance requirements, as listed above, they must then apply for formal admittance to the major.

Majors and Pre-RPLS students must also earn a "C" or better in each RPLS class to remain in good standing in the major and be permitted to advance in the program.

Practicum Policy. Each student must complete the practicum requirement. Students are required to enroll in RPLS 495 (9 credits) after completing all RPLS course work. Students must also meet the following requirements to be eligible to register for Practicum:

- Completion of all other required RPLS coursework with a "C" (2.0) or better in each RPLS class,
- A minimum cumulative GPA of 2.5 in the major,
- Completion of RPLS 302 (Pre-Practicum Seminar)
- Completion of RPLS 384 (Field Experience),
- Completion of an Application for Practicum one semester before the Practicum begins. The application must be approved by the student's faculty advisor; and
- Permission to register from the student's faculty advisor.

P/N Grading Policy. Recreation, Parks and Leisure Services majors and minors must take required courses for a letter grade with the exception that the field experience, pre-practicum seminar and 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.

Transfer Policy. Transfer students are required to complete a minimum of 40 semester credits of the major at Minnesota State Mankato.

RECREATION, PARKS & LEISURE SERVICES BS

Degree completion = 120 credits

Pre-requisites to the Major

Students must earn a "C" or better in RPLS 272 prior to admission to the major. In special circumstances, the department may grant admission to students who have not first completed RPLS 272. However, all RPLS majors must complete RPLS 272 as a requirement for graduation.

- IT 100 Introduction to Computing and Applications (4)
- RPLS 272 Introduction To Recreation, Parks & Leisure Services (3)

Major Common Core

- RPLS 277 Recreation Leadership (3)
- RPLS 278 Leisure and Lifestyle (3)
- RPLS 302 Pre-Practicum Seminar (2)
- RPLS 376 Program Planning in Rec., Parks, and Leisure Services (3)
- RPLS 377 Public Relations (3)
- RPLS 379 Management of Parks & Recreation Facilities (3)
- RPLS 384 Field Experience (1)
- RPLS 471W Research Design in Recreation, Parks, and Leisure Services (3)
- RPLS 473 Administration of Leisure Time Programs (3)

RECREATION, PARKS & LEISURE SERVICES CONTINUED

- RPLS 483 Legal Processes in Recreation, Parks and Leisure Services (3)
RPLS 495 Practicum (9)

Major Emphasis: Resource Management

- GEOG 373 Introduction to Geographic Information Systems (4)
RPLS 282 Wildlife as a Recreational Resource (3)
RPLS 350 Methods of Interpretation in RPLS (3)
RPLS 475 Public Land Use Policies (3)
RPLS 478 Review of Outdoor Recreation Research (3)
RPLS 479 Wildland Recreation Management (3)
RPLS 481 Park Planning (3)

Major Emphasis: Leisure Planning and Management

- RPLS 274 Therapeutic Recreation Services (3)
RPLS 325 Programming for Outdoor Settings (3)
RPLS 378 Commercial Recreation and Tourism (3)
RPLS 451 Advanced Program Delivery Methods (3)
RPLS 465 Event Management (3)

Major Emphasis: Therapeutic Recreation

- RPLS 274 Therapeutic Recreation Services (3)
RPLS 440 Therapeutic Recreation Assessment (3)
RPLS 447W Therapeutic Recreation Process (3)
RPLS 450 Therapeutic Recreation Techniques (3)
RPLS 489 Advancement of the Therapeutic Recreation Profession (3)

NATIONAL CERTIFICATION IN THERAPEUTIC RECREATION

(choose 0 credits) - Please see Dr. Wise, Advisor for Therapeutic Recreation

- BIOL 220 Human Anatomy (4)
HP 348 Structural Kinesiology and Biomechanics (3)
KSP 235 Human Development (3)
PSYC 455 Abnormal Psychology (4)

RECREATION, PARKS & LEISURE SERVICES MINOR

Required for Minor

- RPLS 272 Introduction to Recreation, Parks, and Leisure Services (3)
RPLS 376 Program Planning in Rec., Parks and Leisure Services (3)
RPLS 377 Public Relations (3)
RPLS 473 Administration of Leisure Time Programs (3)

Required for Minor

(Choose 9 credits of electives from one of the option areas)

- RPLS xxx Leisure Planning & Management
RPLS xxx Therapeutic Recreation
RPLS xxx Resource Management

COURSE DESCRIPTIONS

RPLS 272 (3) Introduction to Recreation, Parks & 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.

Fall, Spring

RPLS 274 (3) Therapeutic Recreation Services

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.

Spring

Diverse Cultures - Purple

RPLS 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.

Fall, Spring

RPLS 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.

Fall, Spring

GE-11

RPLS 282 (3) Wildlife as a Recreational 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.

Fall, Spring

GE-10

RPLS 302 (2) Pre-Practicum Seminar

This course is designed to be taken two semesters before students completes their practicums. It will help students identify and secure a practicum. It will also help students establish reasonable expectations for a quality practicum experience.

Fall, Spring

RPLS 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 professional planning strategies for outdoor recreation.

Fall

RPLS 350 (3) Methods of Interpretation in RPLS

Students will be introduced to various methods and skills used to design and deliver interpretive programs and materials to various audiences. Students will also apply the philosophies, concepts, theories and practical skills necessary for implementing effective interpretive programs.

Fall

RPLS 376 (3) Program Planning in Recreation, Parks, & 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.

Fall, Spring

RPLS 377 (3) Public Relations

Focuses on the total planning, implementation and techniques of effective public relations.

Fall, Spring

RPLS 378 (3) Commercial Recreation and Tourism

This course is a survey of commercial recreation and tourism that examines the basic types of commercial recreation and tourism providers, some basic trends in commercial recreation and the social, economic and environmental impacts of commercial recreation and tourism.

Fall

RPLS 379 (3) Management of Parks and Recreation Facilities

This course introduces students to basic management and planning techniques for a wide variety of indoor and outdoor recreation facilities.

Fall, Spring

RPLS 384 (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 100 hours of volunteer or paid experience in a leisure services organization.

Written permission required from the advisor.

Fall, Spring

RPLS 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and one adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

RPLS 440 (3) Therapeutic Recreation Assessment

Students will learn about and gain experience with assessment as it is practiced in therapeutic recreation settings. The course focuses on the basis of assessment, the four most frequently utilized information gathering techniques, and commonly used assessment instruments.

Pre: RPLS 274

Fall

RPLS 447W (3) Therapeutic Recreation Process

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

Fall

WI

RPLS 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 RPLS 447W

Spring

RPLS 451 (3) Advanced Program Delivery Methods

Students will study the recreation needs of various groups of people and learn the best practices for serving those needs. The emphasis will be on program planning guidelines appropriate for each group across the lifespan and for diverse groups.

Spring

RPLS 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 fundraising strategies are discussed and employed.

Pre: RPLS 377

Spring

RPLS 471W (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.

Fall, Spring

WI

RPLS 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.

Fall, Spring

RPLS 475 (3) Public Land Use Policies

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 nonfederal public lands. Attention is given to international oceanic resources and how the international community will manage these resources.

Fall, Spring

RPLS 478 (3) Review of Outdoor Recreation Research

This course examines major topics of social science research aimed at learning the preferences, attitudes, behaviors, experiences and benefits of visitors to outdoor recreation areas.

Spring

RPLS 479 (3) Wildland Recreation Management

This course introduces students to some basic natural resource and visitor management techniques in outdoor recreation settings. Topics such as interpretation and environmental education, visitor management and ecosystem management are among those discussed.

Spring

RPLS 481 (3) Park 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.

Fall

RPLS 482 (3) Leisure and Older Adults

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.

Variable

RPLS 483 (3) Legal Processes in Recreation, Parks and Leisure Services

This course investigates legislative and budgetary processes utilized in the public, nonprofit, and private sectors of the leisure services profession.

Fall, Spring

RPLS 485 (1-3) Selected Topics

Fall, Spring

RPLS 486 (1-4) Minor Practicum

Course work set through student/advisor agreement.

Fall, Spring

RPLS 489 (3) Advancement of the Therapeutic Recreation Profession

This course is designed to develop the 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.

Fall

RPLS 490 (2-4) Workshop

Variable

RPLS 495 (9) 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 560 hours of service at a department approved agency where the student works full time for 14 consecutive weeks. Written permission is required from the student's advisor one semester in advance.

Pre: RPLS 302, RPLS 384. Completion of major coursework with a 2.5 GPA in the major courses.

RPLS 497 (1-8) Internship

Course based on student/advisor agreement.

Fall, Spring

RPLS 498 (1-8) Internship

Course based on student/advisor agreement.

Fall, Spring

RPLS 499 (1-4) Individual Study

Course work set by student/advisor discussion.

Fall, Spring

REHABILITATION COUNSELING

Rehabilitation Counseling

*College of Allied Health and Nursing
Department of Speech, Hearing & Rehabilitation Services*
103 Armstrong Hall • 507-389-1414
<http://ahn.mnsu.edu/rehabilitation/>
MRS/TTY: 800-627-3529

Chair: Bonnie Berg, Ph.D.

Brian Kamnetz, Ph.D.; Andrew Phemister, Ph.D.

The Rehabilitation Counseling Program prepares Rehabilitation Counselors to become fully competent, dedicated, and effective professionals, who embrace and practice the rehabilitation core values.

People with disabilities share all of the rights, privileges, and responsibilities enjoyed by all members of society and shall be treated as full and equal participants in society without regard to type or degree of disability.

When people with disabilities require or request assistance in order to achieve the rights, privileges, and responsibilities afforded by society, that assistance will be provided by a qualified, conscientious, and dedicated provider who promotes informed choice, empowerment, and the integrity of the individual.

In addition to being guided by the mission statement listed above, the Program has adopted and advocates for practices that follow the Code of Professional Ethics for Rehabilitation Counselors, adopted by the Commission on Rehabilitation Counselor Certification, effective January 1, 2010. All Rehabilitation Counseling Program faculty and staff strive to conduct themselves in a manner that is consistent with this Code, while encouraging and educating students to do the same.

The Rehabilitation Counseling Program at Minnesota State Mankato has been offered at the Master's degree level since 1959, with its first graduate completing the program in 1960.

COURSE DESCRIPTIONS

REHB 110W (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.

Fall, Spring

WI, GE-7

Diverse Cultures - Gold

REHB 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

Variable

RUSSIAN

Russian

*College of Arts & Humanities
Department of World Languages & Cultures*
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Although Minnesota State Mankato does not offer a degree in Russian, students may register for Russian courses offered at Gustavus Adolphus College for Minnesota State Mankato credit.

SCANDINAVIAN STUDIES

Scandinavian Studies

*College of Arts and Humanities
Department of World Languages & Cultures*
227 Armstrong Hall • 507-389-2917
Website: www.mnsu.edu/languages
Fax: 507-389-5887

Chair: Gregory Taylor

Director: Rennesa Osterberg Jessup, Ph.D.

The Scandinavian Studies Program is an interdisciplinary program that combines acquisition of a Scandinavian language with study of the diversity and richness of the greater Nordic cultural region of Norway, Sweden, Denmark, Finland, and Iceland. With a major or minor in Scandinavian Studies, students become familiar with the heritage of Scandinavia from the Vikings to the modern day and learn more about the role of the Nordic nations in communications technology, environmental awareness, social equality, and international peace initiatives in the contemporary world. A Scandinavian Studies minor can enhance a traditional major and serve to provide a global focus to students' education, whether in engineering or health sciences, international relations or international busi-

ness, art or literature. It is recommended that students combine a Scandinavian Studies major or minor with studies in fields such as art, history, international business, international relations, World Languages & Cultures, political science, engineering or social work.

The Scandinavian Studies Program involves a variety of Minnesota State Mankato departments and programs. Minnesota State Mankato also has study abroad options in Norway, Sweden, and Finland for Scandinavian Studies majors and minors. Additional courses, particularly for majors, may also be completed in language, literature, history, and peace studies at Gustavus Adolphus College in nearby St. Peter, Minnesota. Minnesota State Mankato students carrying 12 semester credits may pay Minnesota State Mankato tuition to take a course at Gustavus Adolphus College that is not offered at Minnesota State Mankato.

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 minor or major must be done for a letter grade, except the Minor Project in Scandinavian Studies (1 credit) which must be taken P/N.

Norwegian and Swedish elementary language sequences start in the fall of every other year.

SCAN 101, SCAN 102, SCAN 111, and SCAN 112 meet General Education requirements for Goal Area 8: Global Perspectives.

SCAN 250, SCAN 299, SCAN 450, SCAN 460 and SCAN 499 may be repeated with different topics.

SCANDINAVIAN STUDIES BA

Degree completion = 120 credits

The Bachelor of Arts major in Scandinavian Studies requires 32 semester credits, including a core of language courses (usually at least two years), a 3-credit "capstone" experience, and approved electives. Students interested in focusing on Scandinavian languages and literature may choose to major in Scandinavian Studies, but they are strongly encouraged to pursue a second major in other BA program or two minors in other BA programs that will complement students' interdisciplinary studies. One minor is required. Majors will work closely with the Scandinavian Studies advisor to develop a course of study that offers flexibility to suit students' needs and interests.

Major Common Core

SCAN 490 Major Project in Scandinavian Studies (3)

(Choose 1 Cluster (choose four semesters of either Norwegian or Swedish.)

Norwegian Language - (choose 10-16 credit)

SCAN 101 Elementary Norwegian I (4)

SCAN 102 Elementary Norwegian II (4)

SCAN 292 Intermediate Norwegian I (1-4)

SCAN 293 Intermediate Norwegian II (1-4)

Swedish Language - (choose 10-16 credits)

SCAN 111 Elementary Swedish I (4)

SCAN 112 Elementary Swedish II (4)

SCAN 294 Intermediate Swedish I (1-4)

SCAN 295 Intermediate Swedish II (1-4)

Major Unrestricted Electives (choose 13-19 credits)

You need to receive approval by the director of Scandinavian Studies before the beginning of the semester to ensure that you will be able to apply credit achieved in courses from affiliated programs (courses with a prefix other than "SCAN") toward a major or minor in Scandinavian Studies. If you wish to take any course not listed below at Gustavus Adolphus, please see their catalog and consult the director of Scandinavian Studies.

ANTH 436W Anthropology of Aging (3)

ART 413 Scandinavian Art (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

ART 499 Individual Study (1-6)

ENG 499 Individual Study (1-4)

GERO 200 Aging: Interdisciplinary Perspectives (3)

GERO 485 Topics in Gerontology (1-3)

GERO 499 Individual Study in Gerontology (1-4)

LAWE 434 Comparative Criminal Justice System (3)

MASS 499 Individual Study in Mass Media (1-2)

POL 439 Comparative Social Policy: The Welfare State in

Europe and the Americas (3)

POL 447 European Democracies (3)

POL 449 Comparative Criminal Justice Systems (3)

SCAN 150W The Nordic Countries: An Introduction (4)

SCAN 250 Selected Topics (1-4)

SCAN 251W Scandinavian Cultures: The Sami (4)

SCAN 299 Individual Study (1-4)

SCAN 450 Special Topics (1-4)

SCAN 451 Scandinavian Crime Fiction (4)

SCAN 460 Topics in Scandinavian Film (4)

SCAN 499 Individual Study (1-4)

SOWK 255 Global Responses to Human Need (3)

Required Minor: Yes. Any.

SCANDINAVIAN STUDIES MINOR

A minor in Scandinavian Studies requires 20 semester credits and can be completed at Minnesota State Mankato. The core of at least 8 credits in Norwegian or Swedish language is supplemented by a 1-credit "capstone" experience plus approved electives. This interdisciplinary minor can be combined with any major at Minnesota State Mankato. Because the minor is tailored to the individual interests, students should consult the Scandinavian Studies program director as well as the major advisor.

Required for Minor

Capstone Project (1 credit)

SCAN 492 Minor Project in Scandinavian Studies (1)

NORWEGIAN

SCAN 101 Elementary Norwegian I (4)

SCAN 102 Elementary Norwegian II (4)

OR

SWEDISH

SCAN 111 Elementary Swedish I (4)

SCAN 112 Elementary Swedish II (4)

Required for Minor (11 credits)

Some elective courses concentrate exclusively on study of Scandinavia, while others have a strong component relating to the Nordic countries. Students taking these related courses for Scandinavian Studies credit should inform the instructor, and the students will be required to write a paper or complete a project on a Nordic topic. The department offers at least one topics course per semester. Individual study courses can also be arranged in several departments with faculty who have special interests in Scandinavia. Some elective courses may be taken at Gustavus Adolphus College with approval of the Minnesota State Mankato Director of Scandinavian Studies.

You need to receive approval by the director of Scandinavian Studies before the beginning of the semester to ensure that you will be able to apply credit achieved in courses from affiliated programs (courses with a prefix other than "SCAN") toward a major or minor in Scandinavian Studies.

Elective courses at Minnesota State Mankato

ANTH 436W Anthropology of Aging (3)

ART 413 Scandinavian Art (3)

ART 492 Art History Seminar (1-6)

ART 494 Topics (3)

ART 499 Individual Study (1-6)

ENG 499 Individual Study (1-4)

GERO 200 Aging: Interdisciplinary Perspectives (3)

GERO 485 Topics in Gerontology (1-3)

GERO 499 Individual Study in Gerontology (1-4)

LAWE 434 Comparative Criminal Justice System (3)

MASS 499 Individual Study in Mass Media (1-2)

POL 439 Comparative Social Policy: The Welfare State in

Europe and the Americas (3)

POL 447 European Democracies (3)

POL 449 Comparative Criminal Justice Systems (3)

SCAN 150W The Nordic Countries: An Introduction (4)

SCAN 250 Selected Topics (1-4)

SCAN 251W Scandinavian Cultures: The Sami (4)

SCAN 292 Intermediate Norwegian I (1-4)

SCAN 293 Intermediate Norwegian II (1-4)

SCAN 294 Intermediate Swedish I (1-4)

SCAN 295 Intermediate Swedish II (1-4)

SCAN 299 Individual Study (1-4)

SCAN 450 Special Topics (1-4)

SCAN 451 Scandinavian Crime Fiction (4)

SCAN 460 Topics in Scandinavian Film (4)

SCANDINAVIAN STUDIES CONTINUED

SCAN 499 Individual Study (1-4)
SOWK 255 Global Responses to Human Need (3)
Elective courses at Gustavus Adolphus College. See the current Gustavus Adolphus College Catalog for course offerings in advanced Swedish language, literature, history, and peace studies.

COURSE DESCRIPTIONS

SCAN 101 (4) Elementary Norwegian I

An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.
Fall
GE-8

SCAN 102 (4) Elementary Norwegian II

An introduction to the basic skills of listening, speaking, reading, and writing coupled with culture.
Pre: SCAN 101
Spring
GE-8

SCAN 111 (4) Elementary Swedish I

An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.
Fall (On-Demand), Spring (On-Demand)
GE-8

SCAN 112 (4) Elementary Swedish II

An introduction to the basic skills of listening, speaking, reading, and writing, coupled with cultural notes.
Pre: SCAN 111
Fall (On-Demand), Spring (On-Demand)
GE-8

SCAN 150W (4) The Nordic Countries: Interdisciplinary Introduction

This course offers an interdisciplinary introduction to the Nordic countries (Norway, Sweden, Denmark, Finland, Iceland, Greenland, Faroe Islands); it will provide an overview of their geography, history, culture, society and current political situation in comparison to the U.S.
Fall, Spring
WI, GE-6, GE-8
Diverse Cultures - Purple

SCAN 250 (1-4) Selected Topics

Special topics courses in Scandinavian Studies will deal with a variety of topics regarding the history, literature, art and culture of the Nordic countries. SCAN 250 courses are planned with the interests and needs of beginning students in mind; they offer broad introductions to the most important artifacts and/discourses in the respective field. Writing assignments offer opportunities to learn to discuss adequately and critically central issues and theories. The course may be repeated for credit.
Fall, Spring

SCAN 251W (4) Scandinavian Cultures: The Sami

In this course, students will learn about the indigenous population of Scandinavia, the Sami. Students will investigate Sami traditions and cultural production along with the historical and contemporary sociopolitical standing of the Sami within the majority cultures of Scandinavia.
Variable
WI, GE-6, GE-8
Diverse Cultures- Purple

SCAN 292 (1-4) Intermediate Norwegian I

Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Pre: SCAN 102 or equivalent.
Fall

SCAN 293 (1-4) Intermediate Norwegian II

Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Pre: SCAN 102 or equivalent
Spring

SCAN 294 (1-4) Intermediate Swedish I

Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Pre: SCAN 112 or equivalent

SCAN 295 (1-4) Intermediate Swedish II

Development of reading and listening skills, oral and writing practice within a cultural context. To be arranged with instructor prior to registration.
Pre: SCAN 112 or equivalent

SCAN 299 (1-4) Individual Study

Variable

SCAN 450 (1-4) Special Topics

Special topics courses in Scandinavian Studies will deal with a variety of topics regarding the history, literature, art, and culture of the Nordic countries. SCAN 450 courses are planned with the interests and needs of more advanced students in mind; they build on and expand upon clearly defined methods and critical approaches which the students will explore both in class discussions and writing assignments. The course may be repeated for credit.
Fall, Spring

SCAN 451 (4) Scandinavian Crime Fiction

In this course, students will read about crime and deviance in Scandinavia and will develop an understanding of how a culture conceptualizes its ethico-political struggles through literature.
Variable
Diverse Cultures - Purple

SCAN 460 (4) Topics in Scandinavian Film

Revolving topics in Scandinavian Film. Students will explore issues of cultural and historical importance as presented through the medium of film. Written assignments and exams allow students to practice and display analytical and interpretive techniques. May be repeated for credit.
Variable

SCAN 490 (3) Major Project in Scandinavian Studies

Individual project demonstrating ability to synthesize experience in interdisciplinary major, drawing together different areas of study focusing on specific topic, problem or concern and demonstrating ability to use a Scandinavian language. Approval of Scandinavian Studies program director required.
Pre: Admission to college as Scandinavian Studies Major.

SCAN 492 (1) Minor Project in Scandinavian Studies

Individual project demonstrating ability to synthesize experience in interdisciplinary minor, drawing together different areas of study focusing on specific topic, problem or concern and demonstrating elementary use of a Scandinavian language. Approval of the Scandinavian Studies program director required.
Must be taken P/N.

