



2003-2005
Graduate Bulletin

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GRADUATE BULLETIN

2003-2005

THE COLLEGE OF GRADUATE STUDIES AND RESEARCH

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Minnesota State University Bulletin, College of Graduate Studies and Research, 125 Wigley Administration Center, Mankato, MN 56001. All provisions within this bulletin are subject to change without notice.

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 occurrence, the University will attempt to accommodate its students. It does not, however, guarantee that courses of instruction, extra curricular activities or other Minnesota State University programs or events will be completed or rescheduled. Refunds will be made to eligible students in accordance with State University Board policy.

Information in this publication will be made available in alternative format, such as large print or cassette tape, upon request. Contact the College of Graduate Studies and Research, phone 507-389-2321, or 800-627-3529 or 711 (MRS/TTY).

MINNESOTA STATE UNIVERSITY, MANKATO MISSION STATEMENT

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

ADMISSION

College of Graduate Studies and Research

125 Wigley Administration Center • 507-389-2321 • Fax 507-389-5974

Students with a four-year bachelor's degree from a regionally accredited college or university may apply for admission to graduate study. Complete application files should be received by the College of Graduate Studies and Research no later than six weeks (30 working days) before the beginning of the semester in which the student wishes to enroll for graduate coursework. International Students must apply and have complete files three months before the term of anticipated enrollment (some academic programs have earlier application deadlines). Admission to the graduate school is open to all who qualify with no limitation based on race, religion, color, veteran's status, sex, age, national origin, marital status, physical and mental disability, sexual orientation, creed, status due to receipt of public assistance or any group against which discrimination is prohibited.

Degree Seeking Admission

Students seeking a graduate degree must submit a completed application in duplicate for a specific graduate degree program. The student, including MSU students, must make arrangements to have two official transcripts sent directly to the College of Graduate Studies and Research from the institution(s) where the undergraduate or graduate degree was received. Official transcripts must either bear the seal of the institution or the signature of the appropriate official. The baccalaureate degree must be listed on the transcript. If a student is seeking admission to the MSU College of Graduate Studies and Research before his/her graduation from an undergraduate institution, we will accept an incomplete transcript for provisional admission. It is the student's responsibility, however, to arrange for an official transcript listing the undergraduate/graduate degree to be sent by the degree-granting institution once it is available. Students are not considered to be fully admitted until an official final undergraduate transcript, verifying the award of the degree, is received by the College of Graduate Studies and Research.

Application Fee. All applicants must submit an application fee with the application for graduate study (no exceptions).

Materials filed with the College of Graduate Studies and Research cannot be returned, borrowed or reproduced. Application materials of applicants who do not enroll in graduate courses are destroyed after two years. If a student starts but does not complete a graduate program, his/her files will be destroyed after six years without course registration.

Degree seeking applicants who have completed graduate work at another institution may have this coursework evaluated for transfer credit. Please see the section on transfer credit for the criteria to have such credit applied to a graduate degree from Minnesota State University. All graduate work not applied to a previous graduate degree and accepted for transfer is averaged into the cumulative grade point average.

A four year accumulated minimum GPA of 2.75 on a 4.0 scale is required in all programs unless otherwise specified. **Some programs require a higher GPA.** Please review the admissions standards of each program for requirements of minimum grade point averages, Graduate Record Examination, Miller's Analogies Test, letters of recommendation or prerequisite requirements. If the program requires the GRE or Miller Analogies Test, official scores must be in the applicant's file before the file will be reviewed for admission.

Once the applicant's file is complete and the applicant meets all the requirements of the College of Graduate Studies and Research, the file is sent to the department for review and admission recommendation. A student is not admitted to the College of Graduate Studies and Research officially until recommended by the department. A departmental review may require several weeks.

As part of this recommendation, the department may require the student to complete certain deficiencies in addition to the normal requirements of the graduate program. Upon receipt of the department's recommendation, the Dean of the College of Graduate Studies and Research will admit the student to the program and the College of Graduate Studies and Research. The College of Graduate Studies and Research officially informs the applicant of his/her admission status.

Applicants with poor academic records or limited probability of succeeding in graduate work may be denied admission to a degree program and permission to take graduate courses. Applicants may also be denied if the department involved and the Dean of the College of Graduate Studies and Research concur that the applicant does not meet the professional standards commonly required for a student earning a graduate degree in that area.

Transfer Credits. A maximum of 10 semester credits of graduate credit, all of which must be related to the program (with a grade "B" or better), may be transferred from other appropriately accredited colleges or universities. A maximum of 16 semester credits of graduate credit may be transferred from the other Minnesota state universities (Bemidji, Moorhead, Southwest, St. Cloud, Winona, Metropolitan) and applied to a program at Minnesota State University, Mankato.

To be accepted as transfer credit and applied towards a Minnesota State University graduate degree, the following conditions must be met:

1. Credit must be from a regionally accredited educational institution
2. Credits transferred into an accredited program may need to come from an accredited program
3. The courses must be taught by a full-time faculty member with graduate faculty status at the originating university
4. The courses must be part of a regular graduate program at the originating university
5. Evaluation and approval by the student's Examining Committee
6. Evaluation and approval by the College of Graduate Studies and Research.

The following will not be accepted as transfer credit:

1. Correspondence or similar study
2. Individual study
3. Credit earned at a location in Minnesota through a university headquartered in another state or country
4. Credit for courses conducted by proprietary groups
5. Credit applied towards another degree
6. Extended campus credit from a university that does not accept that credit for its own on-campus graduate programs; or
7. Workshops, Continuing Education Courses and In-Service Training credits

All credit counting toward an MSU graduate degree, including all transferred credit, must be completed within the six year time limit.

Miller Analogies Test/Graduate Records Examination Some graduate programs require the Graduate Record Examination or the Millers Analogies Test for admission to the program. Students should check the specific admission requirements listed under each graduate program. Testing Services makes accommodations for individuals with special needs. Please contact the testing service for more information.

Change of Program. To change degree programs, students must complete the admission requirements of the new program including a review and acceptance by that program's admission committee. Students must submit a new application form to the College of Graduate Studies and Research for the change to be effective. A student must order two current MSU transcripts to be sent to the Graduate Studies Office when changing programs. No more than 12 graduate credits taken by a degree seeking student can be applied to the new program. Credits can only be counted once towards a degree.

Part-Time Students. Minnesota State University welcomes the student who, because of employment, family or other obligation, chooses to attain a degree on a part-time basis. Students may choose to not register for classes for several semesters, and resume a part-time or full-time load at a later date. However, the **maximum time limit for valid coursework is six years.** Financial aid is available to qualified students taking at least six graduate credits. For more information, see the section on Financial Aid in this Bulletin or contact the Office of Financial Aid at 507-389-1185.

Immunizations. All students born after 1956 are required by law to be immunized for measles, mumps, rubella, tetanus and diphtheria. Students will need to provide proof of these immunizations before they are allowed to register.

REGISTRATION PROCEDURES

International Student Admission

Requirements for all international students. International students must follow all of the normal application procedures listed above. In addition, a completed, certified financial statement listing the availability of adequate financial support for the applicant must be attached to the application form. No financial assistance can be guaranteed by Minnesota State University. An official Test of English as a Foreign Language (TOEFL) score must be sent directly to the College of Graduate Studies and Research from the testing service, as explained in the following section. **Examinee's copies of TOEFL scores will not be accepted.** All completed forms must be returned directly to the College of Graduate Studies and Research from the student applicant. Official application documents will only be accepted through the mail from testing agencies. **Unofficial transcripts and application materials are unacceptable.** Transcript evaluation by a reputable evaluation agency is required for most academic programs.

English Competency for International Students. The Test of English as a Foreign Language (TOEFL) is required of all applicants whose native language is not English and who have not recently graduated from an educational institution in the U.S. or an English speaking nation.

Applications for the TOEFL can be obtained from the Educational Testing Service, Box 899, Princeton, New Jersey 08540. Only official scores sent directly to the College of Graduate Studies and Research by the Educational Testing Service are acceptable.

Applicants whose first language is not English must demonstrate their ability to study in English by submitting a score of 500 or higher on the paper version, 173 or higher on the computer version. Prior completion of English coursework at other U.S. colleges does not exempt the student from the Minnesota State University English Placement Examination. Some academic programs have higher minimum requirements.

Because of the procedures required to determine English competency and the additional administrative time required, it is absolutely necessary that international student applications for graduate study be complete no later than three months before the beginning of the semester in which the student wishes to enroll for graduate coursework. All official transcripts, official test scores, letters of recommendation, financial statement and background sheet must be in the student's file in the College of Graduate Studies and Research three months before the beginning of the term of anticipated entry. It is recommended that all international students planning to attend Minnesota State University, Mankato should plan to arrive on campus at least one week before classes begin to participate in the required orientation program coordinated by the Office of International Students. There is no summer admission for international students.

International Student Residency. International students are required to enroll for a full-time graduate student course load (6 semester credits). International students must check on current immigration requirements in the **International Student Handbook**, which is distributed to each new student during initial orientation by the Office of International Students.

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

The ISO also processes immigration paper work for faculty from abroad in J-1 status.

The Office of International Students coordinates and implements international social and cultural activities to promote international awareness and understanding on campus.

Health Insurance. Health and Accident insurance is REQUIRED for all international students and their dependents studying at Minnesota State University on an F-1 or J-1 Visa. All newly arrived international students are required to subscribe to the University's designated health plan prior to enrollment. Health insurance is required for the entire period of study at Minnesota State University – including the summer. Any exception or waiver can only be granted by the ISO Health Insurance Committee.

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

English Placement Test and ESL. All new and transfer students whose native language is not English are required to take the English Placement Examination prior to enrolling in classes. This applies to both undergraduate and graduate students, as well as to transfer

students. Based on student performance students may be required to enroll in English as a Second Language (ESL) classes, beginning their first semester on campus, until authorized by the ESL instructor as eligible to enroll in English Composition 101 or waived of further requirements in case of graduate students. If a student fails to meet this requirement, a hold will be placed on the student's records. ESL for undergraduate students is not a substitute for English Composition 101 for general education requirements. Questions concerning ESL can be referred to the Department of Modern Languages at 389-2116.

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

Non-Degree Seeking Admission

Students wishing to take graduate coursework, but who do not wish to seek a graduate degree, must complete an application as a non-degree seeking student prior to registration. No more than 12 graduate credits taken by a non-degree seeking student may be applied to a graduate degree program. This option is not available to international students.

REGISTRATION PROCEDURES

Office of the Registrar

136 Wigley Administration Center • 507-389-6266

Registration procedures are established by the Office of the Registrar and are published in the semester and summer session schedules.

Courses carrying graduate credit are those listed at the 500 or 600 levels. Many courses listed on the 500 level are open to undergraduates as well as graduate students (undergraduates enroll in corresponding 400 numbered courses). The courses listed at the 600 level are open only to graduate students.

All students wishing to take graduate level courses must complete and submit an Application for Admission to the College of Graduate Studies and Research. Graduate students enrolled in 500 level courses will be required to demonstrate graduate level work in the testing process and/or through additional class assignments as required by the instructor, department, and the College of Graduate Studies and Research.

An undergraduate of Minnesota State University, Mankato who has 6 semester credits or fewer remaining on a bachelor's degree and has a cumulative grade point average of 3.0 or better for the last 60 semester credits may, with the consent of the Dean of the College of Graduate Studies and Research, be permitted to register for graduate work to complete a normal load. Usually, no more than two graduate courses may be taken under these circumstances. Forms initiating this procedure are available in the College of Graduate Studies and Research. International students may not be eligible for this process due to immigration rules. MSU undergraduate students permitted to register for graduate credits are considered as undergraduate students until they complete all undergraduate degree requirements. They are not eligible for graduate student financial aid or for graduate assistantships.

Registration. Students will register by using a touch tone phone or the Internet. Instructions are listed in the class schedule. Students should be aware that only they can process registration. If permission is given for any reason, the student must then complete registration by using a phone or the web. Normally, registration should be completed by the fifth day of the semester.

Class Schedules. Summer session class schedules are available in March. Fall Semester class schedules are available in April. Spring Semester class schedules are available in November. Contact the Office of the Registrar for class schedules.

The Extended Campus Bulletin. A schedule of classes offered off campus with essential enrollment and advising information for off-campus students is available approximately 5 months before the beginning of the next semester.

Academic Transcripts. A fee is assessed for each official transcript. Payment is to be submitted when transcripts are requested. Allow a minimum of seven working days from receipt of request for processing. All holds must be cleared before an official transcript is issued.

Requests for transcripts should include a Social Security number, current address, \$2 per transcript, dates of attendance, and address to which the transcript should be sent. Upon request, transcripts can be ordered but not sent until grades or degrees have been awarded.

TUITION AND FEES

Minnesota Residency

The Minnesota State Colleges and Universities (MNSCU) Board establishes residency requirements for the entire State University system. These residency requirements pertain only to the payment of tuition within the University system. Voting privileges have no bearing on whether or not students pay resident or non-resident tuition.

Non-resident tuition will be charged to students whose permanent homes are outside Minnesota. "Permanent" means family home or home established for a purpose other than for University attendance.

Initial classification of a student as a non-resident, however, does not prevent reclassification at any time when residency requirements are met. Students desiring changes in residency may obtain specific information concerning residency requirements from the Office of the Registrar.

Tuition and Fees

Current tuition and fee rates may be found in the Class Schedule from the Office of the Registrar, the Extended Campus Class Schedule, and on the University's web page.

NOTE: Tuition and fees are subject to change without advance notification. Semester tuition rates are not yet available. Contact the Office of Graduate Studies for more information.

Reciprocity Tuition. Students from North Dakota, South Dakota, Wisconsin and Manitoba are eligible to participate in the reciprocity tuition program. Forms are available at the Office of the Registrar.

Midwest Student Exchange Program. The Midwest Student Exchange Program is an interstate initiative established by the Midwestern Higher Education Commission (MHEC) to increase educational opportunities for students in its members states. This program enables residents of Kansas, Michigan, Minnesota, Missouri, Nebraska, and North Carolina to enroll in designated institutions and programs at reduced tuition levels outside of their home state. Contact the Office of the Registrar 507-389-6266.

SOURCES OF FINANCIAL ASSISTANCE

Internships

Contact the specific departments for information on internships, some of which are available with compensation.

Student Employment

All students seeking any kind of employment at Minnesota State University, Mankato must be able to lawfully accept employment in the United States at the time of employment as prescribed in the Immigration Reform and Control Act. Ordinarily, a state issued driver's license and a social security card will be sufficient evidence, but other appropriate documents may be required.

Need-Based Financial Aid Programs

The programs below are available to students who demonstrate financial need and otherwise meet program and application requirements: Federal Work-Study, Federal Stafford Student Loan, Minnesota State Work-Study, Federal Perkins Student Loans, Student Education Loan Fund (SELF). To apply, complete the Free Application for Federal Student Aid (FAFSA) for the academic year in which financial assistance is needed. Applications for these financial resources should be filed early in the calendar year. For additional information, please contact the **Office of Financial Aid, 109 Wigley Administration Center, 507-389-1185.**

GRADUATE ASSISTANTSHIPS

Graduate assistantships provide academically-related employment for eligible graduate students. The three basic types of assistantships are for teaching, research, or program assistance. **Teaching Assistants** generally assist a professor with teaching his/her courses. Some will teach courses as the instructor of record under faculty supervision. **Research Assistants** assist faculty with various research projects. **Program Assistants** work in a variety of programs and offices throughout the university. Most departments with graduate programs have assistantships available. Application forms for graduate assistantships are available in the College of Graduate Studies and Research and department offices. Applications should be submitted to the department or unit for which the student wishes to work. Students wishing to

apply for assistantships in multiple departments or units need to submit a separate application for each.

Resolution Regarding Graduate Scholars, Fellows, Trainees, and Assistants

Acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. In that context, the conditions affecting such offers and their acceptance must be defined carefully and understood by all parties.

Students are under no obligation to respond to offers of financial support prior to April 15; earlier deadlines for acceptance of such offers violate the intent of this Resolution. In those instances in which a student accepts an offer before April 15, and subsequently desires to withdraw that acceptance, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer. It is further agreed by the institutions and organization subscribing to the above Resolution that a copy of this Resolution should accompany every scholarship, fellowship, traineeship, and assistantship offer.

Federal Work-Study Graduate Assistantships. Federal Work-Study Graduate Assistantships are available to graduate students who are eligible for financial aid. Students must complete the Free Application for Federal Student Aid (FAFSA) for the academic year in which financial assistance is needed. Apply through the **Office of Financial Aid, 109 Wigley Administration Center 507-389-1185.**

Memorial Library Graduate Assistantships. Applicants for any of the graduate programs who have had experience working in libraries may apply for assistantships in Memorial Library. These assistantships are especially beneficial to new librarians who wish to attain the necessary second Master's degree before entering full-time employment in a library. Positions exist in a variety of areas throughout the library.

Student Affairs Graduate Assistantships. Each year, 15 to 20 graduate assistantships are usually available through the following: Office of Student Affairs; Office of Admissions; Career Development and Counseling Center; Centennial Student Union; Counseling and Health Services; Lesbian, Gay, Bisexual Center; Office of Financial Aid; Office of First Year Experience; Pre-Major Advising; Orientation; Office of International Students; Department of Residential Life; Student Leadership Development & Services-Learning; Office of the Vice President; and Women's Center. Apply through the Office of Student Affairs.

Appointments. Appointments are competitive and are determined on the basis of undergraduate and/or graduate grade point average, test scores, letters of recommendation, pertinent experience, educational preparation or appropriate combinations of these factors.

Assistantship policies are updated from time to time. Please contact the College of Graduate Studies and Research for current assistantship policies.

Policy Background. Graduate Assistantships are stipends awarded to assist students in making progress toward their degree. Graduate Assistants provide instructional, research, and/or administrative support to departmental efforts. A graduate assistantship provides the opportunity for a student to practice what is being studied in an applied activity, such as research, teaching, and other sorts of professional practice.

Policy Statement. Graduate assistantships are awarded to full-time students who are fully admitted to a graduate program and who maintain good academic standing during the time of the award. Appointments are competitive and are determined on the basis of undergraduate and/or graduate grade point average, test scores, letters of recommendation, pertinent experience, educational preparation, interviews, or a combination of these factors. The amount of compensation and terms and conditions of awards will be maintained and published by the College of Graduate Studies and Research.

Requirements. Since the purpose of the award is to assist the student in making progress toward the degree, the maximum time commitment to assistantship activities is normally 20 hours per week (for a teaching assistant, 8-9 semester credits over 2 semesters). Teaching assistants may be assigned extra duties (not to exceed the equivalent of 9 semester credits). In special cases when a student is in the last term of study, additional assignments may be made up to 30 hours per week. For the same reasons, a student must be concurrently enrolled each term for at least 6 graduate semester credits, but not more than 12 semester credits. Summer session appointments require a minimum of 1 graduate semester credit. A student who was assigned a limited number of deficiency courses as a condition of admission may petition the Graduate Dean to accept the deficiency credits toward meeting the mini-

POLICIES AND REGULATIONS OF THE GRADUATE COLLEGE

imum credits required for the assistantship. The maximum length of appointment (from all sources of funding) is limited to the normal length of time for completing the degree, in most cases 2 years (a few programs which require more than a minimum of 40 credits have a normal length of 3 years to completion).

Compensation. The amount of the Graduate Assistant stipend is published each year by the College of Graduate Studies and Research. As far as possible, stipends are set to cover the full cost of attending the institution, as determined by the Office of Financial Aid. Stipends are calculated on a full-time equivalent of “20 hours per week.” The stipend is subject to State and Federal taxes. Full awards carry a waiver of 18 credits of tuition for Fall and Spring semesters (normally, 9 each semester). Tuition waivers for more than 9 credits each semester must be approved by the Graduate Dean. No tuition waiver is provided for Summer Session appointments. Tuition waivers for duties which include teaching or research are not subject to State and Federal taxes. Partial awards are permitted and may carry a corresponding reduction in tuition waiver. Students may hold multiple concurrent appointments in different departments or administrative units, as long as the total of all appointments does not exceed the maximum allowed. At no time will a graduate assistant be employed concurrently as an adjunct faculty.

Students who hold an assistantship are considered residents for Minnesota resident tuition purposes during the time of their award, and over the Summer if they held an award the previous Spring semester, during the Summer, or have accepted an award for the following Fall semester.

Terms and Conditions. Prior to the beginning date of the award, graduate assistants will receive a letter summarizing their general duties, stipend, and times and flexibility of duties. During the first week of duty, graduate assistants will be given an initial orientation to their assigned duties by their supervisor, including a description of specific duties, standards for evaluation of performance, and training and other resources available.

Appointment. The award of a graduate assistantship is made by a letter of offer. Acceptance must also be in writing, and constitutes an agreement between the student and the department that both are expected to honor. Resignation from an appointment before the end of the term initially specified should also be in writing, and should be delivered to the department as early as possible. Students who resign or are released from their appointment prior to the mid-point of a semester will lose the tuition waiver for that term.

Termination. Graduate assistants are expected to meet the standards of performance described at their appointment, and to maintain satisfactory academic progress toward their degree. Failure to meet either set of standards can lead to termination of the assistantship. Although, immediate termination may be invoked for serious misbehavior or failure to perform, under normal circumstances of poor performance the following guidelines will be followed:

1. Written notice of warning, with a two-week trial period; followed (if necessary) by
2. Written notice of termination, effective immediately.

Copies of this correspondence will be sent to the Graduate Dean and to the department chairperson (for departmental appointments) or to the unit’s director (for administrative unit appointments). The notice of termination must also be sent to the Office of Business Affairs, and to the Office of International Students (if appropriate). All compensation accrued prior to receipt of the notice of termination in the Business Office will be charged to the unit responsible for direct supervision of the student.

Both written notice of warning and written notice of termination may be appealed. In case of appeal, the student will send to the department chair or the unit director a copy of the written notice and a letter stating the errors of fact or interpretation, which is the basis of the appeal. The chair or unit director must investigate the appeal and deliver a written response within one week. The appeal may be carried one step further, in writing, to the College dean (for appointments in academic departments) or to the appropriate vice president (for appointments outside the academic departments). The dean or vice president will consult with the Dean of the College of Graduate Studies and Research, and their decision will be final. The initiation of an appeal does not extend the trial period or the termination of duties.

POLICIES AND REGULATIONS OF THE GRADUATE COLLEGE

The Graduate Dean enforces established graduate policy, administers the affairs of the College and reports to the Vice President for Academic Affairs.

The Graduate Committee of Faculty is consulted on all proposed graduate policy

changes at the University. Policy changes must be proposed in writing at least one meeting prior to action on the proposed changes.

Student Involvement. The Student Senate and the Graduate Student Association are invited to select a group of graduate students who will serve as an advisory committee to the Dean of the College of Graduate Studies and Research.

Waiving of Regulation by Petition. Graduate students may petition the Dean of the College of Graduate Studies and Research and/or the Graduate Sub-Meet and Confer Unit for waiving of certain regulations based on the existence of extenuating circumstances. Such a petition must be endorsed by the student’s advisor before it will be considered.

Graduate Faculty. The Dean of the College of Graduate Studies and Research appoints Graduate faculty based on the recommendation of the department chair and the college dean as well as a review of their credentials by the Graduate Committee.

Advisors. Students are assigned an initial advisor upon admission to program. Students, however, frequently change advisors after taking some courses and meeting faculty who share their interest. A **Change of Advisor** form must be approved by the College of Graduate Studies and Research for the change to be effective.

Students are encouraged to work closely with their advisors in:

1. Developing a Plan of Study and choosing courses
2. Meeting all departmental and College of Graduate Studies and Research requirements
3. Organizing an Examining Committee
4. Completing the required research Thesis or Alternate Plan Paper
5. Arranging for comprehensive examinations.

Non-degree students who are taking graduate courses will not be assigned an advisor. They may, however, ask a faculty member to serve as an advisor on an ad-hoc basis.

Courses

Only courses bearing graduate credit are applicable toward a graduate degree. The minimum number of credits required to be taken in courses restricted to graduate students is specified in the various graduate programs. At least one-half of the credits required for the Master’s degree program must be from courses listed as 600-699, excluding thesis or APP credits. These courses are for graduate students only. If a dual numbered course is taken at the undergraduate level, it cannot be taken at the graduate level and counted toward a graduate degree program.

Graduate Student Load. The student’s maximum course load each semester is 12 credits for the regular school year and a maximum of 8 semester credits during the summer session. Any exception must be approved by the student’s advisor and the Dean of the College of Graduate Studies and Research. Any student exceeding the load limit without proper authorization shall lose the credits in excess of the authorized load.

Credit by Examination. Students who possess expertise and knowledge in a specific area covered by graduate coursework may, with the approval of the class instructor, department chairperson, and the graduate dean, apply for credit by examination for up to 6 credits. Forms may be obtained from the department offering the specific course(s) to be examined.

Workshops, In-Service, Tours. A maximum of 10 credits earned in workshops, in-service courses, and tours may be used in a graduate degree program.

Individual Studies. A maximum of 6 credits may be taken for independent study.

Course Definitions

1. **CONTACT HOUR:** One 50-minute period containing class group activity under supervision.
2. **REGULAR COURSE:** Contact hours between professor and students designed more to synthesize content than to present material to be learned. Thus, contact among class members and professor is heavily supplemented by regular assignments and systematic evaluation. A course meets on a regular basis usually for an academic semester, a summer session or as a module.
3. **WORKSHOP:** The principal learning takes place through interchange among class members, the professor and her/his assistants. Thus, most work for credit is frequently done within the scheduled contact hours; however, appropriate evaluation of student performance may include assessment of outside work as well. A workshop has specific focus on an educational problem and occurs in a compact time period.
4. **IN-SERVICE:** A professor and a group of students concentrate on cooperatively working toward the resolution of a specific problem clearly relating to professional assignments of students. An in-service course focuses on concerns of a unique clientele. This course is usually offered on-site over an ex-

tended period of time. Each new subtitle must be approved by the department chairperson, college dean and, if at the graduate level, the graduate dean. Approval is for an indefinite time.

5. **SEMINAR:** Characterized by in-depth study and a narrow focus. Students are expected to do extended research outside of class and to present and defend their research in class. A limited number of students is accepted and stringent prerequisites are required.
6. **PRACTICUM, INTERNSHIP, FIELD STUDY OR FIELD WORK:** Credit is awarded for an educational experience on an individual basis emphasizing on-the-job training. Compensation in dollars may not be awarded but academic credit is always awarded. The student's work is jointly supervised by the academic unit involved and the cooperating agency. Written permission from the individual professor and/or department is required prior to registration.
7. **TOUR:** An extended group experience off campus in which major learning results from travel. Tours must be supervised by regular Minnesota State University faculty who accompany it. Credit is awarded and student evaluation is expected. The tour itself constitutes the major learning experience in earning credits.
8. **FIELD TRIP:** A short-term visit off campus to a site of educational significance. This activity is supplemental to a regular course. Credit awarded is for the course involved, with no extra or separate credit awarded for the field trip.
9. **INDIVIDUALLY PACED COURSE:** A series of specifically defined lessons. Each lesson involves an assignment and an evaluation which the student must complete at an acceptable competence level. Learning may involve group and/or individual activity, but the standards established apply equally to all members.
10. **INDIVIDUAL STUDY:** Permits properly qualified students to undertake independent study under guidance of a faculty member. It is used only where the time sequence and content are especially suited to the individual student and no other students are enrolled in the same work at the same time. Written permission from the individual professor and/or department is required prior to registration.
11. **MODULE:** Identifies a regular course taught in a compact time frame. All other guidelines for a regular course apply.

NOTE: Individual study courses require consent of instructor and department head. In-service courses carry individual subtitles and are designed to meet special practitioner needs.

Scholastic Standards

The accumulation of grades below 3.0 in more than two courses of three or more credits each or Incomplete/In-Progress in more than three courses of two or more credits, or a combination of the above in four courses excluding thesis/alternate plan paper credits removes the student from degree status.

The Dean of the College of Graduate Studies and Research will monitor the academic standing of all graduate students each semester and take the following actions based on the review of the graduate students' semester ending grade reports. A student who fails to meet the academic standards may be required by the Dean of the College of Graduate Studies and Research to withdraw from the university.