SCAN 499 (1-4) Individual Study

Advanced study of works by selected Swedish or Norwegian authors.
Pre: SCAN 299 or SCAN 299
Variable

Science Teaching

Websites: cset.mnsu.edu/biology/
cset.mnsu.edu/chemgeol/
cset.mnsu.edu/pa/
cset.mnsu.edu/geography/

Coordinators:

Thomas Brown, Ph.D., Physics
 Phillip Larson, Ph.D., Geography
 Bryce Hoppie, Ph.D., Geology
 Beth Lavoie, Ph.D., Biological Sciences
 Jeffrey R. Pribyl, Ph.D., Chemistry

The State of Minnesota grants science teacher licensure for grades 5-8 general science, 9-12 Chemistry, 9-12 Earth Science, 9-12 Life Science, and 9-12 Physics. Students earning a degree from Minnesota State Mankato will qualify for two licenses (1) 5-8 general science and (2) 9-12 specialty.

POLICIES/INFORMATION

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 120 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.

GPA Policy. Students obtaining a degree in science teaching must maintain a minimum cumulative GPA of 2.50 in the sciences. Students who are not science teaching majors should consult an advisor concerning possible additional course requirements.

P/N Grading Policy. Courses leading to a degree in science teaching may not be taken on a P/N basis except where P/N grading is mandatory.

SCIENCE TEACHING PROGRAMS

Required for all Science Teaching Programs unless otherwise noted.

Required General Education

HLTH 240 Drug Education (3)

Required General Science Core (31 credits)

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)*

* PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 may substitute. The additional credit hours will reduce the number of credits in the advanced physics courses.

Required for All Majors . (Professional Education, 30 credits)

See the SECONDARY EDUCATION section for additional information about admissions to Professional Education, and course requirements.

Required Minor: None.

CHEMISTRY 9-12 BS TEACHING

Degree completion = 120 credits

Required General Education

BIOL 105 General Biology I (4)
 CHEM 201 General Chemistry I (5)
 HLTH 240 Drug Education (3)
 MATH 121 Calculus I (4)

Major Common Core

CHEM 202 General Chemistry II (5)
 CHEM 305 Analytical Chemistry (4)
 CHEM 316 Descriptive Main Group Chemistry (3)
 CHEM 322 Organic Chemistry I (4)
 CHEM 324 Organic Chemistry II (3)
 CHEM 325 Organic Chemistry II Lab (1)
 CHEM 340 Quant for Chem and Biochem I (1)
 CHEM 341 Quant for Chem and Biochem II (1)
 CHEM 360 Principles of Biochemistry (4)
 CHEM 381W Introduction to Research (2)
 CHEM 440 Physical Chemistry I (3)
 CHEM 450 Physical Chemistry Laboratory I (1)
 CHEM 479 Teaching Physical Science (4)
 CHEM 495 Senior Seminar (1)
 PHYS 211 Principles of Physics I (4)
 PHYS 212 Principles of Physics II (4)

Other Graduation Requirements

Professional Education

LEVEL 1

KSP 202 may be taken in either LEVEL 1 or LEVEL 2. KSP 464 must be taken in all levels but credit will be awarded in LEVEL 4 only.

KSP 202 Technology Integration in the Classroom (2)
 KSP 220W Human Relations in a Multicultural Society (3)
 KSP 222 Introduction to the Learner and Learning (2)
 KSP 464 Professional Seminar (1)

LEVEL 2

KSP 202 may be taken in either LEVEL 1 or LEVEL 2. KSP 464 must be taken in all levels but credit will be awarded in LEVEL 4 only.

KSP 330 Planning, Instruction, and Evaluation in the Classroom (5)
 KSP 464 Professional Seminar (1)

LEVEL 3

KSP 464 must be taken in all levels but credit will be awarded in LEVEL 4 only.

KSP 440 Creating Learning Environments to Engage Children, Families, and Community (3)
 KSP 442 Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms (3)
 KSP 464 Professional Seminar (1)

LEVEL 4

Course credit for KSP 464 is awarded in LEVEL 4, but must be taken in all levels.

KSP 464 Professional Seminar (1)
 KSP 477 5-12 Student Teaching (11)

Required Minor: None.

EARTH SCIENCE 5-12 BS TEACHING

Degree completion = 120 credits

Required General Education (3 credits)

Required General Science Core (31 credits)

Required Professional Education (30 credits)

Required for Major

AST 125 Observational Astronomy (3)
 GEOG 217 Weather (4)
 GEOG 315 Geomorphology (3)
 GEOG 410 Climatic Environments (3)
 GEOL 122 Earth History (4)

SCIENCE TEACHING CONTINUED

GEOL 201	Elements of Mineralogy (4)
GEOG 464	Teaching Earth Science (4) OR
GEOL 479	Teaching Earth Sciences (4)

Required for Major (Research, 1-3 credits)

GEOG 440	Field Studies: Colorado (3)
GEOG 440	Field Studies: Field Methods (3)
GEOG 480	Seminar (1-4)
GEOG 499	Individual Study (1-3)
GEOL 499	Individual Study (1-5)

Required for Major (Electives, 9 credits)

(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 Geographic Information Systems (4)
GEOG 420	Conservation of Natural Resources (3)
GEOL 330	Structural Geology (4)
GEOL 350	Environmental Geology (4)
GEOL 450	Hydrogeology (3)

Required Minor: None.

LIFE SCIENCE 5-12 BS TEACHING

Degree completion = 120 credits

Required General Education

AST 101	Introduction to Astronomy (3)
BIOL 105	General Biology I (4)
CHEM 201	General Chemistry I (5)
GEOL 121	Physical Geology (4)
HLTH 240	Drug Education (3)
KSP 220W	Human Relations in a Multicultural Society (3)
PHYS 211	Principles of Physics I (4)

Math Requirement (choose 3-4 credits)

MATH 113	Trigonometry (3)
MATH 115	Precalculus Mathematics (4)

Major Common Core

BIOL 106	General Biology II (4)
BIOL 211	Genetics (4)
BIOL 215	General Ecology (4)
BIOL 220	Human Anatomy (4)
BIOL 270	Microbiology (4)
BIOL 301	Evolution (2)
BIOL 485	Biology Teaching Methods and Materials (4)
GEOL 310	Earth and Space Systems (3)
PHYS 212	Principles of Physics II (4)

Independent Study (choose 1 credits)

At least one credit is required. Additional credits will be counted as electives.

BIOL 499	Individual Study (1-4)
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Major Restricted Electives (choose 4 credits)

BIOL 408	Vertebrate Ecology (4)
BIOL 409	Advanced Field Ecology (4)

Major Unrestricted Electives

Choose at least 9 additional credits of 300-400 level Biology courses.

Other Graduation Requirements

Professional Education

LEVEL 1

KSP 202 may be taken in LEVEL 1 or LEVEL 2. KSP 464 must be taken in all levels, but credit will be awarded in LEVEL 4 only.

KSP 202	Technology Integration in the Classroom (2)
KSP 220W	Human Relations in a Multicultural Society (3)

KSP 222	Introduction to the Learner and Learning (2)
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KSP 464	Professional Seminar (1)
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LEVEL 2

KSP 202 may be taken in LEVEL 1 or LEVEL 2. KSP 464 must be taken in all levels, but credit will be awarded in LEVEL 4 only.

KSP 330	Planning, Instruction, and Evaluation in the Classroom (5)
KSP 464	Professional Seminar (1)

LEVEL 3

KSP 464 must be taken in all levels, but credit will be awarded in LEVEL 4 only.

KSP 440	Creating Learning Environments to Engage Children, Families, and Community (3)
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KSP 442	Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms (3)
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KSP 464	Professional Seminar (1)
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LEVEL 4

Course credit for KSP 464 is awarded in LEVEL 4, but it must be taken in all levels.

KSP 464	Professional Seminar (1)
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KSP 477	5-12 Student Teaching (11)
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PHYSICS (5-12) BS TEACHING

Degree completion = 120 credits

Required General Education

AST 101	Introduction to Astronomy (3)
BIOL 105	General Biology I (4)
CHEM 201	General Chemistry I (5)
GEOL 121	Physical Geology (4)
HLTH 240	Drug Education (3)
KSP 220W	Human Relations in a Multicultural Society (3)
MATH 121	Calculus I (4)

Major Common Core

PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 may substitute for PHYS 211 and PHYS 212. The additional credit hours will reduce the number of credits on the advanced physics courses.

BIOL 106	General Biology II (4)
GEOL 310	Earth and Space Systems (3)
PHYS 211	Principles of Physics I (4)
PHYS 212	Principles of Physics II (4)
PHYS 335	Modern Physics I (3)
PHYS 336	Modern Physics II (3)
PHYS 465	Computer Applications in Physics (3)
PHYS 482	Teaching Methods and Materials in Physical Science (4)

(choose 2 credits)

2 credits are required for the core.

PHYS 381	Tutoring Physics (1-3)
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(choose 2 credits)

2 credits are required for the core.

PHYS 493	Undergraduate Research (1-6)
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Physics Electives (choose 8 credits)

This is reduced to 4 credits if PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 have been taken in place of PHYS 211 and PHYS 212 in partial fulfillment of the General Science Core requirements. If PHYS 211 and PHYS 212 are completed successfully, PHYS 221, PHYS 222, PHYS 223, PHYS 232 and PHYS 233 may be used to fulfill the Physics Elective credits.

PHYS 300-499

Other Graduation Requirements

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses.

Secondary 5-12 & K-12 Professional Education

Art Education (K-12)
 Business Education (collaborative program with Winona) (5-12)
 Communication Arts and Literature (5-12)
 Dance Education (K-12)
 Developmental Adapted Physical Education (K-12)
 English as a Second Language (K-12)
 Family Consumer Science (5-12)
 Health Sciences (5-12)
 Instrumental and Vocal Music (K-12)
 Mathematics (5-12)
 Physical Education (K-12)
 Science (Life Science, Chemistry, Earth & Space Sciences, Physics) (5-12)
 Social Studies (5-12)
 Visual Arts (K-12)
 World Languages and Cultures (Spanish, German, and French) (K-12)

College of Education

Department of Educational Studies: K-12 & Secondary Programs (KSP)

Coordinator of Undergraduate Licensure, Scott Page, Ph.D.

Phone: 507-389-1788

Coordinator of Graduate Licensure, Teresa Kruiuzenga, Ph.D.

Phone: 507-389-1777

Johnson Afolyan, Ph.D.; Carrie Chapman, Ph.D.; Anne Dahlman, Ph.D.; Kitty Foord, Ed.D.; David Georgina, Ph.D.; Allen Hoffman; Deborah Jesseman, Ph.D.; Teresa Kruiuzenga, Ph.D.; Guynel Reid, Ph.D.; Amy Scheuermann, Ph.D.

The K-12 and Secondary Programs department prepares undergraduate and graduate students for initial licensure as professional educators in K-12, middle and high school classrooms. Program emphasis is placed upon facilitating students to gain the knowledge, skills, and dispositions needed to function effectively in diverse educational settings.

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 the coordinator of Initial Licensure. Formal approval of coursework is based on course descriptions, syllabi, samples of completed work and/or field experience evaluations.

POLICIES/INFORMATION

Admission to Professional Education

Academic Advising Office

117 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 Level 1 coursework. Application to professional education should be made when the following requirements have been met:

- a minimum of 32 earned semester credit hours
- a minimum 2.75 cumulative GPA
- evidence of registration for the Minnesota Teacher Licensure Examinations (MTLE) Basic Skills exam.
- enrollment or completion of KSP 220
- "C" grade in ENG 101
- "C" grade in General Education Math

A multifaceted Professional Education application exists. Students are required to attend orientation and application session. Please consult the Office of Academic Advising (117 Armstrong Hall) for deadlines.

Admission is competitive. Achievement at the 2.75 level and completion of all prerequisite courses qualifies students for the applicant pool but does not guarantee admission to the K-12 and Secondary program.

Advising. Students are assigned an advisor in their content area (major). In addition the KSP department provides advising prior to registration each semester. For more information stop by 313 Armstrong Hall. Faculty in each level provide individual and group advising. Career counseling is integrated throughout all levels.

Field Experiences. A major component of professional education coursework involves field experiences in various settings. These experiences are gradual in expectation, time commitment, and skills practice throughout all four levels. Multiple methods of assessment are used and evidence collected to provide a view of the teacher candidates' knowledge, skills and dispositions. Successful completion of each field experience is necessary for progression into future levels and field activities (e.g., student teaching).

Many Level 3 and Level 4 field experiences will be long-term placements. Long-term placements are two consecutive placements during the last two semesters, in one setting. Priority will be given to teacher candidates requesting placement in a long-term placement for their Level 3 and student teaching placements. These placements will most likely take place in our Professional Development Schools.

Background Checks. All field placements are initiated by the Office of Field and International Experience. Students involved in any field experience need to undergo a national criminal background check prior to admittance to professional education. Students are responsible for the fees associated with the background checks. This information is provided to districts for their determination of suitability for placement. The Office of Field and International Experience coordinates the background check process.

Teacher Licensure. Please contact Gail Orcutt, Licensure Coordinator, in 118 Armstrong Hall for questions in regard to the licensure process. The University recommends licensure to a state upon students' completion of a licensure program. Licensure does not occur automatically through graduation and the awarding of a diploma. Students need to make application for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to program requirements, students must successfully complete the Minnesota Teacher Licensure Examinations (MTLE) including the Basic Skills exam, the pedagogical exam, and the content specific exam(s) for licensure. Minnesota state law requires that all candidates applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will also need to be completed and signed. There is a fee for the criminal background check. There is also a fee for the issuance of a State of Minnesota teaching license.

GPA Policy. Coursework in professional education requires a grade of "C" or better. A cumulative career GPA of 2.75 is required.

Admission to Major. Admission to major is granted by the academic department in which the student proposes to major. Earned grade of "C" or better in Goal Area 1 (ENG Comp) and Goal Area 4 (MATH).

P/N Grading Policy. Grades are required in all professional education coursework except courses that are offered on a P/N basis only.

SECONDARY 5-12 & K-12 PROFESSIONAL EDUCATION

Required for General Education

HLTH 240 Drug Education (3)

Required Professional Education (30 credits)

LEVEL 1

KSP 220W Human Relations in a Multicultural Society (3)

KSP 222 Introduction to the Learner and Learning (2)

Floating course (can be taken with Level 1 or 2)

KSP 202 Technology Integration in the Classroom (2)

SECONDARY 5-12 & K-12 PROFESSIONAL EDUCATION CONTINUED

LEVEL 2

KSP 330 Planning, Instruction, and Evaluation in the Classroom (5)

LEVEL 3

KSP 440 Creating Learning Environments to Engage Children, Families and Communities (3)

KSP 442 Reading, Literacy, and Differentiated Instruction in the Inclusive Classroom (3)

LEVEL 4 Student Teaching

KSP 464 Professional Seminar (1) Course is taken in each level with credit awarded in Level 4

For 5-12 majors

KSP 477 5-12 Student Teaching (11)

For K-12 majors

KSP 476 K-12 Student Teaching (11)

* NOTE: Double licensure majors also enroll in KSP 482 (6)

Student Teaching. (119 Armstrong Hall)

Director of Office Field and International Experience: Elizabeth Finsness, Ph.D.

Student teaching at Minnesota State Mankato is a results-oriented, performance based 16-week program requiring the demonstration of an acceptable level of teaching performance in the areas of planning and preparation, enhancing the learning environment, teaching for student learning, and professionalism. Multiple methods of assessment are used and evidence collected to provide a view of the teacher candidate's knowledge, skills and dispositions. These methods include direct observations of teaching activities by public school and university faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in learning communities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Director of the Office of Field and International Experience requests placements for all teacher candidates in partner districts, especially our Professional Development Schools. Teacher candidates should not contact schools regarding their placement. Admission to the student teaching experience is contingent upon completion of:

1. Completion of all coursework in major and General Education requirements.
2. A cumulative grade point average of 2.75, grades of a "C" or better for all professional education coursework.
3. Admittance into Professional Education.
4. Completion of all methods and professional education course work (except KSP 475).
5. Completion and validation of formal application materials one year prior to student teaching semester.
6. Attendance at all preliminary student teaching meeting(s).
7. Recommendation of advisor.
8. Approval of placement by school district administration, a mentor teacher, and Director of the Office of Field and International Experience, and completion of Minnesota State Police Background check materials.

Study abroad experiences may be available during student teaching. Selection is based on personal interview, faculty recommendation, and grade point average. Students develop interpersonal communication skills and dispositions for living in a global society. Students participating in study abroad opportunities will be required to complete course requirements in a shorter timeframe, thus long-term placements for level 3 field experiences and student teaching will be highly recommended. Additional fees will be incurred with participation in student teaching abroad programs. Application material and specific deadline dates are available online at <http://ed.mnsu.edu/field/studentteaching/applications.html>.

LIBRARY MEDIA EDUCATION

Library Media Education courses offer instruction and experience in acquiring, administering, evaluating, producing, organizing and using print, audiovisual, and electronic media. Today's rapid expansion of information is characterized by a great variety of media through which knowledge is recorded and distributed. Now and in the future, libraries and information centers must deal with transfer of data and information in all formats. Educators must meet the information needs, ranging from recreational to research, of preschool children to adults. Please refer to the graduate catalog for information on the master's and specialist degree programs in Library Media Education which are designed to prepare professionals for careers in school library media programs.

COURSE DESCRIPTIONS

KSP 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. GE-9

KSP 105 (1) Library Orientation

A basic course to help students become familiar with the library of Minnesota State Mankato and the use of information resources.

KSP 106 (1) Education & Culture in the United States

Course gives students new to this country and to the 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 professors.

Pre: International Student

KSP 150 (3) Exploring Careers in Education

Students will explore a variety of careers in education (teaching, counseling, social work, psychology, library media, administration) through research, off-campus observation and participation along side a practicing professional in education, and off-campus service learning with school-age youth and adolescents. Fall, Spring

Diverse Cultures - Gold

KSP 200 (3) Critical Issues in Public Education Today

This course will engage students in an in-depth exploration of how the challenges and demands imposed by an ever evolving diverse, legalistic, politically minded, and technologically driven society impact public education in America today. Students will research central issues and critically analyze to foster ethical and civil responsible decision making.

Fall, Spring, Summer

GE-2, GE 9

Diverse Cultures - Gold

KSP 202 (2) Technology Integration in the Classroom

Teacher candidates will develop skills to access information and integrate technology to improve learning for PK-12 students. Teacher candidates research, select, and evaluate information about diverse populations to design classroom applications using a wide variety of instructional technology.

Fall, Spring

KSP 205 (1) Library Orientation II

Specialized references sources, computer strategies, nationally available data banks, community resources. May apply toward general education.

KSP 220W (3) Human Relations in a Multicultural Society

Study of interpersonal skills, motivation, and group skills. Applied to educational settings. Requires 18 hours clinical service learning experience (out of class). Meets State of Minnesota human relations requirement for teacher licensure.

WI, GE-7, GE-11

Diverse Cultures - Gold

KSP 222 (2) Introduction to the Learner and Learning

Teacher candidates develop understanding of cognitive, language, personal and social development for implications on teaching in the inclusive classroom. Dispositions and skills will be developed for recognizing and accommodating exceptional ability in student learning.

Fall, Spring

Coreq: KSP 220W, KSP 222

KSP 235 (3) Human Development

Designed for non-teacher education students, this is a general education course considering human development from a life span perspective.

GE-5

KSP 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. GE-9

KSP 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. GE-6, GE-7

KSP 260 (3) Creating Global Awareness through Studying Abroad

A companion course for students studying abroad. Pre-departure preparation, in country experiential learning and reflection and reentry debriefing will maximize the study abroad experience. Students develop critical thinking, interpersonal communication skills and dispositions for living in a global environment. On-Demand
GE-7, GE-8
Diverse Cultures - Gold

KSP 290 (1-2) Workshop

Short-term workshops dealing with specific subjects germane to the broader disciplines with in 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.

KSP 301 (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.

KSP 320 (2) Special Student in the General Classroom

Provides general education majors with information and strategies including the special needs students in the regular classroom.

KSP 330 (5) Planning, Instruction, and Evaluation in the Classroom

The course is designed to guide K-12 and 5-12 teacher candidates through the design, implementation, and assessment of a standards-based curriculum. Candidates will analyze standards, create assessments, and design and deliver instruction in a field-site. Fall, Spring

KSP 334 (3) Assessing the Post-Secondary Learner

Course content addresses formal and informal, standardized evaluation of learner achievement in the classroom and programmatic evaluation. Assigned projects will accommodate the student's present/future professional career track.

KSP 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. Graduate students will have additional course requirements.

KSP 407 (2) Teaching in a Multicultural Society

Adaptation of curriculum, classroom organization and teaching practices. Graduate students will have additional course requirements.

KSP 408 (3) Teaching to the K-12 ELL Student

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. Graduate students will have additional course requirements.

KSP 415 (2) Materials for Younger Children

Examination of print and audiovisual media for younger children birth to age seven. Identification selection sources to identify materials. Evaluation of resources, including but not limited to, research collections, discussion groups, and electronic periodicals. Graduate students will have additional course requirements.

KSP 417 (3) Materials for Children

Print, audiovisual and electronic media: their selection, evaluation, and use with children in grades K-6. Three credit section includes storytelling. Graduate students will have additional course requirements.

KSP 425 (2) Reading and Writing in the Secondary School

Concepts, objectives, procedures and reading in subject matter field. Graduate students will have additional course requirements.

KSP 440 (3) Creating Learning Environments to Engage Children, Families, and Community

Teacher candidates will further develop processes for creating and sustaining a classroom learning environment that enables success for all learners, including interacting with diverse families, school colleagues, and representatives from community agencies to support student engagement and learning. Fall, Spring
Coreq: KSP 440, KSP 442

KSP 442 (3) Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms

Teacher candidates will develop skills in differentiated instruction, reading and content-based literacy in inclusive classrooms. Teacher candidates will integrate prior knowledge of diverse learners, developmental models of learning, and curriculum and instruction into a comprehensive understanding of teaching. Fall, Spring
Coreq: KSP 440, KSP442

KSP 450 (3) Human Relations in a Multicultural Society

Study of interpersonal skills. Motivation, and group skills. Applied to educational settings. Required 18 hours clinical service learning experience (out-of-class). Meets State of Minnesota human relations requirement for teacher licensure. Graduate students will have additional course requirements.

KSP 451 (1-3) Cultural Diversity Internship

Opportunity for "hands-on" immersion experience in a culturally diverse setting. This may be faculty-led or self-designed by students with prior approval by the instructor. The experience will include: cultural orientation, site-based experience, debriefing and reflection. Pre: KSP 220W or KSP 450

KSP 460 (2-4) Practicum

Practical experience set up between faculty, student, and on-site supervisor.