ACADEMIC WARNING letters will be sent to graduate students who receive a grade of less than 3.0, an In-Progress (IP), or Incomplete (I) in any graduate course of 2 credits or more, or who have a cumulative grade point average of less than 3.0.

PROBATION letters will be sent to students who received an academic warning letter the previous term and who have subsequently failed to demonstrate significant improvement in their academic record. While under Academic Warning status, students who receive a grade of less than 3.0, a grade point average for the term of less than 3.0, a cumulative grade point average of less than 3.0, or an In-Progress or Incomplete in excess of four graduate courses of 2 credits or more will be placed on probation.

DISMISSAL letters will be sent to all students who were placed on probation the previous term and who failed to demonstrate a significant improvement in his/her academic record and received a grade point average for the term less than 3.0, or a grade of less than 3.0, IP, or I in excess of four graduate courses of 2 credits or more.

No grade lower than a "C" is counted for graduation credit, but all grades earned (including Ds and Fs) are counted in determining the grade point average. Graduate courses may be repeated but credit for the course is applicable toward the degree only once. However, all grades earned for that course shall be used in calculating the grade point average.

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

"A" represents work of definitely superior quality.

"B" represents a level of performance that is above average.

"C" represents a below-average level of performance.

"D" represents unacceptable performance.

"F" represents unacceptable performance.

"AU" represents that a course has been audited. Audit courses do not satisfy program requirements, are not used in determining the grade point average, and cannot be applied to a degree. Tuition and fees, however, are paid.

Incompletes. Courses that are "incompletes" must be removed within 1 semester of registration and replaced with a grade. Otherwise, the Incomplete ("I") will turn to an "F" at the end of the following semester, if it has not already been changed.

In-Progress Courses. Courses that are In-Progress "IP" must be removed within 2 semesters of registration and replaced with a grade. Otherwise, the In-Progress will turn to an "F" after one year, if it has not already been changed. (The Registrar's Office reviews them only once a year in August, and it only turns over those that have been on the transcript for no less than one year.)

P/N Grading System. Under the P/N (pass or no credit) system a graduate student may choose to register for a course so designated with the understanding that credit will be received, indicated by the letter "P," if the equivalent of a "B" grade or better is earned. If less than a "B" grade is earned, no credit will be granted, but an "N" will replace the traditional grade on the record. Whether the grade is "P" or "N," the hours taken will not enter into the computation of grade point average.

Graduate students may take any course for which they qualify as general education or elective on a Pass/No Credit basis. (Departments may, with approval of the Dean of the College of Graduate Studies and Research, prohibit P/N students from graduate courses open only to their majors. These courses will be designated in the Class Schedule.)

Departments 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.

Students are requested to check with respective departments for specific information. Students shall have the option of choosing the regular grading system or the P/N system in all courses open to P/N. All grading method changes must be processed through the Office of the Registrar by the end of the 10th class day. No more than one-third of a graduate degree shall consist of Pass/No Credit grades.

Dismissal from a Program. Students may be dismissed from a graduate program "for cause" by the Dean of the College of Graduate Studies and Research on the basis of recommendations of the advisor, examining committee (if one exists), and the department chairperson. "For cause" includes professional judgment of the department involved and the Dean of the College of Graduate Studies and Research that the student does not meet the academic or professional standards required for a student earning a graduate degree in that area.

Registration "Hold". On the recommendation of the appropriate department and concurrence of the Dean of the College of Graduate Studies and Research, a "hold" may be placed on future registration of graduate students who are not making "satisfactory progress" toward a degree.

Grade Appeal Review Process. A graduate student who feels he/she has been unfairly treated concerning grades or actions taken at the departmental level may appeal such treatment as follows:

The appeal process is initiated by a personal visit with the professor involved. In the case of a grade appeal, a written petition must be submitted within two weeks of university notification of a final grade, to which petition the instructor must respond in writing within two weeks.

If no resolution is achieved, the student should submit a written petition to the department chairperson with a copy to the instructor. The department chairperson may arrange a hearing with the student and the faculty member involved, and will, in any case, respond to the petition in writing within two weeks with copies to the student and the instructor.

If no satisfactory resolution is achieved, the student may appeal to the dean of the college in writing with copies sent to the department chairperson and the instructor. The dean may convene a College Grade Appeals Committee, if appropriate, which shall serve in an advisory capacity to the dean. Within two weeks the College Grade Appeals Committee will make a recommendation to the dean who will respond in writing to the student of the decision reached with copies to the instructor and the department chair.

If a satisfactory agreement cannot be reached, the student will submit a written statement to the Dean of the College of Graduate Studies and Research with cop-

ies to the instructor, the department chairperson, and the college dean. The Dean of the College of Graduate Studies and Research may convene a Grade Appeals Committee to serve in an advisory capacity. This ad hoc committee will be comprised of three members of the Graduate Sub-Meet and Confer and a graduate student. The chairperson of the Grade Appeals Committee will respond to the Dean of the College of Graduate Studies and Research within two weeks with copies to the student, the instructor, the chairperson, and the dean of the college. Both the student and the faculty shall be permitted to make a rebuttal to the written record compiled by the committee; this must be done within two weeks. The decision of the Dean of the College of Graduate Studies and Research shall be communicated in writing to all concerned parties. This decision is final.

Written petitions should describe the nature of the problem including relevant information, the remedy sought, and a statement that an attempt was made to resolve the issue at the appropriate levels. If witnesses are named in the petition, they should receive copies. The student should always keep a copy of all paperwork.

Graduation

Time Limit. All work for a graduate degree must be completed within a six-year period. The time limit is calculated similar to the following example: credits completed fall semester 1998 will no longer apply or be counted towards your degree at the end of summer session 2004. This six year limit includes all previous credit transferred to an MSU program.

Examining Committees. The Examining Committee supervises a student's program, comprehensive examinations and the writing of a Thesis or Alternate Plan Paper. Students should ask faculty to serve on their examining committee after consulting their advisor. Faculty are then appointed with their consent by the Dean of the College of Graduate Studies and Research.

Each graduate student will have an examining committee of at least three graduate faculty members representing at least two departments or program areas. The committee chairperson shall be the student's advisor, a regular member of the graduate faculty and in the student's area of concentration. Other members of the examining committee may be either regular or associate members of the graduate faculty.

All MS students in education programs shall have at least one member on the examining committee from professional education. All MAT students shall have at least one member of the committee from professional education and one from their teaching discipline. Specialist Degree students shall have at least one member of the committee from the College of Education and one from outside the College of Education. Two members shall be from the student's area of concentration.

Faculty from other institutions may serve (without compensation) as a second or third member on a student's examining committee. These external members must obtain Graduate Faculty Status at Minnesota State University, Mankato.

Plan of Study. A Plan of Study approved by the examining committee and the Dean of the College of Graduate Studies and Research must be filed before the completion of a limited number of graduate credits at Minnesota State University. The Plan of Study is defined as an official listing of the student's total graduate degree program by department, course number, course title, grade, semester of completion or anticipated completion and the number of semester hours. The Plan of Study must be signed by the student, major advisor, the two examining committee members Graduate Program Director and the Dean of the College of Graduate Studies and Research. Forms for this application may be obtained in the College of Graduate Studies and Research.

Thesis. A part of each graduate student's program is the demonstrated ability to do individual, independent work of a creative and/or investigative type in an area related to the student's major field. Such ability may be demonstrated by a thesis or, in certain programs and departments, by the alternate plan paper.

The thesis must show independent thought in the recognition of a clearly defined problem and in the method of its treatment. It involves extended research resulting in a significant contribution to new knowledge. The thesis content must be relevant to the degree program involved, conform to an approved manual of style, and be approved by the student's examining committee and the Dean of the College of Graduate Studies and Research.

A minimum of three thesis credits must be earned by a student following the thesis plan.

A Master of Arts degree student and a Master of Science degree student may earn from 3 to 6 thesis credits. Thesis credit earned by a student who changes to the Alternate Plan shall be converted to an "audit" on the student's record.

Students should review the **Thesis Guidelines**, available in the College of Graduate Studies and Research before starting the thesis. A **Thesis Proposal** must be

approved by the student's examining committee and the College of Graduate Studies and Research Program Director prior to data collection. Thesis or alternate plan papers involving research on human participants require **IRB approval** prior to data collection and thesis proposal approval. IRB application forms are available in the College of Graduate Studies and Research.

Creative Thesis Policy. The creative/production thesis option is available in certain degree programs. For further information on this option, consult the appropriate program chairperson.

Alternate Plan. The student may follow an alternate plan in programs where such an option is available. The alternate plan paper(s) includes a research requirement less extensive in nature than a thesis. However, the research should be significantly greater in quality and quantity than the standard graduate term paper. Ordinarily, the thesis is oriented more toward original research, data gathering with statistical analysis, theory testing and theory building, whereas the alternate plan paper is oriented more toward the usage of secondary research sources. Under the alternate plan, the student earns a minimum of 34 semester credits in approved courses and one or two research papers or their equivalent as required by the major department or Examining Committee.

The research requirement for the alternate plan may be fulfilled in one of these ways:

- As part of a regular course in which case no discrete credit is given for the alternate plan paper;
- As part of an internship or practicum in which case the experiences are cataloged, evaluated and presented in written form as an alternate plan paper; or
- As one or two credits earned in the course entitled "Alternate Plan Paper Research." When this plan is followed, the professor supervising the study will ordinarily be the student's advisor.

Students should review the Alternate Plan Paper Guidelines, available in the College of Graduate Studies and Research, before starting work on the project. **Research involving human participants requires IRB approval prior to data collection.** IRB application forms are available in the College of Graduate Studies and Research.

Guidelines for Graduate Research Involving Human Participants. Minnesota State University, Mankato policy requires adequate protection for human participants involved in research. All such research, whether or not federally funded, shall be reviewed in accordance with federal regulations requiring review at the institutional level. Students planning to involve human participants in their research for Thesis, Alternate Plan papers or other projects should review the **Thesis or Alternate Plan Paper Guidelines** and the **Human Participants (IRB) Packet** available in the College of Graduate Studies and Research. A completed Human Participants Research Form must be submitted and **approved prior** to data collection.

Comprehensive Examinations. Comprehensive examinations are designed to examine the student's broad understandings of his/her field of study, specific areas of interest and/or the nature and design of the research project. They may be oral or written or both. Every candidate for a graduate degree takes either the oral comprehensive examination, the written comprehensive examination, or both. Students following the thesis plan take the written or oral comprehensive examinations or both depending on the program. Students following the alternate plan may have the oral examination waived with the approval of the examining committee.

Comprehensive examinations are taken sometime after the Plan of Study is approved and must be passed before the Recommendation for Graduation can be signed by the Examining Committee and submitted to the College of Graduate Studies and Research.

Written Comprehensive Examinations. Regularly scheduled written comprehensive examinations are administered by the major department. They generally cover coursework and/or designated reading lists. Each student planning to take a written comprehensive examination must submit a completed **Written Comprehensive Examination Request and Report** form to the graduate coordinator of the major department according to departmental requirements and deadlines. The department decides who shall write and/or grade the examinations. The examinations are graded as pass, fail or decision deferred. Students must pass in all sub-areas to qualify and may retake the examination once. The department reports the results to the student and to the College of Graduate Studies and Research.

Oral Comprehensive Examinations. The Oral Examination, sometimes referred to as the Thesis Defense, is held after the examining committee approves the draft of the thesis or alternate plan paper. The student arranges the time and place after consulting the examining committee who conducts the examination.

The examination generally deals with the thesis or alternate plan paper itself and the portion of the candidate's field of specialization in which his/her thesis or alternate plan paper falls, although it need not be confined exclusively to the subject matter of

the thesis or paper. While there are no time requirements, normally the examination requires a minimum of one hour and not usually more than two hours.

The report of the examining committee must be unanimous. The vote on whether a student has passed or failed the oral examination shall be conducted with only the committee members present.

The written and/or oral comprehensive examination may be retaken by filing the necessary request with the graduate coordinator or the examining committee, respectively. Sufficient time should be allowed to correct weaknesses discovered in the first examination. Comprehensive examinations may be taken a second time only with the consent of the graduate faculty in the department involved.

Tools of Research Requirement. All graduate programs must include a minimum of one research methods or statistics course with two or three credits. Any substitute course or variance must be approved by the Dean of the College of Graduate Studies and Research.

Language Proficiency for the MA Degree. Many Master of Arts degree programs require the student to demonstrate a reading knowledge of one modern foreign language prior to the awarding of the degree. Some departments, however, allow a research tool to be substituted. The student should consult the department chairperson to determine the specific requirements. Research substitutions may include at least one course in research methods either as a foreign language substitute or as part of the regular program. If the course(s) is (are) used as a substitute for a foreign language, the credits do not count toward fulfilling minimum credit requirements. If the course(s) is (are) used as apart of the regular program, the credits earned will count toward fulfilling the program requirements.

Application for Graduation. An application for Graduation needs to be approved by the examining committee and the graduate coordinator and submitted to the College of Graduate Studies and Research. Contact the College of Graduate Studies and Research for submission dates.

When a student has completed all requirements for graduation, the examining committee endorses a **Recommendation for Awarding the Degree Form** and sends the form to the College of Graduate Studies and Research. This requires completion of all course requirements, research requirements, comprehensive examinations and the thesis or alternate plan paper(s). The student must also have maintained a 3.0 grade point average on all graduate work. All courses applied to the degree must have been completed in the six years prior to graduation and cannot have been used for another degree. The form must be submitted to the College of Graduate Studies and Research no later than two weeks before graduation.

For all Master's degree programs, at least one-half of the credit must be earned in courses restricted to graduate students and listed as 600-699 (**excluding Thesis and APP credits**). Additionally, the candidate must complete or meet all special requirements established by the student's examining committee and approved by the Dean of the College of Graduate Studies and Research.

Each recipient of a graduate degree is invited to complete a survey or hold an exit interview with the Dean of the College of Graduate Studies and Research for the purpose of program evaluation. The graduate is invited and urged to participate in commencement ceremonies, but it is not required.

Awarding a Degree or Certificate. After verifying that all requirement have been met, the College of Graduate Studies and Research mails diplomas to the graduates. This process takes approximately eight weeks after the end of the semester. At the request of the graduate, the College of Graduate Studies and Research can send a letter verifying graduation to appropriate officials as soon as all requirements are met. This verification is needed before the degree is posted on the student's transcripts.

THE GRADUATE PROGRAMS

From art to women's studies, Minnesota State University, Mankato has the most comprehensive offering of Master's programs in the Minnesota State Colleges and Universities system. The College of Graduate Studies and Research provides more than 80 graduate degree programs. Almost all of our Graduate Faculty hold the highest degree in their respective discipline. Many of our faculty have won teaching awards, published scholarly books, and have provided a broad range of services to our University and community.

In addition to the program information provided by the College of Graduate Studies and Research, graduate students should check with their area(s) of interest for current information about options, programs, courses and graduate faculty, admission, plan of study, application for graduation and exit standards.

MASTER OF ARTS

The Master of Arts degree is designed for those students who wish to concentrate in depth in a given discipline or area of study. At least one course in research methodology is required. A program of study leading to the master of arts degree has been approved for the following areas:

Art
Chemistry
Clinical Psychology
English
History
Industrial/Organizational Psychology
Mathematics
Physical Education
Political Science
Public Administration
Public Administration/Urban & Regional Studies
Sociology
Speech Communication
Theatre Arts
Urban and Regional Studies
Urban Planning
Urban and Regional Studies/Public Administration

Language Requirement. The usual language requirement is a reading knowledge of one modern foreign language. Modifications of this requirement may be permitted by a particular department. The student should check with the department for details.

MASTER OF ARTS IN TEACHING

The Master of Arts in Teaching (MAT) program is designed to allow students who hold a baccalaureate degree in an academic area from a college or university accredited by a regional accrediting agency, to earn a Master's degree while completing requirements for secondary teaching licensure.

It is important that students meet with their MAT advisor early in their graduate career. Advisors may be from the Department of Educational Foundations or from Curriculum and Instruction. The program requirements are detailed in the Curriculum and Instruction section of this bulletin.

Approved licensure areas include:

Dance & Theatre Arts
English as a Second Language
Social Studies
Vocal Music & Instrumental Music
Communication Arts & Literature
Languages and Cultures (Spanish & French)
Developmental Adapted Physical Education
Science (Life Science, Chemistry, Earth & Space Science, and Physics)
Physical Education
Visual Arts
Mathematics
Health Science
Library Media World

MASTER OF FINE ARTS IN CREATIVE WRITING

MASTER OF FINE ARTS IN FORENSICS

MASTER OF FINE ARTS IN THEATRE

MASTER OF MUSIC

The Master of Music degree is the standard professional music degree in most colleges and universities, including Minnesota State University. This degree is most appropriate for those students who want to teach in colleges, do further graduate study in music, perform professionally, compose or conduct.

The Master of Music degree gives the student a choice of four areas of concentration:

1. Applied Music (instrumental, keyboard, voice);
2. Music Theory;
3. Composition; or
4. Music Education.

All programs are accredited by the National Association of Schools of Music.

MASTER OF SCIENCE IN NURSING

The MSN degree prepares nurses for advanced practice roles such as clinical nurse specialist and nurse practitioner.

Nursing

GRADUATE PROGRAMS

MASTER OF SCIENCE

The programs leading to the Master of Science degree are designed for the purpose of strengthening and broadening the academic and professional preparation of individuals who are or will be employed in a broad range of scientific, educational, and professional careers. The coursework required of each student is determined on the basis of undergraduate preparation, experience and professional goals. Master of Science programs include:

Anthropology
Biology
Chemistry
Communication Disorders
Community Health Science
Computer Science
Counseling and Student Personnel
Education Technology
Educational Administration: Leadership
Educational Studies
Engineering
Environmental Studies
Ethnic and Multi-Cultural Studies
Experiential Education
French
Geography
Gerontology
History
Library Media Education
Manufacturing Engineering Technology
Mathematics: Computer Science
Mathematics
Multidisciplinary Studies
Physics
Rehabilitation Counseling
Sociology Corrections
Sociology Human Services Planning/Administration
Spanish
Special Education
Talent Development and Gifted Education
Teaching and Learning
Women's Studies

Refer to the section on the particular department for the details of these programs.

MASTER OF SCIENCE IN EDUCATION

(DISCIPLINE-BASED)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. Majors are offered by the following department/program areas:

Art Education
Biology Education
English Education
French Education
Geography Education
History Education
Mathematics Education
Physical Education
 Elementary/Secondary PE
 Sport Administration
Physics Education
School Health Education
Science Education
Social Studies Education
Spanish Education
Speech Communication Education

SPECIALIST

Curriculum and Instruction
Educational Administration
Library Media Education
Talent Development and Gifted Education

The specialist degree represents a minimum of one year (30 credits) of study beyond the master's degree. It is designed primarily for entrance licensure for the school administrator and to improve the competency of the practicing supervisor, coordinator, media specialist or teacher at the elementary, secondary, vocational or college level.

SIXTH YEAR CERTIFICATE PROGRAM FOR SCHOOL ADMINISTRATORS

The Sixth Year Approved Program in Educational Administration is an alternative program leading to entrance licensure. This program meets the Minnesota State Department of Education requirements for licensure as an elementary principal, secondary principal or superintendent.

The University also offers a number of **licensure** and **certificate** programs. Please see the individual program sections for additional information.

CURRENT ACCREDITATIONS

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

General Accreditations

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

Program Accreditations

Art - 1974: National Association of Schools of Art
Athletic Training - 1969: Board of Directors, Commission on Accreditation of Allied Health Education Programs - Joint Review Committee on Educational Programs in Athletic Training
Automotive Engineering Technology - 1996: Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET)
Business, College of - 1997: The Association to Advance Collegiate Schools of Business (AACSB) (Accounting; Finance; International Business; Management; Marketing)
Chemistry - 1970: American Chemical Society
Communication Disorders - 1993: American Speech-Language Hearing Association (M.S. in Speech Language Pathology), Certification of Clinical Competence (CCC), Educational Standards Board of the American Speech-Language Hearing Association (ESB)
Corrective Therapy - 1973: American Corrective Therapy Association
Counseling and Student Personnel (School Counseling, College Student Affairs, Community Counseling) - 1985: Council of Accreditation of Counseling and Related Educational Programs
Dental Hygiene - 1970: Commission on Accreditation, American Dental Association
Dietetics - 1972: American Dietetic Association
Electrical Engineering - 1987: Commission of the Accreditation Board for Engineering and Technology (ABET)
Electronic Engineering Technology - 1984: Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET)
Manufacturing Engineering Technology - 1990: Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET)
Mechanical Engineering - 1994: Commission of the Accreditation Board for Engineering and Technology (ABET)
Music - 1971: National Association of Schools of Music
Nursing - 1953: Minnesota State Board of Examiners of Nurses (Minnesota Board of Nursing), 1972: National League for Nursing Accrediting Commission.
Recreation, Parks and Leisure Services - 1986: National Recreation and Park Association/American Association for Leisure and Recreation
Rehabilitation Counseling - 1977: Council on Rehabilitation Education, Certified Rehabilitation Counselor (CRC)
Social Work - 1974: Council on Social Work Education

Certifications:

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

UNIVERSITY POLICIES

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

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

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

Harassment because of race, sex, or disability is a form of discrimination prohibited by state and federal law. Harassment because of sexual orientation is prohibited by state law. Harassment is defined as verbal or physical conduct that is directed at an individual because of his/her race, color, national origin, sex, sexual orientation, or disability or that of his/her partner and that is sufficiently severe, pervasive, or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Harassment may occur in a 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 University. These acts will be investigated and may subject an individual to complaints and disciplinary sanctions as well as possible referral to appropriate law enforcement agencies.

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

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

Equity In Athletics Disclosure Act 1994. U.S. Department of Education guidelines now require post-secondary institutions participating in federal student aid programs to publish annual reports on gender equity in intercollegiate sports. In compliance with the EADA, Minnesota State University prepared its first Equity Act report by October 1, 1996. Updated reports are released by October 15 of each subsequent year. Included is data on the amount of money spent on men's and women's teams and recruiting efforts, participation rates, personnel and operating expenses, revenues generated, and sports related financial aid allocations. The report is readily accessible to students, prospective students and the public. Contact the Office of Student Affairs, 336 Wigley Administration Center, 507-389-2121.

Student Right-to-Know and Campus Security Act 1995. The Student Right-to-Know and Campus Security Act increased the level of information universities must collect and provide to current and prospective students and employees and to the Department of Education. The first part of the act, entitled the Student Right-to-Know Act, requires colleges and universities to compile and release institution-wide graduation rates for all students, with more detailed statistical information submitted on the graduation rates of athletes. The graduation rate for Minnesota State University, Mankato, new entering freshman, fall term 1995 cohort, is 44 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 1995 cohort is the most recent one for which a six year graduation rate is available.

Part II of the act, entitled the Campus Crime Awareness and Campus Security Act of 1990, requires colleges and universities to annually make available to all current employees and students as well as to applicants for enrollment or employment the following information: 1) a description of policies concerning the security of and access to all campus facilities; policies and procedures for reporting campus crime; and policies concerning law enforcement along with crime prevention educational programs relating to campus security, and 2) statistics concerning the occurrence of certain categories of campus crimes. Institutions are also required to issue timely warnings to the campus community about criminal activities representing a continued safety threat to aid in crime prevention. In addition, the University complies with the 1998 Higher Education Amendments Act that amended the Campus Security Act by expanding the geographic scope and categories of offenses that must be included in the annual statistics. This information is available 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, First Year Experience, 10 Gage Complex, 389-5489, and Human Resources, 325 Wigley Administration Center, 389-2015. The brochure is also available at www.mnsu.edu/safety.

UNIVERSITY SERVICES

AIDS POLICY

Students and employees with HIV infection will be permitted full access to the University as long as they are physically and mentally able to function in that role. An AIDS Task Force was established in April 1987 to promote educational and support efforts that will help prevent the spread of the virus. For information about AIDS or the AIDS Task Force, contact the Student Health Service at 389-6276 or the Counseling Center at 389-1455.

UNIVERSITY SERVICES

ACADEMIC FACILITIES

Minnesota State University, Mankato consolidated all programs and facilities onto the 400-acre Highland Campus in 1979. All academic buildings and on-campus housing facilities are located on a level terrain close to parking. Extensive modifications made to existing buildings facilitate easy mobility for disabled students. All but three academic buildings are connected by enclosed passageways.

Campus accessibility maps that indicate location of parking places, curb cuts, accessible entrances and elevators are available.

OFFICE OF AFFIRMATIVE ACTION

112 Armstrong Hall • 507-389-2986 (V) • 800-627-3529 or 711 (MRS/TTY)

The goal of the Office of Affirmative Action is to help students obtain a prompt and equitable resolution of problems related to discrimination and harassment. Students who believe they have been harassed or treated unfairly because of their race, religion, color, national origin, sex, sexual orientation, age, marital status, disability, creed, or on any other basis prohibited by state laws, federal laws, or MnSCU System policy are encouraged to contact the Office of Affirmative Action.

The Affirmative Action policy, policies prohibiting violence or harassment based on sex, race, disability or sexual orientation, and the Grievance Procedures are available upon request at the Office of Affirmative Action.

CAREER DEVELOPMENT & COUNSELING

209 Wigley Administration Center/ 245 Centennial Student Union

507-389-6061/507-389-1455 • www.mnsu.edu/cdc

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

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

National testing (CLEP, LSAT, MAT, GRE, and others) is coordinated through the Counseling area of the CDC.

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

Classroom and group presentations are scheduled throughout the semester on topics such as choosing a major writing resumes, job interviewing, job searching, overcoming test anxiety, grief and loss, coping with academic burnout, and building your self-image.

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

MSU Job Service assists students in securing part-time, seasonal, and temporary employment either on- or off-campus.

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

CULTURAL DIVERSITY PROGRAM

115 Alumni Foundation Center • 507-389-6125

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

DENTAL HYGIENE CLINIC

3 Morris Hall (Lower Level)

507-389-2147 • 800-627-3529 or 711 (MRS/TTY) • www.mnsu.edu/dentalhygiene

The dental hygiene clinic is a student training facility staffed by a dentist and faculty. Comprehensive dental hygiene services performed include prophylaxis, radiographs, sealants, tooth whitening, and mouthguards. The clinic is open to the public and most dental insurance is accepted. Day and evening appointments available September - December and February - May.

OFFICE OF DISABILITY SERVICES

116 Memorial Library • 507-389-2825, (V) • 800-627-3529 or 711 (MRS/TTY)

The Office of Disability Services facilitates accommodations for individuals with disabilities which ensure equal access to programs, services and activities offered by Minnesota State University. The office assists with advocacy; alternative format of printed materials; alternative testing services; assistive technology; early registration; notetaking; sign language interpreters; and text on tape. The office also acts as a resource and referral agent for community contacts and disability-related information.

Emergency assistance is also available on a 24-hour basis through the Security Department. Grievances, questions or requests related to equal opportunity for individuals with disabilities should be presented to the ADA coordinator, phone 507-389-2986 (Voice) 800-627-3529 or 711 (MRS/TTY).

EXTENDED CAMPUS AND CONTINUING EDUCATION

116 Alumni Foundation Center • 507-389-2572 or 800-722-0544

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

INFORMATION AND TECHNOLOGY SERVICES (ITS)

3010 Memorial Library • 507-389-6651 • Fax: 507-389-6115 • www.mnsu.edu/its

Information and Technology Services (ITS) serves the faculty, staff and student members of the MSU community in providing and supporting technology services. The Academic Computer Center and the Office of Instructional Technologies are areas within ITS.

The Academic Computer Center (ACC), Located at 121 Wissink Hall, telephone 507-389-5160. The Academic Computer Center has over 475 computers and printers for student use. Our computers are constantly being upgraded to keep current with technology. All computers have access to the Internet. Student workers are on duty at all times to maintain the lab, provide safety and security, and offer technical assistance. For students who need to develop their computer skills, free workshops are offered throughout the semester.

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

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

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

Many satellite labs, with over 300 computers, are located around campus to provide specialized needs.