KSP 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.

KSP 464 (1) Professional Seminar

Content focus is on professional rights, responsibilities, and development; student rights and responsibilities; and legal issues regarding data privacy and confidentiality. Skills of professional development, inquiry, reflection, coaching, and collaboration will be developed, practiced, and monitored. Fall, Spring

KSP 465 (3) Filmmaking

Students will produce a short digital film incorporating the five phases and ten planning stages of filmmaking. The role independent film plays in a culturally diverse society will be illustrated and discussed. Examples of each genre will be examined.

KSP 475 (1) 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 multiculturalism is explored. Requires twelve hours of out-of-class clinical experience. Pre: Recommended for final semester of Professional Education.

KSP 476 (11) K-12 Student Teaching

Student teaching in the K-12 schools including weekly seminar for K-12 majors. Pre: Admission to student teaching. Coreq: KSP 475

SECONDARY 5-12 & K-12 PROFESSIONAL EDUCATION CONTINUED

KSP 477 (11) 5-12 Student Teaching

Student teaching in the secondary school including weekly seminar for 5-12 majors.

Pre: admission to student teaching.

KSP 478 (5) Supplementary Student Teaching

Student teaching in the elementary school including weekly seminar for K-12 majors.

Pre: Admission to student teaching

Coreq: KSP 476 and KSP 475

KSP 479 (3) Grant Writing and Program Funding

Procedures for designing research, writing proposals and requests for grants, contracts and funding from external resources; grant administration. Graduate students will have additional course requirements.

KSP 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. Graduate students will have additional course requirements.

KSP 482 (3-6) Enrichment Experience Secondary

Student teaching projects determined jointly between student and advisor.

Coreq: KSP 477 or KSP 476

KSP 483 (2) Supervision of Student Teaching

To assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers. Graduate students will have additional course requirements.

KSP 489 (1-3) Selected Topics

Specific focus on an educational topic that may be taught as a regular course such as Web Resources for the Classroom (usually a group requests a specific topic.) Graduate students will have additional course requirements.

KSP 490 (1-6) Workshop

Specific focus on an educational topic that is conducted for a special group. Graduate students will have additional course requirements.

KSP 491 (1-4) In-Service

Specific course designed to meet changing educational trends. Graduate students will have additional course requirements.

KSP 497 (1-8) Internship

On-the-job training. Work is jointly supervised by the academic unit and the cooperating institution.

KSP 499 (1-6) Individual Study

Student and faculty agree upon a specific unit of study. Student presents unit to faculty member for evaluation.

SOCIAL STUDIES

Social Studies

College of Social & Behavioral Sciences

Social Studies Program

114 Armstrong Hall • 507-389-5718

Website: sbs.mnsu.edu/socialstudies

Coordinator: Clark Johnson

The social studies program is designed to prepare students to teach social studies in secondary schools. This challenging program draws upon faculty from nine areas (anthropology, economics, ethnic studies, gender and women's studies, geography, history, political science, psychology, and sociology) 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.

POLICIES/INFORMATION

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 their advisor to prepare for admission to the social studies program.

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.

SOCIAL STUDIES BS TEACHING

Degree completion = 120 credits

ANTHROPOLOGY OPTION

Required General Education

ANTH 101	Introduction to Anthropology (4)
GEOG 100	Elements of Geography (3)
POL 111	United States Government (3)
PSYC 101	Introduction to Psychological Science (4)
<i>U.S. History to 1877</i> (choose 4 credits)	
HIST 190	United States to 1877 (4)
HIST 190W	United States to 1877 (4)
<i>U.S. History Since 1877</i> (choose 4 credits)	
HIST 191	United States Since 1877 (4)
HIST 191W	United States Since 1877 (4)

Major Common Core

ECON 201	Principles of Macroeconomics (3)
ECON 202	Principles of Microeconomics (3)
GEOG 340	United States (3)
HIST 302	World History: An Overview (4)
POL 321	Democracy and Citizenship (3)
SOC 101	Introduction to Sociology (3)
SOST 200	Introduction to Social Studies Teaching (2)
SOST 450	Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits)

ETHN 410	Foundations of Oppression (3)
GWS 220	Global Perspectives on Women and Change (4)
GWS 220W	Global Perspectives on Women and Change (4)

Major Emphasis: Anthropology (15 credits)

(choose 4 credits)

ANTH 220	Human Origins (4)
ANTH 230	Peoples and Cultures of the World (4)
ANTH 240	Languages and Cultures (4)

(choose 11 credits of 300-400 level anthropology courses)

ANTH 300 - ANTH 400

Other Graduation Requirements

Professional Education, choose 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200- KSP 499

Alcohol & Drug Education (choose 1 credit)

PSYC 490 Workshop (1-3)

ECONOMICS OPTION**Required General Education**

ANTH 101 Introduction to Anthropology (4)

GEOG 100 Elements of Geography (3)

POL 111 United States Government (3)

PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits from the following)

HIST 190 United States to 1877 (4)

HIST 190W United States to 1877 (4)

U.S. History Since 1877 (choose 4 credits from the following)

HIST 191 United States Since 1877 (4)

HIST 191W United States Since 1877 (4)

Major Common Core

ECON 201 Principles of Macroeconomics (3)

ECON 202 Principles of Microeconomics (3)

GEOG 340 United States (3)

HIST 302 World History: An Overview (4)

POL 321 Democracy and Citizenship (3)

SOC 101 Introduction to Sociology (3)

SOST 200 Introduction to Social Studies Teaching (2)

SOST 450 Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits of the following)

ETHN 410 Foundations of Oppression (3)

GWS 220 Global Perspectives on Women and Change (4)

GWS 220W Global Perspectives on Women and Change (4)

Major Emphasis: Economics (15 credits)

(Select one of the following options)

ECON 314W Current Economic Issues (3)

ECON 403 Labor Economics (3)

ECON 412 Resources and Environmental Economics (3)

ECON 416 Sport Economics (3)

ECON 420 International Economics (3)

Other Graduation Requirements

Professional Education, 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200- KSP 499

GEOGRAPHY OPTION**Required General Education**

ANTH 101 Introduction to Anthropology (4)

GEOG 100 Elements of Geography (3)

POL 111 United States Government (3)

PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits from the following)

HIST 190 United States to 1877 (4)

HIST 190W United States to 1877 (4)

U.S. History Since 1877 (choose 4 credits from the following)

HIST 191 United States Since 1877 (4)

HIST 191W United States Since 1877 (4)

Major Common Core

ECON 201 Principles of Macroeconomics (3)

ECON 202 Principles of Microeconomics (3)

GEOG 340 United States (3)

HIST 302 World History: An Overview (4)

POL 321 Democracy and Citizenship (3)

SOC 101 Introduction to Sociology (3)

SOST 200 Introduction to Social Studies Teaching (2)

SOST 450 Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits of the following)

ETHN 410 Foundations of Oppression (3)

GWS 220 Global Perspectives on Women and Change (4)

GWS 220W Global Perspectives on Women and Change (4)

Major Emphasis: Geography (15 credits)

GEOG 101 Introductory Physical Geography (3)

GEOG 103 Introductory Cultural Geography (3)

Physical Geography (choose 3 credits from the following)

GEOG 313 Natural Disasters (3)

GEOG 315 Geomorphology (3)

GEOG 410 Climatic Environments (3)

GEOG 420 Conservation of Natural Resources (3)

Regional Geography Course (choose 3 credits)

GEOG 445 Latin America (3)

GEOG 450 Europe (3)

GEOG 454 Russian Realm (3)

GEOG 456 Africa (3)

GEOG 458 Geography of East Asia (3)

Culture Geography (choose 3 credits)

GEOG 425 Economic Geography (3)

GEOG 435 Urban Geography (3)

GEOG 436 Rural Geography (3)

GEOG 438 Social Geography (3)

Other Graduation Requirements

Professional Education, 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200 - KSP 499

Alcohol & Drug Education

(choose 1 credit)

PSYC 490 Workshop (1-3)

HISTORY OPTION**Required General Education**

ANTH 101 Introduction to Anthropology (4)

GEOG 100 Elements of Geography (3)

POL 111 United States Government (3)

PSYC 101 Introduction to Psychological Science (4)

U.S. History to 1877 (choose 4 credits from the following)

HIST 190 United States to 1877 (4)

HIST 190W United States to 1877 (4)

U.S. History Since 1877 (choose 4 credits from the following)

HIST 191 United States Since 1877 (4)

HIST 191W United States Since 1877 (4)

Major Common Core

ECON 201 Principles of Macroeconomics (3)

ECON 202 Principles of Microeconomics (3)

GEOG 340 United States (3)

HIST 302 World History: An Overview (4)

POL 321 Democracy and Citizenship (3)

SOC 101 Introduction to Sociology (3)

SOST 200 Introduction to Social Studies Teaching (2)

SOST 450 Teaching Social Studies Secondary School (4)

SOCIAL STUDIES CONTINUED

Major Restricted Electives

Expansion Course (choose 3 credits of the following)

ETHN	410	Foundations of Oppression (3)
GWS	220	Global Perspectives on Women and Change (4)
GWS	220W	Global Perspectives on Women and Change (4)

Major Emphasis: History (15 credits)

Select (15 credits) of 300-400 level courses, including at least one 400 level course from each of the following areas: Europe, Third World, and the U.S.

HIST 300- HIST 499

Other Graduation Requirements

Professional Education, 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200 - KSP 499

Alcohol & Drug Education (choose 1 credit)

PSYC 490 Workshop (1-3)

POLITICAL SCIENCE OPTION

Required General Education

ANTH	101	Introduction to Anthropology (4)
GEOG	100	Elements of Geography (3)
POL	111	United States Government (3)
PSYC	101	Introduction to Psychological Science (4)
<u>U.S. History to 1877</u> (choose 4 credits)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (choose 4 credits)		
HIST	191	United States Since 1877 (4)
HIST	191W	United States Since 1877 (4)

Major Common Core

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
GEOG	340	United States (3)
HIST	302	World History: An Overview (4)
POL	321	Democracy and Citizenship (3)
SOC	101	Introduction to Sociology (3)
SOST	200	Introduction to Social Studies Teaching (2)
SOST	450	Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits)

ETHN	410	Foundations of Oppression (3)
GWS	220	Global Perspectives on Women and Change (4)
GWS	220W	Global Perspectives on Women and Change (4)

Major Emphasis: Political Science

POL	371	State & Local Government (3)
POL	414	Early United States Political Thought (3)
POL	473	Legislative Process (3)
(choose 3 credits)		
POL	231	World Politics (3)
POL	241	Introduction to Comparative Politics (3)
(choose 3 credits)		
POL	422	Campaigns & Elections (3)
POL	423	Political Parties (3)
POL	454	Civil Liberties (3)
POL	474	Executive Process (3)

Other Graduation Requirements

Professional Education, (30 credits)

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200- KSP 499

PSYCHOLOGY OPTION

Required General Education

ANTH	101	Introduction to Anthropology (4)
GEOG	100	Elements of Geography (3)
POL	111	United States Government (3)
PSYC	101	Introduction to Psychological Science (4)
<u>U.S. History to 1877</u> (choose 4 credits)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (choose 4 credits)		
HIST	191	United States Since 1877 (4)
HIST	191W	United States Since 1877 (4)

Major Common Core

ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
GEOG	340	United States (3)
HIST	302	World History: An Overview (4)
POL	321	Democracy and Citizenship (3)
SOC	101	Introduction to Sociology (3)
SOST	200	Introduction to Social Studies Teaching (2)
SOST	450	Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits)

ETHN	410	Foundations of Oppression (3)
GWS	220	Global Perspectives on Women and Change (4)
GWS	220W	Global Perspectives on Women and Change (4)

Major Emphasis: Psychology

PSYC	201	Statistics for Psychology (4)
PSYC	211	Research Methods and Design (4)
(choose 4 credits)		
PSYC	407	Advanced Behavior Analysis (4)
PSYC	413	Sensation & Perception (4)
PSYC	421	Behavior Neuroscience (4)
(choose 3 credits)		
PSYC	340	Social Psychology (4)
PSYC	433	Child Psychology (4)
PSYC	436	Adolescent Psychology (4)
PSYC	455	Abnormal Psychology (4)
PSYC	456	Personality Theories (3)

Other Graduation Requirements

Professional Education, 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200- KSP 499

Alcohol & Drug Education (choose 1 credit)

PSYC 490 Workshop (1-3)

SOCIOLOGY OPTION

Required General Education

ANTH	101	Introduction to Anthropology (4)
GEOG	100	Elements of Geography (3)
POL	111	United States Government (3)
PSYC	101	Introduction to Psychological Science (4)
<u>U.S. History to 1877</u> (choose 4 credits from the following)		
HIST	190	United States to 1877 (4)
HIST	190W	United States to 1877 (4)
<u>U.S. History Since 1877</u> (choose 4 credits from the following)		
HIST	191	United States Since 1877 (4)
HIST	191W	United States Since 1877 (4)

Major Common Core

ECON	201	Principles of Macroeconomics (3)
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ECON 202	Principles of Microeconomics (3)
ECON 429	Economic Education (3)
GEOG 340	United States (3)
HIST 302	World History: An Overview (4)
POL 321	Democracy and Citizenship (3)
SOC 101	Introduction to Sociology (3)
SOST 200	Introduction to Social Studies Teaching (2)
SOST 450	Teaching Social Studies Secondary School (4)

Major Restricted Electives

Expansion Course (choose 3 credits of the following)

ETHN 410	Foundations of Oppression (3)
GWS 220	Global Perspectives on Women and Change (4)
GWS 220W	Global Perspectives on Women and Change (4)

Major Emphasis: Sociology (15 credits)

Theory

SOC 458	Sociological Theory (3)
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Issues

(choose 3 credits from the following)

SOC 255	Juvenile Delinquency (3)
SOC 307	Sex & Gender in Contemporary Society (3)
SOC 425	Social Movements (3)
SOC 441	Social Deviance (3)
SOC 446	Race, Culture & Ethnicity (3)
SOC 463	Social Stratification (3)
SOC 482	Social Change (3)

Methods

(choose 3 credits from the following)

SOC 201	Social Research I (3)
SOC 469	Survey Research (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)

Family

SOC 408	Family Life Dynamics (3)
SOC 409	Family Violence (3)
SOC 483	The Family and Society (3)

Macro

SOC 351	Social Psychology (3)
SOC 407	Population Dynamics (3)
SOC 423	Complex Organizations (3)
SOC 461	Urban Sociology (3)

Other Graduation Requirements

Professional Education, 30 credits

See the SECONDARY EDUCATION section for admission requirements to Professional Education and a list of required professional education courses. NOTE: Students must also meet a drug and alcohol education requirement (1-3 credits)

KSP 200- KSP 499

Alcohol & Drug Education (choose 1 credit)

PSYC 490	Workshop (1-3)
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SOCIAL STUDIES BS

Degree completion = 120 credits

Major Restricted Electives

A minimum of 27 credits (of which 17 need to be upper division) must be taken on a widely distributed basis from the social sciences and history OUTSIDE the area of concentration and/or from the interdisciplinary programs of: Ethnic Studies, Gender & Women Studies and Urban Studies.

Students are encouraged to take a mixture of courses that reflect a global and multicultural understanding.

ANTH 100 - ANTH 499
ECON 100 - ECON 499
ETHN 100 - ETHN 499
GEOG 100 - GEOG 499
GWS 100 - GWS 499
HIST 100 - HIST 499

POL 100 - POL 499
PSYC 100 - PSYC 499
SOC 100 - SOC 499
URBS 100 - URBS 499

Students should enroll in SOST 299, Individual Study in the subsequent semester to declaring the Social Studies non-teaching major. Students 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, Individual Study.

(choose 1-14 credits)

SOST 299	Individual Study (1-6)
SOST 499	Individual Study (1-8)

Major Emphasis: Area of Concentration

A minimum of 24 credits must be taken in ONE of the following areas (15 credits of the 24 credits must be upper division courses). Areas include: Anthropology, Economics, Ethnic Studies, Gender & Women Studies, Geography, History, Political Science, Psychology, Sociology.

(choose 24 credits)

Students taking the history option are required to take 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

ANTH 100 - ANTH 499
ECON 100 - ECON 499
ETHN 100 - ETHN 499
GEOG 100 - GEOG 499
GWS 100 - GWS 499
HIST 100 - HIST 499
POL 100 - POL 499
PSYC 100 - PSYC 499
SOC 100 - SOC 499

Required Minor: None.

COURSE DESCRIPTIONS

SOST 200 (2) Introduction to Social Studies Teaching

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.

Fall, Spring

SOST 222 (1-4) Selected Topics

Designed to provide students the opportunity to explore a variety of topics related to social studies.

Fall, Spring

SOST 299 (1-6) Individual Study

SOST 450 (4) Teaching Social Studies 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 KSP 440

Fall, Spring

SOST 485 (1-6) Topics

Designed to provide students the opportunity to explore a variety of topics related to social studies.

SOST 491 (1-6) In-Service

Designed to provide students the opportunity to integrate academic learning with professional practice.

SOST 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: www.sbs.mnsu.edu/socialwork

Chair: Annelies Hagemeister

Ross Aalgaard, David Beimers, Kofi Danso, Annelies Hagemeister, Christine Black-Hughes, Nancy Fitzsimons, Debra Gohagan, Paul Mackie, Laura Strunk, Robin R. Wingo, Kimberly Zammitt

Accreditations. Council on Social Work Education (CSWE).

This major is preparation for beginning-level generalist 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.

POLICIES/INFORMATION

Admission to Major. 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 441, SOWK 443, SOWK 447, SOWK 450 and SOWK 455) occurs during 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.

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 exceptions are made based on 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 satisfactory academic performance by earning a minimum grade of "C-" in required courses. No formal additional requirements are applied to acceptance for the Social Work Practicum in the final semester of the program, other than successful completion of course requirements, including Junior Field Experience and practice sequence courses.

P/N Grading Policy. SOWK 450 and SOWK 455 (Social Work 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 grade 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 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 and fieldwork/practicum.

SOCIAL WORK BSSW

Degree completion = 120 credits

Required General Education

KSP 235 Human Development (3)

Values, Ethics, and Critical Thinking

(choose 3-4 credits one course from the following)

ENG 213W Perspectives in Ethics and Civic Responsibility (4)

PHIL 110 Logical and Critical Thinking (3)

PHIL 120W Introduction to Ethics (3)

PHIL 222W Medical Ethics (3)

PHIL 240W Law, Justice and Society (3)

Biological Systems

(choose 3-4 credits one course from the following)

BIOL 100 Our Natural World (4)

BIOL 102 Biology of Women (3)

Diversity and Social Justice A

(choose 3-4 credits one course from the following)

ANTH 230 People and Cultures of the World (4)

ANTH 240 Language and Culture (4)

ENG 211W Perspectives in Literature and Human Diversity (4)

ETHN 100 American Racial Minorities (3)

ETHN 101 Introduction to Multicultural and Ethnic Studies (3)

HUM 281W Human Diversity and Human Traditions (4)

KSP 220W Human Relations in a Multicultural Society (3)

PHIL 115W Philosophy of Race, Class, and Gender (3)

PHIL 205W Culture, Identity, and Diversity (3)

Diversity and Social Justice B

(choose 3-4 credits one course from the following)

AIS 101 Introduction to American Indigenous Studies (3)

AIS 210W Oral Traditions (3)

AIS 230W American Indians of MN (3)

AIS 240W American Indian Women (3)

CDIS 290 Introduction to Communication Disorders (3)

ETHN 150 Multicultural and Ethnic Experience (3)

ETHN 201W Perspectives on African Americans (3)

ETHN 203W Perspectives on Asian Americans (3)

ETHN 204W Perspectives on Latinos/Hispanics (3)

GWS 110W Introduction to Gender (4)

GWS 220W Global Perspectives on Women and Change (4)

GWS 225W Introduction to LGBT Studies (4)

REHB 110W Sensitivity to Disability (3)

Social, Economic, and Political Perspectives

(choose 6 credits)

(Select two courses each from different departments from the following)

ECON 100 Introduction to US Economy (3)

ECON 201 Macroeconomics (3)

ECON 202 Microeconomics (3)

POL 101 Introduction to Public Life (3)

POL 104 Understanding US Constitution (3)

POL 106 Politics in the World Community (3)

POL 111 US Government (3)

SOC 101 Introduction to Sociology (3)

SOC 150 Social Problems (3)

URBS 150 Sustainable Communities (3)

Statistical Analysis Methods

(choose 3-4 credits one course from the following)

ECON 207 Business Statistics (4)

SOC 202 Introductory Social Statistics (3)

STAT 154 Elementary Statistics (3)

Major Common Core

SOWK 180W Social Welfare Services (4)

SOWK 212 Introduction to Social Work (4)

SOWK 310 Human Behavior in the Social Environment (4)

SOWK 315 Junior Field Experience (4)

SOWK 410 Social Welfare Policy (4)

SOWK 435 Applied Social Work Research (4)

SOWK 441 Generalist Social Work Practice (4)

SOWK 443 Social Work Interviewing and Counseling Skills (4)

- SOWK 446 Organizations and Community Practice (4)
 SOWK 450 Integrative Seminar (2)
 SOWK 455 Social Work Practicum (10)

Major Restricted Electives

(choose one course from the following)

- SOWK 415 Child-Family Welfare Services (3)
 SOWK 419 Social Work and Aging (3)
 SOWK 420 Women's Issues in Social Work (3)
 SOWK 422 Social Work and Chemical Dependency (3)
 SOWK 425 Social Work in Health Care Setting (3)
 SOWK 427 Social Work and Domestic Violence (3)
 SOWK 430 Social Work in the School Setting (3)
 SOWK 432 Social Work and Disabilities (3)

Required Minor: None.

SOCIAL WELFARE MINOR**Required for Minor**

- SOWK 180W Social Welfare Services (4)
 SOWK 212 Introduction to Social Work (4)
 SOWK 310 Human Behavior in the Social Environment (4)
 SOWK 410 Social Welfare Policy (4)

One additional course from the following:

- SOWK 255 Global Responses to Human Need (3)
 SOWK 415 Child-Family Welfare Services (3)
 SOWK 419 Social Work and Aging (3)
 SOWK 420 Women's Issues in Social Work (3)
 SOWK 422 Social Work and Chemical Dependency (3)
 SOWK 425 Social Work in Health Care Setting (3)
 SOWK 427 Social Work and Domestic Violence (3)
 SOWK 430 Social Work in the School Setting (3)
 SOWK 432 Social Work and Disabilities (3)

*SOWK 315 and SOWK 435 may be considered at part of the Social Welfare Minor with the approval of the Chair.

COURSE DESCRIPTIONS**SOWK 180W (4) Social Welfare Services**

The objective of this course is to explore social welfare as a social institution. Consideration will be given to formal and informal efforts to meet common social needs. This course emphasizes social challenges facing American society and the program and policy prescriptions designed to minimize or eliminate these problems.

Fall, Spring, Summer
 WI, GE-5, GE-9

SOWK 212 (4) Introduction to Social Work

An introduction to social work as a profession including the history of the profession, professional behaviors, values and Codes of Ethics, fields of practice, roles and tasks, and core theories and social work skills required for generalist social work practice. Students will develop skills in critical thinking, professional communication and behaviors, demonstrate self-awareness as they prepare to work in a diverse society, and apply values, ethics, and theories through group-based projects. Students are provided with information about the BSSW curriculum.
 Fall, Spring

SOWK 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.
 Fall, Spring
 GE-5, GE-8

Diverse Cultures - Purple

SOWK 291 (1-3) Exploratory Studies

Under faculty mentorship, students can pursue subjects of individual interest related to social work and social welfare.

Fall, Spring

SOWK 310 (4) Human Behavior in the Social Environment

Applies theoretical frameworks for assessing and organizing knowledge of human behavior and the social environment in conjunction with social systems, to understand individual, family, group, organizational, and community systems. Attention is paid to human diversity, discrimination, and oppression.

Pre: SOWK 180W, SOWK 212

Fall, Spring, Summer

SOWK 315 (4) Junior Field Experience

Beginning level supervised field experience with a social service agency. Students complete 120 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 the semester before registration.

Pre: SOWK 180W, SOWK 212

Fall, Spring, Summer

SOWK 410 (4) Social Welfare Policy

Exploration of the interrelatedness of social services, social policy formulation and analysis, and generalist social work practice. Presentation of contemporary social issues and social welfare policies, the introduction of a framework for policy analysis, and an overview of policy, practice, advocacy and action skills. Critical analysis of issues and policy from a social work perspective, drawing from the values and ethics of the profession, with examination of how issues differentially impact groups within our diverse society.

Pre: SOWK 180W, SOWK 212, SOWK 310

Fall, Spring, Summer

SOWK 415 (3) Child-Family Welfare Services

Social services designed to facilitate child development and family functioning.

Fall, Spring

SOWK 419 (3) Social Work and Aging

Service delivery issues and social work practice with older persons, their families and communities.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOWK 422 (3) Social Work and Chemical Dependency

This course is designed to provide upper level (junior and senior) undergraduate social work students with a comprehensive introduction to the epidemiology (scientific study of disease), etiology (causes of disease), history, policy, and treatment modalities of substance abuse from a person-in-environment and systems theory social work perspective.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOWK 425 (3) Social Work in Health Care Setting

Service delivery issues and skills for working in hospitals, nursing homes, and community programs.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOWK 427 (3) Social Work and Domestic Violence

The overall goal of this course is to enable students to understand the rationale for and application of a variety of intervention strategies for the prevention and intervention of domestic violence.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOWK 430 (3) Social Work in the School Setting

Service delivery issues, knowledge and skills for providing social services within school settings.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOWK 432 (3) Social Work and Disabilities

Course focuses on service delivery issues and skills, using a strengths-based, family systems, and empowerment approach for working with individuals with developmental and other disabilities and their families across the life span. Students hoping to do a practicum in a disability services setting should complete this course prior to beginning the practicum.

Fall (On-Demand), Spring (On-Demand), Summer (On-Demand)

SOCIAL WORK CONTINUED

SOWK 435 (4) Applied Social Work Research

Explores research issues and techniques, needs assessments, and program and practice evaluations. In addition, there is a lab designed to supplement class discussions and to assist students in understanding some of the technical details and specific skills associated with conducting research and writing a research proposal. The lab enhances skills in developing questionnaires, reviewing previous studies, using American Psychological Association (APA) citations and data analysis using SPSS.

Pre: ECON 207 or SOC 202 or STAT 154

Fall, Spring

SOWK 441 (4) Generalist Social Work Practice

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.

SOWK 443 (4) Social Work Interviewing and Counseling Skills

Intervention skills for working with individuals, families, and groups.

Pre: SOWK 441 and permission

Fall, Spring

SOWK 446 (4) Organizations and Community Practice

This course prepares students for direct and indirect macro generalist social work practice in organizations and communities. Students will learn: 1) to recognize characteristics and assets of organizations and communities, 2) to identify and respond to changing community and organizational needs, and 3) strategies for planned change process in organizations and communities. Emphasis is placed on engaging, assessment, intervening and evaluating consumer services across mezzo and macro systems through the process of participating in task-oriented groups.

Pre: Admission to the major.

Fall, Spring

SOWK 447 (3) Social Work Practice IV

This course prepares students with social work practice knowledge, skills, and values to address organizational issues while considering the needs of clients. Social justice, advocacy, ethics, generalist social work practice, and professional development will be examined within the organization.

Pre: SOWK 441, SOWK 443 & SOWK 445

SOWK 450 (2) Integrative Seminar

Integration of senior field practicum with academic content and concepts. Serves as the capstone experience. Taken with SOWK 455 and SOWK 447.

Pre: SOWK Foundation, Practice Sequence, and permission

Fall, Spring

SOWK 455 (10) Social Work Practicum

Culminating practicum experience with 32 hour per week placement in a social service setting with supervision provided by a degreed social worker. Taken with SOWK 450, SOWK 447

Pre: SOWK Foundation, Practice Sequence, and permission

Fall, Spring

SOWK 485 (1-6) Selected Topics

Topics announced when offered

Variable

SOWK 490 (1-3) Workshop

SOWK 492 (1-3) Honors Reading

SOWK 495 (1-3) Social Work Honors Paper

This elective is for those students who desire to complete an advanced writing assignment in preparation for employment or graduate education.

SOWK 497 (1-10) Internship: Social Work

Additional field experience in approved social agency.

SOWK 499 (1-6) Individual Study

Under faculty mentorship, students may pursue in-depth library or field research on topics of their choice.

SOCIOLOGY

Sociology

College of Social & Behavioral Sciences

Department of Sociology & Corrections

113 Armstrong Hall • 507-389-1561

Website: <http://sbs.mnsu.edu/soccorr>

Chair: Luis Posas

Afroza Anwary, Emily Boyd, Steve Buechler, Barbara Carson, Jeffery Dennis, Donald Ebel, Catarina Fritz, Carol Glasser, Diane Graham, Vicki Hunter, Barbara Keating, Luis Posas, Paul Prew, James Robertson, Sarah Rusche, Pedro Thomas, Sherrise Truesdale-Moore, William Wagner, Dennis Waskul

Sociology is the scientific study of society and culture examining patterns of human social behavior. The sociology program at Minnesota State University Mankato is dedicated to the pursuit, transmission and application of sociological knowledge in order to understand and transform the social world. The pursuit of sociological knowledge involves scholarly inquiry by faculty and students. The transmission of sociological knowledge entails teaching and learning within and beyond the academy. The application of sociological knowledge translates the unique insights of sociological perspectives into our professional activities and daily lives. The sociology program at Minnesota State Mankato leads to careers in academic and applied settings including human services, government, business, nonprofit organizations and social action organizations.

The Sociology undergraduate major includes three options: **Option I:** General Sociology provides a liberal arts curriculum along with research skill develop-

ment for students interested in a comprehensive education or preparation for graduate education. **Option II:** Applied Sociology prepares students for careers in a variety of applied settings. This applied program includes an internship. **Option III:** The Globalization Studies Emphasis provides students a global perspective to understand global social processes and the role of the United States in an increasingly interconnected world.

The Sociology program uses a portfolio model of student professional development. Students planning to major in sociology should take SOC 200: Foundations of Sociology as soon as possible to start their portfolio. Our program mission statement, program goals, career information and more are available on our website (<http://sbs.mnsu.edu/soccorr>).

POLICIES/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.

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.

Residency Requirements. Excluding SOC 101, all majors must complete 33 of the required 39 credit hours within this Department of Sociology and Corrections at Minnesota State Mankato. Transfer courses that will not be accepted are Internship, Capstone and Experiential learning courses such as GERO 200, SOC 200, and SOC 406.

Normally the department will not accept transfer courses at the 200-level for our

upper level courses, except on a case-by-case basis.

Excluding SOC 101, all students minoring in sociology must complete 12 of the required 18 credit hours within the Department of Sociology and Corrections at Minnesota State Mankato.

GPA Policy. A minimum grade of “C” is required for all courses counting towards the Sociology major.

SOCIOLOGY BA

Degree completion = 120 credits

Option I: General Sociology

Required General Education

SOC 101 Introduction to Sociology (3)

Major Common Core (choose 21 credits)

SOC 200 Foundations of Sociology (3)
 SOC 201 Social Research I (3)
 SOC 202 Introductory Social Statistics (3)
 SOC 351 Social Psychology (3)
 SOC 458 Sociological Theory (3)
 SOC 463 Social Stratification (3)
 SOC 495 Senior Seminar (3)

Major Restricted Electives (choose one of the following)

SOC 469 Survey Research (3)
 SOC 479 Sociological Ethnography (3)
 SOC 480 Qualitative Methods (3)

Major Unrestricted Electives

Choose 15 credits from 300-400-level courses.

SOC 307 Sex & Gender in Contemporary Society (3)
 SOC 360 Indigenous People and Environmental Struggles (3)
 SOC 402 Medical Sociology (3)
 SOC 404 Sociology of Aging (3)
 SOC 405 Sociology of Death (3)
 SOC 407 Population Dynamics (3)
 SOC 408 Family Life Dynamics (3)
 SOC 409 Family Violence (3)
 SOC 417 Program Administration (3)
 SOC 420 Identity Work in Women’s Reentry Experiences (3)
 SOC 423 Complex Organizations (3)
 SOC 425 Social Movements (3)
 SOC 430 Sociology of Globalization (3)
 SOC 441 Social Deviance (3)
 SOC 442 Criminology (3)
 SOC 446 Race, Culture & Ethnicity (3)
 SOC 451 Law & Social Justice in Society (3)
 SOC 460 Environmental Sociology (3)
 SOC 461 Urban Sociology (3)
 SOC 465 Law & Chemical Dependency (3)
 SOC 466 Program Planning (3)
 SOC 469 Survey Research (3)
 SOC 470 Sociology of Parent-Child Interaction (3)
 SOC 479 Sociological Ethnography (3)
 SOC 480 Qualitative Methods (3)
 SOC 482 Social Change (3)
 SOC 483 The Family and Society (3)
 SOC 484 Sociology of Religion (3)
 SOC 485 Selected Topics (2-6)
 SOC 490 Workshop (1-3)
 SOC 491 In-Service (1-6)
 SOC 492 Honors Reading (1)
 SOC 493 Applied Sociology (3)
 SOC 497 Internship: Sociology (1-12)
 SOC 499 Individual Study (1-6)

Other Graduation Requirements

Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor. Yes. Any.

Option II: Applied Sociology

Required General Education

SOC 101 Introduction to Sociology (3)

Major Common Core (choose 27-30 credits)

SOC 200 Foundations of Sociology (3)
 SOC 201 Social Research I (3)
 SOC 202 Introductory Social Statistics (3)
 SOC 351 Social Psychology (3)
 SOC 458 Sociological Theory (3)
 SOC 463 Social Stratification (3)
 SOC 493 Applied Sociology (3)
 SOC 495 Senior Seminar (3)
 SOC 497 Internship: Sociology (1-12)

Major Restricted Electives (choose one of the following)

SOC 469 Survey Research (3)
 SOC 479 Sociological Ethnography (3)
 SOC 480 Qualitative Methods (3)

Major Unrestricted Electives (choose 6 to 9 credits)

SOC 307 Sex & Gender in Contemporary Society (3)
 SOC 360 Indigenous People and Environmental Struggles (3)
 SOC 402 Medical Sociology (3)
 SOC 404 Sociology of Aging (3)
 SOC 405 Sociology of Death (3)
 SOC 407 Population Dynamics (3)
 SOC 408 Family Life Dynamics (3)
 SOC 409 Family Violence (3)
 SOC 417 Program Administration (3)
 SOC 420 Identity Work in Women’s Reentry Experiences (3)
 SOC 423 Complex Organizations (3)
 SOC 425 Social Movements (3)
 SOC 430 Sociology of Globalization (3)
 SOC 441 Social Deviance (3)
 SOC 442 Criminology (3)
 SOC 446 Race, Culture & Ethnicity (3)
 SOC 451 Law & Social Justice in Society (3)
 SOC 460 Environmental Sociology (3)
 SOC 461 Urban Sociology (3)
 SOC 465 Law & Chemical Dependency (3)
 SOC 466 Program Planning (3)
 SOC 469 Survey Research (3)
 SOC 470 Sociology of Parent-Child Interaction (3)
 SOC 479 Sociological Ethnography (3)
 SOC 480 Qualitative Methods (3)
 SOC 482 Social Change (3)
 SOC 483 The Family and Society (3)
 SOC 484 Sociology of Religion (3)
 SOC 485 Selected Topics (2-6)
 SOC 490 Workshop (1-3)
 SOC 491 In-Service (1-6)
 SOC 492 Honors Reading (1)
 SOC 499 Individual Study (1-6)

Other Graduation Requirements

Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor. Yes. Any.

SOCIOLOGY BS

Degree completion = 120 credits

Option I: General Sociology

Required General Education

SOC 101 Introduction to Sociology (3)

SOCIOLOGY CONTINUED

Major Common Core

SOC 200	Foundations of Sociology (3)
SOC 201	Social Research I (3)
SOC 202	Introductory Social Statistics (3)
SOC 351	Social Psychology (3)
SOC 458	Sociological Theory (3)
SOC 463	Social Stratification (3)
SOC 495	Senior Seminar (3)

Major Restricted Electives (choose one of the following)

SOC 469	Survey Research (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)

Major Emphasis - Option 1: General Sociology (choose 15 credits)

Must be upper division and then with the approval of an advisor to total 39 credits in the major.

SOC 307	Sex & Gender in Contemporary Society (3)
SOC 360	Indigenous Peoples and Environmental Struggles (3)
SOC 402	Medical Sociology (3)
SOC 404	Sociology of Aging (3)
SOC 405	Sociology of Death (3)
SOC 407	Population Dynamics (3)
SOC 408	Family Life Dynamics (3)
SOC 409	Family Violence (3)
SOC 417	Program Administration (3)
SOC 420	Identity Work in Women's Reentry Experiences (3)
SOC 423	Complex Organizations (3)
SOC 425	Social Movements (3)
SOC 430	Sociology of Globalization (3)
SOC 441	Social Deviance (3)
SOC 442	Criminology (3)
SOC 446	Race, Culture & Ethnicity (3)
SOC 451	Law & Social Justice in Society (3)
SOC 460	Environmental Sociology (3)
SOC 461	Urban Sociology (3)
SOC 465	Law & Chemical Dependency (3)
SOC 466	Program Planning (3)
SOC 469	Survey Research (3)
SOC 470	Sociology of Parent-Child Interaction (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)
SOC 482	Social Change (3)
SOC 483	The Family and Society (3)
SOC 484	Sociology of Religion (3)
SOC 485	Selected Topics (2-6)
SOC 490	Workshop (1-3)
SOC 491	In-Service (1-6)
SOC 492	Honors Reading (1)
SOC 493	Applied Sociology (3)
SOC 497	Internship: Sociology (1-12)
SOC 499	Individual Study (1-6)

Option 2: Applied Sociology

Required General Education

SOC 101	Introduction to Sociology (3)
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Major Common Core

SOC 200	Foundations of Sociology (3)
SOC 201	Social Research I (3)
SOC 202	Introductory Social Statistics (3)
SOC 351	Social Psychology (3)
SOC 458	Sociological Theory (3)
SOC 463	Social Stratification (3)
SOC 495	Senior Seminar (3)

Major Restricted Electives (choose one of the following)

SOC 469	Survey Research (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)

Major Emphasis - Option 2: Applied Sociology

SOC 493	Applied Sociology (3)
SOC 497	Internship: Sociology (1-12)

Major Electives (choose 6-9 credits)

Must be upper division and then taken with the approval of an advisor to total 39 credits in the major.

SOC 307	Sex & Gender in Contemporary Society (3)
SOC 360	Indigenous Peoples and Environmental Struggles (3)
SOC 402	Medical Sociology (3)
SOC 404	Sociology of Aging (3)
SOC 405	Sociology of Death (3)
SOC 407	Population Dynamics (3)
SOC 408	Family Life Dynamics (3)
SOC 409	Family Violence (3)
SOC 417	Program Administration (3)
SOC 420	Identity Work in Women's Reentry Experiences (3)
SOC 423	Complex Organizations (3)
SOC 425	Social Movements (3)
SOC 430	Sociology of Globalization (3)
SOC 441	Social Deviance (3)
SOC 442	Criminology (3)
SOC 446	Race, Culture & Ethnicity (3)
SOC 451	Law & Social Justice in Society (3)
SOC 460	Environmental Sociology (3)
SOC 461	Urban Sociology (3)
SOC 465	Law & Chemical Dependency (3)
SOC 466	Program Planning (3)
SOC 469	Survey Research (3)
SOC 470	Sociology of Parent-Child Interaction (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)
SOC 482	Social Change (3)
SOC 483	The Family and Society (3)
SOC 484	Sociology of Religion (3)
SOC 485	Selected Topics (2-6)
SOC 490	Workshop (1-3)
SOC 491	In-Service (1-6)
SOC 492	Honors Reading (1)
SOC 499	Individual Study (1-6)

Required Minor. Yes. Any.

SOCIOLOGY: GLOBALIZATION STUDIES BA

Required General Education

SOC 101	Introduction to Sociology (3)
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Major Common Core

SOC 200	Foundations of Sociology (3)
SOC 201	Social Research I (3)
SOC 202	Introductory Social Statistics (3)
SOC 458	Sociological Theory (3)
SOC 463	Social Stratification (3)
SOC 495	Senior Seminar (3)

Add ONE of the following (choose 3 credits)

SOC 469	Survey Research (3)
SOC 479	Sociological Ethnography (3)
SOC 480	Qualitative Methods (3)

Major Restricted Electives

Please select a total of 18 credits of major restricted electives.

Departmental Courses (choose 12-15 credits)

SOC 307	Sex & Gender in Contemporary Society (3)
SOC 407	Population Dynamics (3)
SOC 425	Social Movements (3)
SOC 430	Sociology of Globalization (3)

SOC	446	Race, Culture & Ethnicity (3)
SOC	460	Environmental Sociology (3)
SOC	461	Urban Sociology (3)
SOC	482	Social Change (3)

SOCIOLOGY MINOR

Required for Minor

SOC	101	Introduction to Sociology (3)
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Required Electives (18 credits)

At least 12 credits must be at the 300-400 level.

SOC	Any Level
SOC	Any Level
SOC	300-400 Level
SOC	300-400 Level
SOC	300-400 Level
SOC	300-400 Level

Other College of Social and Behavioral Sciences Electives

(choose 3-6 credits)

ANTH	436W	Anthropology of Aging (3)
ETHN	330	Immigration and Ethnicity (3)
GEOG	425	Economic Geography (3)
GWS	220	Global Perspectives on Women and Change (4)
POL	231	World Politics (3)
POL	241	Introduction to Comparative Politics (3)
POL	431	International Relations (3)
POL	435	Capitalism, Nationalism, and Democracy (3)
POL	436	International Political Economy (3)
POL	448	Political Development & Change (3)
SOWK	255	Global Responses to Human Need (3)
URBS	150	Sustainable Communities (3)

Other Graduation Requirements

Required for Bachelor of Art (BA) ONLY: Language (8 credits)

Required Minor. Yes. Any.

SOCIOLOGY: GLOBALIZATION STUDIES BS

Required General Education

SOC	101	Introduction to Sociology (3)
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Major Common Core

SOC	200	Foundations of Sociology (3)
SOC	201	Social Research I (3)
SOC	202	Introductory Social Statistics (3)
SOC	458	Sociological Theory (3)
SOC	463	Social Stratification (3)
SOC	495	Senior Seminar (3)

(choose 3 credits - one course from the following)

SOC	469	Survey Research (3)
SOC	479	Sociological Ethnography (3)
SOC	480	Qualitative Methods (3)

Major Restricted Electives

Please select a total of 18 credits of major restricted electives.

Departmental Courses (choose 12-15 credits)

SOC	307	Sex & Gender in Contemporary Society (3)
SOC	407	Population Dynamics (3)
SOC	425	Social Movements (3)
SOC	430	Sociology of Globalization (3)
SOC	446	Race, Culture & Ethnicity (3)
SOC	460	Environmental Sociology (3)
SOC	461	Urban Sociology (3)
SOC	482	Social Change (3)

Other College of Social and Behavioral Sciences Electives

(choose 3-6 credits)

ANTH	436W	Anthropology of Aging (3)
ETHN	330	Immigration and Ethnicity (3)
GEOG	425	Economic Geography (3)
GWS	220	Global Perspectives on Women and Change (4)
POL	231	World Politics (3)
POL	241	Introduction to Comparative Politics (3)
POL	431	International Relations (3)
POL	435	Capitalism, Nationalism, and Democracy (3)
POL	436	International Political Economy (3)
POL	448	Political Development & Change (3)
SOWK	255	Global Responses to Human Need (3)
URBS	150	Sustainable Communities (3)

Required Minor. Yes. Any.

COURSE DESCRIPTIONS

SOC 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.

Fall, Spring
GE-5, GE-8
Diverse Cultures - Purple

SOC 101W (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. This is a writing intensive course.

Variable
WI, GE-5, GE-8
Diverse Cultures - Purple

SOC 150 (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.

Fall, Spring
GE-5, GE-7
Diverse Cultures - Purple

SOC 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 or SOC 101W
Fall, Spring

SOC 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 or SOC 101W
Fall, Spring

SOC 202 (3) Introductory Social Statistics

Basic descriptive and inferential statistics used in the analysis of sociological data.

Fall, Spring
GE-4

SOC 208 (3) Courtship, Marriage & Family

Courtship, marriage and family are studied as social and cultural phenomena. Focuses on the relationships between society, culture, social institutions, families and individuals especially as they are affected by social change.