Computer Help Desk. Located at 3010 Memorial Library, 389-6654, Help Desk staff field questions about campus computers' hardware, software and related issues. They are also the contact for the Multimedia Presentation Systems in classrooms. Contact them via telephone at 507-389-6654 e-mail HelpDesk@mnsu.edu or in person at 3010 Memorial Library.

Computer Store. Located at 118 Centennial Student Union, 389-1907. Computers, printers, and software are available for purchase at low educational prices.

Interactive Television (ITV). Located at 86 Memorial Library, 389-5947. ITV courses provide a video/interactive format to deliver MSU courses and programs to learners in other communities. Class locations have included Fairmont, St. Cloud, Duluth, St. Paul, Marshall and Eden Prairie. See the Web site for more information/course listings www.intech.mnsu.edu/intech (ITV is an area of the office of Instructional Technologies.)

Student Technology Assistant Training Program. Located at 3010 Memorial Library, 389-6654. Student workers in administrative and academic departments at MSU may participate in computer training related to their position responsibilities. Training subjects include MS Office, MS Access, MS Excel, MS PowerPoint, MS Word, MS FrontPage, Internet & Multimedia, and Time Management & Communication.

INTERNATIONAL PROGRAMS

238 Centennial Student Union • 507-389-6669 • www.mnsu.edu/ipo

The International Programs Office provides information and guidance to students and faculty about academic opportunities abroad. Students receive help at every step to facilitate their study in a different culture. The office operates with proper procedures to comply with all legal requirements for the institution, sponsors and student participants. The office is responsible for publicizing and marketing various opportunities for study. It is also the designated overseer for all institutional agreements between MSU and programs abroad.

LESBIAN, GAY, BISEXUAL CENTER

242 Centennial Student Union • 507-389-5131 (phone and calendar announcements)
• Fax: 507-389-5632 • mankato_lgbc@hotmail.com • www.csu.mnsu.edu/lgbc

Filling the need for lesbian, gay, bisexual students and their supporters, the Lesbian, Gay, Bisexual Center (LGBC) at Minnesota State University, Mankato provides a place for students to build community; referrals to University, regional and national resources; information on gay, lesbian and bisexual (glb) issues; diversity though our visibility; and encouragement by acknowledging the efforts of volunteers and supporters of the LGBC. The LGBC educational resources include our video and book library, speakers panels, and educational events throughout the year such as Eliminate Hate.

LIBRARY SERVICES

www.lib.mnsu.edu • Reference Services: 507-389-5958

The mission of Library Services is to support the University curriculum by providing students and faculty with information resources available through traditional methods and evolving technologies. Assistance and instruction in the use of information resources is available through reference services, formal classes, web access, and individual consultations with librarians. The library's resources consist of approximately 1.2 million volumes including 3200 print periodical subscriptions, 17,000 full-text electronic periodicals and over 125 electronic databases. Circulation services include check out of materials from all areas of print, audio, video, and equipment collections. Interlibrary loan services complement the collections by providing access and delivery of materials at other libraries.

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

Additional services include internet access from over 100 dedicated terminals, print and electronic reserve materials, study carrels, seminar rooms, and a complete copy shop with paper and microform copiers. Wireless Internet access is provided for personal laptop computers in all study areas of Memorial Library.

OFFICE OF MULTICULTURAL AFFAIRS

22 Centennial Student Union • 507-389-6300

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

SPEECH AND HEARING CLINIC

103 Armstrong Hall • 507-389-1414

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

STUDENT HEALTH SERVICES

Carkoski Commons • 507-389-6276 • www.mnsu.edu/dept/healthsv/welcome.html

The Student Health Services provides medical care, pharmacy services, laboratory services, and health education services including care for illnesses and injuries (e.g. sore throats, sprained ankles, or allergy shots), sports medicine, contraception, STD screening, and physical exams. There may be a small charge for seeing a physician or nurse practitioner, certain medical procedures, laboratory tests, and prescriptions. A health insurance plan is available to students, spouses and dependents. Information is available at the Student Health Services and The Hub or Cashier's Window in the Wigley Administration Center.

The Student Health Services emphasizes prevention through health education. Health educators provide sexuality/birth control information, drug and alcohol education and nutrition information, as well as information in a variety of other health-related areas.

STUDENTS' ATTORNEY

280 Centennial Student Union • 507-389-2611 • www.mnsu.edu/mssa/

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

WOMEN'S CENTER

218 Centennial Student Union • 507-389-6146 • Fax: 507-389-5539
www.cus.mnsu.edu/womensc/index2.htm • www.2.mnsu.edu/assault

The mission of the Women's Center is to foster a healthy, safe, and engaging campus community by enabling the full and active participation of women students in both their personal and educational pursuits at Minnesota State University, Mankato. The Women's Center provides programs, connections, advocacy, services and leadership opportunities for all MSU students.

Our programs include: The Brown Bag Lunch series, Women & Leadership programs, Women's History Month, "Go Girls!" programs supporting women's sports, The Vagina Monologues, Love Your Body Day, National Young Women's Day of Action, and sexual violence awareness and prevention education.

Services offered: The Women's Center offers connections and resources for nontraditional students, students seeking sexual violence support services, those interested in feminism, reproductive rights, social justice, eating issues and body image, assertiveness, self esteem, and countless other issues. General advocacy and assistance is available to all MSU students. The Women's Center hosts RAISE, asexual violence peer education group for students, as well as connections to other feminist, anti-violence, and global social justice organizations. In addition, staff members at the Women's Center are available to present programs and lead workshops for campus organizations or classes.

RESIDENTIAL LIFE HOUSING

Office: 112 Carkoski Commons • 507-389-1011

Fax: 507-389-2687 • www2.mnsu.edu/reslife/

The residence life program at Minnesota State University, Mankato is designed to provide a variety of opportunities and services that enhance and support students' academic experiences. There are a number of living-area choices available, including quiet study floors, upper-class/non-traditional age/graduate student floors, intercultural floors and smoke-free residence halls. The residence halls also offer convenience and close proximity to the library and classrooms. Residence halls remain open during all breaks. Leaving spaces set aside in the residence halls specifically for graduate students and/or those who are 21 years old or older.

Vacation Periods: Students who need to stay on campus during academic year breaks may do so in any facility. The room and board payment is not inclusive of the vacation period, so students should be aware that they are responsible for their own meals during these times, and that there is an additional charge for the room for winter break. Students may have to move to another location for summer school housing.

Summer Session: A residence hall on campus is always open for students attending summer school, and an abbreviated meal plan is also offered. Specific information about summer housing is available after Spring Break (usually late March) each year.

Costs and Payment: Residence hall costs vary according to the type of room, type of meal plan, and length of term. Please contact the Department of Residential Life for the current list for the various meal and room options.

Housing Reservations: Students admitted to the graduate school may receive a housing reservation application by contacting the Department of Residential Life. The telephone number is 507-389-1011. The fax number is 507-389-2687. Housing contracts are for the entire academic year.

Off Campus Housing. For the MSU students who do not live in the residence halls there are numerous off-campus housing available in the Mankato area, much of it very near to campus. **Student Leadership Development & Service-Learning (SLDSL)**, 173 Centennial Student Union, 507-389-6076 or www.csu.mnsu.edu/comcon/off-campus.html, can provide a listing of nearby apartment complexes, representing more than 1,500 living units, with information on amount of rent, deposit and length of lease. There is also a database of other rental options in the surrounding area.

ANTHROPOLOGY MS

College of Social and Behavioral Sciences
Department of Anthropology
358 Trafton Science Center N • 507-389-6504

Chair: Winifred Mitchell, Ph.D.
Graduate Coordinator: Paul F. Brown, Ph.D.

Susan Schalge, Ph.D.; Michael Scullin, M.A.; Richard Strachan, Ph.D.

Anthropology is the study of the origins and diversity of human biology and culture. Students who complete the Masters of Science program in Anthropology at Minnesota State University are competitive either for the applied professional career market or for admission to nationally recognized doctoral degree programs. Graduate work at Minnesota State University, Mankato offers students a generalist, holistic foundation in the discipline and one of the three subfields of Archaeology, Biological Anthropology or Cultural Anthropology. The program includes a series of core seminars in Anthropological theory, research methods and professional practice. Electives are chosen from within the department or in a cognate field relevant to the students' professional goals.

Admission. The GRE is not required. Prospective students should submit the application provided by the MSU College of Graduate Studies and Research. For the Department of Anthropology, students need to provide three letters of recommendation and write a personal statement which describes their previous training in Anthropology and reasons for pursuing a graduate degree. Submit these materials to the Anthropology Graduate Coordinator. Anthropology attracts people from a wide variety of backgrounds, so we welcome applicants from any field. Students who do not have the equivalent of at least an undergraduate minor in Anthropology may need to take some undergraduate core courses before taking the Master's seminars.

Financial Assistance. We are able to offer some financial support to all of our students at some point in their training. Graduate teaching and research assistantships are granted each year in Anthropology, on a competitive basis. The Andreas Graduate Scholarships in Anthropology are also awarded annually. Some scholarships and assistantships are available for incoming students. Advanced students can also apply for adjunct teaching positions.

To Apply for Financial Assistance, submit a statement about your financial needs and relevant experience (if you have taught or done research, etc.) with the other materials that you send to the Department of Anthropology. You can apply for other types of financial aid (such as Federal work-study or loans) through the Office of Financial Aid.

Comprehensive Exam Policy. The oral defense of the student's thesis proposal or alternate plan proposal and the successful completion of all core seminars serve as the comprehensive exam.

Thesis Policy. Students are required to complete a thesis as part of the degree program. The Department of Anthropology follows the basis guidelines found in the Minnesota State University, Mankato Graduate Studies Bulletin. Prior to commencing work on the thesis a student must present a thesis proposal first to the examining committee and then to the College of Graduate Studies and Research. This proposal should be complete and presented to the student's committee no later than the end of the eighth week of the semester prior to commencing the thesis project. The student will present an oral defense of the thesis to the examining committee at least two weeks prior to the end of fall or spring semester. No thesis defense can be scheduled during the summer.

ANTHROPOLOGY MS

(Thesis - 30 credits)

Required core (18-21 credits)

- ANTH 601 Seminar in Anthropological Theory (3)
- ANTH 602 Seminar in Qualitative Research Methods (3)
- ANTH 603 Seminar: Professional Practice in Applied Anthropology (3)
- ANTH 697 Internship (6)*
- ANTH 699 Thesis (3-6)

Electives (9-12 credits)

In consultation with an advisor, choose credits from the list of Anthropology courses below or choose one or more courses or seminars in a related as appropriate to your career goals. In accordance with the Graduate College policies, at least one half of the credits earned for the Master's degree must be from courses at the 600 level. Also, no more than 10 credits earned as individual study, fieldwork, internship, or laboratory can be applied to the total elective course credit for the Master's degree.

- ANTH 510 Prehistory of MN (3)
- ANTH 511 Prehistory of North America (3)
- ANTH 512 Prehistory of Latin America (3)
- ANTH 514 Museology (3)
- ANTH 515 Cultural Resource Management (3)
- ANTH 520 Osteology/Forensic Anthropology (3)
- ANTH 521 Health, Culture and Disease (3)
- ANTH 530 Ethnography of Latin America (3)
- ANTH 531 Applied Cultural Research (3)
- ANTH 532 Social Organization (3)
- ANTH 533 Anthropology of Gender (3)
- ANTH 534 Ethnographic Classics (3)
- ANTH 535 Origins of Civilization (3)
- ANTH 536 Anthropology of Aging (3)
- ANTH 537 Applied Anthropology (3)
- ANTH 538 Anthropological Theory (3)
- ANTH 539 Qualitative Research Methods (3)
- ANTH 580 Fieldwork: Archaeology/ Ethnology* (3-6)
- ANTH 585 Topics in Anthropology (1-3)
- ANTH 586 Workshop (variable subtitle) (1-3)
- ANTH 591 Archaeology Laboratory* (1-3)
- ANTH 593 Ethnology Lab* (1-3)
- ANTH 604 Seminar in Advanced Topics (Variable topic, may be taken more than once) (3)
- ANTH 677 Individual Study* (1-6)

Five to seventeen credits may be chosen from this list; up to 10 can be chosen from a related field as appropriate to the student's plan of study.

*No more than 10 credits can be earned from this group.

COURSE DESCRIPTIONS**ANTH 510 (3) Prehistory of Minnesota**

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

Prerequisite: ANTH 102 or 210/310 or permission of instructor

ANTH 511 (3) Prehistory of North America

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

Prerequisite: ANTH 101, 102, or 210/310, or permission of instructor

ANTH 512 (3) Prehistory of Latin America

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

Prerequisite: ANTH 101, 102, or 210/310, or permission of instructor

ANTH 514 (3) Museology**ANTH 515 (3) Cultural Resource Management****ANTH 520 (3) Osteology/Forensic Anthro**

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

Prerequisite: ANTH 220, 221, 320, and 321 or permission of instructor

ANTH 521 (3) Health, Culture, & Disease

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

Prerequisite: ANTH 101, 220, or permission of instructor

ANTH 530 (3) Ethnography of Latin America

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

Prerequisite: ANTH 101, 103, or 230/330, or permission of instructor

ANTH 531 (3) Applied Cultural Research

This course introduces concepts and methods of applying anthropological understanding to contemporary problems to bring about the empowerment of affected peoples. Case studies illustrate the impact and problems of culture change with special attention to its affect on powerless groups of people. Students will also design their own applied projects

Prerequisite: ANTH 101, 103, or 230/330, or permission of instructor

ANTH 532 (3) Social Organization

Family and kinship are the basis for all human organization. This course explores the role of systems of relationship in both simple and complex cultures. It presents modern analysis of kinship systems including sociobiological, evolutionary, and feminist perspectives as well as traditional kin terminology and marriage and residence patterns. Prerequisite: ANTH 101, 103, or 230/330, or permission of instructor

ANTH 533 (3) Anthropology of Gender

Major anthropological theories of gender relations are read, discussed, and applied to a variety of contemporary ethnographic case studies. Prerequisite: ANTH 101, 103, or 230/330, or permission of instructor

ANTH 534 (3) Ethnographic Classics

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

ANTH 535 (3) Origins of Civilization

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

Prerequisite: ANTH 101, 103, or 230/330, or permission of instructor

ANTH 536 (3) Anthropology of Aging

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

Prerequisite: ANTH 101, 230/330, or 220/230, or permission of instructor

ANTH 537 (3) Applied Anthropology**ANTH 538 (3) Anthropological Theory****ANTH 539 (3) Qualitative Research Methods****ANTH 580 (3-6) Fieldwork: Archea/Ethno**

Field experience in which method and theory are learned through participation in and on-going field project.

Prerequisite: one of the following: ANTH 101, 103, 102, 210/310, or 220/320, or permission of instructor

ANTH 585 (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.

ANTH 586 (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.

Prerequisite: depends on topic and instructor

ANTH 591 (1-3) Archaeology Laboratory

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

ANTH 592 (1-3) Biological Anthro Lab

Guided advanced laboratory work in biological/physical anthropology.

Prerequisite: ANTH 221 and 321, or permission of instructor

ANTH 593 (1-3) Ethnology Lab

Individual projects are done in close coordination with faculty member. Prerequisite: permission of instructor

ANTH 601 (3) Seminar

A comprehensive historical overview of the major theoretical schools of thought in anthropology. Special emphasis given to assumptions, methods of data collection and analysis, and major issues surrounding each theoretical perspective.

Prerequisite: permission of instructor

ANTH 602 (3) Seminar: Research Methods

Advanced review of major qualitative and quantitative methods used in anthropological research. Course is also intended to aid students in the preparation of the thesis proposal.

ANTH 603 (3) Seminar: Professional Practice

This course introduces professional ethics, comportment, and practice in anthropology. Students learn how to prepare grant proposals, project bids, articles, and professional reports. Emphasis is placed on the requirements of writing and presentation style in nonacademic contexts. Visiting applied anthropologists make special presentations and serve as resources for the course.

ANTH 604 (3) Seminar: Advanced Topics

A seminar on a topic from one of the major sub disciplines in anthropology. Topic is announced. Seminar may be taken more than once for credit, as the topic changes.

Prerequisite: permission of instructor

ANTH 677 (1-6) Individual Study

Prerequisite: permission of instructor

ANTH 697 (1-12) Internship

Practical field experience, usually under the supervision of some off-campus professional

Prerequisite: permission of instructor

ANTH 699 (3-6) Thesis

Preparation on the master's thesis

Prerequisite: permission of instructor

ART MA**ART EDUCATION MS**

(DISCIPLINE-BASED)

College of Arts & Humanities

Department of Art

136 Nelson Hall • 509-389-6412

Chair: James Johnson, MFA

Graduate Coordinator: Ralph Jacobs, Ed.D.

Harlan Bloomer, MFA; Hope Cook, MFA; Brian Frink, MFA; Curt Germundson, Ph.D.; James Johnson, MFA; Rea Mingeve, MFA; David Morano, MFA; Todd Shanafelt, MFA; Gina Wenger, ABD

The Department of Art at Minnesota State University occupies a modern building at one end of the central campus. The graduate art faculty, diverse in educational and professional experience, shares the objective of quality education in a stimulating and creative environment. Small classes ensure personalized instruction from a faculty committed to excellence in their various studio and academic specialties. Graduates from the program are placed not only in education and business but often pursue additional work toward advanced degrees. The flexibility acquired by art graduate students as they develop their ideas and skills is attractive to potential employers.

The serious student with appropriate undergraduate art credentials may select courses in various specialized areas leading to a Master of Arts or Master of Science degree. Successful applicants for each of these options must have a four-year baccalaureate degree from an accredited institution with a minimum undergraduate grade point average of 2.75/4.0 for the last two undergraduate years for the degree. A portfolio must be submitted and approved with the application for full admission. Applications are considered for each term and summer session. A comprehensive oral examination is required for the MA degree and the written examination is required for the MS degree in Art. Program options are flexible to accommodate specific needs or objectives in art education or in the studio areas of ceramics, drawing, fiber design, graphic design, painting, photography, printmaking or sculpture. An attractive feature of the studio curriculum, for example, is the creative thesis option, which includes a brochure and exhibition. A thesis or alternate plan paper options are available for education degrees.

Students enjoy the advantages of excellent facilities, including the Conkling Art Gallery, a versatile, contemporary space providing exhibitions in all media from local, regional and national artists and collections. Student exhibitions, along with gallery openings, lectures and workshops, contribute significantly to a feeling of community among students, faculty and gallery patrons. In addition to the department's own slide collection, the Memorial Library provides a number of resources for art students. A vigorous art community in the Mankato, southern Minnesota and Minneapolis-St. Paul areas offers valuable off-campus stimulation and exhibition opportunities.

Admission. Candidates must complete departmental admission requirements as well as the requirements specified by the College of Graduate Studies and Research. An undergraduate major in art or its equivalent is required to pursue a graduate degree.

Student Work. The department may request the retention of at least one student work from the creative thesis exhibition for its permanent instructional and exhibition collection and the right to use photographs of students and their work. Additionally, the department cannot insure student work, material and equipment or take responsibility for its loss or damage.

P/N Grading. Students from other fields may elect graduate courses in art for P/ N grading if prerequisites have been fulfilled or special consent is given by the instructor. Art majors are required to take art courses under the regular letter grade system except as indicated under general Graduate College requirements.

Studio Course Costs. Notations showing the costs of individual courses are included in the semester course schedules. In some cases, student fees are charged for materials used. Verifying such information with the individual instructor is suggested.

ART MA

(Thesis Plan only - 30 credits)

The Art MA degree is offered as a studio arts emphasis only.

Required Core (6 credits)

ART 601 Introduction To Research (3)

ART 699 Thesis (3)

Required Art History (3-6 credits)

Choose any 500 level Art History courses (3-6 credits)

Required Art Studio (15-18 credits)

Choose any 5/600 level Art Studio courses (15-18 credits)

Required Related (non-art) Electives (2-8 credits)

Choose any 5/600 level related elective courses (2-8 credits)

ART EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program where an emphasis in art is available. Please see the section concerning the MAT program listed in this bulletin.

Required Core (3 credits)

ART 600 Introduction To Research (3)

Required Art History (6 credits)

Choose any 500 level Art History courses (6 credits)

Required Art Studio (6 credits)

Choose any 5/600 level Art Studio courses (6 credits)

Required Related (non-art) Electives (6 credits)

Choose any 5/600 level related elective courses (6 credits)

Required Professional Education Courses (6 credits)

EDFN 640 Advanced Evaluation in Educational Settings (3)

EDFN 641 Evaluative Procedures in Problem Solving Situations (3)

Required Thesis or Alternate Plan Paper

ART 699 Thesis (3-6)

ART 694 Alternate Plan Paper (1-2)

COURSE DESCRIPTIONS

500 (3) Graphic Design

Advanced level graphic design and graphic communication problems. (F,S)

Pre: Art 300 or consent

510 (3) Drawing Workshop

Continued in-depth exploration of drawing techniques and concepts. (F,S)

Pre: Art 410 or consent

512 (3) Life Drawing

Advanced experience in drawing from the human figure. (F,S)

Pre: Art 412 or consent

513 (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: consent

514 (3) Early Medieval Art

Introduction to art and architecture of Western Europe, the Byzantine Empire and the Islamic World from the second to the early twelfth centuries. Examination of

representative works of art and major styles of Christian, Jewish, Germanic, Celtic and Islamic Cultures.

515 (3) Later Medieval Art

Introduction to the art and architecture of Western Europe from the mid-twelfth through the fifteenth centuries. Examination of representative works of art and major styles of secular and Christian religious medieval art of the Romanesque and Gothic periods.

516 (3) Art of Africa, The Americas and the South Pacific

Introduction to the art and architecture of indigenous peoples. Examination of representative works of art and major styles and cultures of preliterate societies in Africa, the Americas, Oceania, and of Pre-Columbian civilizations in the Americas.

Pre: consent

519 (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: consent

521 (3) Art Methods Elementary School

Art expression related to child growth, development and teaching strategies. Emphasis on two-dimensional projects. (Required for student teaching and certification.) (F,S)

523 (3) Elementary Art Materials II

Advanced elementary teaching methods and art materials, emphasis on three-dimensional projects.

Pre: Art 421 or Consent

524 (3) Art for the Exceptional Child

Theory and practice of teaching mentally challenged, physically handicapped and other exceptionals.

Pre: Art 421 or Consent

525 (3) Current Issues in Art Education

Teaching art as related to current trends, philosophies, and issues.

Pre: Art 426 or consent

526 (3) Art Methods Secondary School

The characteristics and evaluation of junior and senior high art expression: the status, curricula and strategies of teaching. (Required for student teaching)

Pre: Art 421 or Consent

528 (3) Teaching Art History & Appreciation

Application of instruction in art history and appreciation to elementary and secondary schools.

Pre: Art 260, 261, 421 or consent

530 (3) Fibers

Advanced fabrication of textiles using loom and off loom techniques. (F,S)

Pre: Art 430 or consent

540 (3) Painting

First course in introductory graduate painting in oil and/or acrylics. May be taken by non-majors. (F,S)

Pre: consent

545 (3) Watercolor

Advanced experience in watercolor. (F,S)

Pre: consent

550 (3) Ceramics

An advanced course which emphasizes individual research in technical, aesthetic and conceptual considerations. (F,S)

Pre: Art 450 or consent

560 (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: consent

562 (3) Renaissance Art

Origins and development of Northern and Italian Renaissance art and architecture as an expression of historical, cultural and religious issues.

Pre: consent

563 (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: consent

566 (3) Realism to Postmodernism

Historical survey of art, architecture and urban planning in Europe and America from the mid-nineteenth century to the present: Realism, Impressionism, Expressionism, Surrealism, Abstract Expressionism, Minimalism, Op Art, Pop Art, and Postmodern issues and trends. (F)

Pre: consent

568 (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 point of view, using analysis strategies that consider style, composition, historical context, functional/propagandistic significance and communicative ability.

Pre: consent.

569 (3) Asian Art

Historical survey of the art and architecture of China, India, Korea and Japan from pre-history to the 19th century.

Pre: consent

570 (3) Print Studio

Continued investigation of advanced print making techniques and concepts. (F,S)

Pre: Art 470 or consent

575 (3) Photography

Expanding technical knowledge and visual awareness while building a portfolio in selected areas. (F,S)

Pre: consent

580 (3) Sculpture

Continuing development of a strongly personal means of aesthetic expression in three dimensions. (F,S)

Pre: Art 480 or consent

590 (1-6) Workshop

In depth investigation of a selected topic. (F,S)

592 (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

594 (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.

600 (1-9) Graphic Design

Advanced graduate level graphic design and graphic communication problems. May be repeated. (F,S)

Pre: Art 500 or consent

601 (3) Introduction to Research in Art

Introduction to the modes of research appropriate to art including creative research studies and investigative thesis research.

Pre: consent

605 (1-9) Graduate Art Studio

Graduate level course for all studio specializations. May be repeated.

Pre: one 500 level course in the studio specialization.

610 (1-9) Drawing

Continued exploration of drawing techniques and concepts at the graduate level.

May be repeated. (F,S)

Pre: Art 510 or consent

630 (1-9) Fibers

Advanced graduate level textile fabrication. Should produce a consistent body of work. May be repeated. (F,S)

Pre: Art 530 or consent

640 (1-9) Painting

Graduate painting, emphasizing development of individual vision. May be repeated. (F,S)

Pre: Art 540 or consent

645 (1-9) Watercolor

Independent creative development. May be repeated.

Pre: Art 545 or consent (F,S)

650 (1-9) Ceramics

A graduate course emphasizing further development and refinement of a body of work in preparation for a thesis and examination. May be repeated. (F,S)

Pre: Art 550 or consent

670 (1-9) Print Studio

Graduate level printmaking. May be repeated. (F,S)

Pre: Art 570 or consent

675 (1-9) Photography

Refinement of technical skills, seeing, and critical abilities while producing a significant body of work. May be repeated. (F,S)

Pre: Art 575 or consent

677 (1-9) Individual Study

Creative and technical problems or research in selected area. All students must file a special form in department office at time of registration. (F,S)

Pre: consent

680 (1-9) Sculpture

Continuing development of a strongly personal means of aesthetic expression in three dimensions. May be repeated. (F,S)

Pre: Art 580 or consent

692 (1-6) Art History Grad Seminar

Specific problems in art emphasizing both individual research and contributions to the seminar group on advanced, in-depth topics appropriate for graduate students.

Pre: consent

694 (1-2) Alternate Plan Paper

Alternate plan paper in lieu of thesis, done in cooperation with major professor. (Credit is "incomplete" until final approval by student's graduate committee.) (F,S)

Pre: consent

697 (1-12) Internship

Field experience in professional setting relating to the specialization: graphic design, museum or arts administration, etc. (F,S)

Pre: consent

699 (3-6) Thesis

Required of all candidates for the Master of Science or Master of Arts degrees. May be creative project or brochure exhibition option. (Credit is "incomplete" until final approval by student's graduate committee.) (F,S)

Pre: consent

AUTOMOTIVE ENGINEERING TECHNOLOGY

*College of Science, Engineering & Technology
Department of Automotive and Manufacturing
Engineering Technology*

205 Trafton E • 507-389-6383 • Fax 507-389-5002

Chair and Graduate Coordinator: Dr. Harry Petersen, Ph.D.

Ann Goebel, MS; Gary Mead, MS; Bruce Jones, Ph.D.; Andrzej Markowski, Ph.D.; Paul Sullivan, Ph.D.

Although there is no graduate degree program in Automotive Engineering Technology, graduate work is possible. By combining courses in AET with courses in other programs, a student may create a graduate program leading to a Master of Science degree in Multidisciplinary Studies. Also, 10 credits of AET course work can be used to meet the requirements of the Master of Science: Manufacturing Engineering Technology degree. For further information, contact the department chairperson at 507-389-6383.

COURSE DESCRIPTIONS

AET 535 (1-4) Automotive Design & Construction

Involves designing and building of prototype vehicles. Topics include: vehicle design decisions, rules, budgets, chassis design, body and aerodynamics, drive train choices, construction techniques, and test procedures. An actual experimental car will be built in this class. May be repeated.