GE-5, GE-7
Diverse Cultures - Purple

SOC 209 (3) Sociology of Human Sexualities

Explores the social construction of sex and sexuality, including the organization of human bodies and activities into particular categories such as female and male or homosexual and heterosexual. How this is done in specific institutional settings like the law, media, and science is a primary focus. The effects of such practices and their associated meanings, as well as resistance to them, are also investigated
 Fall, Spring
 GE-5, GE-7
 Diverse Cultures - Purple

SOC 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 or SOC 101W
 Fall, Spring
 GE-5, GE-9

SOC 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
 Fall, Spring

SOC 307 (3) Sex & 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 or SOC 101W
 Fall, Spring

SOC 325 (3) Sociology of Popular Culture

This course examines the sociological significance of popular culture and focuses on how popularized aspects of social life are produced, consumed and experienced by members of society. Includes discussion of celebrities, sports, music, television, movies, commercials and consumption practices.
 Pre: SOC 101 or SOC 101W
 Variable

SOC 351 (3) Social Psychology

The study of symbolic interaction as the basis of the mind, the self, and society.
 Pre: SOC 101 or SOC 101W
 Fall, Spring

SOC 360 (3) Indigenous Peoples and Environmental Struggles

Introduces students to the differences between indigenous and Western views of the environment. Analyzes the impact of invasion and encroachment on indigenous societies' interactions with nature. Compares historical and contemporary environmental issues in indigenous societies.
 Variable
 GE-10
 Diverse Cultures - Purple

SOC 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.
 Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.
 Fall, Spring, Summer

SOC 402 (3) Medical Sociology

Introduces students to central topics in medical sociology including; social factors responsible for people's health outcomes; social construction of health and illness; health inequalities; evolution of the social institution of medicine; and/or issues related to race/ethnicity, social class and gender.
 Fall

SOC 403 (3) Sociology of Mental Health

This course brings a sociological perspective to the understanding of mental health and illness. Students review the history and the perception of mental illness in Western society, and critically examine how social factors influence the definition and the responses to mental disorders.
 Fall, Spring

SOC 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 or SOC 101W
 Fall
 Diverse Cultures - Purple

SOC 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 or SOC 101W
 Fall

SOC 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 or SOC 101W
 Variable

SOC 409 (3) Family Violence

Various forms of family violence including dating violence, spouse abuse, and child abuse; social theory, empirical research and social policy on family violence; social context, responses and solutions.
 Fall

SOC 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.
 Spring

SOC 420 (3) Identity Work in Women's Reentry Experiences

Applies sociological theories of identity to the experience of women being released from prison. Taught at the women's prison in Shakopee, Minnesota and integrates Minnesota State Mankato students with students drawn from the educational program located within the women's prison in Shakopee.
 Fall, Spring
 Diverse Cultures - Gold

SOC 423 (3) Complex Organizations

Analysis of the development, structure, and functioning of social processes in large-scale, formal organizations.
 Pre: SOC 101, SOC 101W
 Fall

SOC 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 or SOC 101W
 Spring

SOC 430 (3) Sociology of Globalization

Overview of the role of the United States in an increasingly globalized society with a focus on economic and political inequality, the class structure, the labor process, race and gender relations, the global dimensions of capitalism, and modern crisis tendencies.
 Pre: SOC 101 or SOC 101W
 Variable
 Diverse Cultures - Purple

SOC 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 or SOC 101W

Fall, Spring

SOC 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 or SOC 101W

Fall, Spring

SOC 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 or SOC 101W

Fall, Spring

Diverse Cultures - Purple

SOC 451 (3) Law & Social 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, SOC 101W and CORR 106

Variable

SOC 458 (3) Sociological Theory

An overview of sociological theory that surveys the classical tradition and emphasizes contemporary theories including functionalism, conflict theory, rational choice theory, and symbolic interactionism as well as recent trends in theoretical developments.

Pre: SOC 101 or SOC 101W

Spring

SOC 460 (3) Environmental Sociology

Examines the sociological relationship between people and the environment including: ways various societies view the environment, social changes from ecological degradation, and solutions to environmental problems. Topics may include a sociological analysis of climate change, agriculture, and resource extraction.

Spring

Diverse Cultures - Purple

SOC 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 or SOC 101W

Variable

Diverse Cultures - Purple

SOC 463 (3) Social Stratification

An overview of the causes, processes and consequences of social stratification in society. Includes an overview of classical statements about stratification and focuses on social inequalities rooted in social class structures, the organization of political power, and social hierarchies based on race and gender differences in society.

Pre: SOC 101 or SOC 101W

Spring

Diverse Cultures - Purple

SOC 465 (3) Law & Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse.

Fall

SOC 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 or SOC 101W

Spring

SOC 469 (3) Survey Research

Techniques of survey research, interview, and questionnaire construction, field administration, and sampling methodology.

Pre: SOC 201

Fall

SOC 470 (3) Sociology of Parent-Child Interaction

Parent-child relationships in societal context; socialization theories; classic and contemporary research; parenting applications; current issues.

Spring

SOC 479 (3) Sociological Ethnography

Examination of ethnographic methodologies in sociology with emphasis on analytic, performance, and autoethnography. Exploration of ethics in ethnography, visual sociology, and first-hand experience in both crafting and presenting ethnographic works.

Pre: SOC 101 or SOC 101W; SOC 201 or similar science research course with instructor permission.

Spring

SOC 480 (3) Qualitative Methods

Participant observation, focused interviews, and qualitative analysis; students actively participate in a field research project.

Pre: SOC 101 or SOC 101W; SOC 201 or similar social science research course with instructor permission.

Fall

SOC 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 SOC 101W

Variable

SOC 483 (3) The Family and Society

Theory development and research findings about family systems with a special emphasis on societal influences (social, economic, political) on the changing family.

Variable

SOC 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 or SOC 101W

Variable

SOC 485 (2-6) Selected Topics

Topics vary as announced in class schedule. May be retaken for credit if topic varies.

Pre: SOC 101 or SOC 101W

Variable

SOC 490 (1-3) Workshop

Workshop topics vary as announced in class schedule. May be retaken for credit.

Variable

SOC 491 (1-6) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

Variable

SOC 492 (1) Honors Reading

For Honors students only.

Variable

SOC 493 (3) Applied Sociology

Focuses on ways sociological theories, perspectives, and methods can be applied to address human concerns; how sociologists make a better world. Participants learn to use sociological methods and concepts (such as theories about social structure, social organization, and social movements) to identify, investigate, and implement solutions to problems of social organization, social process, and social change. Potential applications include issues encountered in various workplace and social situations including community agencies and organizations, government, business, health care, and other social institutions.

Pre: SOC 201. Senior Standing; SOC 201 or equivalent with permission
Fall

SOC 495 (3) Senior Seminar

Reviews sociological competencies and their applications in a variety of professional settings. A faculty-supervised, student-designed capstone project will integrate sociological knowledge, theory and research. Students must have completed or be currently enrolled in all other required courses for the major.

Pre: SOC 200, SOC 201, SOC 458
Fall, Spring

SOC 497 (1-12) Internship: 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
Fall, Spring

SOC 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
Fall, Spring

SPANISH

Spanish

College of Arts & Humanities
Department of World Languages & Cultures
227 Armstrong Hall • 507-389-2116
Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Kimberly Contag, Alfredo Duplat, James A. Grabowska, Adriana Gordillo, Elizabeth Harsma, Gregory Taylor, Enrique Torner

Students in the Spanish program acquire language proficiency and cultural competency that prepares them to work and travel where Spanish is spoken. Students at the end of their program will meet the National Standards for Foreign Language Learning.

Communicate in Languages Other Than English

- Standard 1.1: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- Standard 1.2: Students understand and interpret written and spoken language on a variety of topics.
- Standard 1.3: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

Gain Knowledge and Understanding of Other Cultures

- Standard 2.1: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.
- Standard 2.2: Students demonstrate an understanding of the relationship between the products and perspectives of the culture studied.

Connect with Other Disciplines and Acquire Information

- Standard 3.1: Students reinforce and further their knowledge of other disciplines through the foreign language.
- Standard 3.2: Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures.

Develop Insight into the Nature of Language and Culture

- Standard 4.1: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- Standard 4.2: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

Participate in Multilingual Communities at Home & Around the World

- Standard 5.1: Students use the language both within and beyond the school setting.
- Standard 5.2: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

POLICIES/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 and placement procedures.

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 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 must see a Spanish faculty member for placement advice before enrolling in a Spanish course. Contact the Department for details and see the department website for guidance.

Fulfilling BA Language Requirement. Students who wish to validate the BA Language requirement for previous study in French, German, Spanish, Swedish or Norwegian may do so by taking credit by exam. Students do not meet the BA language requirement merely because they have taken two years of high school language.

Residency Requirement. Transfer credits will be applied only if they are the equivalent of work offered by the Department of World Languages & Cultures for the major or minor in that language. In addition, a minimum of work must be taken at Minnesota State Mankato as follows. Major: A minimum of three upper division courses other than SPAN 492 or SPAN 499, 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 SPAN 492 or SPAN 499, 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 Spanish Education:

Emphasis is on meeting the National Standards for Foreign Language Learning and Minnesota Board of Teaching competencies.

- BS Spanish for the Professions:

Emphasis is on the development of communicative competency, cultural competency and literacy to work in the 21st century workplace where Spanish is required.

SPANISH BA

Degree completion = 120 credits

Pre-requisites to the Major

- SPAN 101 Elementary Spanish I (4)
 SPAN 102 Elementary Spanish II (4)
 SPAN 193 Individual Study Abroad: Elementary Spanish I (1-6)
 SPAN 194 Individual Study Abroad: Elementary Spanish II (1-6)

Major Common Core

- SPAN 210W Composition & Conversation (4)

Major Restricted Electives

Language/Linguistics (choose 3-6 credits)

- SPAN 301 Topics in Language (1-4)
 SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
 SPAN 401 Topics in Linguistics (1-4)

Conversation (choose 3-6 credits)

- SPAN 310 Conversation and Composition (1-4)
 SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)

Reading (choose 3-6 credits)

- SPAN 365 Selected Readings (1-4)
 SPAN 395 Individual Study Abroad: Readings in Hispanic Lit. (1-6)
Spanish Peninsular Civilization (choose 3-6 credits)
 SPAN 355 Spanish Civilization (1-4)
 SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)

Spanish American Civilization (choose 3-6 credits)

- SPAN 356 Latin American Civilization (1-4)
 SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)

Spanish Peninsular Literature (choose 3-6 credits)

- SPAN 402 Topics in Spanish Peninsular Literature (1-4)
 SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)

Spanish American Literature (choose 3-6 credits)

- SPAN 403 Topics in Spanish American Literature (1-4)
 SPAN 494 Ind. Study Abroad: Topics in Spanish American Lit. (1-6)

Major Unrestricted Electives (choose 1-11 credits)

- SPAN 201 through SPAN 499

Other Graduation Requirement

Required for Bachelor of Arts (BA) degree: Language (8 credits) or other proof of proficiency

Required Minor: Yes. Any

SPANISH BS

Degree completion = 120 credits

Pre-requisites to the Major

- Language (8 credits) or other proof of proficiency
 SPAN 101 Elementary Spanish I (4)
 SPAN 102 Elementary Spanish II (4)
 SPAN 193 Individual Study Abroad: Elementary Spanish I (1-6)
 SPAN 194 Individual Study Abroad: Elementary Spanish II (1-6)

Major Common Core

- SPAN 210W Composition & Conversation (4)

Major Restricted Electives

Language/Linguistics (choose 3-6 credits)

- SPAN 301 Topics in Language (1-4)
 SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
 SPAN 401 Topics in Linguistics (1-4)

Conversation (choose 3-6 credits)

- SPAN 310 Conversation and Composition (1-4)
 SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)

Reading (choose 3-6 credits)

- SPAN 365 Selected Readings (1-4)
 SPAN 395 Individual Study Abroad: Readings in Hispanic Lit. (1-6)
Spanish Peninsular Civilization (choose 3-6 credits)
 SPAN 355 Spanish Civilization (1-4)
 SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
Spanish American Civilization (choose 3-6 credits)

SPAN 356 Latin American Civilization (1-4)

SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)

Spanish Peninsular Literature (choose 3-6 credits)

- SPAN 402 Topics in Spanish Peninsular Literature (1-4)
 SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)

Spanish American Literature (choose 3-6 credits)

- SPAN 403 Topics in Spanish American Literature (1-4)
 SPAN 494 Ind. Study Abroad: Topics in Spanish American Lit. (1-6)

Major Unrestricted Electives (choose 1-11 credits)

- SPAN 201 through SPAN 499

Required Minor: Yes. Any.

SPANISH FOR THE PROFESSIONS BS

Degree completion = 120 credits

Spanish for the Professions is a degree that prepares students to work in a variety of careers where a high level of Spanish language and cultural competency associated with the Spanish-speakers of the 21st century are required. The required coursework emphasizes the development of communicative competency, cultural competency and literacy (reading skills, translation of documents for the professions, etc.) to work in the 21st century workplace where Spanish is required. Required general education courses in a variety of areas (geography, ethnic studies, anthropology, philosophy, environmental studies, for example) and advanced courses in culture, civilization and history enhance the student's understanding of the people, cultures, and environments where Spanish is used in the workplace (here in the US and in Spain, Mexico, the Caribbean and Central America and South America). Core competencies include demonstration of skills in written and oral communication and competencies in literacy and cultures. This program requires study abroad immersion in a Spanish-speaking country.

Required General Education

- ANTH 240 Language and Culture (4)
 CMST 203 Intercultural Communication (3)
 CMST 212 Professional Communication and Interviewing (3)
 ENVR 101 Perspectives in Environmental Science (4)
 ETHN 150 Multi-Cultural/Ethnic Experience (3)
 ETHN 204W Perspectives on Latinos/Hispanics (3)
 GEOG 103 Introductory Cultural Geography (3)
 Select two (choose 6-8 credits)
 BLAW 131 Consumer Law & Ethics (3)
 PHIL 224W Business Ethics (3)
 PHIL 240W Law, Justice & Society (3)
 PHIL 321W Social & Political Philosophy (3)

Pre-requisites to the Major

Spanish language equivalency (choose 4-5 credits)
 Students must have the equivalent proficiency level of 102 to enter the major. One language course 101-202 may be used in General Education. Students whose proficiency level exceeds the minimum required should complete an elective course in Spanish or course at the appropriate level in another language of their choice.

- SPAN 101 Elementary Spanish I (4)
 SPAN 102 Elementary Spanish II (4)
 SPAN 193 Individual Study Abroad: Elementary Spanish I (1-6)
 SPAN 194 Individual Study Abroad: Elementary Spanish II (1-6)
 SPAN 201 Intermediate Spanish I (4)
 SPAN 202 Intermediate Spanish II (4)
 SPAN 293 Individual Study Abroad: Intermediate Spanish I (1-6)
 SPAN 294 Individual Study Abroad: Intermediate Spanish II (1-6)

Major Common Core

- ENG 272W Business Communication (4)
 SPAN 210W Composition & Conversation (4)
 SPAN 450 Spanish for the Professions (4)

SPANISH CONTINUED

Major Restricted Electives

Integrative Skills (choose 14 credits)

- SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN 396 Experiencing Diverse Cultures (1-3)
SPAN 407 Topics in Translation (1-4)
SPAN 498 Internship: Spanish for the Professions (1-4)
Cultural Competency (choose 7-8 credits)
HIST 442 History of Latin America (4)
SPAN 355 Spanish Civilization (1-4)
SPAN 356 Latin American Civilization (1-4)
SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)
SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
Literacy Competency (choose 8 credits)
SPAN 365 Selected Readings (1-4)
SPAN 395 Individual Study Abroad: Readings in Hispanic Literature (1-6)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 403 Topics in Spanish American Literature (1-4)

Major Unrestricted Electives

Spanish Electives (choose 8-11 credits)

Choose electives in consultation with an advisor.

- SPAN 256 Individual Study Abroad: Supervised Project (1-6)
SPAN 301 Topics in Language (1-4)
SPAN 310 Conversation and Composition (1-4)
SPAN 365 Selected Readings (1-4)
SPAN 395 Individual Study Abroad: Readings in Hispanic Literature (1-6)
SPAN 401 Topics in Linguistics (1-4)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 403 Topics in Spanish American Literature (1-4)
SPAN 464 Internship: FLES (1-6)
SPAN 492 Independent Study (1-3)
SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)
SPAN 494 Ind. Study Abroad: Topics in Spanish American Literature (1-6)
(choose 0-3 credits)

Number of elective credits will depend upon total number of credits completed in the core and restricted and unrestricted electives.

SPAN 201 through SPAN 499

Required Minor. Yes. Any

Recommended minors for Spanish for the Professions vary in credit length. The following minors fit within the 120 credit limit as they are 20 credits or less and pair well with this major: Corrections, Environmental Studies, Financial Planning, Human Resource Management, Marketing, Political Science, Social Welfare and Technical Communication. Other minors that exceed 20 credits that would also be an appropriate pair for this major are: Business Administration, Community Health, French, German, International Relations, Nonprofit Leadership, Psychology, Scandinavian Studies, Social Welfare, Sports Medicine.

SPANISH BS, TEACHING

Degree completion = 120 credits

Pre-requisites to the Major

- SPAN 201 Intermediate Spanish I (4)
SPAN 202 Intermediate Spanish II (4)
SPAN 293 Individual Study Abroad: Intermediate Spanish I (1-6)
SPAN 294 Individual Study Abroad: Intermediate Spanish II (1-6)

Major Common Core

- WLC 460 Methods of Teaching Modern Languages (3)
WLC 461 Applied Modern Language Teaching Methods (1)
WLC 462 Foreign Language in the Elem. School (FLES) Methods (3)
WLC 463 Applied FLES Method (1)
SPAN 210W Composition and Conversation (4)

Major Restricted Electives

Conversation (choose 3-6 credits)

- SPAN 310 Conversation and Composition (1-4)
SPAN 393 Individual Study Abroad: Spanish I (1-6)
Language/Linguistics (choose 3-6 credits)

- SPAN 301 Topics in Language (1-4)
SPAN 394 Individual Study Abroad: Advanced Spanish II (1-6)
SPAN 401 Topics in Linguistics (1-4)
Reading (choose 3-6 credits)
SPAN 365 Selected Readings (1-4)
SPAN 395 Individual Study Abroad: Readings in Hispanic Lit. (1-6)
Spanish Peninsular Civilization (choose 3-6 credits)
SPAN 355 Spanish Civilization (1-4)
SPAN 497 Ind. Study Abroad: Topics in Peninsular Spanish Culture (1-6)
Spanish American Civilization (choose 3-6 credits)
SPAN 356 Latin American Civilization (1-4)
SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)
Spanish Peninsular Literature (choose 3-6 credits)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)
Spanish American Literature (choose 3-6 credits)
SPAN 403 Topics in Spanish American Literature (1-4)
SPAN 494 Ind. Study Abroad: Topics in Spanish American Lit. (1-6)

Major Unrestricted Electives (choose 1-11 credits)

- SPAN 256 Individual Study Abroad: Supervised Project (1-6)
SPAN 299 Individual Study (1-4)
SPAN 301 Topics in Language (1-4)
SPAN 310 Conversation and Composition (1-4)
SPAN 355 Spanish Civilization (1-4)
SPAN 356 Latin American Civilization (1-4)
SPAN 365 Selected Readings (1-4)
SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
SPAN 395 Ind. Study Abroad: Readings in Hispanic Literature (1-6)
SPAN 401 Topics in Linguistics (1-4)
SPAN 402 Topics in Spanish Peninsular Literature (1-4)
SPAN 403 Topics in Spanish American Literature (1-4)
SPAN 407 Topics in Translation (1-4)
SPAN 450 Spanish for the Professions (4)
SPAN 464 Internship: FLES (1-6)
SPAN 492 Independent Study (1-3)
SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)
SPAN 494 Ind. Study Abroad: Topics in Spanish American Lit. (1-6)
SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Lit. (1-6)
SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)
SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
SPAN 498 Internship: Spanish for the Professions (1-4)
SPAN 499 Individual Study (1-4)

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 or equivalent.

Required for the Major. First-hand experiences with the target cultures.

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.

SPANISH MINOR (24 credits)

Minor Core

Integrated Productive Skills I

Students must have sufficient language proficiency in Spanish before enrolling in this course. If students demonstrate an intermediate level of proficiency (or equivalent on ACTFL scale) or complete the equivalent of SPAN 201, they have the required productive skills for success in this course. Due to intensive writing in this course, students may want to complete 202 to build stronger productive skills before attempting 210W.

SPAN 210W Composition and Conversation (4)

Integrated Productive Skills II (choose 3-6 credits) Choose one course

- SPAN 310 Conversation and Composition (1-4)
 SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
 SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)

Restricted Electives (choose 1 Cluster from the following)

Perspectives on Language and Linguistics (choose 3-6 credits)

- SPAN 301 Topics in Language (1-4)
 SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)

Perspectives on Literature (choose 3-6 credits)

- SPAN 365 Selected Readings (1-4)

Minor Elective

Unrestricted Electives (On campus, online and overseas) (choose 8-14 credits)
 Choose Spanish courses from the approved elective list according to proficiency level and student interest to meet the 24 credit requirement. Student must consult with Spanish faculty since some courses have overseas course equivalents and may not be repeated for credit.

- SPAN 201 Intermediate Spanish I (4)
 SPAN 202 Intermediate Spanish II (4)
 SPAN 256 Individual Study Abroad: Supervised Project (1-6)
 SPAN 293 Individual Study Abroad: Intermediate Spanish I (1-6)
 SPAN 294 Individual Study Abroad: Intermediate Spanish II (1-6)
 SPAN 299 Individual Study (1-4)
 SPAN 301 Topics in Language (1-4)
 SPAN 310 Conversation and Composition (1-4)
 SPAN 355 Spanish Civilization (1-4)
 SPAN 356 Latin American Civilization (1-4)
 SPAN 365 Selected Readings (1-4)
 SPAN 393 Individual Study Abroad: Advanced Spanish I (1-6)
 SPAN 394 Supervised Study Abroad: Advanced Spanish II (1-6)
 SPAN 395 Ind. Study Abroad: Readings in Hispanic Literature (1-6)
 SPAN 396 Experiencing Diverse Cultures (1-3)
 SPAN 401 Topics in Linguistics (1-4)
 SPAN 402 Topics in Spanish Peninsular Literature (1-4)
 SPAN 403 Topics in Spanish American Literature (1-4)
 SPAN 407 Topics in Translation (1-4)
 SPAN 450 Spanish for the Professions (4)
 SPAN 464 Internship: FLES (1-6)
 SPAN 492 Independent Study (1-3)
 SPAN 493 Ind. Study Abroad: Topics in Language and Linguistics (1-6)
 SPAN 494 Ind. Study Abroad: Topics in Spanish American Literature (1-6)
 SPAN 495 Ind. Study Abroad: Topics in Spanish Peninsular Literature (1-6)
 SPAN 496 Ind. Study Abroad: Topics in Spanish American Culture (1-6)
 SPAN 497 Ind. Study Abroad: Topics in Spanish Peninsular Culture (1-6)
 SPAN 498 Internship: Spanish for the Professions (1-4)
 SPAN 499 Individual Study (1-4)

COURSE DESCRIPTIONS

SPAN 101 (4) Elementary Spanish I

An introduction to the basic language skills of listening, speaking, reading and writing; presentation of condensed cultural notes.
 GE-8

SPAN 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
 GE-8

SPAN 193 (1-6) Individual Study Abroad: Elementary Spanish I

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.

SPAN 194 (1-6) Individual Study Abroad: Elementary Spanish II

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.

SPAN 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
 GE-8

SPAN 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
 GE-8

SPAN 210W (4) Composition and Conversation

Includes basic communication exchanges, common vocabulary and experiences. Emphasis is on improving written expression through compositions related to socio-cultural topics of the countries in which Spanish is the primary language.
 WI, GE-8

SPAN 256 (1-6) Individual Study Abroad: Supervised Project

Topics will vary. May be repeated for credit.

SPAN 293 (1-6) Individual Study Abroad: Intermediate Spanish I

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

SPAN 294 (1-6) Individual Study Abroad: Intermediate Spanish II

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

SPAN 299 (1-4) Individual Study

Variable topics.

SPAN 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

SPAN 310 (1-4) Conversation and Composition

Emphasis on development of oral communication skills and improvement in writing.

SPAN 311W (4) Intensive Reading and Writing for Spanish Speakers

Develop writing and reading skills for academic and professional settings for students with intermediate/high oral language proficiency who would like to develop their critical reading skills and improve their writing for academic and professional purposes. Practice of orthography, stylistics, compositional elements characteristic of writing in Spanish for a variety of cultural settings, etc. and development of communicative competence for a Spanish-speaking audience based on multicultural readings.

Variable

WI

SPAN 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

SPAN 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

SPAN 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

SPANISH CONTINUED

SPAN 393 (1-6) Individual Study Abroad: Advanced Spanish I

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

SPAN 394 (1-6) Supervised Study Abroad: Advanced Spanish II

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

SPAN 395 (1-6) Ind. Study Abroad: Readings in Hispanic Literature

An introduction to reading literature in Spanish. Discussion and analysis of representative works by major authors from the Spanish speaking world.

SPAN 396 (1-3) Experiencing Diverse Cultures

This course will focus on acquisition of cultural, personal & universal dimensions of cultural learning that will lead to recognition and (appropriate) response to conditions of marginalized populations as they experience first-hand diverse cultures.

Pre: SPAN 201, SPAN 202

Fall, Spring, Summer

Diverse Cultures - Gold

SPAN 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

SPAN 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

SPAN 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

SPAN 407 (1-4) Topics in Translation

Introduction to the theory and practice of translation. This course is targeted at Spanish students and language professionals interested in developing translation skills, as well as in finding out what is involved in becoming a professional translator.

SPAN 450 (4) Spanish for the Professions

This course is targeted at language professionals including teachers, business professionals, health professionals, law enforcement professionals. The purpose is to improve overall oral proficiency and address communication issues and vocabulary associated with the students' field of expertise.

SPAN 464 (1-6) Internship: FLES

Field Experience in the Elementary School setting for students earning licensure in Spanish or Elementary Education Teaching Specialty in Spanish.

SPAN 492 (1-3) Independent Study

Variable topics.

Pre: Completion of eight 300-level credits, or equivalent

SPAN 493 (1-6) Ind. Study Abroad: Topics in Language and Linguistics

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

SPAN 494 (1-6) Ind. Study Abroad: Topics in Spanish American Lit.

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

SPAN 495 (1-6) Ind. Study Abroad: Topics in Spanish Peninsular Lit.

Topics will vary. May be repeated for credit.

Pre: Two years university level Spanish

SPAN 496 (1-6) Ind. Study Abroad: Topics in Spanish American Culture

Topics will vary. May be repeated for credit.

Pre: Two years university level Spanish

SPAN 497 (1-6) Ind. Study Abroad: Topics in Spanish Peninsular Culture

Topics will vary. May be repeated for credit.

SPAN 498 (1-4) Internship: Spanish for the Professions

Internship in Spanish is designed to provide opportunities to apply classroom learning to practice and enhance skills, to experience the workplace and professional demands, and to explore a career.

Fall, Spring

SPAN 499 (1-4) Individual Study

Variable topics.

Pre: completion of eight 300-level credits, or equivalent

SPECIAL EDUCATION: ACADEMIC AND BEHAVIORAL STRATEGIST

Special Education: Academic and Behavioral Strategist

College of Education

Department of Special Education

313 Armstrong Hall • 507-389-1122

Website: <http://ed.mnsu.edu/sped>

Chair: Alexandra Panahon

Undergraduate Major Coordinator: Sean Wachsmuth

Faculty: Kyena Cornelius, Aaron Deris, Alexandra Panahon, Kiersten Hensley, Karen Hurlbutt, Andrew Johnson, Kimberly Johnson-Harris, Dana Wagner, Sean Wachsmuth, Teri Wallace

Accreditations. National Council for Accreditation of Teacher Education

(NCATE).

The Department of Special Education serves the needs of undergraduate and graduate students at Minnesota State Mankato seeking to become licensed Special Educators in the state of Minnesota. The Special Education undergraduate program is designed to meet the licensure standards as determined by the Minnesota Board of Teaching. The five-semester program of study is typically begun in the second year after successful completion of General Education requirements. The Department employs a cohort model for the preparation of undergraduates, with all students from a given year considered members of the same cohort. Cohort students concurrently enroll in the same block of courses. All interested students are highly encouraged to contact the Coordinator for program information and guidance for admission procedures.

POLICIES/INFORMATION

Incoming and Transfer Student Orientation. Orientation makes a significant difference in a student's success and persistence in college. All new and transfer students are required to attend an orientation program before registering for

classes. The College of Education Student Relations Coordinator conducts the Academic Success session. This session includes explanation of general education and general education coursework required for program, cultural diversity requirements, academic performance, and assignment of program advisors. Students are accompanied to a registration lab to complete their upcoming term schedule.

Transfer Credit Evaluation. Evaluation of prior academic course work will be based on evidence presented through (a) transcripts, (b) course syllabi, (c) course description. Students have a right to appeal this decision.

Required General Education Course and Credits

- CDIS 205 Beginning Sign Language (3 cr.) **OR** HLTH 210 First Aid and CPR
(Goal Area 11: Human Performance)
- HLTH 240 Drug Education (3 cr.)
(Goal Area 5: History and the Social & Behavioral Sciences)
- MATH 201 Elements of Mathematics I (3 cr.)
(Goal Area 4: Math & Logical Reasoning)

Admission to the Special Education Program

Undergraduate Major Coordinator: Sean Wachsmuth

Admission to Professional Education

Coordinator of Admission to Professional Education
Mymique Baxter, Armstrong Hall 118

Mankato Program

Students working toward a teaching degree must be admitted to Professional Education during their first semester in the program to allow continued registration.

1. Minimum of 40 earned semester credits
2. Minimum of 2.75 cumulative GPA
3. Evidence of registration for the MTLE Basic Skills Exams
4. Completion of MATH 201, HLTH 240, and CDIS 205 or HLTH 210

Program Continuance. The Special Education Department will monitor block entrance and continuance in program. Students must maintain a 3.0 cumulative GPA in Program coursework.

Admission to Student Teaching. Student teaching at Minnesota State Mankato is a result-oriented, performance-based, 16-week program, requiring the demonstration of an acceptable level of teaching performance in the areas of planning and preparation, enhancing the learning environment, teaching for student learning, and professionalism. Multiple methods of assessment are used and evidence is collected to provide a view of the student teacher's skills and dispositions. These methods include direct observations of teaching activities by cooperating teachers and University faculty, the use of videotaped lessons and activities for self-assessment, use of logs, participation in online activities, and participation in activities reflective of the professional responsibilities of teachers (e.g., parent conferences). The Director of Clinical and Field Experience requests placements for all student teachers in partner districts. Student teachers should not contact schools regarding their placement. Application materials are available in 119 Armstrong Hall.

Admission to the student teaching experience is contingent upon completion of:

1. completion of all General Ed and Diverse Cultures program requirements.
2. a grade point average of 3.0, grades of "C" or better for all major coursework
3. admittance to Professional Education
4. completion of all methods and professional education course work
5. completion and validation of formal application materials one year prior to student teaching semester (obtain specific dates from 119 Armstrong Hall)
6. attendance at all preliminary student teaching meeting(s)
7. submission of scores on the MTLE Basic Skills Exam
8. recommendation of advisor
9. approval of placement by school district administration and cooperating teacher, and Director of Clinical and Field Experience, and completion of Minnesota State Police background check materials.

Teacher Licensure Coordinator. *Gail Orcutt, 118 Armstrong Hall*

The University recommends licensure to a state upon satisfactory completion of a licensure program. However, licensure does not occur automatically through graduation and the awarding of a diploma. Students need to make application for a Minnesota teaching license at the close of the term in which they graduate. The College of Education, 118 Armstrong Hall, coordinates the licensure process. In addition to meeting all program requirements, the MTLE Basic Skills examination of skills in reading, writing, and mathematics needs to be successfully completed, as well as the Pedagogy and Content examinations. Minnesota State Law requires that all candidates applying for initial licensure in this state be fingerprinted for national background checks. A conduct review statement will also need to be completed and signed. There is a fee for the criminal background check and a fee for the issuance of a State of Minnesota teaching license.

Application for Graduation. No special departmental activities are required of students in this Major for Graduation. Students must follow the university procedure for application for graduation. See front section of this Catalog for the steps in this process and the corresponding timelines.

Clinical Experiences. A major component of professional education coursework involves clinical experiences in area schools. These experiences are sequential in development. Multiple methods of assessment are used to document competencies. The successful completion of each clinical experience is necessary for progression in the program. All clinical placements are set up by the Office of Clinical and Field Experience.

Background Checks. Students involved in any clinical experience need to undergo a background check (once per academic year) to assess misdemeanor and felony conviction records maintained at the Minnesota Bureau of Criminal Apprehension. This information is provided to districts for their determination of suitability. The Office of Clinical and Field Experience coordinates the background check process.

GPA Policy. All non-clinical courses that make up the program courses must be taken on a graded basis. Students must maintain a cumulative GPA of 3.0 and earn at least a "C" in all major coursework for program continuance.

SPECIAL EDUCATION: ACADEMIC AND BEHAVIORAL STRATEGIST BS

Degree completion = 120 credits

This program will prepare teacher candidates to work as special education teachers for students with mild/moderate disabilities and will prepare them for licensure as an Academic and Behavioral Strategist.

There are five structured and sequenced semesters in the Major in Special Education, leading to the Bachelor in Science Degree. Each is made of up required courses that meet one or more Minnesota Board of Teaching requirements for Standards of Effective Practice (A), Core Teaching Skills for Special Educators (B), and specific content requirements (C). The first semester courses are taken prior to admission to Professional Education. Continued enrollment in semester 2 through 5 is contingent on the academic status of the student.

Prerequisites to the Major

- HLTH 240 Drug Education (3)
- MATH 201 Elements of Mathematics I (3)
- Choose one of the following (choose 3 credits)
- CDIS 205 Beginning Sign Language (3)
- HLTH 210 First Aid & CPR (3)

Major Common Core

- SPED 333 Transition Plan/Secondary Methods for Students w/Mild Moderate Disabilities (4)
- SPED 401 IEP Writing and Professional Practice (4)
- SPED 404 Instructional Decision Making (4)
- SPED 406 Strategies for Teaching Learners with Special Needs: Reading & Writing (4)
- SPED 407 Positive Behavioral Interventions and Supports (3)
- SPED 408 Individuals with Diverse and Exceptional Needs (4)

SPECIAL EDUCATION: ACADEMIC AND BEHAVIORAL STRATEGIST CONTINUED

SPED 409	Learning and Human Development for Diverse Learners (4)
SPED 410	Assessment, Evaluation, and Individualized Planning for Diverse Learners (4)
SPED 411	Effective Strategies for the Inclusive Classroom (4)
SPED 412	Due Process, Planning & Design of the Individual Education Program (4)
SPED 413	Professional Growth and Development for Teachers of Diverse Learners (4)
SPED 414	Literary Methods for an Inclusive Classroom: Diverse Learners (4)
SPED 422	Strategies for Teaching Learners with Special Needs: Math and Science (4)
SPED 448	Behavior Management and Learning Environments for Diverse Learners (4)
SPED 458	Seminar: Student Teaching (4)
SPED 459	Student Teaching: Developmental Disabilities (8)

SPED 409 (4) Learning and Human Development for Diverse Learners
Introduces students to theories of learning and human development as they relate to regular and diverse learning populations. Students will acquire an understanding of the many factors that affect learning and human development and strategies that can be used to enhance learning for all learning populations.
Diverse Cultures - Gold

SPED 410 (4) Assessment, Evaluation, and Individualized Planning for Diverse Learners

Provides the student learner with the knowledge and skills to assess the individual needs of the student learner and to design an educational program based on the assessment information collected. Emphasis will be placed on providing the student learner with the opportunity to learn and administer a variety of norm-referenced and criterion-referenced test instruments and apply test results to developing individual education programs for a variety of learners with diverse educational needs.

SPED 411 (4) Effective Strategies for the Inclusive Classroom

Describes and demonstrates strategies that teachers can use to differentiate the curriculum to meet the needs of special learners in an inclusive classroom. Course will also examine the latest knowledge related to intelligence, creativity, holistic education and classroom differentiation.

SPED 412 (4) Due Process, Planning & Design of the Individual Education Program

Provides student learner with the knowledge and skills to plan, develop, and implement the IEP for a student with DCD. In addition, the student learner will develop an understanding of the alternative dispute processes in the state of Minnesota. The student learner will learn the legal requirements of the IEP process and parental participation including a) how to operate the IEP process, b) conciliation process, c) participation in mediation, and d) due process as outlined in IDEA 1997. Legal issues and requirements will be discussed.

SPED 413 (4) Professional Growth and Development for Teachers of Diverse Learners

Introduces students to methods and strategies for personal and professional growth and development. As a result of taking this course, students will be able to a) engage in reflective inquiry for personal and professional growth, b) identify and demonstrate dispositions necessary for teaching special needs learners, c) understand the cultural, social, and other environmental effects on learning and human development, and d) use strategies for personal and professional growth.

SPED 414 (4) Literary Methods for an Inclusive Classroom: Diverse Learners

Provides an introduction to reading and language arts instruction for special needs and other students in an inclusive classroom. As a result of taking this course, students will be able to plan and implement effective literacy lessons and utilize a variety of differentiation strategies.

SPED 422 (4) Strategies for Teaching Learners w/Special Needs: Math and Science

This course provides instruction in the connections between critical content concepts, standards, research-based practices in mathematics and science, and students with mild-moderate disabilities for the purpose of developing goals and objectives in order to implement effective instruction.

Fall

SPED 448W (4) Behavior Management and Learning Environments for Diverse Learners

This course is designed to teach pre-service special education teachers the basics of Applied Behavior Analysis as well as classroom management skills that foster positive interactions among students in pre-K through 12th grade. Students will learn to conduct behavioral assessments and report results through professional writing.

WI

SPED 458 (4) Seminar: Student Teaching

Focuses on competencies, strategies, issues and trends to prepare the student to teach persons with DCD.

Coreq: SPED 449

COURSE DESCRIPTIONS

SPED 333 (4) Transition Plan/Secondary Methods for Students w/Mild Moderate Disabilities

This course is designed to teach secondary assessment, instructional and transition planning methods needed by students in the undergraduate program of study in Special Education – Academic and Behavioral Strategist. The course focuses on strategies that promote choice and quality of life for young adults with mild to moderate disabilities.

SPED 401 (4) IEP Writing and Professional Practice

This course will introduce teacher candidates to different aspects of being a Special Educator, including writing Individualized Education Program plans, working collaboratively, addressing strategies for working with paraprofessionals, and developing an understanding of collaboration including co-teaching, and using technology in the classroom to assist student learning.

Spring

SPED 404 (4) Instructional Decision Making

This course provides the student learner with the knowledge and skills necessary to make effective data-based decisions within the instructional context. Students will gain training in and knowledge of instructional decision making at the individual and systems level.

Spring

SPED 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.

SPED 406 (4) Strategies for Teaching Learners with Special Needs: Reading and Writing

This course teaches how to select and apply specific evidence-based reading and writing strategies for students with mild/moderate disabilities. Students will learn basic instructional principles behind validated instructional models and how to use these models in different instructional settings.

Fall

SPED 407 (3) Positive Behavioral Interventions and Supports

This course is designed to teach the principles of Positive Behavior Supports and Intervention planning. Students will learn how PBIS can be applied at the school, classroom, and individual levels. Students will apply learned information to identify successful interventions.

Spring

SPED 408 (4) Individuals with Diverse and Exceptional Needs

Designed to provide an introduction and overview of the characteristics and educational needs of children and youth with diverse and exceptional needs in the public school. The course introduces Minnesota Graduation Standards Rules in relationship to the needs of students with diverse and exceptional needs.

SPED 459 (8) Student Teaching: Mild and Moderate Disabilities

Focuses on documenting the university student's ability to apply the knowledge and skills learned in coursework and teach youth with DCD in the public school. The university student will assess students with DCD, develop individual goals and objectives, design instructional units and lesson plans, implement instruction in the LRE, and evaluate the effectiveness of instructional interventions.

SPED 490 (1-3) Workshop in Special Education

Authentic applications of special education knowledge.

SPED 491 (1-2) In-Service: Special Education

Teaching students with disabilities.

SPED 499 (1-3) Individual Study

Advanced independent study in a specified area.

SPORT MANAGEMENT

Sport Management

College of Allied Health and Nursing

Department of Human Performance

1400 Highland Center • 507-389-6313

Website: <http://ahn.mnsu.edu/hp/undergraduate/sportmanagement.html>

Chair: Robert Pettitt

Program Director: Jon Lim

Mission Statement of the Sport Management Program: The sport management program at Minnesota State Mankato is committed to excellence in teaching, research and service in and for the sport industry.

Program Purpose. The Sport Management program is designed to provide professional preparation that develops competitive sport management leaders through a comprehensive education in both theory and its application in sports business. The Sport Management major offers students a broad base educational foundation to prepare them for a career in sport management through a comprehensive education in both theory and its application in sports business. The major prepares students with sport business concepts and develops skills and knowledge in the following areas: management, marketing, promotions, communication, legal preparation, public relations, consumer behavior, facilities, and finance.

POLICIES/INFORMATION

Admission to Major. All sport management majors and potential sport management majors who plan on applying to the sport management program need to have sport management as their declared major.

Criteria Considered for Admission to the Sport Management Program

1. Completion of at least 30 semester credits.
2. Minimum career grade point average (GPA) of a 2.7 on a 4.0 scale.
3. Minimum grade of a "C" in all required prerequisite and support courses.

Please note: Meeting these minimum requirements does not guarantee admission to the major.

The following courses must be completed before applying:

ENG	101	English Composition (4)
PSYC	101	Introduction to Psychological Science (4)
ECON	201	Principles of Macroeconomics (3) OR
ECON	202	Principles of Microeconomics (3)
CMST	212	Professional Communication and Interviewing (3) OR
CMST	200	Public Speaking (3)
SOC	101	Introduction to Sociology (3)
MATH	112	College Algebra (4)

From all eligible applicants, students will be admitted on the basis of their rank order on the criterion of cumulative GPA and their GPA in the six courses listed above. If all six courses are not complete when a student applies, their application will not be considered. In the past two admission periods, the pre-sport management GPA of admitted students varied between 2.95 and 4.0.

GPA Policy. Students must maintain a minimum cumulative GPA of 2.5 once admitted into the program in order to take the required sport management courses. 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 Shirley Murray, Student Relations Coordinator, 124 Myers Field House, 507-389-5194,

SPORT MANAGEMENT BS

Degree completion = 120 credits

Required General Education

ENG	101	Composition (4)
MATH	112	College Algebra (4)
PSYC	101	Introduction to Psychological Science (4)
SOC	101	Introduction to Sociology (3)
(choose 3 credits)		
ECON	201	Principles of Macroeconomics (3)
ECON	202	Principles of Microeconomics (3)
(choose 3 credits)		
CMST	102	Public Speaking (3)
CMST	212	Professional Communication and Interviewing (4)

Pre-requisites to the Major

ACCT	217	Survey of Financial and Managerial Accounting (4)
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Major Common Core

Students must complete a minimum of 9 combined credits from HP 488 and HP 496.

HP	141	Introduction to Sport Management (2)
HP	290	Psycho-Social Aspects of Sport (3)
HP	325	Sport Ethics and Professional Development (3)
HP	360	Foundations of Sport Management (3)
HP	435	Planning Sport Facilities (3)
HP	459	Financial Aspects of Sport (3)
HP	462	Sports Administration (3)
HP	465	Legal Aspects of Physical Education and Sport (3)
HP	468	Sport Marketing (3)
HP	469	Event Management in Sport (3)
HP	488	Applied Sport Business (3)
HP	496	Internship (1-10)

Major Restricted Electives (choose 6 credits)

HP	437	Sport Media, Sponsorship and Sales (3)
HP	463	Seminar in Sport Management (3)
HP	464	Analysis of Sport Data (3)
HP	475	International Sport Management (3)

Required Minor: Yes. See Advisor. Minor must be in one of the following areas: Accounting, Athletic Coaching, Business Law, Community and Corporate Fitness, Marketing, Economics, International Business, Financial Planning, and Human Resources Management. Other minors are accepted upon advisor's approval.

Statistics

College of Science, Engineering, & Technology
 Department of Mathematics & Statistics
 273 Wissink Hall • 507-389-1453
 Website: www.cset.mnsu.edu/dept/mathstat/

Chair: Charles Waters

Mezbahur Rahman, Hyekung Min, Deepak Sanjel, Han Wu

Statistics is the mathematical science of studying and learning from data. Statisticians acquire, organize, analyze, present and draw inferences from data. Inferences about a population are communicated with measures of likelihood. Statistical analysis is used in a variety of disciplines to communicate uncertainties for the purpose of making informed decisions. Applications of statistics are all around us such as in weather forecasting, surveys, quality control, market demand, causality, and effectiveness of treatments, to name only a few.