BIOLOGY

AET 568 (4) Automotive Research Methods & Design of Experiments

Automotive research techniques and equipment form the basis for this course. Environmental measurement, air flow testing, engine dynamometer testing, and vehicle performance measurement are covered. Emphasis is placed on research procedures, data acquisition and interpretation, and technical report writing. Current research projects from the automotive industry are also examined.

Prerequisite: AET 366, STAT 154

AET 592 (1-4) Seminar: Automotive

Selected automotive topics.

AET 637 (1-3) Automotive Emission Design and Measurement

An in-depth laboratory experience involving the evaluation of existing automotive emission control systems and the design or modification of those systems. Emission testing using chemical analysis and chassis dynamometer as required in state and federal test procedures is also included.

AET 638 (1-3) High Performance Engineering

This course is intended for individuals wishing to be employed in professional automotive racing as a product development engineer, technical representative for a race product supplier, or race engineer. An in-depth study of vehicle dynamics and engine design utilizing on-board data acquisition, air flow measurement, and the engine dynamometer.

AET 647 (1-3) Advanced Automotive Emissions and Measurement

A continuation of AET 637.

AET 648 (1-3) Advanced High Performance Engineering

A continuation of AET 638.

AET 677 (1-4) Individual Study

AET 694 (1-2) Alternate Plan Paper

AET 697 (1-5) Internship: Automotive

Automotive work experience in an area pertinent to the student's objective. Registration required prior to beginning employment.

AET 699 (2-4) Thesis

BIOLOGY MS

BIOLOGY EDUCATION MS

(DISCIPLINE-BASED)

College of Science, Engineering, & Technology

Department of Biological Sciences

242 Trafton Science Center S • 507-389-2786

Chair: Gregg Marg, Ph.D.

Graduate Coordinator: Steve Mercurio, Ph.D.

Daryl Adams, Ph.D.; Michael Bentley, Ph.D.; William Bessler, Ed.D.; Christopher Conlin, Ph.D.; John Frey, DA; Marilyn Hart, Ph.D.; Keith Klein, Ph.D.; Penny Knoblich, DVM, Ph.D.; John Krenz, Ph.D.; Mark Lyte, Ph.D.; John Madsen, Ph.D.; Alison Mahoney, Ph.D.; Gregg Marg, Ph.D.; Brock McMillian, Ph.D.; Donovan Nielsen, Ph.D.; Bertha Proctor, Ph.D.; Christopher Ruhland, Ph.D.; Robert Sorensen, Ph.D.; Edward Williams, Ph.D.; Dorothy Wrigley, Ph.D.

The Biological Sciences graduate program is designed flexibly to allow students, with their advisors, to mold and focus their program of study on professional interests and specific needs. To do this, students can draw from a broad range of graduate courses and select from a diverse and well-trained faculty for direction in research.

The Department of Biology is located in Trafton Science Center one of the best science buildings in the state university system. Trafton Science Center presents an open, collaborative atmosphere for graduate study and research, and includes well-equipped research and classroom laboratories. Another attractive feature is Biology's proximity to other science departments, whose faculty members provide opportunities for multidisciplinary study in chemistry, mathematics, computer science, physics and electrical engineering.

The department's modern facilities provide opportunities for research and teaching, with 18 research laboratories, plus support areas. Among those are a media kitchen, environmental chambers, animal complex, greenhouse, dishwashing facility, herbarium, museum and a garage for field equipment. The department's equipment is suitable for biological investigations ranging from ecosystem analysis to subcellular physiology.

Instrumentation available includes transmission and scanning electron microscopes, ICP, ultracentrifuges, diode array spectrophotometers, graphite furnace AA, scintillation counter, gas chromatographs with FID, ECD and MSD, ultrafreezers, computer-controlled physiology data acquisition, Coulter counter, fermentation facility, freeze dryers, thermocyclers (PCR) and other equipment necessary for modern biological research opportunities.

All members of the biology graduate faculty hold doctorates and have extensive research experience. Areas of concentration in research and teaching are Biology Education, Microbiology, Human Biology/Physiology, Environmental Science, Ecology, and Plant Science. Sub areas of teaching specialization include cellular biology, developmental biology, plant and animal ecology, genetics, parasitology, immunology, entomology, and aquatic biology.

Approximately 25 graduate teaching assistantships (TA) are available each year to qualified applicants. A minimum 3.0 GPA in undergraduate courses in math, chemistry, biology and physics and a 600 TOEFL are required for consideration of a TA. Research assistantships are also offered, depending on external funding. Applications should be submitted by February 3 to the Biological Sciences Department. Although the first selection of assistantships occurs in March for the following academic year, the department encourages applications year-round because periodic openings occur.

Admission. In addition to completing the minimum requirements for the College of Graduate Studies and Research, admission to the Biology program must be approved by the Biology Graduate Committee prior to completion of 16 credits of graduate coursework.

For admission to the Biology Program, applicants must provide a one-page statement of career interests and goals. In addition, the applicant must have an undergraduate degree in Biology from an accredited, four-year institution or in another field of science with evidence of having had the following equivalent undergraduate biology core: Biology I (BIO 105), Biology II (BIO 106), Genetics (BIO 211), and two of the following: General Ecology (BIO 215), Cell Biology (BIO 320) or physiology course including laboratory. Students lacking one or more of the above courses may be admitted to the program on the condition that the deficiencies will be rectified during their first year in the program.

In addition, a booklet, "Graduate Studies in Biology," is issued to help each student and advisor keep the graduate program on schedule.

Requirements. The Written Comprehensive Examination may be required at the discretion of the Examining Committee. The Oral comprehensive Examination is required for each degree candidate and it will include an open seminar on the candidate's research. The candidate will distribute seminar announcements to department faculty at least one week prior to the seminar.

BIOLOGY MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (11 credits)

BIOL 601 Biometrics (2)

BIOL 602 Research Methods/Proposal (2)

BIOL 695 Graduate Seminar (1) (3 Seminar credits required)

BIOL 619 Selected Topics (2-3) (4 Selected Topics credits required)

ENVI 619 Selected Topics (3)

(may be taken to satisfy 3 credits of the BIOL 619 requirement)

Required Electives (19-23 credits)

Choose any 500/600 level Biology courses in consultation with an advisor

Required Thesis or Alternate Plan Paper

BIOL 694 APP (1-2)

BIOL 699 Thesis (3-6)

BIOLOGY EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. Please see the section concerning the MAT program that is listed in this bulletin.

Required Core (11 credits)

BIOL 601 Biometrics (2)

BIOL 602 Research Methods/Proposal (2)

- BIOL 695 Graduate Seminar (1) (3 Seminar credits required)
 BIOL 619 Selected Topics (2-3) (4 Selected Topics credits required)
 ENVI 619 Selected Topics (3) (may be taken to satisfy 3 credits of the BIOL 619 requirement)

Required Biology Electives (7-11 credits)

Choose any 500/600 level Biology courses in consultation with an advisor

Required Professional Education (6 credits)

Choose 6 credits of professional education courses in consultation with an advisor

Required Related Science Electives (6)

Choose 6 credits of related science courses in consultation with an advisor

Required Thesis or Alternate Plan Paper

BIOL 694 Alternate Plan Paper (1-2)

BIOL 699 Thesis (3-6)

COURSE DESCRIPTIONS

BIOL 502 (4) Stream Limnology

Study of flowing water on environment. Lab (fieldwork) included.

Prerequisite: BIOL 105, 106, 215, or consent

BIOL 503 (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.

(S) Prerequisite: BIOL 215 or consent

BIOL 504 (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.

(S) Prerequisite: BIOL 105, 106, 215, or consent

BIOL 505 (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.

(F) Prerequisite: BIOL 105, 106, 215, or consent

BIOL 508 (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, 106, 215 or consent

BIOL 509 (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, 106, 215 or consent S

BIOL 510 (3) Human Ecology

The human species' place in the biological world, effects on various communities, and potential methods of correcting the detrimental effects with economic and social implications.

(S) Prerequisite: BIOL 105, 106, 215, or consent

BIOL 511 (2) Evolution for Teachers

This course is designed for students preparing to become science teachers in grades 5-12. It will expand on the genetics and evolution background material contained in the biology core. Special emphasis will be given to dealing with the controversial nature of the concept. Hands-on activities and exercises will be stressed.

(S) Prerequisite: BIOL 105 and 106

BIOL 512 (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.

(S) Prerequisite: BIOL 105, 106, 215 or consent

BIOL 517 (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.

(S) Prerequisite: BIOL 100 or 105

BIOL 518 (4) Macro & Microscopic Imaging

Properties and physical principles underlying biological images. The course provides a survey of macro-imaging techniques (such as x-ray tomography, magnetic resonance imaging, positron emission tomography, and ultrasound) and micro-imaging techniques (such as light microscopy, transmission and scanning electron microscopy, fluorescence microscopy, laser scanning confocal microscopy, and atomic force microscopy).

(F) Prerequisite: one year of physics

BIOL 519 (2-3) Special Topics in Instrumentation

Instruction in specialized biological instrumentation.

(F) Prerequisite: BIOL 105 and 106

BIOL 520 (3) Diagnostic Parasitology

Clinically important parasites. Protozoans, Flukes, Tapeworms, Roundworms, Ticks, Mites, and Insects. Designed for Medical Technology, Pre-Medicine, Pre-Veterinary, and Biology majors. Identification, clinical disease, epidemiology, and ecology are covered. Lab included. (S)

BIOL 521 (3) Entomology

Morphological, ecological, medical, and economic significance of insects.

(ALT-F) Prerequisite: BIOL 105 and 106 or consent

BIOL 530 (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.

(S) Prerequisite: BIOL 230

BIOL 531 (3) Comparative Animal Physiology

A comparison of adaptation mechanisms, from cell to organ-systems, used by animals in response to "changes in" environmental conditions such as oxygen, carbon dioxide, food availability, temperature, wate, solutes, pressure and buoyancy.

(ALT-F) Prerequisite: BIOL 105, 106 or consent

BIOL 532 (4) Limnology

Biotic, physical, and chemical characteristics of lakes. Lab (fieldwork) included.

(F) Prerequisite: BIOL 105, 106, 215, or consent

BIOL 533 (3) Cardiovascular Physiology

This course is a functional study of the heart and circulatory systems.

(S) Prerequisite: BIOL 230

BIOL 534 (3) Development & Human Embryology

Understanding the process of cell differentiation and development. These principles are then applied to the descriptive study of human embryology including the basis of congenital malformations.

(F) Prerequisite: BIOL 100 or 105

BIOL 535 (4) Histology

Study of types, arrangements, and special adaptations of human tissues. Lab included.

(S) Prerequisite: BIOL 220

BIOL 536 (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. (S)

Prerequisite: BIOL 105, 106, or consent

BIOL 538 (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.

(S) Prerequisite: BIOL 100 or 105

BIOL 540 (4) Horticulture

Fundamental principles of horticulture: classification, structure, growth and reproduction, technology including propagation, mineral nutrition, training and pruning, growth regulation and protection, horticultural crops, and esthetic horticulture. Lab included.

(F) Prerequisite: BIOL 105 and 106

BIOL 541 (4) Plant Physiology

Plant functions such as water relations, mineral nutrition, translocation, metabolisms, photosynthesis, photorespiration, fat and protein metabolisms, respiration, growth and development, phytohormones, reproduction and environmental physiology. Lab included.

(S) Prerequisite: BIOL 105, 106, 217, and one semester organic chemistry

BIOLOGY

BIOL 542 (4) Plant Taxonomy

Field identification of plants with emphasis on local flora. History of systematics, techniques, plant biogeography, methods of plant collection, preservation, preparation of herbarium specimens are covered. Lab and field trips included
(S) Prerequisite: BIOL 105, 106, or consent. BIOL 217 recommended.

BIOL 543 (4) Plant Ecology

BIOL 545 (4) Economic Botany

We interact with plants every day and they've had a profound effect on human history and society. This course surveys the roles of plants in foods, beverages, medicines, drugs, poisons, fibers, fuels, building materials, ceremony, landscape, and more. Lecture, discussion, lab, and field trip. Open to non-science majors.
(F) Prerequisite: BIOL 100 or 105 or consent

BIOL 549 (2) Computers, Networks, & Science

This course provides students with the necessary skills to explore and utilize computer resources for scientific purposes. Students learn techniques for communicating with the world scientific community electronically, accessing internal computer networks, and locating computer-based scientific resources through a hands-on, problem solving approach.

BIOL 552 (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 ISO9000 practices.

(S) Prerequisite: BIOL 105, 106, or consent

BIOL 553 (4) Bioprocess Engineering Analysis I

The application of engineering principles and skills as applied to fermentation and to biological product recovery.

(F) Prerequisite: BIOL 270 and one semester each of calculus, physics, and organic chemistry

BIOL 554 (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.
(S) Prerequisite: BIOL 553

BIOL 556 (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.

(S) Prerequisite: concurrent enrollment in BIOL 553

BIOL 557 (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.

(S) Prerequisite: BIOL 556, concurrent enrollment in BIOL 554

BIOL 560 (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.

Prerequisite: BIOL 105, 106, and one year of general chemistry

BIOL 561 (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, and 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.

Prerequisite: BIOL 460/560

BIOL 562 (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.

Prerequisite: BIOL 105, 106, and general chemistry

BIOL 564 (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.

Prerequisite: BIOL 105, 106, and general chemistry

BIOL 565 (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.

Prerequisite: BIOL 464/564

BIOL 566 (3) Principles of Pharmacology

A lecture course that examines mechanisms of drug action, physiological responses and adverse reactions from sensitivities or allergies through overdose.

Prerequisite: BIOL 105, 106, 230, and one year of general chemistry

BIOL 567 (3) Industrial Hygiene

A lecture course that examines Minnesota State University 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.

Prerequisite: BIOL 105, 106, and one year of general chemistry

BIOL 572 (4) Microbial Ecology & Bioremediation

Role of microorganisms in soil, air, water, and sewage processes as well as methods of measurement and detection. Special emphasis on the role of microorganisms in bioremediation. Lab included.

Prerequisite: BIOL 105, 106, and 270

BIOL 574 (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.

(F) Prerequisite: BIOL 105, 106, and 270

BIOL 575 (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.

(F)

BIOL 576 (5) Microbial Physiology & 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.

(S) Prerequisite: BIOL 105, 106, 270

BIOL 578 (4) Food Microbiology & Sanitation

The role microbes play in production and spoilage of food products, as prepared for mass market. Topics include food-borne pathogens, epidemiology and control, and essential principles in sanitation including Hazard Analysis/Critical Control Point and ISO 9000 requirements. Lab included.

(S) Prerequisite: BIOL 105, 106 and 270

BIOL 579 (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.

(S) Prerequisite: BIOL 105, 106, or consent

BIOL 580 (2) Biological Laboratory Experiences for Elementary

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.

(F,S) Prerequisite: BIOL 100 and C&I 322

BIOL 585 (4) Biology Teaching Methods & 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.

(F) Prerequisite: 16 credits BIOL and EDFN 345

BIOL 586 (3) Field-Based Teaching Methods & 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.

Prerequisite: BIOL 485/585

BIOL 590 (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.

(F,S)

BIOL 591 (1-4) In-Service

(F, S)

BIOL 601 (2) Biometrics

This course will focus on the application of biometric principles to the planning and analysis of biological research similar to the student's thesis research. Completion of this course will aid the student in planning and completing her/his thesis.

(F)

BIOL 602 (2) Research Methods

The design, planning, and writing of a research proposal will be discussed in terms of problem selection, objectives, and appropriate methods. The students will apply information from the class to prepare their thesis proposals.

(S)

BIOL 603 (2) Research in the Biological Sciences I**BIOL 604 (2) Research in the Biological Sciences II****BIOL 605 (2) Ethical Issues in Biological Research**

What does it mean to do biological research ethically? This course will discuss scientific integrity and misconduct, human and animal research, conflicts of interest and the ethical dimension of other topics in modern biological and biomedical research.

BIOL 612 (3) Practicum in Electron Microscopy

A laboratory course of basic training in the instrumentation and methodology use in scanning and transmission electron microscopy. With a hands-on approach, students will learn instrument operation and techniques necessary to process and examine a variety of samples, and whenever possible, to examine specimens related to their own research interests.

(S) Prerequisite: BIOL 418/518

BIOL 618 (2) Biological Monitoring**BIOL 619 (2-3) Selected Topics in Biology**

Selected study of graduate level topics. May be repeated for different titled topic.

(F,S)

BIOL 677 (1-5) Individual Study

Prerequisite: consent

BIOL 681 (1-2) Laboratory Supervision

Practical experience in preparing and teaching laboratory courses.

(F,S) Prerequisite: consent

BIOL 685 (2) Teaching Assistant Methods

This course is design to provide teaching assistants (TA) with the knowledge and skills needed to prepare and teach college-level science courses. Special emphasis will be placed on the attainment of skills that maximize the effectiveness of material that will be presented to students.

(F)

BIOL 691 (1-5) In-Service

(F,S)

BIOL 694 (1-2) Alternate Plan Paper

(F,S)

BIOL 695 (1) Seminar

Students will attend and critique seminars presented by other students, faculty, and by people from external agencies and institutions.

Prerequisite: none (F,S)

BIOL 697 (1-12) Internship

(F, S)

BIOL 699 (1-6) Thesis

(F,S)

BUSINESS ADMINISTRATION

College of Business

150 Morris Hall • 507-389-5426

Although graduate courses are occasionally offered, the College of Business currently offers no graduate program.

ACCOUNTING AND BUSINESS LAW**ACCOUNTING****ACCT 500 (3) Advanced Financial Accounting**

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

Prerequisite: ACCT 301

ACCT 510 (3) Business Income Tax

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

S Prerequisite: ACCT 160

ACCT 511 (3) Individual Income Tax

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

S

ACCT 520 (3) Auditing

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

Prerequisite: ACCT 320

ACCT 521 (3) External Auditing

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

Prerequisite: ACCT 420

ACCT 522 (3) Internal Auditing

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

Prerequisite: ACCT 420

ACCT 570 (3) Advanced Topics

A study of accounting principles and concepts for governmental and not-for-profit organizations. It also includes an introduction to the Securities and Exchange Commission and a study of the Financial Accounting Standards Board's official pronouncements.

Prerequisite: ACCT 301

ACCT 577 (3) International Accounting**ACCT 579 (3) Executive Lectures****ACCT 677 (1-4) Individual Study****ACCT 690 (2) Seminar: Accounting****ACCT 694 (1-2) Alternate Plan Paper****ACCT 699 (3-6) Thesis****BUSINESS LAW****BLAW 552 (3) Employment & Labor Law**

Rights and duties of employer and employee, including the right to organize and bargain collectively. Federal employment discrimination laws, harassment and the duty to investigate, employee benefit laws, employee safety and worker compensation. Email privacy, drug testing, employer surveillance, ESOPS, and emerging employment issues.

Prerequisite: BLAW 200

BLAW 553 (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, and 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.
Prerequisite: BLAW 200

BLAW 574 (3) Environmental Regulation & 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.
Prerequisite: BLAW 200

BLAW 576 (3) Construction & 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.
Prerequisite: BLAW 200

BLAW 577 (3) Negotiation & 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.
Prerequisite: BLAW 200

BLAW 583 (1-3) Special Topics

Seminar topics may include 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 ESOPs, and complying with NAFTA.

BLAW 591 (1-3) Inservice**BLAW 600 (3) Global & Ethical Perspectives in Business****BLAW 677 (1-4) Individual Study****BLAW 694 (1-2) Alternate Plan Paper****BLAW 698 (1-6) Internship****BLAW 699 (1-4) Thesis****FINANCE****FINA 559 (3) Personal Financial Planning**

Fundamental concepts of personal financial management: insurance, budgeting, credit, savings, investments, retirement and estate planning, and consumer debt managements.
S

FINA 560 (3) Investments

Formulation of investment policy of individuals and institutions, factors influencing the values of securities, and techniques of portfolio selection and management.
Prerequisite: FINA 362

FINA 561 (3) Short-Term Financial Management

This course describes the nature and types of credit, instrument, and agencies. It deals with the management and analysis of consumer and commercial credit and control.
Prerequisite: FINA 362

FINA 562 (3) Strategic Financial Management

Applications of financial principles and analytical tools through the use of case studies and problems from local businesses.
S Prerequisite: FINA 362

FINA 563 (3) Security Analysis

Tools and techniques to aid in individual and institutional portfolio management.
Prerequisite: FINA 362 and FINA 460

FINA 564 (3) Financial Institutions & Markets

Introduction to money and capital markets, instruments, and institutions. Consideration of the management problems of financial institutions.
Prerequisite: FINA 362

FINA 566 (3) Employee Benefit Plan

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.
Prerequisite: FINA 362

FINA 567 (3) Insurance & Risk Management

Principles and practices of risk management in the recognition and treatment of exposure to potential financial loss and with primary emphasis on property and liability insurance for individuals and families.

FINA 568 (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 business firms.
Prerequisite: FINA 467

FINA 569 (3) International Business Finance

Financing investments and working capital management problems in multinational environments.
Prerequisite: FINA 362

FINA 570 (3) Life and Health Insurance

Nature and uses of various economic security devices in protecting and/or replacing the earning power of the human life at the personal, family, and business levels.

FINA 576 (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.

FINA 577 (3) Real Estate

Fundamental principles: valuation, brokerage, financing, law, property management, land descriptions, and basic investment.
Prerequisite: FINA 362

FINA 578 (3) Real Estate Investment

Property productivity analysis utilizing discount cash flow methodology, urban growth and taxation factors, and economic base analysis.
Prerequisite: FINA 362

FINA 579 (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 580 (3) Options and Futures

Trading practices and procedures utilizing these contracts in hedging and risk management policies for business.

FINA 582 (3) Commercial Bank Management

Fundamental concepts of commercial bank management: banking trends and performance evaluations, managing the balance sheet, and evaluating loan requests.

FINA 591 (1-4) In-Service**FINA 599 (3) Personal Financial Plan****FINA 631 (3) Financial Management****FINA 677 (1-4) Individual Study****FINA 694 (1-2) Alternate Plan Paper****FINA 695 (3) Seminar: Finance**

This course is provided on demand to interested graduate students who want to pursue further study in investigating the empirical and theoretical issues in the financial literature.

FINA 699 (3-6) Thesis**MANAGEMENT****MGMT 540 (3) Human Resource Management**

This course examines management of human resources in organizations. Topics include analyzing jobs and writing job descriptions; recruiting and hiring of applicants; complying with employment law; managing promotions, quits, and layoffs; employee training and development; evaluating job performance; determining compensation; and managing human resources in a unionized environment.
F,S

MGMT 541 (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.

S

MGMT 542 (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, and occupations requiring special pay programs.

F,S

MGMT 543 (3) Entrepreneurship

The course focuses on providing the knowledge and experience regarding the important aspects of new business ownership and management and covers the distinctive issues associated with start-ups and acquisitions to help entrepreneurs, managers, and those preparing for such roles to understand better the similarities and differences between new ventures and established firms.

F

MGMT 544 (3) Organization Design

This course provides an understanding of the processes that cause organizations to be structured in various forms. The impact on size, technology, strategy, culture, and environmental conditions on structure are examined. The internal processes of power, conflict, culture, and organizational transformation are also emphasized.

MGMT 545 (3) Training & Development

Students design and deliver training by assessing client needs, defining learning outcomes, choosing effective methods, training, and evaluating results.

F,S

MGMT 547 (3) Management: Special Topics

Special topics as requested by students.

S

MGMT 548 (3) Operations Planning & Control

This course covers the needs of managers in profit or non-profit organizations who are engaged in planning and control functions. The course also focuses on the use and application of emerging technologies in a global, competitive environment.

MGMT 549 (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.

S

MGMT 551 (3) Advanced Topics POM

This course covers recent developments and trends in operations management. The emphasis is on such issues as JIT, GT, FMS, CIM, Concurrent Engineering, DFM, and Optimized Technology. Case studies and industrial projects will be used to illustrate the implementation aspects of the subjects covered. POM software applications are also emphasized.

MGMT 552 (3) Operations Strategy

Capstone course covering strategic issues in Operations Management, and their practical consequences for policy making. The emphasis is one (a) understanding how manufacturing interacts with other business functions, e.g. marketing, accounting, and finance, and (b) determining how the manufacturing function can contribute to the success of the firm.

MGMT 559 (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.

F

MGMT 580 (3) Human Behavior in Organization

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.

F,S

MGMT 582 (3) Business, Society & Ethics

This course examines business organizations as one part of a complex socioeconomic system. It analyzes the ways in which businesses and societies interact with each

other. It examines how managers can more effectively deal with issues that arise in society that may affect the organization. Business ethics is one thread that runs throughout the course.

S

MGMT 585 (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.

MGMT 600 (3) Techniques of Research

This course explores the research process as an aid to making decisions and examines the role of research in decision-making, problem identification and formulation, assessment of the value of research, research proposals, literature reviews, research designs, sampling, measurement, scaling, questionnaires, data collection, data preparation, and the purposes of major data analysis methods.

MGMT 607 (3) Statistical Analysis for Business

Advanced concepts, data analysis, with emphasis on Chi square, analyses of variance and multiple correlation, and regression.

MGMT 641 (3) Total Quality Management

Concepts of TQM including employee involvement, leadership, competition, internal time, cost, and workplace.

MGMT 651 (3) Human Behavior in Organizations

MGMT 677 (1-4) Individual Study

MGMT 685 (3) Introduction to Operations Research

Quantitative methods of operations research/management sciences used for managerial decision making are explored. Topics covered include: resource allocation problems (linear programming, integer programming), network flow problems (PERT/CPM), and queuing models.

MGMT 691 (1-3) In-Service

MGMT 693 (3) Management of Human Resources

This course examines managing the human resources of an organization. It covers assigning the work to be done to jobs; recruiting, hiring and training employees; managing promotions, transfers, layoffs, and terminations; evaluating employee performance; and determining employee compensation. Attention is given to managing a diverse work force in a global marketplace.

MGMT 694 (1-2) Alternate Plan Paper

MGMT 696 (3) Seminar: Management

MGMT 698 (1-6) Internship

MGMT 699 (3-6) Thesis

MARKETING AND INTERNATIONAL BUSINESS

MARKETING

MRKT 510 (3) Principles of Marketing Management

An introductory course for graduate students without undergraduate business degrees: basic marketing concepts and analysis.

MRKT 513 (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.

Prerequisite: MRKT 310

MRKT 515 (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.

Prerequisite: MRKT 310, 316

MRKT 520 (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.

Prerequisite: MRKT 310, 412

MRKT 528 (3) International Marketing

This course takes a managerial approach to analyzing marketing decision making in multinational market situations.

F Prerequisite: MRKT 310 and IBUS 380

CHEMISTRY

MRKT 541 (3) Consulting for Small Business

Student teams assist businesses with problems by conferring with clients, conducting analyses, and recommending solutions. Problems may encompass accounting, finance, personnel procedures, production, or marketing.

Prerequisite: consent of instructor

MRKT 591 (1-4) In-Service

Topics will vary across various hands-on practical experience.

Prerequisite: consent of instructor

MRKT 602 (4) Basic Business Functions

MRKT 677 (1-4) Individual Study

S Prerequisite: consent of instructor

MRKT 694 (1-2) Alternate Plan Paper

Independent research related to topic proposal for alternate plan paper.

F Prerequisite: consent of instructor

MRKT 697 (3) Seminar: Marketing

Prerequisite: consent of instructor

MRKT 698 (1-6) Internship

F Prerequisite: consent of instructor

MRKT 699 (3-6) Thesis

Prerequisite: consent of instructor

INTERNATIONAL BUSINESS

IBUS 519 (3) International Business Seminar

Topics on current developments in international trade and legislation.

Prerequisite: IBUS 380

IBUS 528 (3) International Marketing

Managerial approach to marketing decision making in multicultural market situations.

F Prerequisite: MRKT 310, IBUS 380

IBUS 548 (3) International Business Management

Comparison of the major management systems within their differing cultural environments. Analysis of differing value systems, group behaviors, conflicts, and supervisory problems.

Prerequisite: MGMT 330 and IBUS 380

IBUS 549 (3) International Business Policy

A capstone course for students majoring in international business designed to analyze and integrate the various international business management decisions.

Prerequisite: IBUS 380, business foundation courses

IBUS 569 (3) International Business Finance

Financing investments and working capital management problems in multinational environments.

Prerequisite: FIRE 362, IBUS 380.

IBUS 575 (3) International Business Law

Comparison of the two major systems of law: code and common, and their effects on commercial transaction between firms in different countries.

IBUS 585 (3) Export Administration

Provides knowledge and documentary skills in managing and implementing the export operations of firms engaged in international trade.

Prerequisite: IBUS 380

IBUS 586 (3) Consulting for Export Business

Student teams under faculty supervision assist area firms interested in developing or expanding international business.

Prerequisite: senior standing/consent of instructor

IBUS 591 (1-4) In-Service

Topics will vary across various hands-on practical experiences.

Prerequisite: consent of instructor

IBUS 677 (1-4) Individual Study

S Prerequisite: consent of instructor

IBUS 692 (3) Multinational Business Management

Organization, finance, production, personnel, executive development, and nationalistic conflict problems of multinational business environment.

Prerequisite: consent of instructor

IBUS 694 (1-2) Alternate Plan Paper

F Prerequisite: consent of instructor

IBUS 696 (1-3) Seminar in International Business

Prerequisite: consent of instructor

IBUS 698 (1-6) Internship

F Prerequisite: consent of instructor

IBUS 699 (3-6) Thesis

Prerequisite: consent of instructor

CHEMISTRY MA

CHEMISTRY MS

College of Science, Engineering & Technology

Department of Chemistry and Geology

242 Trafton Science Center N • 507-389-1963

<http://cset.mnsu.edu/chemgeol/>

Chair: Jeffrey Pribyl, Ph.D.

Graduate Coordinator: James Rife, Ph.D.

Brian Groh, Ph.D.; Bryce Hoppie, Ph.D.; S. Dean Moosavi, Ph.D.; Marie Pomije, Ph.D.; James Rife, Ph.D.; Theresa Salerno, Ph.D.; John Thoenke, Ph.D.; Trent Vorlicek, Ph.D.

The Department of Chemistry and Geology offers programs that lead to Master of Arts and Master of Science degrees in chemistry. The MS is a professional degree leading to employment in industrial research or advancement to Ph.D. programs. The MA is designed to strengthen and broaden the academic and professional preparation of those students who qualify for teacher licensure.

The Graduate Program in the Department of Chemistry and Geology offers students an opportunity to strengthen their academic education in the field of chemistry and to develop the necessary research skills for future careers.

Housed in Trafton Science Center, the Department of Chemistry and Geology offers an experienced faculty with diverse research interests and exceptional teaching skills. The instruments which are available to graduate students in the Department of Chemistry include a 200 MHz Fourier Transform nuclear magnetic resonance spectrometer, gas chromatographs, high pressure liquid chromatograph, Fourier Transform infrared spectrometer, atomic absorption and ultraviolet-visible spectrophotometers, centrifuges, and a scintillation counter.

Admission. In addition to meeting the general requirements for admission to the College of Graduate Studies and Research, students must meet the following admission requirements for the department. Information should be sent to the Graduate Coordinator.

1. Three letters of recommendation from individuals familiar with the applicant's academic background, training, and abilities.
2. A minimum GPA of 2.75/4.0 for the last two years of the baccalaureate degree.
3. A minimum GPA of 2.50/4.0 in undergraduate math and science courses or a minimum score of 600 on the Chemistry Graduate Record Exam.
4. A core of undergraduate chemistry courses must have been completed, including one year of general chemistry, one year of organic chemistry, one course in analytical chemistry, one course in inorganic chemistry (beyond the freshman year), and one semester (two quarters) of physical chemistry.
5. International students must have a minimum TOEFL score of 500 if they have not received a bachelor's degree from an educational institution whose language of instruction is English. A score of 550 or more is recommended.

Provisional admission of students with lesser qualifications will be at the discretion of the Chemistry Graduate Committee.

CHEMISTRY MS

(Thesis Plan - 30 credits)

Required Core (10-14 credits)

CHEM 692 Research (4 minimum)

CHEM 695 Graduate Seminar (2) (may be repeated)

CHEM 699 Thesis (4 maximum)

Required Chemistry Electives (14-16 credits)

Choose a maximum of 10 credits of 500 level courses:

CHEM 513 CHEM 515 CHEM 523 CHEM 524 CHEM 534

CHEM 541 CHEM 551 CHEM 560 CHEM 561 CHEM 565

CHEM 566 CHEM 574 CHEM 577 CHEM 585

Choose at least two 600 level courses from:

CHEM 602 CHEM 616 CHEM 621 CHEM 642 CHEM 660

The following courses may not be used to fulfill the 14 credit elective requirement: CHEM 540, 550, 582, 677, 682, 685, 690, 692, 694, 695, 698, 699. Electives should be selected in consultation with an advisor

Required Science/Mathematics Electives Outside Major Field (6 credits)

6 credits at 500/600 level in Science/Mathematics (e.g. Biology, Physics, Mathematics, Computer Science, etc.), selected in consultation with an advisor.

Additional Requirements:

Fifty percent of all coursework must be taken at the 600 level.

All students must participate in two semesters of Graduate Seminar (CHEM 695). The presentation of one seminar each semester, and attendance at all other course meetings, are required. The first seminar, given early in the course of study, should be a research proposal, and the second seminar, given near the end of graduate study, will be a presentation of the student's thesis or alternate plan paper work.

All students must take proficiency exams at the beginning of the first semester of graduate study. The proficiency exams consist of undergraduate material in the following four areas: analytical, organic, inorganic, and physical chemistry. To be admitted to candidacy, a student must demonstrate proficiency in all four areas either by passing all four examinations or by passing with a grade of B or better the appropriate undergraduate courses selected by the Chemistry Graduate Committee.

All students must take written and oral comprehensive examinations. The written examination will be given by the student's examining committee and must be taken before the research proposal is submitted to the Graduate Office. Deficiencies revealed by the written examination should be rectified by enrollment in the appropriate course(s) followed by re-examination. The oral examination will be a thesis or alternate paper defense.

CHEMISTRY MA

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core Courses (6-12 credits)

CHEM 695 Graduate Seminar (2)

CHEM 677/692 Individual Study/Graduate Research (2-4)

Choose one of the following:

CHEM 699 Thesis (3-6)

CHEM 694 Alternate Plan Paper (1-2)

Required Chemistry Electives (minimum of 6 credits)

6 credits at 500/600 level, selected in consultation with an advisor

Required Science/Mathematics Electives Outside Major Field (minimum of 6 credits)

6 credits at 500/600 level in Science/Mathematics (e.g. Biology, Physics, Mathematics, Computer Science, etc.), selected in consultation with an advisor.

Required Professional Education Electives (minimum of 6 credits)

2-3 credits need to be taken from 600 level Educational Foundations courses. Electives should be selected in consultation with an advisor.

Additional Requirements:

See additional requirements described under the MS degree above.

COURSE DESCRIPTIONS

CHEM 507 (3) Water Chemistry

A broad introduction to the chemistry of natural waters and chemical analysis of such systems. Topics covered may include: macromolecular analytes, organic analytes, inorganic analytes, major component/minor component/trace component determinations, matrix effects, equilibrium processes, modeling of chemical/physical transport, regulatory monitoring, and compliance issues. Laboratory exercises will provide students with goal-orientated, cooperative experiences in sampling and measurement of complex samples.

Prerequisite: CHEM 305 (or equivalent) V

CHEM 513 (3) Advanced Inorganic Chemistry

A survey of topics in inorganic chemistry including quantum mechanics, symmetry and group theory, solid state chemistry, molecular structure and geometry, bonding theories, and coordination chemistry emphasizing the theoretical foundation.

Prerequisite: CHEM 440/540 (or equivalent) F

CHEM 515 (2) Inorganic Preparations

The preparation and study of inorganic/organometallic compounds utilizing a variety

of synthetic techniques including common Schlenk technique. The studies will include characterization by common instrumental methods such as IR, NMR, and UV-vis spectroscopy. Additional studies using instrumental techniques such as IR, NMR, UV-vis, electrochemistry, and magnetic susceptibility will also be conducted.

Prerequisite: CHEM 413/513 previously or concurrently S

CHEM 523 (4) Chemical & 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.

Prerequisite: CHEM 321 and 331 (or equivalent) F

CHEM 524 (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.

Prerequisite: CHEM 423523 (or equivalent) S-E

CHEM 534 (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.

Prerequisite: CHEM 321 (or equivalent) S-O

CHEM 540 (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.

Prerequisite: CHEM 305, 321, one year of physics, MATH 121 (or equivalent) F

CHEM 541 (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. The course concludes with a treatment of molecular reaction dynamics based on primary literature.

Prerequisite: CHEM 440/540, MATH 122 (or equivalent) S

CHEM 545 (2) Advanced Physical Chemistry

Integrated application of the content from 440 and 441 to an applied topic of interest to the instructor. The course will depend heavily on reading and discussion of the current primary literature of physical chemistry. Possible topics include: atmospheric chemistry, thermodynamics of protein folding, catalytic processes, or molecular processes at interfaces.

Prerequisite: CHEM 441/541 V

CHEM 550 (1) Physical Chemistry Laboratory I

Laboratory to accompany 540. 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 develop more independence and sophistication in planning, performing, and reporting experimental work.

Prerequisite: CHEM 440/540 previously or concurrently F

CHEM 551 (1) Physical Chemistry Laboratory II

Laboratory to accompany 541. 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.

Prerequisite: CHEM 441/541 previously or concurrently S

CHEM 560 (3) Biochemistry I

Detailed analysis of the structures, properties, and functions of proteins, carbohydrates, lipids, and nucleic acids; theory for the purification and analysis of proteins and nucleic acids. Concurrent enrollment in CHEM 565 is recommended.

Prerequisite: CHEM 321 and 331, and BIOL 105 and 106 (or equivalent) F

CHEM 561 (3) Biochemistry II

Detailed analysis of the reactions involved in intermediary metabolism, translation, and replication.

Prerequisite: CHEM 460/560 (or equivalent) S

CHEM 565 (1) Biochemical Techniques I

A lecture/laboratory course which presents methodology and instrumentation used to purify and analyze biomolecules. Techniques include chromatography, autoradiography and radioisotope techniques, agarose and polyacrylamide gel electrophore-

CLINICAL PSYCHOLOGY

sis, and spectrophotometry.

Prerequisite: CHEM 460/560 previously or concurrently. CHEM 305 is recommended. F

CHEM 566 (2) Biochemical Techniques II

Students work in teams to solve biochemical research problems by conducting and analyzing experiments which they design.

Prerequisite: CHEM 460/560 and 465/565 S

CHEM 574 (2) Chromatography

Theory and applications of thin layer, paper, liquid, and gas chromatography.

Prerequisite: CHEM 320 previously or concurrently is recommended F-E

CHEM 575 (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.

Prerequisite: CHEM 305; PHYS 212 or 222 previously or concurrently S

CHEM 577 (1-3) Special Topics in Instrumental Analytical Chemistry

Detailed study and focused discussion of a specific analytical technique such as electrochemistry, X-ray analysis, etc., or an area of analysis such as metals, bioanalytical, etc. May be taken more than once for credit, if the topic is different.

Prerequisite: CHEM 305 (or equivalent) V

CHEM 579 (4) Teaching Physical Science

Methods and materials for teaching physical sciences in middle school through high school. Clinical experiences required for the course.

Prerequisite: consent S

CHEM 582 (1-3) Problems in Teaching Science

Investigation of current issues and topics related to the teaching of science in K-12 grades. V

CHEM 585 (1-2) Seminar in Environmental Chemistry

Study of current environmental problems or issues with emphasis on the relevant chemical principles and understanding necessary to monitor or alleviate the problems.

Prerequisite: CHEM 305 (or equivalent) V

CHEM 590 (1-6) Workshop

CHEM 591 (1-6) In-Service

CHEM 597 (1-16) Internship

CHEM 602 (1-6) Topics: Analytical Chemistry

Recent advances in analytical chemistry or detailed study of advanced techniques or areas of analytical chemistry. This course may be taken more than once for credit if the topic is different.

Prerequisite: CHEM 305 (or equivalent) V

CHEM 616 (1-6) Topics: Inorganic Chemistry

Topics from inorganic chemistry which may include such fields as bioinorganic chemistry, organometallic chemistry, solid state chemistry, and other topics of current interest. This course may be taken more than once for credit if the topic is different.

Prerequisite: CHEM 413/513 (or equivalent) V

CHEM 621 (2-6) Topics: Organic Chemistry

Topics may include the chemistry of heterocyclic compounds or natural products, control of stereochemistry, photochemistry, advanced NMR techniques, or other areas of current interest not covered in other courses. This course may be taken more than once for credit if the topic is different.

Prerequisite: CHEM 321 and 331 (or equivalent) V

CHEM 642 (2-6) Topics: Physical Chemistry

Advanced consideration of some fundamental area in physical chemistry with application to a topic of current interest to the instructor and students. The course will depend on reading and discussion of current primary literature. Possibilities include: quantum mechanics and molecular structure calculations, condensed phase structure, development of novel materials, etc.

Prerequisite: CHEM 442/542 (or equivalent) V

CHEM 660 (2-6) Topics: Biochemistry

Detailed study of the literature in one selected area of biochemistry. This course may be taken more than once for credit if the topic is different.

Prerequisite: CHEM 461/561 (or equivalent) V

CHEM 677 (1-6) Individual Study

CHEM 682 (2) Chemistry for the Elementary Teacher

CHEM 685 (1-3) Laboratory Supervision & Maintenance

CHEM 690 (1-6) Workshop

CHEM 692 (1-6) Research

CHEM 694 (1-2) Alternate Plan Paper

CHEM 695 (1-2) Graduate Seminar

Students will present a seminar on either a research proposal for their graduate research or the results of their thesis research.

S

CHEM 698 (1-8) Internship

CHEM 699 (3-6) Thesis

CLINICAL PSYCHOLOGY MA

College of Social and Behavioral Sciences

Department of Psychology

23 Armstrong Hall • 507-389-2724

Chair: Rosemary Krawczyk, Ph.D.

Graduate Coordinator: Barry J. Ries, Ph.D.

Paul Brandon, Ph.D.; Michael Fatis, Ph.D.; Nancy Fenrick, Ph.D.; Phillip Goernert, Ph.D.; Daniel Houlihan, Ph.D.; Kimberly O'Farrell, Ph.D.; Edison Perdomo, Ph.D.; Lisa Perez, Ph.D.; Dan Sachau, Ph.D.; Tilman Sheets, Ph.D.; Robert Widner, Ph.D.

The Department of Psychology offers programs of study leading to the MA degree in Clinical Psychology and Industrial/Organizational Psychology.

Application for graduate study in Clinical Psychology should be initiated by contacting the Department of Psychology as well as the College of Graduate Studies and Research. Two separate applications are required. The Clinical Psychology Program application is available from the department and must be submitted to the clinical program to initiate the admission review process. All applicants should arrange to take the GRE and have scores forwarded to the College of Graduate Studies and Research and to the Clinical Program Admission Committee.

Financial Assistance. In recent years, the Department of Psychology has been able to award graduate assistantships to some students accepted into the program. Assistantships are awarded on the basis of standardized test scores and past performance as a graduate assistant.

Program Description. The Clinical Psychology Program is a full time, two year research oriented course of study which provides theoretical and applied training to students who wish to pursue doctoral study. Graduates typically pursue the doctorate in professional psychology.

Admission. In addition to completing the general admission requirements for the College of Graduate Studies and Research, the following must be completed:

1. A bachelor's degree in psychology from an accredited institution. Coursework must include statistics and a course in conditioning, learning or behavior modification.
2. Applicants who have a bachelor's degree other than psychology, from an accredited institution and courses in statistics, experimental psychology, personality, abnormal psychology, a course in conditioning, learning or behavior modification, developmental psychology (child, adolescent, or aging) and a course in history and systems of psychology.
3. Students with undergraduate course deficiencies may be considered, however, they must complete deficiencies prior to enrolling in advanced coursework.
4. The GRE is required (see department for specific requirements).
5. Three letters of recommendation, preferably from psychology professors.
6. A personal statement including the applicant's interest in clinical psychology and long term career goals.

CLINICAL PSYCHOLOGY MA

(Thesis Plan - 50 credits)

Required Core Courses (50 credits)

PSYC 610	Research Design & Statistics (4)
PSYC 613	Beh. Res. Meth (4)
PSYC 649	Behavior Theory and Philosophy (3)
PSYC 650	Schools of Psychotherapy (3)
PSYC 651	Adult Psychopathology & Therapy (4)
PSYC 654	Clinical Case Management (4)
PSYC 682	Child Psychopathology & Therapy (4)

PSYC 683	Beh. Assessment (4)
PSYC 689	Standards and Ethics (3)
PSYC 691	Clinical Practicum I (2)
PSYC 692	Clinical Practicum II (2)
PSYC 696	Research Clinical Psychology I (3)
PSYC 698	Research Clinical Psychology II (3)
PSYC 699	Thesis (3)

Required Elective

0 to 6 credits

Recommended

PSYC 519	Psychometric Theory (4)
PSYC 578	Behavioral Medicine (4)
PSYC 618	Multivariate Analysis (4)

COURSE DESCRIPTIONS

PSYC 504 (4) Memory and Cognition

A survey of the research and theories describing how humans perceive, elaborate, store, recover, and use information. Emphasis is placed on understanding and evaluating the experimental strategies used to gather data about human mental processes.

Prerequisite: PSYC 201 and 207 or 211 F,S

PSYC 505 (4) Motivation

Major concepts of human motivation and emotion, presentation of learned cognitive and biological influences on sustained behavior.

Prerequisite: PSYC 201, 211, or 217, or consent V

PSYC 507 (4) Advanced Behavior Analysis

The science and technology of behavior analysis. The application of the principles of operant and respondent conditioning to the understanding and modification of human behavior. The primary mode of instruction is unit/mastery based on the text. There will also be a lab component involving human and animal experiments.

Prerequisite: PSYC 207 F,S

PSYC 509 (3) History of Psychology

Examination of the historical origins of the principal contemporary psychological theories.

Prerequisite: two of PSYC 404, 407, 413, or 421 F,S

PSYC 513 (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 effect of maturation and learning in altering those patterns are also considered.

Prerequisite: PSYC 201, 207, or 211 F

PSYC 519 (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.

Prerequisite: PSYC 201 F

PSYC 520 (4) Drugs and Behavior

Drug and alcohol use and abuse including history, biology, psychology, sociology, and clinical treatment and prevention of abuse.

Prerequisite: PSYC 521 or equivalent V

PSYC 521 (4) Biopsychology

Biological basis of psychological processes and behavior. Basic topics such as neuroanatomy and neuron function are presented as well as more general ones such as sensation and movement, sleep, memory and learning, schizophrenia and depression.

Prerequisite: PSYC 201, and either 207 or 211

PSYC 522 (4) Neuropsychology

This course will provide a detailed analysis of the relationship between human behavior and brain function. Basic topics will include cerebral asymmetry, memory, language, and attention as well as behavioral deficits such as learning disabilities, psychiatric disorders, and disconnection syndromes associated with neurological abnormalities.

V

PSYC 529 (3) Drug Dependence

Examination of psychological theories relevant to the prevention and treatment of drug abuse.

Prerequisite: PSYC 101 F

PSYC 533 (4) Child Psychology

Physical, social, emotional, intellectual, and personality development from concep-

tion to preadolescence. Focus on interplay between maturation and experience.

Prerequisite: PSYC 101 F,S

PSYC 536 (4) Adolescent Psychology

This class covers the development of the individual from the age of 11 to 19 years of age. Discussion will include aspects of both normal and abnormal development F,S

PSYC 537 (3) Youth and Sports

Psychological impact of sports on youthful participants.

V

PSYC 538 (3) Community Psychology

The application of psychological principles to the assessment, analysis, intervention, and prevention of social problems. Research from an applied behavior analysis perspective will be emphasized.

Prerequisite: 3 PSYC courses V

PSYC 541 (3) Attitudes

Examining cultural, social, and individual influences on attitude development and change through lectures and discussions of theories and findings and through experiential activities.

Prerequisite: PSYC 101

PSYC 542 (3) Group Psychology

Exploring factors affecting leadership and effective group processes through lectures and discussion of theories and findings and through experiential activities.

Prerequisite: PSYC 101 V

PSYC 543 (3) Advanced Social Psychology

An in-depth examination of social psychological research in laboratory and field settings.

Prerequisite: PSYC 201, 211, and 439

PSYC 548 (3) International Behavior

Images of foreign nations, cultures, people, and products in travel and cross-national contact. Effects of events, crises, news reporting, education persuasion, foreign policy decision-making, and strategies of international conflict resolution.

Prerequisite: 8 PSYC credits V

PSYC 551 (3) Methods of Enhancing Performance

The role of psychological factors in performance and psychological methods of performance enhancement. Factors examined will include attention, motivation, decision making, mental rehearsal, arousal, and self management.

Prerequisite: 8 PSYC credits F

PSYC 552 (3) Individual Differences

The nature, extent, and origins of mental, physical, and psychological differences among individuals.

Prerequisite: PSYC 201 V

PSYC 553 (3) Human Factors

The person-machine system: the strengths, operating limits, and tendencies of its human component.

Prerequisite: PSYC 201 and 211 or 217 F

PSYC 555 (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.

Prerequisite: 8 PSYC credits F,S

PSYC 556 (3) Personality

Major theories of normal personality formation, organization, and structure.

Prerequisite: 8 PSYC credits F,S

PSYC 557 (3) Cross Cultural Psychology

Subjective culture effects on communication, culture contact, interactions in socialization, education, workplace, travel, gender, and family.

Prerequisite: 8 PSYC credits V

PSYC 560 (3) Psychology of Women

Psychological study of women in historical and functional perspective. Role of hereditary, physiological, and socialization variables on women's thinking, feelings, and behavior.

Prerequisite: PSYC 101 S

PSYC 561 (3) Marketing Psychology

Analysis of product marketing and consumer purchasing strategies and their determinants.

Prerequisite: 8 PSYC credits V

PSYC 562 (3) Management Psychology

Managerial behavior, problems, and effects in planning, problem-solving, decision-

making, supervision, leadership, conflict, communication, appraisal, motivation, training, and information systems in organizational environments.

Prerequisite: 8 PSYC credits S

PSYC 563 (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.

Prerequisite: PSYC 201, 211, or 217 F

PSYC 564 (3) Environmental Psychology

Exploring environmental influences on group and individual perceptions, cognition, attitudes, and behaviors through lectures and discussion of theories and findings and through experiential activities. V

PSYC 566 (3) Psychology of Aging

Aging process and development during the adult years, psychology and psychological concerns of the aging individual, and dealing with death.

Prerequisite: PSYC 101 S

PSYC 573 (3) Teaching of Psychology

Methods of teaching psychology.

Prerequisite: PSYC 101 V

PSYC 576 (3) Behavior Therapy

Principles and procedures of behavior therapy in clinical areas. Emphasis is placed on procedures for developing more appropriate behaviors through positive and negative reinforcement, modeling, and cognitive procedures. Decreasing problematic behaviors through decelerating consequences and exposure techniques is also presented.

Prerequisite: PSYC 211 or 217 V

PSYC 578 (4) Behavior Medicine

The interface of behavioral and medical science is explored. Research on environmental and learning factors in the etiology and treatment of physical disease and rehabilitation is examined. Specific topics include pain management, medical compliance, behavior disorders in nursing homes, and chronic illnesses.

Prerequisite: Three courses in PSYC V

PSYC 590 (1-3) Workshop

Topics to be announced. May be retaken for credit. V

PSYC 591 (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. Prerequisite: Permission of instructor. Academic and experience in human services strongly recommended.

PSYC 609 (1-4) Industrial/Organizational Psychology Internship

Enrollment limited to students in good standing in the industrial/organizational track.

PSYC 610 (4) Research Design & Statistics

Research methodology and statistical procedures involving descriptive and inferential techniques for simple and multivariate situations involving parametric and non parametric variables using manual and computer methods.

PSYC 613 (4) Behavioral Research Methodology

Covers methods for analyzing treatments and experimental (as well as quasi-experimental) manipulations that focus on the behavior of the individual subject, multiple N=1, and small group designs.

Prerequisite: PSYC 615

PSYC 618 (4) Multivariate Analysis

Overview of multivariate statistical analyses including: multiple regression, ANCOVA, MANOVA, discriminate function analysis, and factor analysis.

Prerequisite: PSYC 610

PSYC 621 (1) Seminar Topics I

Topics in contemporary psychology. Each instructor selects topic. Sixteen contact hours in seminar format. May be repeated for credit. Prerequisite: permission of instructor

PSYC 622 (2) Seminar Topics II

Topics in contemporary psychology. Each instructor selects topic. Thirty-two contact hours in seminar format. May be repeated for credit. Prerequisite: permission of instructor

PSYC 623 (3) Seminar Topics III

Topics in contemporary psychology. Each instructor selects topic. Forty-eight

contact hours in seminar format. May be repeated for credit.

Prerequisite: permission of instructor

PSYC 624 (4) Seminar Topics IV

Topics in contemporary psychology. Each instructor selects topic. Sixty-four contact hours in seminar format. May be repeated for credit. Prerequisite: permission of instructor

PSYC 633 (3) Job Analysis & Performance Appraisals

An overview of techniques used to measure employee performance. Topics include: Job analysis methods and use of results, criterion development, performance appraisal methods, rater training, bias and accuracy in performance appraisal, organizational and contextual issues.

Prerequisite: PSYC 519

PSYC 649 (3) Behavior Theory and Philosophy

This course will be a seminar examining the philosophy of science underlying the field of behavior analysis and some of the implications of this approach to human behavior. The course is intended for graduate students in psychology. It will be based on student presentations.

PSYC 650 (3) Schools of Psychotherapy

The major schools of psychotherapy are considered from the perspective of their philosophy of science and empirical support. Research strategies and implications for prescriptive intervention are addressed.

Prerequisite: Admittance to clinical program or consent of instructor

PSYC 651 (4) Adult Psychopath & Therapy

The diagnosis of adult behavior disorders using the DSM-IV classifications procedures. Behavioral case formulation is emphasized. Students develop skills in cognitive and behavioral intervention strategies.

Prerequisite: admitted to clinical master's program or permission of instructor.

PSYC 653 (3) Behavioral Consultation

Detailed collaborative approaches to treatment and referral for mental health practitioners. Appropriate for those going into clinical, school, and counseling psychology, as well as those in special education, guidance and student personnel, and administration.

PSYC 654 (4) Clinical Case Management

Techniques of diagnostic assessments, clinical management, and intervention applied to behavior disordered patients. This course emphasizes interviewing, report writing, and treatment planning.

Prerequisite: admitted to clinical master's program or permission of instructor

PSYC 660 (3) Employee Selection

Overview of issues and techniques used to make hiring and promotion decisions in organizations. Topic includes: introduction of the selection process, legal and affirmative action issues, validity issues in selection, validity generalization, utility and decision making, and use of selection methods.

Prerequisite: PSYC 610

PSYC 662 (3) Training & Development

An overview of theories and techniques used to improve employee satisfaction, employee productivity, and organizational effectiveness. Topics include: identifying problems, intervention techniques, training, determining the effectiveness of training, and intervention programs.

Prerequisite: PSYC 547

PSYC 677 (1-4) Individual Study

Individualized learning under faculty supervision. May be retaken for credit.

Prerequisite: 12 graduate credits

PSYC 682 (4) Child Psychopathology & Therapy

This course presents behavioral assessments and interventions for children and adolescents who are exhibiting a variety of psychological disorders such as oppositional defiant disorder, attention deficit disorder, fears/phobias, depression, and adjustment disorders. Data based cognitive behavioral interventions with youths, their families, and their environments will be emphasized.

Alt E Prerequisite: PSYC 683 S

PSYC 683 (4) Behavioral Assessment

An introduction of the basic theoretical principles and techniques of behavioral assessment in clinical psychology for targeting specific behaviors as the beginning step in treatment, and as a system for evaluating outcomes. Techniques include direct observation, self-monitoring, behavior rating scales, behavioral interviews, task analytic, and cognitive-behavioral measures.