The Department offers a major and minor in statistics. The major provides a sufficient background in statistics, mathematics, and computer science to enable students to pursue a career in business, industry, or actuarial science as well as to pursue advanced study in statistics. The major is organized into 3 tracks to allow an emphasis in applied mathematics, computer science, or biological science. A well prepared student can expect to complete the major in four years. The minor gives students a basic core of statistics that would compliment majors in many areas by providing a thorough grounding in basic statistical principles, methods of data analysis, and a knowledge base to assist in understanding statistical procedures applied to a variety of disciplines.

POLICIES/INFORMATION

A student must be admitted to a major to be permitted to take 300- and 400-level courses. Admission is granted by the department. In addition to minimum university admission requirements of: a minimum of 32 earned semester credit hours and a minimum cumulative GPA of 2.00, students must complete 10 credits in mathematics and statistics counting towards the Major with a 2.5 GPA.

Contact the College of Science, Engineering and Technology Student Relations Office for application procedures.

GPA Policy. Statistics major and minors must earn a grade of 2.00 (“C”) or better in all courses applied to the major or minor.

Course Application Policy. Within each major or minor, no course may be applied to more than one requirement.

P/N Grading Policy. All 300- and 400-level courses are offered for grade only with the exception of STAT 498 and STAT 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 Limitation. A student may not receive credit for STAT 354 or MATH 354 after completing MATH 455 or STAT 455.

Placement Information for Mathematics and Statistics Course

Enrollment. Students seeking enrollment in MATH 112: College Algebra, MATH 113: Trigonometry, MATH 115: Precalculus Mathematics, MATH 121: Calculus I, MATH 130: Finite Mathematics and Introductory Calculus, MATH 201: Elements of Mathematics I, or STAT 154: Elementary Statistics must demonstrate readiness to succeed in the course by satisfying the corresponding requirement in the following table.

Course	Minimum ACT Math Subscore		Minimum Accuplacer Elementary Algebra Score		Minimum Accuplacer College Level Math Score		Minimum Accuplacer Calculus Readiness Score		Course Prerequisites
Math 112	22	Or	76	AND	50		N/A	Or	Successful Completion of Math 098
Math 113	22	Or	N/A		63	Or	16	Or	Math 112 with “C” or better
Math 115	23	Or	N/A		86	Or	19	Or	MATH 098 and Permission from dept. chair
Math 121	24	Or	N/A		103	Or	22	Or	Math 115 or both Math 112 and 113 with “C” or better
Math 130	23	Or	N/A		86	Or	19	Or	Math 112 or 115 with “C” or better
Math 201	22	Or	76	AND	50		N/A	Or	Successful completion of Math 098
Stat 154	19	Or	76	AND	50		N/A	Or	Successful completion of Math 098

NOTE 1: The Calculus Readiness test may be taken in addition to the ACCUPLACER instrument by students seeking to enroll in courses above MATH 112.

NOTE 2: Documented ACCUPLACER scores from any Minnesota State Colleges and Universities (MNSCU) institution taken within two calendar years will be accepted.

NOTE 3: ACT scores and ACCUPLACER scores that are more than two years old will not be accepted for mathematics placement.

Procedures. Students may substitute for the above requirements based on documentation of:

1. equivalent or higher scores on standardized college admissions tests, such as SAT quantitative scores, that report a separate mathematics sub-score within two calendar years;
2. successful completion of equivalent prior post-secondary education, such as course transfer evaluations or Cambridge International Examinations; or
3. enrollment exclusively in non-credit courses or programs. Students requesting such substitutions should submit the documentation to the Chair of the Department of Mathematics and Statistics for evaluation. The evaluation will be based on nationally accepted concordances between the testing instruments and/or courses. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

Procedure for Waiver.

1. Students not meeting the requirements for enrollment in MATH 112, MATH 201 or STAT 154 may request a waiver to this policy.
2. Written requests for waivers to the policy must be submitted to the Chair of the Department of Mathematics and Statistics, and should include evidence of alternate means of demonstrating readiness for college algebra including but not limited to:
 - a. High school or recent post-secondary coursework which would indicate adequate preparation (transcripts or other records which include course titles, levels and grades are acceptable), or
 - b. Verification of extenuating circumstances which may have affected performance on previous exams.
3. Requests for waivers should be submitted by the following deadlines:
 - a. August 5th for fall semester enrollment,
 - b. December 1st for spring semester enrollment, and
 - c. May 1st for summer session enrollment.
4. The Chair of the Department of Mathematics and Statistics or designee should respond in writing to student requests within three weeks of receiving them.

5. Students whose initial requests are denied may submit a written appeal to the Dean of the College of Science, Engineering and Technology. The Dean should respond in writing, with a copy to the Chair of the Department of Mathematics and Statistics.
6. The Dean's decision is the final step in this appeal process

Policy Rationale. The purpose of the policy is to place students in a course that is developmentally appropriate to help ensure their long term success. Data suggests students not meeting these guidelines have a higher likelihood of having to repeat a course.

STATISTICS BS

Degree completion = 120 credits

Required General Education

MATH 121 Calculus I (4)

Major Common Core

IT 210 Fundamentals of Programming (4)
 IT 214 Fundamentals of Software Development (4)
 IT 340 Introduction to Database Systems (4)
 MATH 122 Calculus II (4)
 MATH 223 Calculus III (4)
 MATH 247 Linear Algebra I (4)
 STAT 154 Elementary Statistics (3)
 STAT 354 Concepts of Probability and Statistics (3)
 STAT 450 Regression Analysis (3)
 STAT 451 Experimental Designs (3)
 STAT 455 Theory of Statistics I (4)
 STAT 456 Theory of Statistics II (4)
 STAT 457 Sample Survey, Design and Analysis (3)
 STAT 458 Categorical Data Analysis (3)
 STAT 459 Nonparametric Methods (3)
 STAT 492 Statistics Capstone Experience (3)

Major Emphasis: Applied Mathematics Track

(choose a minimum of 16 credits from the following list)

MATH 290 Foundations of Mathematics (4)
 MATH 321 Ordinary Differential Equations (4)
 MATH 375 Introduction to Discrete Mathematics (4)
 MATH 422 Partial Differential Equations (4)
 MATH 425 Mathematical Modeling (4)
 MATH 470 Numerical Analysis I (4)
 MATH 471 Numerical Analysis II (4)

Major Emphasis: Information Technology Track

(choose a minimum of 16 credits from the following list)

IT 310 Data Structures & Algorithms (4)
 IT 320 Machine Structures and Operating Systems (4)
 IT 350 Information Security (4)
 IT 360 Introduction to Data Communication and Networking (4)
 IT 380 Systems Analysis and Design (4)
 MATH 470 Numerical Analysis I (4)
 MATH 471 Numerical Analysis II (4)

Major Emphasis: Biological Science Track

(choose a minimum of 16 credits from the following list)

BIOL 105 General Biology I (4)
 BIOL 211 Genetics (4)
 BIOL 320 Cell Biology (4)
 BIOL 479 Molecular Biology (4)

Required Minor: None

STATISTICS MINOR

Required for Minor

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 455 Theory of Statistics I (4)
 STAT 457 Sample Survey, Design and Analysis (3)
 STAT 458 Categorical Data Analysis (3)
 STAT 459 Nonparametric Methods (3)

COURSE DESCRIPTIONS

STAT 154 (3) Elementary Statistics

An introduction to statistical concepts and methods that is applicable to all disciplines. Topics include descriptive measures of data, probability and probability distributions, statistical inference, tests of hypotheses, confidence intervals, correlation, linear regression, and analysis of variance. The use of statistical software will be emphasized.

Pre: ACT Math sub-score of 19 or higher, successful completion of MATH 098 or appropriate placement scores (see Placement Information under Statistics)

Fall, Spring, Summer

GE-4

STAT 354 (3) Concepts of Probability & 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 with "C" (2.0) or better or consent

Fall, Spring, Summer

STAT (3) 356 Introduction to Programming in SAS

Introduction to basic programming techniques: creating DATA and PROC statements, libraries, functions, programming syntax, and formats. Descriptive and Inferential statistics in SAS. Emphasis is placed on using these tools for statistical analyses. Working with arrays, loop and SAS macro.

Pre: STAT 154 or instructor's approval

On-Demand

STAT 398 (0) CPT: Co-Operative Experience

Curricular Practical Training: Co-Operative Experience is a zero-credit full-time practical training experience for one summer and on adjacent fall or spring term. Special rules apply to preserve full-time student status. Please contact an advisor in your program for complete information.

Pre: At least 60 credits earned; in good standing; instructor permission; co-op contract; other prerequisites may also apply.

Fall, Spring, Summer

STAT 450 (3) Regression Analysis

Simple and multiple regression, correlation, analysis of variance and covariance.

Pre: MATH 354 / STAT 354 or STAT 455 with "C" (2.0) or better or consent
 Spring

STAT 451 (3) Experimental Designs

Completely randomized, block, fractional factorial, incomplete block, split-plot, Latin squares, expected mean squares, response surfaces, confounding, fixed effects and random effects models.

Pre: MATH 354 / STAT 354 or STAT 455 with "C" (2.0) or better or consent
 Spring (Even Years)

STAT 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 with "C" (2.0) or better or consent

Fall

STAT 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 455, STAT 455 with "C" (2.0) or better or consent

Spring

STATISTICS CONTINUED

STAT 457 (3) Sample Survey, Design and Analysis

Sampling distributions: means and variances. Bias, robustness and efficiency. Random sampling, systematic sampling methods including stratified random sampling, cluster sampling and two-stage sampling, ratio, regression, and population size estimation. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc.

Pre: MATH 354, STAT 354 or STAT 154 with "C" (2.0) or better or consent
Fall (Even Years)

STAT 458 (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, logistic models and incompleteness. Logistic regression. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc.

Pre: MATH 354, STAT 354 or STAT 154 with "C" (2.0) or better or consent
ALT-Fall

STAT 459 (3) Nonparametric Methods

Derivation and usage of nonparametric statistical methods in univariate, bivariate, and multivariate data. Applications in count, score, and rank data, analysis of variance for ranked data. Nonparametric regression estimation. Suitable statistical software is introduced, for example, MATLAB, R, SAS, etc.

Pre: MATH 354, STAT 354 or STAT 154 with "C" (2.0) or better or consent
Alt-Spring

STAT 488 (1-3) Seminar

The study of a particular topic primarily based upon recent literature. May be repeated for credit on each new topic.

STAT 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.

STAT 492 (3) Statistics Capstone Experience

This course is designed to allow undergraduate students an opportunity to integrate their statistics experiences by engaging each student in working on problems in applied or theoretical statistics.

Pre: STAT 457, STAT 458, STAT 459, STAT 450 (at least two of these)
Spring

STAT 495 (1-4) Selected Topics

A course in an area of statistics not regularly offered. May be repeated for credit on each new topic.

STAT 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.

STAT 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.

SWEDISH

Swedish

College of Arts & Humanities

Department of World Languages & Cultures

227 Armstrong Hall • 507-389-2116

Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Please go to Scandinavian studies to see course descriptions.

SCAN 111	Elementary Swedish I (4)
SCAN 112	Elementary Swedish II (4)
SCAN 294	Intermediate Swedish I (1-4)
SCAN 295	Intermediate Swedish II (1-4)

TEACHING ENGLISH AS A SECOND LANGUAGE (TESL)

Teaching English as a Second Language (TESL) (See *English*)

THEATRE ARTS

Theatre Arts

College of Arts & Humanities

Department of Theatre and Dance

201 Earley Center for Performing Arts • 507-389-2118

Website: www.MSUTheatre.com

Fax: 507-389-2922

Chair: Paul J. Hustoles

George Grubb, Heather Hamilton, Julie Kerr-Berry, Mike Lagerquist, David McCarl, John Paul, Catherine Schmeal-Swope, Steven Smith, Dan Stark, Nick Wayne

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 and dance experience. These goals interweave to provide entertainment and education to those on both sides of the curtain.

POLICIES/INFORMATION

Admission to Major is granted by the department. Contact the department for application procedures.

See "**Dance**" for **Dance Major and Minor requirements**.

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.

Limit on Number of Activity Credits. Students must take 5 activity credits from three areas, and no more than 6 activity credits total. No student may take more than 4 practicum credits total. Only one activity or practicum credit is allowed per production.

Summer Stock Activity Credits. No one may take more than 4 summer stock activity credits per summer.

THEATRE ARTS**Required General Education**

THEA 100 Introduction to Theatre (3)

Major Core

THEA 110 Fundamentals of Acting (3)
 THEA 235 Fundamentals of Directing (3)
 THEA 381W Play Analysis (3)
 THEA 481 Theatre History I (3)
 THEA 482 Theatre History II (3)

Theatre Activity (choose 5 credits from at least three different areas)

THEA 102 Theatre Activity: Acting (1-2)
 THEA 103 Theatre Activity: Management (1-2)
 THEA 105 Theatre Activity: Stagecraft (1-2)
 THEA 107 Theatre Activity: Costume (1-2)
 THEA 108 Theatre Activity: Lighting (1-2)
 THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives (choose 1 Cluster) Admission through audition only.

BFA ACTING OPTION

Degree completion = 120 credits

Choose any 6 credits of studio dance; must have 3 credits of THEA 300; must have 4 credits of THEA 302; must have 3 credits of any approved Theatre elective.

THEA 121 Movement for Theatre (1)
 THEA 210 Intermediate Acting (3)
 THEA 215 Audition Methods (2)
 THEA 252 Theatre Technology (3)
 THEA 265 Stage Makeup (2)
 THEA 300 Summer Stock (3)
 THEA 302 Practicum: Acting (1-2) (4 credits total)
 THEA 315 Careers in Theatre (1)
 THEA 410 Music Theatre Acting I (3)
 THEA 412 Theatre Speech I (2)
 THEA 413 Theatre Speech II (2)
 THEA 414 Stage Dialects I (2)
 THEA 415 Stage Dialects II (2)
 THEA 416 Acting Scene Studies (3)
 THEA 417 Acting Techniques (3)
 THEA 418 Acting Styles (3)
 THEA 419 Acting for Radio/TV (3)
 THEA 426 Stage Combat (2)

Required Minor: None.**BFA MUSICAL THEATRE OPTION**

Degree completion = 120 credits

Must have 3 credits of THEA 300; must have 4 credits of THEA 302; must have 4 years of Private Voice for the Actor.

DANC 223 Intermediate Jazz Dance (2)
 DANC 226 Intermediate Ballet (2)
 DANC 227 Intermediate Tap Dance (2)
 THEA 111 Private Voice for the Actor (0) (4 times)
 THEA 121 Movement for Theatre (1)
 THEA 210 Intermediate Acting (3)
 THEA 212 Music Skills for Theatre I (2)
 THEA 213 Music Skills for Theatre II (2)
 THEA 214 Singing for Actor (1)
 THEA 215 Audition Methods (2)
 THEA 252 Theatre Technology (3)
 THEA 265 Stage Makeup (2)
 THEA 300 Summer Stock (3)
 THEA 302 Practicum: Acting (1-2) (4 credits total)
 THEA 311 Private Voice for the Actor (0) (4 times)
 THEA 315 Careers in Theatre (1)
 THEA 410 Musical Theatre Acting I (3)
 THEA 411 Musical Theatre Acting II (3)
 THEA 413 Theatre Speech II (2)
 THEA 414 Stage Dialects I (2)
 THEA 415 Stage Dialects II (2)

THEA 416 Acting Scene Studies (3)
 THEA 417 Acting Techniques (3)
 THEA 418 Acting Styles (3)
 THEA 426 Stage Combat (2)
 THEA 483 Musical Theatre History (3)

Required Minor: None.**BFA THEATRE DESIGN/TECHNOLOGY OPTION**

Degree completion = 120 credits

Must have 3 credits of THEA 300; must take 6 credits of any Theatre electives.

THEA 240 Basic Design (3)
 THEA 255 Stagecraft (3)
 THEA 260 Costume Construction (3)
 THEA 270 Lighting Technology (3)
 THEA 275 Sound Technology (3)
 THEA 300 Summer Stock (3)
 THEA 400 Portfolio Seminar (1)
 THEA 430 Theatre Management (3)
 THEA 451 Drafting for the Theatre (3)
 THEA 485 Theatre Dramaturgy (3)
 (choose 4 credits)
 THEA 303 Practicum: Theatre Management (1-2)
 THEA 304 Practicum: Scene Design (1-2)
 THEA 305 Practicum: Scene Design (1-2)
 THEA 306 Practicum: Costume Design (1-2)
 THEA 307 Practicum: Costume Construction (1-2)
 THEA 308 Practicum: Light Design (1-2)
 THEA 309 Practicum: Sound (1-2)
 (choose 3 credits)
 THEA 444 Styles and Ornamentation (3)
 THEA 464 Costume History (3)
 (choose 9 credits)
 THEA 440 Scene Design I (3)
 THEA 460 Costume Design I (3)
 THEA 470 Lighting Design I (3)
 THEA 475 Sound Design I (3)
 (choose 6 credits)
 THEA 441 Scene Design II (3)
 THEA 461 Costume Design II (3)
 THEA 471 Lighting Design II (3)
 THEA 476 Sound Design II (3)

Required Minor: None**THEATRE ARTS GENERALIST BA OPTION**

Degree completion = 120 credits

Required General Education

THEA 100 Introduction to Theatre (3)

Major Common Core

THEA 110 Fundamentals of Acting (3)
 THEA 235 Fundamentals of Directing (3)
 THEA 381W Play Analysis (3)
 THEA 481 Theatre History I (3)
 THEA 482 Theatre History II (3)

Theatre Activity (choose 5 credits)

From at least three different areas

THEA 102 Theatre Activity: Acting (1-2)
 THEA 103 Theatre Activity: Management (1-2)
 THEA 105 Theatre Activity: Stagecraft (1-2)
 THEA 107 Theatre Activity: Costume (1-2)
 THEA 108 Theatre Activity: Lighting (1-2)
 THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives**Professional Prep** (choose 1 credit)

THEA 315 Careers in Theatre (1)
 THEA 400 Portfolio Seminar (1)

THEATRE ARTS CONTINUED

Theatre Technology (choose 3 credits) (may not be repeated)

- THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Foundations (choose 9 credits) May also choose any 2-credit Dance class

- THEA 121 Movement for Theatre (1)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 265 Stage Makeup (2)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)
THEA 285W Theatre of Diversity (3)

Advanced (choose 15 credits)

- DANC 322 Dance Improvisation (2)
THEA 410 Musical Theatre Acting I (3)
THEA 412 Theatre Speech I (2)
THEA 413 Theatre Speech II (2)
THEA 414 Stage Dialects I (2)
THEA 415 Stage Dialects II (2)
THEA 416 Acting Scene Studies (3)
THEA 417 Acting Techniques (3)
THEA 418 Acting Styles (3)
THEA 419 Acting for Radio/TV (3)
THEA 430 Theatre Management (3)
THEA 435 Advanced Directing Methods (3)
THEA 440 Scene Design I (3)
THEA 451 Drafting for the Theatre (3)
THEA 455 Technical Direction (3)
THEA 460 Costume Design I (3)
THEA 470 Lighting Design I (3)
THEA 475 Sound Design I (3)
THEA 483 Musical Theatre History (3)
THEA 485 Theatre Dramaturgy (3)
THEA 487 Playwriting (3)

Other Graduation Requirements

Required for Bachelor of Arts (BA) ONLY: Language (8 credits)

Required Minor: None.

THEATRE GENERALIST BS OPTION

Degree completion = 120 credits

Required General Education

- THEA 100 Introduction to Theatre (3)

Major Common Core

- THEA 110 Fundamentals of Acting (3)
THEA 235 Fundamentals of Directing (3)
THEA 381W Play Analysis (3)
THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)

Theatre Activity (choose 5 credits)

From at least three different areas

- THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)
THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)

Major Restricted Electives

Professional Prep (choose 1 credit)

- THEA 315 Careers in Theatre (1)

- THEA 400 Portfolio Seminar (1)

Theatre Technology (choose 3 credits) (may not be repeated)

- THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)

Foundations (choose 9 credits) May also choose any 2-credit Dance class

- THEA 121 Movement for Theatre (1)
THEA 210 Intermediate Acting (3)
THEA 214 Singing for the Actor (1)
THEA 215 Audition Methods (2)
THEA 231 Stage Management (1)
THEA 240 Basic Design (3)
THEA 252 Theatre Technology (3)
THEA 255 Stagecraft (3)
THEA 260 Costume Construction (3)
THEA 265 Stage Makeup (2)
THEA 270 Lighting Technology (3)
THEA 275 Sound Technology (3)
THEA 285W Theatre of Diversity (3)

Advanced (choose 15 credits)

- DANC 322 Dance Improvisation (2)
THEA 410 Musical Theatre Acting I (3)
THEA 412 Theatre Speech I (2)
THEA 413 Theatre Speech II (2)
THEA 414 Stage Dialects I (2)
THEA 415 Stage Dialects II (2)
THEA 416 Acting Scene Studies (3)
THEA 417 Acting Techniques (3)
THEA 418 Acting Styles (3)
THEA 419 Acting for Radio/TV (3)
THEA 430 Theatre Management (3)
THEA 435 Advanced Directing Methods (3)
THEA 440 Scene Design I (3)
THEA 451 Drafting for the Theatre (3)
THEA 455 Technical Direction (3)
THEA 460 Costume Design I (3)
THEA 470 Lighting Design I (3)
THEA 475 Sound Design I (3)
THEA 483 Musical Theatre History (3)
THEA 485 Theatre Dramaturgy (3)
THEA 487 Playwriting (3)

Required Minor: None.

THEATRE ARTS MINOR

Core

- THEA 235 Fundamentals of Directing (3)
THEA 252 Theatre Technology (3)
THEA 381 Play Analysis (3)
(choose 3 credits)
THEA 101 Acting for Everyone (3)
THEA 110 Fundamentals of Acting (3)

Theatre Activity (choose 5 credits)

From at least three different areas

- THEA 102 Theatre Activity: Acting (1-2)
THEA 103 Theatre Activity: Management (1-2)
THEA 105 Theatre Activity: Stagecraft (1-2)
THEA 107 Theatre Activity: Costume (1-2)
THEA 108 Theatre Activity: Lighting (1-2)
THEA 109 Theatre Activity: Sound (1-2)

(choose 3 credits)

- THEA 481 Theatre History I (3)
THEA 482 Theatre History II (3)

Elective

In addition, choose 3 credits of any Theatre course except THEA 100, or more than 5 Theatre Activity classes.

COURSE DESCRIPTIONS

THEA 100 (3) Introduction to Theatre

Survey of theatre arts; lectures, with lab experience available.

Note: Students may not take both THEA 115 and this class.

Fall, Spring

GE-6

THEA 101 (3) Acting for Everyone

Performance scenes and exercises for the beginner.

Fall, Spring

GE-6

THEA 102 (1-2) Theatre Activity: Acting

Acting in a mainstage or approved production. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 103 (1-2) Theatre Activity: Management

Work on stage or house management, or public relations. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 104 (1-2) Theatre Activity: Dance Captain

Serve as Dance Captain, to assist the Choreographer, for a mainstage or approved production. May be repeated.

Pre: Consent

Fall, Spring

THEA 105 (1-2) Theatre Activity: Stagecraft

Work on stage crew in a mainstage production. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 107 (1-2) Theatre Activity: Costume

Work on costumes or wardrobe crew in a mainstage production. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 108 (1-2) Theatre Activity: Lighting

Work on lighting crew in a mainstage production. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 109 (1-2) Theatre Activity: Sound

Work on sound crew in a mainstage production. May be repeated.

Pre: Consent

Fall, Spring

GE-11

THEA 110 (3) Fundamentals of Acting

Performance scenes and acting exercises for the beginning theatre major.

Pre: Consent

Fall

THEA 111 (0) Private Voice for the Actor

Private lessons in developing the actor's singing voice. May be repeated.

Pre: Consent

Fall, Spring

THEA 115 (3) Experiencing Theatre

This course examines the various components of the theatre utilizing cultural and historical perspectives. Students investigate basic principles of design, construction, acting, directing and playwrighting. Every student obtains hands on experience in the theatre.

GE-6, GE-11

THEA 121 (1) Movement for Theatre

Instructs the student through a series of movement exercises in body alignment, breathing, flexibility, strength and coordination.

Pre: Consent

Fall

THEA 210 (3) Intermediate Acting

The process of character structuring through script analysis and scene work.

Pre: THEA 110 or consent

Fall

THEA 212 (2) Music Skills for Theatre I

A group instruction course covering fundamental music theory and skills applicable to the theatre artist including the study of music notation, style, harmony and literature. Skills learned will include basic keyboarding, sight reading and sight singing music.

Alt-Fall

THEA 213 (2) Music Skills for Theatre II

A continuation of Music Skills for Theatre I, this course will focus on recent developments in the American Musical Theatre while increasing skills learned in the previous class.

Alt-Spring

Pre: THEA 212

THEA 214 (1) Singing for Actor

Study and exercise to prepare actors to sing for the musical theatre with the focus on competence and musicianship.

Pre: Permission of Instructor

THEA 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

Spring

THEA 231 (1) Stage Management

Exploration of all aspects of theatrical stage management activities through specific theoretical and practical study.

Alt-Fall

THEA 235 (3) Fundamentals of Directing

Introduction to the theory and practice of directing for the theatre.

Pre: THEA 100 and THEA 101 or THEA 110

Fall

THEA 240 (3) Basic Design

Introduction to the concepts, process, and practices of theatrical scenic, lighting, and costume design including script analysis and historical overviews.

Pre: THEA 100

Spring

THEA 245 (3) Scene Painting I

Introductory course examining the basics of materials and techniques of scenic painting with a large amount of lab time for experimentation with technique.

Pre: Consent

Variable

THEA 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

Spring

THEA 255 (3) Stagecraft

Introduction to theory and practice of construction techniques used in the theatre.

Pre: THEA 100

ALT-Fall

THEA 260 (3) Costume Construction

Theory and techniques in stage costume construction.

Pre: THEA 100

Spring

THEATRE ARTS CONTINUED

THEA 262 (1) Dance Production: Costumes

Fundamental concepts of costume design and production for the Dance.
Alt-Spring

THEA 265 (2) Stage Makeup

Theory and practical laboratory work in stage makeup applications.
Pre: Consent
Fall

THEA 266 (1) Makeup Module

Exposes K-12 teachers to a practical methodology of applying stage makeup.
Pre: Consent
Fall

THEA 270 (3) Lighting Technology

The study of lighting technology and its effect on lighting design.
Pre: THEA 100
Fall

THEA 272 (1) Dance Production: Lighting

Fundamental concepts of lighting design and production for the Dance.
Alt-Fall

THEA 275 (3) Sound Technology

The study of sound technology and its effect on sound design.
Pre: THEA 100
Spring

THEA 276 (1) Dance Production: Sound

Fundamental concepts of sound design and production for the Dance.
Alt-Spring

THEA 285W (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-Fall
WI, GE-6, GE-7
Diverse Cultures - Purple

THEA 291 (1-4) Individual Study

Pre: Consent
Fall, Spring

THEA 295 (1-4) Touring Theatre

Work on the actual mounting and performance of a touring theatrical production.
Pre: Consent
Spring

THEA 300 (1-4) Summer Stock

Technical work and/or acting in summer theatre productions. May be repeated.
Pre: Consent
Summer

THEA 301 (1-2) Practicum: Directing

A considerable production responsibility which utilizes skills in script analysis, actor coaching, design coordination and general production management; or assistant directing for a mainstage production. May be repeated.
Pre: Consent
Fall, Spring

THEA 302 (1-2) Practicum: Acting

A considerable production responsibility dealing with the preparation and performance of a major acting role. May be repeated.
Pre: Consent
Fall, Spring

THEA 303 (1-2) Practicum: Theatre Management

Special assignments in stage management, house and/or concessions management, public relations or related areas. May be repeated.
Pre: Consent
Fall, Spring

THEA 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. May be repeated.
Pre: Consent
Fall, Spring

THEA 305 (1-2) Practicum: Tech Theatre

A considerable production responsibility dealing with some technical aspects including technical drawings, budget management, or construction techniques. May be repeated.
Pre: Consent
Fall, Spring

THEA 306 (1-2) Practicum: Costume Design

Full and assistant costume design assignments for theatre productions. May be repeated.
Pre: Consent
Fall, Spring

THEA 307 (1-2) Practicum: Costume Construction

The construction of costumes for theatre productions. May be repeated.
Pre: Consent
Fall, Spring

THEA 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. May be repeated.
Pre: Consent
Fall, Spring

THEA 309 (1-2) Practicum: Sound

Preparation and execution of a major sound design assignment including all sound effects, reinforcement and amplification. May be repeated.
Pre: Consent
Fall, Spring

THEA 311 (0) Private Voice for the Actor

Continuation of THEA 111. May be repeated.
Pre: THEA 111
Fall, Spring

THEA 315 (1) Careers in Theatre

Introduction to the various career opportunities directly in or appertaining to theatrical arts performance.
Pre: THEA 100
ALT-Fall

THEA 324 (3) Methods and Materials for Teaching Creative Dramatics

Exploration of teaching creative dramatics in the K-12 setting.
Pre: THEA 121
On-Demand

THEA 381W (3) Play Analysis

The study and application of various analytical approaches to play texts in preparation for production.
Pre: THEA 100
Spring
WI

THEA 400 (1) Portfolio Seminar

Exploring the techniques of building a working design/technology portfolio and resume.
Pre: Consent

THEA 410 (3) Musical Theatre Acting I

Introduction to musical theatre performance techniques for the American Musical Theatre actor.
Pre: THEA 210 or consent
Spring

THEA 411 (3) Musical Theatre Acting II

Scene studies from the American Musical Theatre, as well as performance techniques for the singing actor.
Pre: THEA 210 and consent
ALT-Fall

THEA 412 (2) Theatre Speech I

Study and exercises in vocal development emphasizing the demands of stage speech.
Pre: THEA 210 or consent
Spring

THEA 413 (2) Theatre Speech II

Study and exercises in vocal development, including the study of the International Phonetic Alphabet.
Pre: THEA 210 or consent
Fall

THEA 414 (2) Stage Dialects I

A study and practice of vocal dialects most often used in performance.
Pre: THEA 413
ALT-Spring

THEA 415 (2) Stage Dialects II

A continuation of Stage Dialects I.
Pre: THEA 413
ALT-Fall

THEA 416 (3) Acting Scene Studies

Advanced scene studies with a focus on analysis and the varied approaches to developing motivations.
Pre: THEA 210 or consent
ALT-Spring

THEA 417 (3) Acting Techniques

The development of individual performance craft and advanced acting methodologies.
Pre: THEA 210 or consent
ALT-Fall

THEA 417W (3) Acting Techniques

The development of individual performance craft and advanced acting methodologies.
Pre: THEA 210 or consent
ALT-Fall
WI

THEA 418 (3) Acting Styles

Advanced scene studies in classical and stylized dramatic literature.
Pre: THEA 210 or consent
ALT-Spring

THEA 419 (3) Acting for Radio/TV

Development of performance craft for the media.
Pre: THEA 210 and consent
ALT-Spring

THEA 424 (3) Theatre Pedagogy

Pedagogy of theatre in the K-12 setting. Emphasis will include: national and state standards, assessment practices, lesson planning and curriculum development.
Pre: THEA 324
On-Demand

THEA 425 (1 or 2) Styles of Motion

Specialized training in a variety of physical techniques. May be repeated.
Pre: Consent
ALT-Spring

THEA 426 (2) 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
Fall

THEA 430 (3) Theatre Management

Exposes students to the functions of theatre managers through case studies, discussions, practical application and readings.
Pre: THEA 235
ALT-Spring

THEA 431 (1) K-12 Theatre Management

Exposes future teachers to a practical methodology of producing theatre in the K-12 setting.
Coreq: THEA 424
On-Demand

THEA 432 (1-2) Practicum: Choreography

Serve as Choreographer for a mainstage or approved production. May be repeated.
Pre: Consent
Fall, Spring

THEA 433 (1-2) Practicum: Musical Directing

Serve as Musical Director for a mainstage or approved production. May be repeated.
Pre: Consent
Fall, Spring

THEA 434 (1-2) Practicum: Dramaturgy

Serve as Dramaturg for a mainstage or approved production. May be repeated.
Pre: Consent
Fall, Spring

THEA 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
Spring

THEA 440 (3) Scene Design I

Development of techniques and skills in the creation of scenery.
Pre: THEA 240 or consent
Fall

THEA 441 (3) Scene Design II

Refinement of model building and drawing skills in theatrical design.
Pre: THEA 440
Spring

THEA 444 (3) Styles and Ornamentation

A visual appreciation of assorted cultures through the study of their architecture, decoration, furniture, utensils, etc.
Pre: Consent
ALT-Spring

THEA 445 (3) Scene Painting II

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-Fall

THEA 448 (3) Drawing & Rendering for the Theatre

Exploring compositional organization of the two-dimensional surface by experimenting with a variety of media, materials, forms, approaches and subjects as a means for theatrical communication.
Pre: THEA 240
Alt-Spring

THEA 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: Consent
ALT-Fall

THEATRE ARTS CONTINUED

THEA 455 (3) Technical Direction

Explores all facets of technical direction, construction techniques, and project management.

Pre: THEA 255

ALT-Fall

THEA 456 (3) Advanced Technical Direction

Explores advanced facets of technical direction including entertainment engineering and technology currently in use in the field.

ALT-Fall

Pre: THEA 455

THEA 460 (3) Costume Design I

Theory and techniques in costume design and execution.

Pre: THEA 240 or consent

Fall

THEA 461 (3) Costume Design II

Advanced costume design theory and techniques.

Pre: THEA 460

ALT-Spring

THEA 464 (3) Costume History

Survey of costume history from ancient Egypt to 1900.

Pre: Consent

ALT-Spring

THEA 465 (3) Advanced Makeup

Practical application of advanced makeup techniques.

Pre: THEA 265

ALT-Spring

THEA 470 (3) Lighting Design I

The study of lighting equipment, usage, techniques and stage lighting design.

Pre: THEA 270

Spring

THEA 471 (3) Lighting Design II

Solving particular lighting design challenges.

Pre: THEA 470

ALT-Fall

THEA 472 (3) Virtual Lighting

Computer realization for virtual lighting design to enhance practical production quality.

Pre: THEA 470. Permission of Instructor

Alt-Fall

THEA 474 (3) Advanced Sound Technology: Digital Audio Systems

A study of the concepts behind digital audio and an exploration of their practical uses.

Alt-Fall

Pre: THEA 275

THEA 475 (3) Sound Design I

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: consent

Fall

THEA 476 (3) Sound Design II

Integrated sound design to support and enhance theatrical production.

Pre: THEA 475

ALT-Fall

THEA 481 (3) Theatre History I

Survey of theatrical history from its origins to 1700.

Pre: THEA 100

ALT-Spring

THEA 482 (3) Theatre History II

Survey of theatrical history from 1700 to the present.

Pre: THEA 100

ALT-Spring

THEA 483 (3) Musical Theatre History

Survey of the history of the American Musical Theatre from its origins to the present.

Pre: THEA 100 and consent

ALT-Spring

THEA 485W (3) Theatre Dramaturgy

This class teaches how to access historical information and present it to directors, actors or designers in a way that will help them make informed and practical artistic choices.

Pre: THEA 100 and consent

Fall

WI

THEA 487W (3) Playwriting

Writing the short and long play.

Pre: THEA 100. Permission of instructor.

Alt-Spring

WI

THEA 490 (1-3) Topics in Theatre

Special topics not covered in other classes. May be repeated.

Pre: THEA 100. Permission of Instructor

Variable

THEA 492 (1-3) Theatre Field Studies

Pre: Consent

THEA 497 (1-8) Internship

Pre: Consent

THEA 499 (1-3) Individual Study

Pre: Consent

TWIN CITIES ENGINEERING

Twin Cities Engineering (see Integrated Engineering)

Department of Integrated Engineering

College of Science, Engineering & Technology

141 Trafton Science Center N • 507-389-2744

Website: cset.mnsu.edu/ie

Chair: Rebecca Bates

Faculty: Robert Sleezer, Jacob Swanson

Location: Normandale Community College, Partnership Center, 9700 France Avenue South, Bloomington, MN

This program provides upper division engineering coursework. Lower-division coursework is typically completed at a community college. Partners for this program include Normandale Community College in Bloomington, MN, Anoka-Ramsey College in Cambridge and Coon Rapids, MN, Century College in White Bear Lake, MN, Inver Hills Community College in Inver Grove Heights, MN, and Saint Paul College in St. Paul, MN.

Admission requires an application to Minnesota State Mankato and the Twin Cities Engineering program. For more information, please see the description at the Integrated Engineering major.

Urban & Regional Studies

College of Social & Behavioral Sciences
 Urban & Regional Studies Institute
 106 Morris Hall • 507-389-1714
 Website: www.mnsu.edu/urbsi

Institute Director: Miriam H. Porter

Raymond Asomani-Boateng, Janet Cherrington, Russell Fricano, Beth Wiede Heidelberg

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 cities and regional areas. There are many career opportunities in community development, urban/regional planning, local government, and local government 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.

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.

POLICIES/INFORMATION

P/N Grading Policy. The internship must be taken on a P/N basis. All other courses must be taken for grade.

URBAN AND REGIONAL STUDIES BS

Degree completion = 120 credits

Required for Major

URBS 100	Introduction to the City (3)
URBS 110	The City: Design and Architecture (3)
URBS 150	Sustainable Communities (3)
URBS 230	Community Leadership (3)
URBS 401	Foundations in Urban Management & Planning (3)
URBS 402	Urban Analysis (3)
URBS 489	Capstone (3)

Required for Major (Electives, 12 credits)

Select 12 credits from URBS upper division courses, or see advisor for approval. The department strongly recommends an internship (URBS 497).

Required Minor: Yes. Any.

URBAN AND REGIONAL STUDIES MINOR

Minor Core

URBS 150	Sustainable Communities (3)
URBS 230	Community Leadership (3)
URBS 431	Urban Design Principles (3)

Minor Electives

Select 9 credits from URBS upper division courses, or see advisor for approval.

COURSE DESCRIPTIONS

URBS 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.

Fall, Spring
 GE-5, GE-8

URBS 110 (3) The City: Design and Architecture

Appreciation of the city as the highest cultural achievement in design and architecture.

Fall, Spring
 GE-6

URBS 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.

Fall, Spring
 GE-5, GE-10

URBS 230 (3) Community Leadership

Introduction to community leadership--elected, professional, or voluntary--and the skills and values which support it.

GE-9, GE-11

URBS 230W (3) Community Leadership

Introduction to community leadership--elected, professional, or voluntary--and the skills and values which support it.

Fall, Spring
 WI, GE-9, GE-11

URBS 260 (3) Community Development

Introduction to knowledge, values and skills required to strengthen and maintain the capacity of a local group (neighborhood, city or region) to provide for the resident's needs.

URBS 401 (3) Foundations in Urban Management & Planning

This course is a survey of the local community--the forces which shape it, the significance of a democratic public, and the professional practice of local government service.

Fall, Spring

URBS 402 (3) Urban Analysis

Introduction to skills and techniques used to form questions about urban affairs, to organize and analyze information to answer it, and to present the results of one's analysis in a professional format.

Spring

URBS 411 (3) Urban Policy & Strategic Analysis

Prepares students to analyze problems, identify alternative solutions and utilize techniques of analysis.

URBS 412 (3) Public Information and Involvement

This course, designed for students preparing for a professional career in local government or public service, focuses on media relations and building citizen involvement through public awareness projects.

Fall

URBS 413 (3) Urban Program Evaluation

Reviews processes and techniques related to evaluation of public programs.

URBS 415 (3) Urban Housing Policy

Public policy and programs that address issues of housing supply, quality, costs, and neighborhood revitalization.

URBAN & REGIONAL STUDIES CONTINUED

URBS 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.

URBS 431 (3) Urban Design Principles

A basic working knowledge and vocabulary of urban design concepts and techniques in an applied problem solving context.

URBS 433 (3) Urban Development

Theory and applications of principles of landscape architecture or urban design.

URBS 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.

URBS 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.

URBS 438 (3) Historic Preservation: Policy and Field Methods

Historic Preservation: Policy and Field Methods introduces students to the rules and laws of structural historic preservation. The course will investigate the major policy documents, laws, agencies, survey methods, and examine how they are applied in local government preservation.

Spring

URBS 450 (3) The Urban Context

Advanced course to explore the interactions of space and social institutions in an urban context.

URBS 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.

URBS 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.

URBS 455 (3) Regional & County Development

Regional and county planning content and procedures, including basic research, land use planning, and implementation of regulations.

URBS 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.

URBS 461 (3) Environmental Planning

Examines and applies the fundamental concepts, techniques and mechanisms for environmental planning at the city, county, and sub-state regional levels.

Fall

URBS 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.

URBS 481 (1-3) Selected Topics:

Varying topics dealing with emerging trends and contemporary needs facing urban America.

URBS 483 (1-6) Workshop

Varying topics using applied techniques to address community issues.

URBS 485 (1-6) Community-Based Problem Solving

Problem solving in communities and direct involvement into specific areas of study of student interest.

Pre: Consent

Fall, Spring

URBS 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.

Spring

URBS 497 (1-12) Internship

Scheduled work assignments, varying in length and content, under the supervision of selected professional sponsors.

Pre: Consent

Fall, Spring

URBS 499 (1-4) Individual Study

Independent study under supervision of an instructor with a research paper or report to be presented.

Pre: Consent

Fall, Spring

WORLD LANGUAGES & CULTURES

World Languages & Cultures

College of Arts and Humanities

Department of World Languages & Cultures

227 Armstrong Hall • 507-389-2116

Website: www.mnsu.edu/languages

Chair: Gregory Taylor

Although English has become the leading commercial and diplomatic language of the twenty-first century, World Languages and Cultures study will be of increasing importance in the years ahead. As technology continues to conquer the obstacles of time and space, the outlook is for even greater travel, commerce, and cultural exchange between the Upper Midwest and the rest of the world.

Minnesota State Mankato does not offer a degree in World Languages & Cultures per se. Students may, however, pursue BA or BS degrees in French, German, Spanish, Spanish for the Professions or Scandinavian Studies or BS degrees in

French, German, or Spanish Education. Chinese, Portuguese, Russian, Latin, and Japanese courses are offered but are not part of any specific academic program. Please see individual sections of this catalog for program details and course offerings in specific languages or contact the Office of the Registrar for information.

COURSE DESCRIPTIONS

DAK 101 (4) Elementary Dakota I

An introduction, within cultural context, to the basic skills of listening, speaking, reading and writing in the Dakota language.

Fall

GE-8

DAK 102 (4) Elementary Dakota II

An introduction, within a cultural context, to the basic skills of listening, speaking, reading and writing in the Dakota language.

Spring

GE-8

WLC 106 (5) Elementary Mandarin I

Beginning Mandarin I is a practical introductory language course with simple, graded activities on essential daily topics. Students will begin to work orally & with the Chinese writing systems while developing early listening and reading skills.
Fall

WLC 107 (5) Elementary Mandarin II

Beginning Mandarin II is a practical introductory language course with simple, graded activities on essential daily topics. Students will continue to work orally & with the Chinese writing systems while developing early listening and reading skills.
Spring

WLC 310 (4) Portuguese for Spanish Speakers

The course is designed to help advanced Spanish students identify similarities and differences between Spanish and Portuguese and begin development of Portuguese productive language skills and cultural competency through comparative practice. Pre: SPAN 201W. Completion of one 300 level Spanish course or equivalent intermediate-midproficiency level of Spanish for admission to the course. See department for language proficiency evaluation information or instructor permission.
Variable

WLC 398 (0) Co-Operative Training WLC

Curricular practical training for World Languages and Cultures is a full-time practical experience in a professional setting in which more than one language is used. The experience is designed to allow students to improve overall communicative proficiency in languages and address business practices associated with the student's academic field of expertise. The Co-Op experience covers a minimum of two consecutive academic terms and requires that students register for a minimum of two consecutive academic terms following the experience.
On-Demand

WLC 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. Pre: Students must demonstrate sufficient language competence in the target language so as to be able to teach courses exclusively in the target language. See content faculty for evaluation.
Fall

WLC 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 WLC 460.

WLC 462 (3) Foreign Languages in the Elementary School (FLES) 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.

Pre: Students must demonstrate sufficient language competence in the target language so as to be able to teach courses exclusively in the target language. See content faculty for evaluation.

Spring

WLC 463 (1) Applied FLES 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 WLC 462.

WLC 465 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.
Variable

WLC 499 (1-4) Individual Study

Special topics in language education. May be repeated for credit.
Fall, Spring

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