F

PSYC 686 (3) Clinical Assessment

This course is designed to be a comprehensive assessment course. Multiple tests will be

covered in the areas of intelligence, adaptive behaviors, behavior management measures, personality, and psychopathology. The end goal of the course is competence in administering a complete battery of tests and writing a professional report on the results.

PSYC 689 (3) Standards and Ethics

Details the principles and standards put forth by the APA to guide the profession of psychology. The course is oriented towards those going into either a career in therapy (i.e., clinical, counseling, or school psychology) or industrial/organizational psychology.

PSYC 691 (2) Clinical Practicum I

Students are placed in clinical settings under the supervision of a licensed psychologist. Placements vary among hospitals, private clinics, and county mental health agencies. Clinical Practicum I covers the first 150 clock hours of the 300 hours needed to fulfill the practicum requirement.

Prerequisite: admitted to clinical master's program OR permission of Director of Clinical Training

PSYC 692 (2) Clinical Practicum II

Extension of Practicum I. Students complete the second 150 hours of the 300 hours of supervised practice.

Prerequisite: admitted to clinical master's program, OR permission of Director of Clinical Training

PSYC 694 (1-2) Alternate Plan Paper

Individualized student paper based on an extensive review of literature in some area of psychology.

PSYC 695 (2) Research in Industrial/Organizational Psychology I

Developing research proposals/projects, ethic committee review, implementing consulting projects, data collection, report writing, presentation to professional societies, and submitting funding requests.

Prerequisite: consent

PSYC 696 (3) Research Clinical Psychology I

Students participate on laboratory teams with clinical faculty. Teams develop research proposals and write ethics committee proposals. Projects include clinical field studies, survey studies, and single subject intervention. Students are expected to present findings at meetings of professional associations.

Prerequisite: permission of instructors, Director of Clinical Training, and admission to clinical program

PSYC 697 (2) Research in Industrial/Organizational Psychology II

Continuation of Research in Industrial/Organizational Psychology I.

Prerequisite: consent

PSYC 698 (3) Research in Clinical Psychology II

Continuation of Research in Clinical Psychology I.

Prerequisite: Permission of instructors, Director of Clinical Training, and admission to clinical program

PSYC 699 (3-6) Thesis

Individualized student research paper which involves a literature review and original research.

COMMUNICATION DISORDERS MS

*College of Allied Health & Nursing
Department of Speech, Hearing, and
Rehabilitation Services*

103 Armstrong Hall • 507-389-1414

Chair: Bruce Poburka, Ph.D.

Graduate Coordinator: Patricia Hargrove, Ph.D.

Cynthia Busch, Ph.D.; Patrica Hargrove, Ph.D.; Judith Kuster, MS; Bonnie Lund, Ph.D.; Carol Myhre, MS; Wayne S. Quirk, Ph.D.; Rene Shellum, MS

Communication Disorders is a discipline in human services offering graduates rewarding careers in speech and language pathology. A Master of Science program is available for students who have an undergraduate major in communication disorders or its equivalent. Employment opportunities are commonly available in schools, hospitals, rehabilitation centers, and private practice. The thesis or the alternate plan programs, when combined with students' undergraduate preparation, lead to the academic and practicum requirements for the Certificate of Clinical Competence (CCC) in Speech Pathology issued by the American Speech, Language and Hearing Association (ASHA). Effective January 1, 1994, all graduate work applied toward the CCC must have been initiated and completed at a program accredited by the Council on Academic Accreditation (CAA) of

ASHA. The Graduate Program in Communication Disorders is accredited by CAA.

Program Purpose. It is the purpose of the Master of Science Program in Communication Disorders to provide a high quality of student preparation leading to careers in human services for persons with communication disorders and to promote scientific investigation in the normal and abnormal development and use of speech, language and hearing.

Admission. Applications for admission are competitive and must be received by February 1 for admission for the following fall semester. If a vacancy occurs during the academic year, mid-year admission is possible. Approximately ten new admissions are accepted each year. To take graduate level courses, applicants must have been admitted by the College of Graduate Studies and Research. Competitive applicants should have attained (1) a Graduate Record Examination (GRE) score of at least 1200 (2) a grade point average (GPA) of 3.00 or better on a 4.0 scale in 40 undergraduate credits in the basic sciences coursework, as required by the ASHA to meet Standard II, A of the Standards for the Certificate of Clinical Competence, and (3) a minimum of 6 semester credits of coursework appropriate to Standard II, B, professional coursework. Applicants who have not attained the above GPA (3.00) may be admitted provisionally on the basis of their performance on the GRE (contact department for specific requirements and prior experience). Three statements of recommendation are also required as well as submission of a writing sample in the form of a letter of intent.

Financial Assistance. A limited number of graduate assistantships in Communication Disorders are available. Application can be obtained from the department or from the College of Graduate Studies and Research and should be filed by February 1 for the following academic year or until positions are filled.

Graduate study in Communication Disorders is fundamentally different than undergraduate work, as graduate students are expected to demonstrate superior academic performance. To be recommended by the faculty for graduation, each student's Plan of Study is reviewed individually for deficiencies.

Since ASHA allows both graduate and undergraduate credits to be applied to certification in speech, graduate students must complete the residual course credits between their undergraduate credits and the total ASHA requirements, as well as the University minimums for theses or alternate plan paper options. Similarly, they must meet the ASHA standard for clock hours of clinical practicum and at least 250 of these hours must be earned at the graduate level. At least 50 percent of students' academic credits must be at the 600 level, excluding the thesis and APP credits. With its emphasis on competency in becoming a speech clinician, students must have experienced clinical supervision by at least two different faculty supervisors. Internship 698 is also required of all graduate students to improve their clinical competencies.

Students graduate on faculty recommendation. Students should be aware the 50 clock hours of supervised practicum is required in a minimum of three different clinical settings. More than one internship may be necessary to meet this requirement, depending upon the student's undergraduate preparation.

Honesty Policy. As members of Minnesota State University, Mankato community, students assume the responsibility to meet the academic obligations in a fair and honest manner. This responsibility includes avoiding such activities as cheating, plagiarism or collusion. Please refer to the University policy on academic honesty for definitions of terms and explanations.

COMMUNICATION DISORDERS MS

(Thesis Plan - 51 credits)

(Alternate Plan Paper - 52 credits)

Required Core (45-46 credits)

- CDIS 518 Seminar: Stuttering (2)
 - CDIS 555 Supervising Paraprofessionals (Lab-Usually taken with 540) (1)
 - CDIS 540 Organization and Management of Clinical Pro.(2)
 - CDIS 577 Instrumentation & Technology in CDIS (3)
 - CDIS 588 Multicultural Issues (3)
 - CDIS 613 Naturalistic Eval. Children (3)
 - CDIS 614 Language Therapy and Children (3)
 - CDIS 615 Sem: Speech Sound Disorders (2)
 - CDIS 616 Seminar: Voice Problems (2)
 - CDIS 621 Motor Speech Disorders (3)
 - CDIS 675 Seminar: Selected Topics (2)
 - CDIS 695-01 Clinical Practicum SLP (2)
 - CDIS 695-02 Clinical Practicum SLP (2)
 - CDIS 522 Clinical Practicum Aud (2)
 - CDIS 698 Internship (1-12) May take more than one internship.
- Other Electives to complete minimum

Graduate Programs

COMMUNICATION DISORDERS

Required Research (3 credits)

CDIS 610

Required Thesis or Alternate Plan Paper

CDIS 694 Alternate Plan Paper (2)

CDIS 699 Thesis (3)

COURSE DESCRIPTIONS

CDIS 502 (2) Child Language Disorders

Types and characteristics of language disorders in children.

Prerequisite: admission to major or concurrent enrollment in CDIS 503, consent of instructor, special education majors F

CDIS 503 (1) Child Language Disorders Lab

Lab associated with CDIS 4/502. Practice in applying course content to the language of children.

Prerequisite: admission to major, or concurrent enrollment in CDIS 502, consent of instructor, special education majors F

CDIS 505 (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. F,S

CDIS 506 (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.

Prerequisite: CDIS 4/505 F,S

CDIS 507 (3) Advanced Sign Language

The third in a sequence of courses which aim at the development of skills in the use of American Sign Language as a form of communication with persons who are hearing impaired or deaf.

Prerequisite: CDIS 4/506 F,S

CDIS 510 (3) Neurological Bases of Speech

CDIS 516 (3) Voice & Resonance Disorders

Description, etiology, assessment, and management of voice and resonance disorders.

Prerequisite: admission to major or consent of instructor F

CDIS 517 (3) Stuttering

Description, etiology, assessment, and management of fluency disorders.

Prerequisite: admission to major, consent of instructor S

CDIS 518 (2) Seminar: Stuttering

Advances in basic research and practices.

Prerequisite: CDIS 417 F

CDIS 520 (3) Seminar: Advanced Audiology

Seminar in audition and advanced audiologist concepts for the speech/language pathologist.

Prerequisite: admission to major, consent of instructor F

CDIS 521 (3) Aural Rehabilitation

Habilitative audiology and the instruction of the hearing-impaired, including hearing aids, speech reading, and auditory training.

Prerequisite: admission to major or consent of instructor Variable

CDIS 522 (2) Clinic Practicum: Audiology

Clinical practice with hearing-handicapped children and adults.

Prerequisite: admission to major; CDIS 301, 421; GPA 2.8 in major F,S

CDIS 523 (2) Educational Audiology

Management of hearing impaired children in school settings.

Prerequisite: admission to major or consent of instructor Variable

CDIS 524 (1) Overview of Dysphagia

CDIS 526 (1) Advanced Diagnosis and Treatment of Dysphagia

CDIS 531 (1) Orientation Lab

Supervised observation of the diagnostic and remedial management of speech and language disorders.

Prerequisite: admission to major plus concurrent enrollment in 4/534 S

CDIS 534 (2) Orient to Clinical Practicum

Procedures and operation of the clinical program in communication disorders.

Prerequisite: admission to major plus concurrent enrollment in CDIS 4/531 S

CDIS 535 (3) Augmentative Communication

CDIS 538 (3) Speech Sound Disorders

Description, etiology, assessment, and management of speech sound problems.

Prerequisite: Admission to major or consent of instructor plus concurrent enrollment in CDIS 4/539 (Speech Sound Lab) F

CDIS 540 (2) Organization & Management of Clinical Speech Programs

Delivery of clinical services in schools, hospitals, rehabilitation centers, and other settings.

Prerequisite: concurrent enrollment in CDIS 555 Supervising Paraprofessionals F

CDIS 544 (3) Appraisal & Diagnosis

Tests, measures, procedures, and processes for the evaluation and diagnosis of speech and language.

Prerequisite: admission to major or consent of instructor S

CDIS 545 (1) Grand Rounds-Foundation

Observation of clinical case studies.

V

CDIS 546 (2) Grand Rounds-Presentation

Presentation of clinical case studies.

V

CDIS 555 (1) Supervising Paraprofessionals

Advances in basic practices of paraprofessionals.

Prerequisite: concurrent enrollment in CDIS 540 F

CDIS 569 (2-3) Hearing Disorders

CDIS 577 (3) Instrumentation & Technology in SHRS

Explains and demonstrates the use of instrumentation and technology in the acquisition of knowledge about the analysis of human communication disorders.

S

CDIS 610 (3) Research Comm Disorders

Exposure to research design of professional literature.

F

CDIS 611 (3) Craniofacial Anomalies

CDIS 612 (5) Child Language Assessment & Therapy

CDIS 613 (3) Naturalistic Eval Child

Non-standardized, informal assessment techniques of children's language disorders.

Prerequisite: CDIS 402 S

CDIS 614 (3) Language Therapy Children

Remedial procedures and intervention programs for language impaired children.

Prerequisite: CDIS 402 S

CDIS 615 (2) Sem: Speech Sound Disorder

Advances in basic research and practices as they pertain to speech sound problems.

Prerequisite: CDIS 438 S

CDIS 616 (2) Sem: Voice Problems

Advances in basic research and practice related to voice and resonance problems.

Prerequisite: CDIS 416 S

CDIS 619 (3) Adult Language Disorders

CDIS 621 (3) Motor Speech Disorders

Apraxia and dysarthria of speech and dysphagia. Causes, assessment, and management.

Prerequisite: CDIS 410 S

CDIS 675 (1-3) Sem: Selected Topics

Course content varies among speech disorders topics with each offering.

V

CDIS 677 (1-6) Individual Study

Advanced individual study in a specific area. All terms

CDIS 688 (3) Multicultural Issues in Speech, Hearing and Rehabilitation Services

CDIS 691 (1-6) Inservice

CDIS 694 (1-2) Alternate Plan Paper

CDIS 695 (2) Clinic Prac: Comm Disord

Supervised delivery of clinical services.

Prerequisite: admission to graduate program and 25 hours of observation

CDIS 698 (1-12) Internship

Prerequisite: CDIS 692 and a minimum of 25 clinical hours.

CDIS 699 (3) Thesis

COMMUNITY HEALTH MS

College of Allied Health and Nursing
Department of Health Science
213 Highland Center N • 507-389-1527

See **HEALTH SCIENCE**

COMPUTER SCIENCE MS

College of Science, Engineering & Technology
Department of Computer and Information Sciences
273 Wissink Hall • 507-389-2968

Chair: Colin Wightman, Ph.D.

Graduate Coordinator: Christophe Veltsos, Ph.D.

Gregg Asher, Ph.D.; Cyrus Azarbod, Ph.D.; David Haglin, Ph.D.; Dean Kelly, Ph.D.; Ann Quade, Ph.D.; Richard Roiger, Ph.D.; Hamed Sallam, Ph.D.; Julio Sanchez, Ph.D.; Susan Schilling, MA; James Slack, Ph.D.; Mahbur Rahman Syed, Ph.D.; Leon Tietz, Ph.D.; Christophe Veltsos, Ph.D.; Michael Wells, Ph.D.

The Master of Science degree in Computer Science program of study prepares the student for a career as a computer professional, yet offers enough flexibility to allow a student to design a course of study suitable for preparation for doctoral work in computer science. The program is designed to offer graduate level educational opportunities with an applied science perspective. It addresses the preservice as well as occupational and career advancement needs of baccalaureate prepared computer scientists. The program objectives are:

1. To address the needs of Minnesota's public and private enterprises by providing opportunities within the state of Minnesota for graduate study in applied computer science.
2. To provide a graduate degree program for practicing computer scientists who have clearly defined academic needs related to professional advancement and/or specialization.
3. To offer a graduate program for baccalaureate students who want to continue their education and gain specialized knowledge and skills in computer science. To expand the functional role of the Department of Computer and Information Sciences in service to the Mankato area and the state of Minnesota.
4. These objectives are met by a curriculum with core studies in software and knowledge engineering and research methods. The core studies provide the foundation upon which students develop an academic program appropriate to their interests, culminating in a research experience.

Admission. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, successful applicants must meet the following requirements for admission:

1. The Graduate Record Examination (GRE) is required (contact department for specific requirements).
2. Applicants must have an undergraduate degree in computer science, computer information systems, management information systems or a related field. Students with other backgrounds will be granted provisional admission and required to complete undergraduate courses in core areas of computer science.

Financial Assistance. Teaching, Lab Project and Research Assistantships requiring professional computer knowledge are available in the CIS Department and various administrative offices. Deadlines are March 1 for fall and October 1 for spring.

COMPUTER SCIENCE MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (13 credits)

- COMS 600 Research Methods (3)
COMS 602 Research Seminar (1)
COMS 631 Knowledge-Based Systems (3)
COMS 640 Advanced Database Systems (3)
COMS 680 Software Engineering Project (3)

Required 600 level Computer Science Electives (6 credits)

Choose at least 6 credits from the following

- COMS 601 Research Topics (3)
COMS 610 Algorithm Analysis (3)
COMS 611 Theory of Computation (3)
COMS 630 Advanced Artificial Intelligence (3)
COMS 641 Distributed Database Systems (3)

Required Computer Science Electives (4-12 credits)

Choose any 5/600 level elective courses from the Department of CIS. The following courses cannot be used as electives: COMS 591, 691.

Required Non-departmental Electives (3-6 credits)

Choose any 5/600 non-departmental elective courses selected in consultation with an advisor

Required Thesis or Alternate Plan Paper

- COMS 699* Thesis (3-6)
COMS 694* Alternate Plan Paper (1-2)

*Before registering for COMS 694 or COMS 699, the student must satisfy the comprehensive examination requirement and must have successfully completed the core courses.

Comprehensive Examination Requirement

The comprehensive examination will contain questions from the computer science core except for COMS 602. The comprehensive examination will be waived if the student obtains a 3.5 GPA in the core courses or achieves 60% or better on the subject GRE in computer science.

COURSE DESCRIPTIONS

COMS 510 (4) Abstract Machines & Grammars

Study of a variety of computational models including finite state machines, regular expressions, context-free grammars, and Turing machines. For each model, we develop, study, and apply techniques for determining those languages which are computable using a particular model, as well as properties of those languages. Prerequisite: MATH 375

COMS 512 (4) Graphics

Concepts and algorithms used in computer graphics, including polygonal and curved images in both 2 and 3 dimensions, representation of solid objects, and color and illumination models. Prerequisite: COMS 210, MATH 247

COMS 520 (4) Advanced Computer Organization

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. Prerequisite: COMS 320

COMS 530 (4) Artificial Intelligence

Artificial intelligence problem solving techniques, including predicate logic and the resolution principle. Artificial intelligence programming languages, machine learning, neural network models, and object-oriented methods are discussed. Prerequisite: COMS 230

COMS 532 (4) Robotics

Current practice and future directions in robotics, including robot anatomy, kinematics, sensors, sensor interfacing and fusion, mobile robotics, real-time programming, vision and image processing algorithms, and subsumption architecture. Prerequisite: COMS 260 or 320, MATH 247

COMS 540 (4) Database Management Systems II

Extensive coverage of query processing and optimization; also concurrence control and recovery and security and integrity in centralized/distributed environments. Team-oriented projects in heterogeneous client server environment. Prerequisite: COMS 340

COMS 550 (4) Operations Research II

A second course in operations research for majors and non-majors. Topics include computer simulation, game theory, stochastic processes, queuing theory, Markov processes, and reliability. Simulation topics include Monte Carlo methods, discrete and continuous simulations, and simulation languages and packages. Prerequisite: COMS 350 and either STAT 352 or 354

COMS 560 (4) Operating Systems

This course covers operating systems concepts including processes, interprocess communication, interprocess synchronization, deadlock, memory allocation, segmentation, paging, resource allocation, scheduling, performance evaluation, file systems, storage, devices, protection, security, and privacy and distributed systems. Prerequisite: COMS 320

COMS 562 (4) Communication Protocols

An introduction to the foundations of computer networking. The course encompasses telecommunications, local area networks, wide-area networks, and wireless communications. Topics covered include the OSI model, TCP/IP, network topologies and associated hardware, error detection and correction, and protocols and security. Prerequisite: COMS 112

COMS 563 (4) Client/Server and Web Applications

This course concentrates on providing administration and client/server development experience. It uses the client/server networking lab to provide exposure to Netware, Windows NT and UNIX network operating systems, as well as client/server applications development. Prerequisite: COMS 562

COMS 564 (4) Mobile Applications and Networks

This course provides an understanding of existing and emerging mobile and wireless data networks, with an emphasis on digital data communications. Students will gain an understanding of the unique considerations that must be given to network protocols for wireless and mobile communication as well as their applications.

COMS 565 (4) Parallel & Distributed Processing

Practical parallel programming experiences. Parallel programming languages, parallel algorithm design and analysis, and parallel architectures. Prerequisite: COMS 210

COMS 570 (4) Compiler Construction

Principles and techniques of compiler construction. Development of efficient parsers and scanners; manual and automatic approaches. Optimization techniques and code generation. Prerequisite: COMS 370

COMS 580 (4) Software Engineering

The software life cycle from specification and design phases through construction and maintenance. Object-oriented design and analysis techniques. Software testing, reliability assessment. Software modularity, portability, reusability. Project management. Prerequisite: COMS 280 and 340

COMS 581 (4) Rapid Application Development

In-depth understanding of low and high CASE tools and rapid development. CASE tools will range from traditional software development life cycle to object-oriented client/server environments. Extensive team-oriented applications will be developed using tools such as SYNON, OBSYDIAN, Power Builder, and MS-SQL server. Prerequisite: COMS 280

COMS 591 (1-6) In-Service in Computer Science

This course is designed to meet the needs of kindergarten through twelfth grade practicing teaching majors who wish to enhance their technology-related skills and knowledge. Both lab and lecture activities are used to provide participants guided experiences with current applications of technology. Prerequisite: consent

COMS 592 (3) Computers in the Classroom

Using both a lecture and lab format, this course provides students with a foundation for developing computer-delivered instruction within the classroom by examining the hardware and software which are part of emerging technologies, and the research issues associated with developing effective instruction using the computer.

COMS 593 (3) Computer-Based Instructional Systems

This course provides participants with opportunities to develop, implement, and assess formative and summative evaluation instruments; identify researchable issues in computer-delivered instruction; develop computer-delivered instruction using a sophisticated authoring tool.

COMS 595 (1) Seminar in Computer Science

Through reading, small group discussion, and presentations, explores the topics not normally covered in the curriculum. Prerequisite: consent

COMS 596 (1-4) Selected Topics in Computer Science

Special topics not covered in other courses. May be repeated for credit on each new topic. Prerequisite: consent

COMS 597 (1-12) Internship

This course is designed to provide students with an opportunity to utilize their training in a real-world business environment. Participants are placed and supervised in selected locations by the internship coordinator for a minimum period of one semester while working under the guidance and direction of a full-time staff member. Prerequisite: Completion of computer science core and consent

COMS 599 (1-2) Individual Study

Problems on an individual basis. Prerequisite: consent

COMS 600 (3) Research Methods

Research methodology in general and in computer science. Data and research sources. Analysis of existing research. Preliminary planning and proposals. Conceptualization, design, and interpretation of research. Good reporting. Prerequisite: an elementary statistics course

COMS 601 (3) Research Topics

Special topics in computer science research not covered in other courses. May be repeated for credit on each new topic.

COMS 602 (1) Research Seminar

Students attend seminar presentations and present a research topic at one of the seminars. Prerequisite: consent

COMS 610 (3) Algorithm Analysis

Brings together fundamental methods in order to provide access to the best method(s) for algorithm usage and analysis. Prerequisite: COMS 510

COMS 611 (3) Theory of Computation

Computation using Turing machines, logic, oracles, alternating Turing machines, and interactive proof systems. Various aspects of computational complexity including NP-completeness, Co-NP, P parallel-complexity theory, their relationships, counting classes, and the polynomial time hierarchy are discussed. Prerequisite: COMS 510

COMS 630 (3) Advanced Artificial Intelligence Systems

This course is a continuation of Artificial Intelligence (COMS 530). Emphasis is placed on advanced topics and the major areas of current research within the field. Theoretical and practical issues involved with developing large-scale systems are covered. Prerequisite: COMS 530

COMS 631 (3) Knowledge-Based Systems

The design of large-scale, knowledge-based systems. Emphasis on both theoretical and practical issues. Examination of alternative knowledge representation techniques and problem-solving methods used to design knowledge-based systems. Prerequisite: COMS 530

COMS 640 (3) Advanced Database Systems

In-depth study of advanced topics such as object-oriented databases, intelligent database systems, parallel databases, database mining and warehousing, distributed database design and query processing, multi-database integration and interoperability, and multilevel secure systems. Prerequisite: COMS 540

COMS 641 (3) Distributed Database Processing

Introduction to distributed database systems, resource allocation, homogenous vs. heterogeneous databases, schema integration, distributed concurrency control and recovery, and other topics dealing with distributed database processing. Prerequisite: COMS 540

COMS 677 (1-4) Individual Study

Problems on an individual basis. Prerequisite: consent

COMS 680 (3) Software Engineering Project

Advanced software design, analysis, and development techniques under realistic time and budget constraints. Hands-on project management techniques. Emphasis of concepts through immersion in a team project of significant size. Prerequisite: COMS 580

COMS 690 (3) Statistical Inference Packages

Statistical package programs used in data collection, transformation, organization, summarization, interpretation, and reporting. Statistical description and hypothesis testing with statistical inference. Interpreting outputs, Chi-square, correlation, regression, analysis of variance, nonparametrics, and other designs. Accessing and using large files (U.S.Census data, National Health Survey, etc.). Prerequisite: a statistics course

COMS 691 (1-6) In-Service in Computer Science

A course designed to upgrade the qualifications of persons on-the-job. Prerequisite: consent

COMS 694 (1-2) Alternate Plan Paper

Preparation of a master's degree alternate plan paper under the direction of the student's graduate advisor. Prerequisite: consent

COMS 699 (1-6) Thesis

Preparation of a master's degree thesis under the direction of the student's graduate advisor. Prerequisite: consent

COUNSELING AND STUDENT PERSONNEL MS

College of Education

Department of Counseling and Student Personnel

107 Armstrong Hall • 507-389-2423

Chair: Diane Coursol, Ph.D.

Richard Auger, Ph.D.; Anne Blackhurst, Ph.D.; Joanne Brandt, Ph.D.; Jacqueline Lewis, Ph.D.; Walter Roberts Jr., Ed.D., LPC, LSC, NCC, NCSC; John Seymour, Ph.D., NCC, LMFT

The need for professional counselors in schools, colleges and social agencies is increasing. The professional counselor is a product of an intensive graduate program which specifically prepares students to take their place in this expanding occupation. The staff of this nationally accredited program are dedicated to offering three challenging specialization areas.

The Council for the Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the American Counseling Association and the Council on Postsecondary Accreditation (COPA), has conferred national accreditation to the following program areas in the Department of Counseling and Student Personnel: Professional Community Counseling, Professional School Counseling, and Student Affairs Practice in Higher Education.

The Department of Counseling and Student Personnel prepares students at the graduate level through the following specialization areas: College Student Affairs, Professional Community Counseling and Professional School Counseling (K-12 and Elementary, Middle, and Secondary School licensure areas). The department also provides service courses for students from a variety of majors within the university for professional development, including an undergraduate course in Decision Making/Career Life. This course is specifically designed to assist students in the decision-making processes that are necessary for effective personal planning.

Admission. All applicants should submit the following to the College of Graduate Studies and Research:

1. A completed Application for Graduate Study;
2. Verification of the Baccalaureate degree from a regionally accredited college or university;
3. Two official transcripts listing undergraduate/graduate degree(s) to be sent directly from the degree granting institution to the College of Graduate Studies and Research (including MSU students, undergraduates, faculty, and staff); and
4. Any additional information required for international students, if appropriate.

Where the GRE or MAT is required (see number 4 below), the applicant must request that the testing institution send the official scores directly to the College of Graduate Studies and Research. Upon receipt of these materials, the College of Graduate Studies and Research will forward the applicant's file to the Department of Counseling and Student Personnel for admission recommendation.

In addition to the College of Graduate Studies and Research' requirements, the applicant must submit the following directly to the Department of Counseling and Student Personnel:

1. Three letters of recommendation (forms are available from the Department of Counseling and Student Personnel) focusing on the applicant's academic potential as well as the individual's promise to become an effective counselor/helping professional (if possible one of these recommendations should be from an undergraduate/graduate instructor and/or academic advisor);
2. A completed Personal Statement form (available from the Counseling and Student Personnel department office) summarizing the applicant's experiences and professional goals;
3. The applicant's professional resume or vita;
4. Attainment of a minimum grade point average of 3.0 on a 4.0 scale during the last two years of undergraduate study. If the applicant's GPA is below 3.0, the student must have obtained a minimum GRE score of 900 in the Verbal plus Quantitative subtests and a minimum of 500 in either the Verbal or Quantitative subtest, with an overall minimum GRE score of 1350 for the verbal, quantitative and analytical combined. NOTE: GRE scores must be received in the College of Graduate Studies and Research prior to the applicant's file being forwarded to the Department of CSP for departmental admission recommendation. A student may choose to submit results from the MAT and attain a raw score of 44 or higher in lieu of the GRE to meet admission requirements.

Admissions will occur summer session and fall semester only. There will be no consideration for admission until all of the above admission criteria have been met. **All materials must be received in the Department of Counseling and Student**

Personnel office by March 15 for summer session admission and June 1 for fall admission. Early application is recommended as enrollment is limited. Applicants will be notified regarding their admission status following the receipt of all required application materials. Complete applications will be reviewed starting in January.

Admission does not guarantee continuation in the department, admission to a practicum, internship, or graduation. As part of the admission process and throughout the program, the student's personal characteristics and professional potential are evaluated. Formalized reviews are conducted at the following times:

1. on completion of the student's Plan of Study (within the first 15 credits of work);
2. during completion of skills acquisition courses;
3. during completion of the pre-practicum application and during the practicum and internship experiences;
4. on completion of comprehensive examinations.

COUNSELING AND STUDENT PERSONNEL MS

(Thesis Plan - 51 credits)

(Alternate Plan Paper - 50 credits)

Choose one of the following specialization areas:

COLLEGE STUDENT AFFAIRS (50 credits)

College Student Affairs is a broad program designed to prepare individuals for positions on the college campus in admissions, counseling, financial aid, student housing, student activities, career development and student affairs administration. A comprehensive overview of the field of student affairs is offered with the opportunity to work in several areas. Emphasis is placed on the developmental issues confronting college students, philosophical bases, and the multi-disciplinary foundations of student affairs.

Required Prerequisite: A course in statistics.

Required Core (39 credits)

CSP 570	Group Procedures (3)
CSP 620	Introduction to College Student Affairs In Higher Education (3)
CSP 622	Adm. in College Student Affairs (3)
CSP 645	Counseling Procedures and Skills I (3)
CSP 647	Crisis Intervention Strategies (3)
CSP 648	Counseling in a Multicultural Society (3)
CSP 658	Career Development I (3)
CSP 662	American College Student (3)
CSP 664	Managing and Assessing Campus Environments (3)
CSP 665	Counseling Theories (3)
CSP 666	Counseling Procedures and Skills II (3)
CSP 681	Practicum in Student Affairs (3)
CSP 686	Internship: Student Affairs (3)

Required Research (5 or 6 credits)

CSP 675	Research and Writing in CSP (3)
CSP 694	Alternate Plan Paper (2) OR
CSP 699	Thesis (3)

Required Electives (6 credits)

Select 6 credits of electives from any 500/600 level course in consultation with an advisor.

PROFESSIONAL COMMUNITY COUNSELING (50 credits)

Professional Community Counseling is a broad program of study intended to prepare individuals to provide counseling in a variety of community helping service settings. Graduates of this program may serve clients in mental health centers, a variety of business and industry settings, career counseling agencies and centers for marriage and family counseling. Emphasis is placed upon counseling with individuals, groups, families, and couples in various settings. Professional preparation includes areas such as theory, skill development, assessment, treatment planning and counseling with specific populations utilizing individual, group, marriage, family, career, and community consultation interventions. A basic background in psychology is helpful for students in this program.

Required Prerequisites: Statistics, Developmental Psychology and Abnormal Psychology or equivalents.

Required Core (45 credits)

CSP 618	Introduction to Professional Community Counseling (3)
CSP 645	Counseling Procedures and Skills I (3)
CSP 648	Counseling in a Multicultural Society (3)
CSP 650	Child/Adolescent Counseling (3)
CSP 652	Counseling Through the Family Life Cycle (3)
CSP 658	Career Development I (3)
CSP 661	Appraisal Techniques: Professional Community Counseling (3)
CSP 665	Counseling Theories (3)

COUNSELING AND STUDENT PERSONNEL

CSP 666	Counseling Procedures and Skills II (3)
CSP 667	Family Counseling (3)
CSP 668	Marriage Counseling (3)
CSP 669	Intervention Treatment Planning and Evaluation (3)
CSP 673	Group Counseling (3)
CSP 679	Practicum: Professional Community Counseling (3)
CSP 686	Internship: Professional Community Counseling (3)

Required Research (5 or 6 credits)

CSP 675	Research and Writing in CSP (3)
CSP 694	Alternate Plan Paper (2) OR
CSP 699	Thesis (3)

Available Electives

Electives may be taken from any 500/600 level course in consultation with an advisor. Selected Community Counseling electives might include courses in the Assessment of Intellectual Functioning, Technology in Counseling and Student Affairs, Professional Issues in Marriage and Family Counseling, Counseling the Chemically Dependent Family, Workshop Design and Development, Women's Issues in Counseling, Play Therapy, and Counseling the Older Adult.

Marriage and Family Therapy Focus: Coursework and advisement is provided to students interested in obtaining a license in Marriage and Family Therapy. The Minnesota Board of Marriage and Family has approved the academic coursework for admission to the national exam.

PROFESSIONAL SCHOOL COUNSELING: K-12 (50 credits)

The Professional School Counseling program of study prepares the individual for Minnesota state licensure as a K-12 professional school counselor to counsel students, individually and in groups, who are in the process of personal, educational, and career development. Particular emphasis is placed on the professional school counselor's role in facilitating the development of positive mental health choices for children and adolescents, as well as the early identification of potential mental health concerns related to the personal and academic growth of K-12 students. To support counseling skills, the counselor learns to use various appraisal instruments, research data, and to consult with significant others in the lives of the student.

Required Prerequisites: Statistics and Abnormal Psychology or equivalents. May be taken during the first year of coursework after admission to the program.

Required Core (45 credits)

CSP 645	Counseling Procedures and Skills I (3)
CSP 647	Crisis Intervention Strategies (3)
CSP 648	Counseling in a Multicultural Society (3)
CSP 650	Child and Adolescent Counseling Techniques (3)
CSP 655	Mental Health in the Schools (3)
CSP 658	Career Development I (3)
CSP 659	Introduction to Professional School Counseling (3)
CSP 660	Appraisal Techniques: Educational (3)
CSP 665	Counseling Theories (3)
CSP 666	Counseling Procedures and Skills II (3)
CSP 667	Family Counseling (3)
CSP 673	Group Counseling (3)
CSP 674	Developmental Guidance (3)
CSP 679	Practicum: K-12 School Counseling (3)
CSP 686	Internship: K-12 School Counseling (3)

Required Research (5 or 6 credits)

CSP 675	Research and Writing in CSP (3)
CSP 694	Alternate Plan Paper (2) OR
CSP 699	Thesis (3)

Strongly recommend, but not required: Counseling Chemically Dependent Families (CSP 573) and a course in Special Education (in consultation with an advisor).

Graduate Assistantships. A limited number of graduate assistantships are available to students enrolled in the Department of Counseling and Student Personnel. Graduate assistantships are also available through the Office of Student Affairs at 336 Wigley Administration Center, Phone 507-389-2121 or the Office of Residential Life, 111 Carkoski Commons, Phone 507-389-1011. All graduate assistants must be full-time graduate students. Full assistantships pay a stipend of \$8,000 plus a tuition waiver of up to nine credits a semester. Other types of financial assistance are available through the Office of Financial Aid, 109 Wigley Administration Center, Phone 507-389-1185.

Adding Areas to Existing Licensure. The Professional School Counseling Program makes efforts, on a space-available basis, to respond to the needs of current licensed practitioners who wish to add additional grade-level areas to an existing school counselor license. Consultation with program advisors is required

to determine specific coursework necessary to fulfill licensure requirements.

The Minnesota Board of Teaching allows individuals with existing master's degrees to take coursework in a school counseling program leading to licensure in the field. Such individuals should consult with a member of the Professional School Counseling Program as to the number of courses required to lead to licensure by the state of Minnesota.

Licensure for Non-Educators. The Minnesota Board of Teaching allows individuals without teaching licenses to take coursework in a school counseling program leading to licensure in the field.

Individuals without a teaching license or experience are strongly recommended to take coursework in the teaching sciences during their studies in the Professional School Counseling Program. Course selection should only be undertaken in consultation with an advisor. Such coursework on a non-teacher licensed individual's transcript and resumé provides evidence of efforts to familiarize oneself with K-12 educational strategies and enhances employment prospects in the job market.

Special Admission Notice for Professional School Counseling Candidates. Due to the large number of individuals who annually apply to the Professional School Counseling Program, applicants are strongly advised to submit application materials as early as possible. Admission review priority is given to those whose completed files reach the program as soon as possible. Priority is given to those individuals seeking full-time admission.

The program is dedicated, as well, to working with the part-time student. All courses in the program are offered at night, late afternoon, or in the summer at least once during each two-year cycle of classes.

COURSE DESCRIPTIONS

CSP 570 (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.

Prerequisite: CSP 4/571

CSP 571 (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.

CSP 573 (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.

Prerequisite: CSP 4/571 or 645

CSP 591 (1-4) Inservice

CSP 618 (3) Introduction to Professional Community Counseling

Philosophies and strategies of professional counseling. Overview of counseling literature, field of counseling, and development of the professional counselor.

CSP 620 (3) Introduction to College Student Affairs in Higher Education

Students will explore the functional areas represented by the student affairs profession and will examine current issues and problems facing student affairs and higher education. Philosophical and historical underpinnings of the student affairs profession will also be examined.

CSP 622 (3) Administration in College Student Affairs

Current theories and practices in the administration of student affairs programs in higher education. Includes: theories of leadership, management, and change; models of planning, budgeting, staffing, and evaluation. Current issues and trends are also explored.

Prerequisite: CSP 620

CSP 645 (3) Counseling Procedures & Skills I

Focus on helping skills model, professional issues, and skill acquisition of basic listening responses.

Prerequisite: CSP 665, or take concurrently

CSP 647 (3) Crisis Intervention Strategies

A combination of classroom lecture and interaction with community professionals involved in crisis intervention. Designed to give students practical experience in distinguishing between crisis intervention, theory, and practice.

CSP 648 (3) Counseling in a Multicultural Society

This course is specific to the counseling profession, focusing on both the cultural and sociopolitical forces influencing people in a multicultural society, as well as the microskills necessary for engaging in cross-cultural counselor-client interactions.

CSP 650 (3) Child and Adolescent Counseling Techniques

Provides an overview of theory, research, and practice regarding counseling with children and adolescents. Developmentally and culturally appropriate counseling strategies are stressed. Relevant current topics are examined.

CSP 652 (3) Counseling Through the Family Life Cycle

Theories of human development and the family cycle are presented as the basis for multi-contextual assessment, case conceptualization, and treatment skills when working with contemporary families.

CSP 653 (3) Professional Issues in Marriage and Family Counseling

An overview of professional issues for community counselors providing marriage and family counseling, including certification/licensure, professional development, ethical guidelines, multicultural issues, and recent developments in theory, research, and practice.

CSP 654 (3) Play Therapy Theories and Techniques

Major theories of play therapy and play therapy techniques are reviewed and applied to a range of mental health, learning, and developmental needs of children. Readings, lectures, class demonstrations, and role-play experiences are included.

CSP 655 (3) Mental Health in the Schools

This course provides students with critically important information for working with P-12 students with disabilities and mental health issues. The course is needed to provide school counseling students with the type of preparation they need to be competitive in the job market and to perform well in a school counseling capacity. The course will also provide helpful educational opportunities to area professionals, which can foster positive relationships between the CSP department and the community.

CSP 658 (3) Career Development I

Overview of theories of career development, career guidance, career choice, and decision-making. Career counseling interviews and assessment techniques are also emphasized. Prerequisite: CSP 645 and 665, or concurrently

CSP 659 (3) Introduction to Professional School Counseling

Roles and functions of the professional school counselor in a school setting. Survey of guidance programs and services.

CSP 660 (3) Appraisal Techniques: Educational

Nature and use of measurement tools in counseling with particular emphasis on representative standardized tests, norms, and basic research procedures. Prerequisite: permission from instructor

CSP 661 (3) Appraisal Techniques: Professional Community Counseling

Basic appraisal principles and applications of projective and objective personality assessment tools in counseling practice. Prerequisite: permission from instructor

CSP 662 (3) American College Student

Provides theoretical and outcomes perspectives on human development during the college years. Includes the theory and application of developmental perspectives on gender, race, ethnicity, religion, age, and sexual orientation. Application to college student affairs programs is stressed.

CSP 664 (3) Management & Assessment of Campus Environments

Provides the developing student affairs practitioner with an understanding of the dynamic relationship between students and the college environment. Includes the study of physical, social, and organizational environments and the assessment of environmental impact on students' development. Prerequisite: CSP 662

CSP 665 (3) Counseling Theories

A review and analysis of major counseling theories coupled with empirical support and specific counseling theory techniques and theoretical case analysis.

CSP 666 (3) Counseling Procedures & Skills II

Emphasis on knowledge and skill acquisition of advanced listening responses, helping interventions, and counseling strategies. Prerequisite: CSP 645

CSP 667 (3) Family Counseling

Overview of family theories and family functioning. Focus on techniques and skills to address issues of contemporary families. Prerequisite: CSP 645, 666, 665

CSP 668 (3) Marriage Counseling

Overview of major theories of marriage counseling; skill and strategies for effective marital counseling and case analysis. Prerequisite: CSP 665, 666

CSP 669 (3) Interventive: Treatment Planning/Evaluation

Fundamentals of treatment plan development in counseling, with particular focus on

the integration of personality assessment, intake interviewing and diagnostic classification data.

Prerequisite: CSP 661

CSP 670 (3) Issues in Counseling Women

This course provides an introduction to the developmental, socio-cultural, and psychological issues unique to women and explores the ways in which such issues affect women's mental health. The course includes an introduction to the basic helping skills necessary to effectively respond to women's developmental and mental health needs.

CSP 671 (3) Assessment of Intellectual Functioning

This course will provide students with an awareness of best practices and current issues in the assessment of intellectual functioning. Students will receive introductory training in the administration and interpretation of selected intellectual assessment measures. The intent of the course is to provide students with a thorough understanding of the proper uses of intellectual measures and intellectual test data, as well as prepare students to administer intellectual tests under clinical supervision.

CSP 673 (3) Group Counseling

Major theories of group development are presented along with analysis of group notes, group techniques, and groups for special populations. An experiential component is included for experience in group processes.

Prerequisite: CSP 665, 645

CSP 674 (3) Developmental Guidance

Developmental needs and characteristics of children and adolescents. School guidance programs and interventions that respond to these needs. Prerequisite: permission from instructor; CSP 679; taken in conjunction with Internship I

CSP 675 (3) Research and Writing in CSP

The primary product of the course will be a scholarly review of literature on a topic mutually acceptable to the student, the faculty advisor, and the instructor of the course. Students will learn to effectively analyze and utilize the results of research in their chosen field.

CSP 676 (3) Workshop Design & Development

Skills and knowledge base of critical components of workshop design. Prerequisite: permission from instructor

CSP 677 (1-4) Individual Study

Individual study focusing upon a curricular or instructional topic under the direction of graduate faculty. Prerequisite: consent

CSP 679 (1-4) Practicum I in Counseling

Supervised practicum experiences. Admission by prior application. Prerequisite: permission from instructor

CSP 680 (1-4) Practicum II in Counseling

Supervised practicum experiences. Admission by prior application. Prerequisite: permission from instructor

CSP 681 (1-4) Practicum in Student Affairs

Supervised practicum experience in Student Affairs. Admission by prior application. Prerequisite: permission from instructor

CSP 686 (1-4) Internship I

Supervised integrative experience. Admission by application only. Prerequisite: permission from instructor

CSP 687 (1-4) Internship II

Supervised integrative experience. Admission by application only. Prerequisite: permission from instructor

CSP 688 (1-4) Internship III

Supervised practical integrative experience. Admission by application only. Prerequisite: permission from instructor

CSP 689 (3) Technology in Counseling & Student Affairs

The course provides an introduction to the use and applications of hardware and software in the fields of counseling and student affairs. The course is based on the technology standards that are identified by the Association of Counselor Educators and Supervisors (ACES) and the literature on the application of technology to the fields of counseling and student affairs.

CSP 694 (2) Alternate Plan Paper**CSP 699 (3-6) Thesis**

For students desiring to consult experimental applied research in their graduate specialization's career. Prerequisite: consent

CREATIVE WRITING MFA

*College of Arts & Humanities
Department of English
230 Armstrong Hall • 507-389-2117*

See **ENGLISH**

ECONOMICS

*College of Social & Behavioral Sciences
Department of Economics
150 Morris Hall • 507-389-2969*

Chair: Ved Sharma, Ph.D.

Ashok Chowdhury, Ph.D.; Atrayee Ghosh Roy, Ph.D.; Steven Hickerson, Ph.D.; Saleheen Khan, Ph.D.; Donald Renner, Ph.D.; Richard Schiming, Ph.D.; Robert Simonson, Ph.D.; Gerald Smith, Ph.D.

Admissions to the MA program in Economics are currently suspended. Students may use economics courses as electives in other programs or as part of a Multidisciplinary Studies program.

COURSE DESCRIPTIONS**ECON 503 (3) Labor Problems**

Employment, wages, and economic security. The structure and impact of labor organizations and labor legislation.
Prerequisite: ECON 201 and 202

ECON 504 (3) Economics of Human Resources

Quantitative and qualitative aspects of human resources; human capital; changing population structure; economic decisions within the household; intergenerational transfers; earnings differentials by race and gender; pensions and social security; public policy towards human resources.
Prerequisite: ECON 201,202

ECON 505 (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.
Prerequisite: ECON 305

ECON 506 (3) Collective Bargaining

Emphasis on philosophy, structure, process of negotiation, grievances, arbitration, important developments and trends, and economic impact of collective bargaining.
Prerequisite: ECON 201 and 202

ECON 508 (3) Government Regulation of Labor Relations

An historical review of the past public policy concerning labor organizations, an analysis of the economic causes and effects of the negotiations of labor, current economic problems in labor legislation, and the role of federal and state governments in the industrial relations.
Prerequisite: ECON 201 and 202

ECON 510 (3) Quantitative Analysis in Economics

This course will introduce the student to the use of mathematics in economic analysis. Topics include equilibrium analysis, metric algebra and linear models, comparative statistics and derivatives, optimization, dynamics and integration, and first-order differential equations.
Prerequisite: ECON 355, 356, 207, and MATH 112

ECON 511 (3) Urban Economics

Economics forces which account for the development of cities and application of principles to some of the major problems of the modern urban community.
Prerequisite: ECON 201 and 202

ECON 512 (3) Resource & Environment Economics

Concepts and techniques for evaluating the alternative uses, management and development of natural resources.
Prerequisite: ECON 201 and 202

ECON 520 (3) International Economics

The economic rationale for interregional trade: emphasis on current problems.
Prerequisite: ECON 201 and 202

ECON 525 (3) Social Control Economic Activity

Considers the role of government in the implementation of social values such as freedom, equality, efficiency, and justice in those areas where markets are imperfect or fail. Theoretical, historical, and philosophical treatment of these issues as manifested in the development of the antitrust laws and economic and social regulation.
Prerequisite: ECON 201 and 202

ECON 529 (3) Economic Education

Fundamental ideas and structure of economics with emphasis on the application of such ideas in the K-12 school curriculum.

ECON 540 (3) Public Finance

Public expenditures, taxes and other revenues, debts and financial administration at federal, state, and local levels.
Prerequisite: ECON 201 and 202

ECON 545 (3) Survey of Economic Ideas

A survey and analysis of the development of economic ideas treated in historical perspective.
Prerequisite: ECON 201 and 202

ECON 546 (3) American Economic Development

An examination of major trends and events of U.S. history from colonial times to the present using tools of economic analysis. Major topics include the role of transportation, economic impact of the Civil War, the role of government in the economy, trends in money and banking, and the Great Depression.
Prerequisite: ECON 201 and 202

ECON 550 (3) Economic Development

Economic underdevelopment and the relationships between mature economies and developing nations.
Prerequisite: ECON 201, 202

ECON 562 (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.
Prerequisite: ECON 201, 202, and 207

ECON 571 (3) Economics, Ethics, & Society

Analysis of theoretical constructs of society and economics. Specific attention will be given to economic questions which have a specific relationship to policy questions and the discrimination of values.
Prerequisite: ECON 201 and 202

ECON 580 (1-3) Seminar: Economics

Prerequisite: ECON 201 and 202

ECON 605 (3) Managerial Economics

To develop and integrate principles and ideas from economics and business and to apply them to management-making decisions and policy formulation within the firm.
Prerequisite: ECON 201 and 202

ECON 606 (3) Applied Macroeconomics

Application of macroeconomics models to analyze current consumer investment and foreign trade behavior. Emphasis on effects of government policy upon interest rates, taxes, foreign trade, the distribution of income and wealth, and the impact of a changing population.
Prerequisite: ECON 201 and 202

ECON 622 (3) Statistical Analysis for Business/Research

A comprehensive course in research design in business and in the application of statistical methods in business decision making. Data files handling and data analysis using mainframe and PC based computer packages such as SPSS will be integrated and emphasized throughout the course.
Prerequisite: ECON 207, and MATH 112

ECON 655 (3) Microeconomic Theory

This course provides the student with an understanding of microeconomic theory. Among the topics covered are optimization, consumer theory, the theory of production and the firm, perfect and imperfect competition, monopoly, factor markets, economic efficiency and market failure, social choice theory, and social welfare.
Prerequisite: ECON 355 and 510

ECON 656 (3) Macroeconomic Theory

This course provides the student with an understanding of macroeconomic theory. Among the topics covered are goals and measurement, business cycles, aggregate demand and supply, Classical and Keynesian analyses, and stabilization theory and policy.
Prerequisite: ECON 356 and 510

ECON 660 (1-3) Seminar: Economics

ECON 670 (1) Alternate Plan/Thesis Proposal Seminar

Designed for students engaged in meeting the thesis/alternate plan paper requirement for the MBA degree. Each student will select, outline, research, and present a proposal on the paper/thesis they will write. Advisor's permission and a submitted plan of study are required for enrollment.

Prerequisite: ECON 622

ECON 677 (1-3) Individual Study

Prerequisite: ECON 201 and 202

ECON 680 (2) Cost-Benefit Analysis

This course provides the student with an understanding of the application of economic analysis to the evaluation of private projects and public programs. Among the topics covered are the theory and practice of cost-benefit analysis, the evaluation of private projects and public programs, shadow prices, economic and environmental impact studies, and regulatory issues.

Prerequisite: ECON 355

ECON 681 (1-3) Readings in Economics**ECON 694 (1) Alternate Plan Paper****ECON 698 (1-5) Internship****ECON 699 (3) Thesis****EDUCATIONAL LEADERSHIP MS****EDUCATIONAL ADMINISTRATION SP****EDUCATIONAL LEADERSHIP SP****EXPERIENTIAL EDUCATION MS**

College of Education

Department of Educational Leadership

115 Armstrong Hall • 507-389-1116

Department Home Page:

www.coled.mnsu.edu/departments/edleader/index.htm

Chair: Scott Wurdinger, Ph.D.

Licensing/EDAD Coordinator: Prudence Gushwa, Ph.D.

Julie Carlson, Ed.D.; Prudence Gushwa, Ph.D.; Jean Haar, Ph.D.; Jasper Hunt, Ph.D.; Ronald Weiss, Ed.D.; Scott Wurdinger, Ph.D.

The mission of the Department of Educational Leadership is to prepare and renew leaders and to provide unique, personalized opportunities for meeting Master of Science and Specialist degree requirements. The Department of Educational Leadership provides Master of Science degrees in Educational Leadership and Experiential Education. The Department also offers a Specialist degree in Educational Administration.

Admission. Complete the general admission requirements of the College of Graduate Studies and Research.

EDUCATIONAL LEADERSHIP MS

(Alternate Plan Paper Only - 34 credits)

Required Leadership Core (9 credits)

EDLD 644 Seminar: Ethics and Leadership (3)

EDLD 644 Seminar: Leadership Studies (3)

EDLD 647 Seminar: Organization and Systems Change (3)

Required Research (3 credits)

EDAD 692 Research in Educational Leadership (3)

EDAD 634 Practicum (1-6 credits)

Electives

Choose 500/600 level electives in consultation with an advisor. Minimum 24 credits total must be in the Department of Educational Leadership.

DIRECTOR OF COMMUNITY EDUCATION, LICENSURE MS

(34 credits, minimum)

To earn licensure in Minnesota, there is a Human Relations Course Required. If you have not satisfied that requirement for a Minnesota teaching license, then you must do it prior to completion of this program. It is an undergraduate course and does not count for this program.

Required Leadership Core (9 credits)

EDLD 644 Seminar: Ethics and Leadership (3)

EDLD 644 Seminar: Leadership Studies (3)

EDLD 647 Seminar: Organization and Systems Change (3)

Required Research Core (3 credits)

Includes Research Fundamentals and the Alternate Plan Paper

EDAD 692 Research in Educational Leadership (3)

Required Educational Administration Courses (10 credits)

EDAD 633 School Administration (beginning of program) (3)

EDAD 670 Situational Observation (Capstone) (3)

EDAD 698 Internship (4)

Elective Administration Courses (12 credits)

EDAD 648 School Public Relations (3)

EDAD 652 Structure/Governance/Trends (3)

EDAD 654 Theory and Practice in Supervision (3)

EDAD 663 Human Resource Management (3)

EDAD 664 School Finance (3)

EDAD 665 School Law (3)

EDAD 681 Planning and Facilities Management (3)

EDUCATIONAL ADMINISTRATION SP

(30 credits, minimum)

This is an advanced degree, which requires a master's degree for admission. Those graduate students with a master's degree from another field may need additional credits to complete the program.

K-12 PRINCIPAL (30 credits minimum)**Required Courses (21 credits)**

EDAD 633 School Administration (Portfolio Development) (recommended first year) (3)

EDAD 654 Theory and Practice in Supervision (3)

EDAD 665 School Law (3)

EDAD 682 Seminar: Field Studies Design (3)

EDAD 698 Internship (6) (3 credits elem., 3 credits sec.)

Admission by application, one semester in advance

Prerequisites: EDAD 633 plus at least 12 additional credits plus Official Plan of Study on file.

EDAD 670 Situational Observation (3) (final semester, Capstone)

Admission by application, one semester in advance

Prerequisites: EDAD 698 completed or in final semester.

Electives Courses (9 credits)

EDAD 648 School Public Relations (3)

EDAD 652 Structure/Governance/Trends (3)

EDAD 664 School Finance (3)

EDAD 681 Planning and Facilities Management (3)

EDAD 699 Thesis (3-4*)

Required Leadership Core

(Take one of the following, unless 3 courses were included in your masters degree)

EDLD 644 Seminar: Ethics and Leadership (3)

EDLD 644 Seminar: Women in Leadership (3)

EDLD 644 Seminar: Leadership Studies (3)

EDLD 647 Seminar: Organization and Systems Change (3)

DIRECTOR OF SPECIAL EDUCATION (30 credits minimum)

Prerequisites: Masters Degree in Special Education or Equivalent

Required Courses (12 credits)

EDAD 633 School Administration (Professional Plan Development) (recommended first year) (3)

EDAD 682 Seminar: Field Studies Design (3)

EDAD 698 Administrative Field Experience (Internship) (6) (3*)

Admission by application, one semester in advance

Prerequisites: EDAD 633 plus at least 12 additional credits.

EDAD 670 Situational Observation (3*) (final semester, Capstone)

Admission by application, one semester in advance

Prerequisites: EDAD 698

Content Courses Select from the following EDAD courses (18 credits)

EDAD 648 School Public Relations (3)

EDAD 652 Structure/Governance/Trends (3)

EDAD 654 Theory and Practice in Supervision (3)

EDAD 663 School Business Management (3)

EDUCATIONAL LEADERSHIP

- EDAD 664 School Finance (3)
EDAD 665 School Law (3)
EDAD 667 Seminar: Advanced Law (Prerequisites: EDAD 665)
May be replaced by Special Ed Law
EDAD 668 Human Resource Management (3)
EDAD 699 Thesis (3-4*)

Leadership Courses

(Take one of the following courses, unless 3 were taken in your masters degree)

- EDLD 644 Seminar: Ethics and Leadership (3)
EDLD 644 Seminar: Leadership Studies (3)
EDLD 644 Seminar: Women in Leadership (3)
EDLD 647 Seminar: Organization and Systems Change (3)

SUPERINTENDENT

It is recommended that an initial license of K-12 Principal, Director of Special Education, or Director of Community Education is completed prior to seeking admission for a program as superintendent. Individual programs will be planned to assist in completing coursework, internship experience, and the final portfolio review. If one does not have any educational administrative license in the state of Minnesota, a 30 credit program will be planned. The Coordinator of Educational Administration should be contacted.

*Plan with advisor

EDUCATIONAL LEADERSHIP SP

(Thesis Plan only - 30 credits)

This is an advanced degree, which requires a master's degree for admission. This program does not lead to recommendation for administrative licensure.

Required Leadership Core (9 credits)

These credits should be selected with the Advisor. Courses should be from those most closely supporting one's profession.

Internship (1-6 credits) Application of leadership in a field-based experience.

EDAD 698 Internship

Required Research (6-7 credits)

- EDAD 682 Seminar: Field Studies Design (3)
EDLD 699 Thesis (3-4)

Elective Courses

Choose 500/600 level elective courses, selected in consultation with an advisor. 6 credits may be outside the Department of Educational Leadership.

OTHER OPTIONS

Students who are pursuing graduate work in more specialized fields such as higher education administration, general administration, community education administration, and computer services administration should consult with their advisor for designing their master's and/or specialist degree program.

EXPERIENTIAL EDUCATION MS

(Alternate Plan Paper Only - 34 credits)

The Master of Science degree program in Experiential Education at Minnesota State University, Mankato is the oldest graduate degree program in the United States. Originally started in 1971 as a joint venture between Minnesota State University, Mankato and the Minnesota Outward Bound, the Master's program is now housed in the Department of Educational Leadership and has expanded its vision and developed an ever-increasing number of options for graduate students. Although there is a strong and still viable tradition of involvement in outdoor oriented activities, the department is committed to the idea that experiential education is much broader than wilderness programming.

The first fundamental assumption of the Master's program is that there is more to the knowing process than much of traditional education assumes. Graduate students in the program are encouraged, even required, to leave the classroom and develop meaningful learning experiences for themselves. Whether their interest is outdoor programming, classroom teaching, administration, psychological interventions or others, the program gives students academic credit for testing ideas. This program is designed for strongly self-directed individuals who want to experiment with new educational ideas.

The other fundamental assumption of the Master's degrees program in Experiential Education is that raw, direct experience must be complements with careful thought and reason. In this light, the core seminars are oriented toward the analysis and questioning about the fundamental theory of experiential education. In addition to core seminars, students can develop their reasoning abilities by taking graduate-level elective courses of the students' own choosing. The goal of the program is to unite practical skills with scholarly abilities in the interests of the individual student.

Recommended Leadership Core (9 credits)

- EDLD 644 Leadership Studies (3)
EDLD 644 Ethics and Leadership (3)
EDLD 647 Organization and Systems Change (3)

Required Experiential Education Individualized (16 credits) or courses within the Department

Choose any 500/600 level elective courses outside the Experimental Education or Educational Leadership electives selected in consultation with an advisor.

Required Electives (9 credits)

Choose 500/600 level Educational Leadership electives selected in consultation with an advisor

One course must be a graduate level research methods course, either within or outside the department.

COURSE DESCRIPTIONS

EDUCATIONAL ADMINISTRATION

EDAD 560 (2) Citizen Involvement in Community Education

The course develops skills in regulation of community issues, working with advisory groups, sustaining community involvement, and developing community leadership.

EDAD 561 (2) Interagency Coordination

The course addresses strategies for trust-building among community groups, mutual goal setting, and public relations.

EDAD 562 (2) Reading in Community Education

Students will engage in secondary research and discussions of community education programs that work.

EDAD 563 (2) Financing Community Education

The course will develop the knowledge base regarding the finance of community education programs, including calculating revenue.

EDAD 580 (2) Evaluation in Community Education

This course will focus on skills in evaluation of personnel, programs, and monitoring evaluation efforts.

EDAD 584 (2) Needs Assessment in Community Education

The course will focus on community assessment, including preparing and conducting surveys and interpreting results.

EDAD 590 (1-3) Workshop

An experience where the principal learning takes place through interchange among class members and the facilitator.

EDAD 622 (3) Seminar in Theory/Reactive Public Administration

Theory of leadership and management in administration. Advanced topics with emphasis on current practice.

EDAD 633 (3) School Administration

Skills and procedures for implementing site-based management, effective school leadership, and management.

EDAD 634 (1-4) Practicum

Practical experience in educational administration.

EDAD 635 (1-6) Internship

Field based experience in administration of school programs.

EDAD 636 (3) Techniques of Clinical Supervision

Objective data gathering and non-directive conferring procedures, including peer coaching.

EDAD 639 (3) Laboratory in Decision Making

This course will center around problem-solving and decision-making skills with an emphasis on case studies. A related practicum experience will also be included.

EDAD 648 (3) School Public Relations

The philosophic framework with practice for organizations and their relationship to community, including the school as a focal point of community.

EDAD 652 (3) Structure, Governance, & Trends

An overview of the organization and administration of education in the United States; analysis of federal, state, and local roles in school governance; investigation and integration of trends, concepts and models which impact the role of the school.

EDAD 654 (3) Theory & Practice in Supervision

This course examines functions of supervision, knowledge, interpersonal communications, and technical skills. Supervision models are presented and communications and human relations skills are emphasized.

EDAD 657 (3) Supervision of Special Programs

This course examines the administration of special programs and activities within education. Curricular and staffing needs are included.

EDAD 659 (3) Seminar: School Administration

Emphasis on leadership and management within the school setting. Advanced topics. Prerequisite: Enrolled in Sixth Year or Specialist Program

EDAD 663 (2) School Business Management

This course is designed to provide the student with knowledge of school accounting, budgeting, and other business administration functions. Prerequisite: EDAD 664

EDAD 664 (3) Public School Finance

This course is designed to provide information to help the student understand the relationship of the economy and education, several types of taxes, and several state and federal school aid schemes.

EDAD 665 (3) School Law

This course is the first of two courses designed to give students a comprehensive view of the law that governs the state school systems of America. Topics range across civil, criminal, and institutional law as they touch the student, teacher, and administrator.

EDAD 667 (2) Seminar: School Law

This course is the second of two courses designed to give students a comprehensive view of the law that governs the state school systems of America. Prerequisite: EDAD 665

EDAD 668 (2) Human Resource Management

This course includes a comprehensive study of all aspects of human resource management for direct application to employment. Topics will be delivered within a working model of educational organizations and will range from the initial planning of personnel positions through each stage of employment.

EDAD 669 (1) Selected Human Resource Topics

EDAD 670 (1-3) Situational Observation
The process by which candidates for licensure as school administrators document and present evidence of mastery of required competencies.

EDAD 674 (3) Fiscal Administration of Higher Education

This course examines various aspects of the fiscal administration of a college or university organization.

EDAD 675 (3) Organizational Development

Sources of grant funds, design of proposals, and regulations.

EDAD 676 (3) Administration Higher Education

This course will focus on funding, organization, governance, processes, and structures of higher education.

EDAD 677 (1-4) Individual Study**EDAD 679 (1-4) Practicum****EDAD 681 (3) Planning & Facilities Management**

This course is a study of the principles, techniques, and procedures used in the planning of programs and facilities with a focus on K-12 systems. It examines the system approach to comprehensive planning with an emphasis on strategic and tactical planning techniques.

EDAD 682 (3) Seminar: Field Study Design

This course is designed for those students involved in writing theses. It is intended to aid students in the selection and development of the field study problem, the selection of the research design, and the development of the instruments to be used in the study for data gathering purposes.

EDAD 683 (3) Community School Administration

A comprehensive overview of community education: establishing, developing, maintaining, and evaluating community education process and programming.

EDAD 685 (3) Administration of NonProfit Organization

This course examines the policy in which nonprofit organizations operate.

EDAD 690 (1-6) Workshop

In workshops, the principal learning takes place through interchange among class members and the facilitator. Most work is completed during scheduled workshop hours. A workshop will have a specific focus on a particular problem and occurs in a compact time period.

EDAD 692 (3) Research in Educational Leadership

This course will focus on techniques and methods for collecting and analyzing data

and developing organizational surveys. The course will also focus on the writing of the alternate plan paper.

EDAD 694 (1-2) Alternate Plan Paper

The alternate plan paper includes a research requirement less extensive in nature than a thesis, but significantly greater in quality and quantity than the standard graduate term paper.

EDAD 697 (3-9) Internship

Field experience focused on development of specified leadership/administrative competencies. Prerequisite: 2/3 of degree

EDAD 698 (3-9) Internship

Practical experience on the job for the principal and superintendency. Focused on the development of administrative competencies. Prerequisite: 2/3 of degree

EDAD 699 (3-6) Thesis

The thesis involves extended research resulting in a significant contribution to new knowledge. This reflects a student's ability to do individual, independent work of a creative and/or investigative type in an area of relation to the student's major field.

EDUCATIONAL LEADERSHIP**EDLD 622 (3) Collaborative Leadership**

Theory of leadership and management of district school administration. Advanced topics with emphasis on current practice.

EDLD 634 (1-6) Practicum

Practical experience in Educational Leadership.

EDLD 644 (3) Seminar: Selected Topics

This seminar is intended to be used as a vehicle to be responsive to clientele with special study interests.

EDLD 646 (3) Punished by Rewards

This seminar explores the intended and unintended consequences of rewards and punishments as a source of motivation.

EDLD 647 (3) Seminar: Organizational & Systems Change

This seminar explores the dynamics of organizational and systems change including two models of the transformation process and tasks facing any organization as it changes.

EDLD 648 (3) Seminar: The Learning Organization

This seminar examines the concepts of the learning organization as articulated by Peter Senge in *The Fifth Discipline: The Art and Practice of the Learning Organization*.

EDLD 649 (3) Seminar: Organizational Conflict

This seminar explores examines the stages, types, and styles of organizational conflict. We also address strategies for dealing with organizational conflicts.

EDLD 677 (1-4) Individual Study

Individualized study in an area of leadership theory, research, or inquiry. Admission by prior application only.

EDLD 679 (1-4) Practicum

Application and practice of leadership competencies. Admission by prior application only.

EDLD 688 (1-3) Project Demonstration

This course will present a wide range of techniques and models for developing and academic projects, including portfolios. Students will develop and demonstrate a professional project. This course may replace or be in addition to an APP or thesis.

EDLD 690 (1-4) Workshop

An experience where the principal learning takes place through interchange among class members and the facilitator.

EDLD 694 (1-2) Alternate Plan Paper

The alternate plan paper includes a research requirement less extensive in nature than a thesis, but significantly greater in quality and quantity than the standard graduate term paper.

EDLD 697 (3-6) Internship in Teaching**EDLD 698 (3-6) Administrative Field Experience**

A field based experience

EDLD 699 (3-6) Thesis

The thesis involves extended research resulting in a significant contribution to new knowledge. This reflects a student's ability to do individual, independent work of a creative and/or investigative type in an area of relation to the student's major field.

EDUCATIONAL STUDIES: ELEMENTARY AND EARLY CHILDHOOD

EXPERIENTIAL EDUCATION

EXED 590 (1-3) Workshop

EXED 603 (3) Experience and Education

This course is where students put the theory of experience education into practice. Students are required to place themselves into educationally significant indeterminate situations where new learning can take place under direct faculty supervision. Students develop a "learning contract" for implementation of this course.

EXED 604 (3) Development of Experiential Education

This course allows graduate students to develop the theory of experiential education from oneself to the direct learning of others. This is an experiential course and will involve direct applications of experiential methodology.

EXED 634 (1-6) Practicum

Practical experience in experiencing education.

EXED 635 (1-4) Internship

Field based experience in Experiential Education.

EXED 644 (3) Seminar: Philosophy of Experiential Education

Examines the theory of Experiential Education. Historical and contemporary writers will be read.

EXED 645 (3) Seminar: Selected Topics

This seminar is intended as an avenue to explore historical, current, and emerging trends, issues, leaders, and topics unique to the field of experiential education.

EXED 677 (1-3) Individual Study

Individual study of an area of leadership theory, research, inquiry. Admission by prior application only.

EXED 694 (1-2) Alternate Plan Paper

The alternate plan paper includes a research requirement less extensive in nature than a thesis, but significantly greater in quality and quantity than the standard graduate term paper.

EDUCATIONAL STUDIES: ELEMENTARY AND EARLY CHILDHOOD MS

College of Education

Department of Elementary and Early Childhood

328 Armstrong Hall • 507-389-1516

Chair: Peggy Ballard, Ph.D.

Peggy Ballard, Ph.D.; Ronald Browne, Ph.D.; Marla A. Mastin, Ed.D.; Karl Matz, Ed.D.; Maureen Prenn, Ph.D.; Steve Reuter, Ph.D.; Mary Ellen Pearson, Ph.D.; Tracy Pellett, Ed.D.; Linda Good, Ph.D.; Terry Fogg, Ph.D.

Elementary and Early Childhood serves teachers, other professional educators and all persons concerned with quality education. Elementary and Early Childhood graduate courses, seminars and in-service programs deal with the teaching-learning process from pre-kindergarten through middle school. Graduate students can pursue advanced curriculum study, examining how curriculum is shaped, delivered, evaluated and changed to meet the needs of students and communities. Program emphasis is placed on helping graduate students strengthen and broaden the knowledge, skills and dispositions previously gained, helping them function even more effectively as educators.

The graduate offering in the Department of Elementary and Early Childhood is a Master of Science Degree.

Admission. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, requirements for specific degree programs and for licensure endorsements are described in the sections which follow.

Financial Assistance. A limited number of graduate assistantships within the Department of Elementary and Early Childhood are available for full-time students. Contact the department for more detail.

ELEMENTARY AND EARLY CHILDHOOD MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

(Creative Project - 34 credits)

The Master of Science in Education Studies emphasizes curriculum planning and improvement of teaching skills. The program is available to all teachers who wish

to broaden their base of knowledge, enhance their classroom performance and better serve the needs of their students. Students choose to specialize in a particular focal area. Either the thesis, alternate plan, or creative project may be followed.

For Admission, applications for the Master of Science program must have a valid Minnesota teaching license. They must have earned a bachelor's degree from an accredited college or university, and have a minimum grade point average of 2.75 for the last two undergraduate years. They must also submit letters of recommendation to the department. Contact the department for further information.

Required Tools of Research Core, All Options (9 Credits)

EEC 600 Introduction to Graduate Studies and Technology (3)

EEC 617 Elementary School Curriculum (3)

EEC 626 Literacy for all Learners (3)

Major Research Core Courses: (9-15 credits)

EEC 604 Teacher as Researcher: Classroom Inquiry (3)

KSP 609 Research Methods **OR**

ESSP 600 Introduction to Education Research (3)

EEC 610 Scholarly Writing

EEC 694 Alternate Plan Paper (1-2)

EEC 695 Creative Project (1-2)

EEC 699 Thesis (3-6)

Required 500/600 level Focal Courses in Education (Varies with each option, 9-15 credits)

500/600 level Elective Courses within the College of Education which will provide focus in a particular area of study (e.g., Early Childhood Education, Reading, and Elementary School).

Focal Areas of Study (9-15 credits)

The courses listed under each area meant to be suggestions only. The Early Childhood courses are to be selected in consultation with an advisor.

EEC 565 Pre-Kindergarten Curriculum and Methods (2)

EEC 595 Internship: Early Childhood Family Education (2-4)

EEC 608 Teacher-Parent Relationships (3)

EEC 609 Education of Infants and Toddlers (3)

EEC 612 Language and Literacy development (2)

EEC 614 Cognitive Development in Early Childhood Education (2)

EEC 640 Seminar: Early Childhood Education (2)

EEC 685 New Directions in Kindergarten (2)

ESSP 520 Education of young Children with Exceptional Needs (3)

Reading

EEC 520 Reading Difficulties (3)

EEC 522 Reading and Writing in the Secondary School (2) **OR**

EEC 528 Teaching Reading And Writing in the Content Areas (3)

EEC 612 Language and Literacy Development (2)

EEC 619 Identifying and Helping Struggling Readers (4)

EEC 626 Trends in Literacy (3)

EEC 628 Writing for Teachers (2)

EEC 629 Administration of Reading Programs (2)

ESSP 645 Clinical Procedures with Children (2)

Elementary School

EEC 520 Reading Difficulties (3)

EEC 528 Teaching Reading And Writing in the Content Areas (3)

EEC 601 Experimentation and Innovation in Elementary Classroom (2)

EEC 608 Teacher-Parent Relationships (3)

EEC 617 Elementary School Curriculum (3) **OR**

EEC 631 Seminar: Elementary Curriculum (2)

EEC 620 Trends in Social Studies (3)

EEC 622 Trends in School Math (3)

EEC 624 Trends in School Science (3)

EEC 626 Trends in Literacy (3)

EEC 628 Writing to Teachers (2)

Related Area Electives (Area varies with each option, 6 credits)

Choose 6 elective credits in a related academic area (outside of the College of Education), chosen in consultation with an advisor.

To satisfy degree requirements, students following a degree plan must successfully complete a written comprehensive examination. Students completing the thesis plan must also defend the thesis orally. A minimum of 50 percent of all coursework must be taken at the 600 level.

COURSE DESCRIPTIONS

EEC 502 (3) Introduction to Teaching the LEP Student

For teachers of students whose dominant language is other than English.

EEC 504 (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.

EEC 514 (2-4) Diagnosis and Corrective Instruction in Elementary Mathematics

Diagnostic teaching, evaluating deficiencies, skill analysis, use of case studies and tools of diagnosis.

EEC 517 (3) Teaching Reading to ESL Students

Foundation level knowledge concerning the reading process and how it pertains to the ESL student including strategy instruction.

EEC 518 (2) Elementary School Science Activities

Identification of appropriate science equipment, process skills, concepts and instructional attitudes for science in the elementary school.

EEC 520 (3) Reading Difficulties

Foundation level of knowledge concerning the characteristics, causes, diagnosis and treatment of reading difficulties.

EEC 522 (2) Emergent Literacy

Presents knowledge base and strategies for literacy development for infants-Kindergarten. Focus on Family Literacy.

EEC 528 (3) Teaching Reading and Writing in the Content Areas

Presents strategies for teaching and reading knowledge, attitudes and skills in the various teaching content areas.

EEC 564 (1) Early Childhood Final Project

Professional portfolio, self video, career options.

EEC 565 (2) Pre-Kindergarten Curriculum and Methods

Planning the curriculum for teaching prekindergarten children.

EEC 583 (2) Supervision of Student Teachers

To assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers.

EEC 590 (1-3) Workshop

Thw workshop format provides teachers and others opportunity to study a specific topic in a shortened, hands-on course. May be repeated.

EEC 591 (1-4) In-Service

Special courses designed to meet changing educational trends.

EEC 595 (2-4) Internship: Early Childhood Family Education

Principals and practices in Early Childhood/Family Education and programs. On-site experiences are required.

Pre: FCS 485, 488; EEC 435

EEC 600 (3) Introduction to Graduate Studies and Technology

Introduction to the programs and requirements of graduate studies in education at Minnesota State University, scholarly writing and the classroom technologies necessary for the master teacher.

EEC 601 (2) Experimentation and Innovation in the Elementary Classroom

Examination of innovative instructional procedures for implementation, evaluation tools and techniques in K-8 settings.

EEC 602 (1-4) Improvement of Instruction

Planning, teaching, skills, instructional procedures, and evaluation with emphasis on classroom implementation.

EEC 604 (3) Teacher as Researcher: Classroom Inquiry

Teachers use observations and informal data to learn more about their own classrooms. Designed to provide learning experiences in using research techniques and procedures in actual field research.

EEC 606 (1-4) Selected Topics

Selected topics explored for elementary or secondary teaching. May be repeated.

EEC 608 (3) Teacher-Parent Relationships

Emphasis on parent-teacher-child relationships for effective learning of children through the elementary grades. Includes Early Childhood Family Education.

EEC 609 (3) Education of Infants & Toddlers

Develop mentally appropriate materials and methods for use with infants and toddlers in the home, in HEAD START, in family daycare and in center based day care.

EEC 610 (3) Scholarly Writing

Designed to provide learning experiences in utilizing techniques and procedures in actual field research situations.

Pre: KSP 602 and EEC 604

EEC 612 (2) Language and Literacy Development

Relationship between speaking, listening, reading, and writing; role and techniques of assessment; language development in literacy and writing; effective literacy programs.

EEC 614 (2) Cognitive Development in Early Childhood

Examination of family development and systems, development of children, environmental needs, problem-solving and critical thinking.

EEC 615 (2) Organize and Direct In-Service Reading Program

To identify special areas of staff needs in literacy: theory and research, cooperation, implementing change.

Pre: EEC 4/520

EEC 617 (3) Elementary School Curriculum

Historical foundations; influencing factors, issues, analysis of materials, projects in construction.

EEC 618 (2) Preparation of Supplementary Reading Materials

Relates basic reading instruction theory to materials used in the classroom and provides guidance in identifying and preparing needed supplementary materials.

EEC 619 (4) Identifying and Helping Struggling Readers

Selection and use of materials and methods; practical application of techniques.

EEC 621 (3) Trends in Early Childhood

EEC 622 (3) Trends:

Recent research and current developments. Contemporary trends and teaching strategies in K-12.

EEC 626 (3) Literacy for All Learners

Emphasizes recent research, issues, teaching methods, and new materials in developmental reading and K-12 levels.

EEC 628 (2) Writing for Teachers

Readings of current issues and trends in methodologies, linguistics, grammar, composition and applications in K-12 settings.

EEC 629 (2) Administration of Reading Programs

A study of the role of the reading supervisor in planning, implementing and evaluating the total reading program.

EEC 631 (2) Seminar: Elementary Curriculum

Critical study of problems and research related to elementary school curriculum.

EEC 632 (2) Elementary School Supervision

Theory of supervision; models, techniques, in-service, role of cooperating teaching; supervision components. Designed for supervision of student teachers and beginning teachers.

EEC 636 (1-6) Clinical Experience in Curriculum Development

Supervised practical experiences in curricular design and development. Admission by application only.

EEC 640 (2) Seminar: Early Childhood Education

Contemporary issues in early childhood education. May be repeated for a maximum of four semester hours of credit.

EEC 642 (2) Organization and Administration of Early Childhood Programs

Develops basic principles of organizing and administrating early childhood programs.

EEC 643 (3) Advanced Assessment and Evaluation of Learning

Intensive study and field practice in administering, scoring and interpreting various evaluative instruments with emphasis on mental aptitude assessment.

EEC 645 (2) Seminar:

EEC 650 (1-4) Technology Based Curriculum Materials

To refresh and update skills and knowledge related to technology use in the elementary classroom.

EEC 658 (2) Pre-Practicum Clinical Experience I

Each student will learn about teaching and learning in a different educational setting, e.g., charter school, four period day. Middle School.

EDUCATIONAL STUDIES: SPECIAL POPULATIONS

EEC 660 (1-6) Practicum in the Elementary School

Special teaching projects of an experiential and creative nature in the students' field of preparations.

EEC 661 (2-4) Practicum

Special teaching projects of an experiential or creative nature in the students' field of preparation.

EEC 663 (3) Curriculum Development

Various theories for organizing curriculum are investigated and experiences are provided in designing an articulate program.

EEC 670 (2) Advanced Seminar in Elementary Education

May be repeated for a maximum of six semester credits. To provide opportunity to study, analyze and synthesize research findings.

EEC 671 (1) Introduction to Minnesota Graduation Standards

Introduction to the standards, their structure and function.

EEC 672 (2) Alignment of Curriculum to Standards

Focus on how the standards are to be imbedded in the curriculum and how to do this as well as where to place them.

EEC 673 (3) Document Student Progress

Emphasis on how to monitor student progress through the standards.

EEC 675 (2-4) Advanced Practicum in Elementary Education

Special projects of an experimental or innovative nature in elementary instruction, curriculum development of supervision.

EEC 676 (2) Strategies for Individualized Instruction

Examine theory and designs for developing implementing and evaluating various individualized instructional strategies.

EEC 677 (1-4) Individual Study

Opportunity for individual study on curriculum or instruction topics under direction of graduate faculty.

EEC 685 (2) New Directions in Kindergarten

Current research, instructional techniques and materials regarding kindergarten curriculum in language arts, reading, science, mathematics, social studies, psychomotor and creative arts.

Pre: EEC 370

EEC 686 (1-4) Curriculum Design

Supervised practical experiences in curriculum design and development. Permission required.

Pre: consent

EEC 690 (1-3) Workshop

Graduate workshops covering a wide range of content.

EEC 691 (1-4) In-Service

EEC 694 (1-2) Alternate Plan Paper

For students completing a Master's degree with the alternate plan paper option.

EEC 695 (1-2) Creative Projects

For students completing a Master's degree with the creative project option.

EEC 699 (1-4) Thesis

For students completing the Master's of Specialist degree using the thesis option.

EDUCATIONAL STUDIES: SPECIAL POPULATIONS

College of Education

Department of Educational Studies: Special Populations

313 Armstrong Hall • 507-389-1122

Chair: Andrew P. Johnson, Ph.D.

Graduate Coordinator Learning Disabilities and Emotional/Behavioral Disorders:
Andrew P. Johnson, Ph.D.

Graduate Coordinator Gifted Education and Talent Development: Marcia Gentry, Ph.D.

Gwen Berry, Ph.D.; Marcia Gentry, Ph.D.; Andrew P. Johnson, Ph.D.; Robert Miller,
Ph.D.; Carole Milner, Ph.D.; Gail Zahn, Ph.D.

The Department of Educational Studies: Special Populations offers graduate programs at Minnesota State University, Mankato designed to prepare professionals

to work in a variety of organizational settings and positions serving individuals with special needs, as well as programs designed to help professionals better serve the needs of all students in general educational settings. Specific areas of graduate study include: Gifted Education and Talent Development (GETD), Learning Disabilities (LD), Emotional and Behavioral Disorders (EBD). From these areas students can choose from the following eight graduate programs:

Gifted Education and Talent Development (GETD)

- Educational Specialist Degree: Gifted Education and Talent Development
- Master of Science: Gifted Education and Talent Development
- Master of Science: Teaching and Learning for Optimal Talent Development
- Certificate: Gifted Education and Talent Development

Emotional and Behavioral Disorders (EBD)

- Master of Science: Emotional/Behavioral Disorders
- Certificate: Emotional/Behavioral Disorders

Learning Disabilities (LD)

- Master of Science: Learning Disabilities
- Certificate: Learning Disabilities

Gifted Education and Talent Development (GETD)

Within Gifted Education and Talent Development (GETD), students may choose from four programs of study, including an Ed.S. or MS in GEDT, an MS in Teaching and Learning that emphasizes GETD techniques and the interest/specialties of the graduate student, and a Certificate in GETD. These accredited, unique graduate programs are designed for educators at all levels and in all subject areas who seek to broaden their knowledge and learn strategies to help students reach their fullest potential. These programs are based upon the belief that the development of various talents and potential is essential for all children. Therefore, the programs are designed to prepare classroom teachers, gifted education specialists, and leadership personnel to apply gifted education pedagogy toward improved curriculum, instruction and programming that will better meet the needs of individual learners. Additionally, the programs focus on meeting the special educational, social and emotional, gifted, talented, and creative students needs by developing and providing a variety of services along a continuum. To help meet the needs of graduate students who are also professionals, courses are offered on weekends and evenings in a variety of locations. All course work is designed with relevance, applicability, meaningfulness, and flexibility to encourage professional growth among students in the program.

Admissions Procedures for Educational Specialist Degree, Master Degree and Certificate in Gifted Education and Talent Development: The GETD programs use a strength-based, portfolio admission procedure. To be considered for admission, candidates must submit the following three items:

1. A completed application form (the standard university application form — required by the Graduate College).
2. Official college transcripts (required by the Graduate College and provides information about previous course work and degrees).
3. A two to five page statement describing their philosophy of education, purpose for applying, educational achievements or honors, and academic interests.

Plus any two of the following:

1. Minimum 3.00 GPA from their most recent two years of study.
2. Miller Analogy Test Score of 45 or above
3. Graduate Records Exam score of 500 or greater on verbal, quantitative or analytic subtests
4. Outstanding educational product or performance (including but not limited to curriculum plans, units papers, presentations...contact the department for more specific details)
5. Evidence of accomplishments outside the field of education in areas such as but not limited to the arts, literature, and community service
6. One or more samples of writing published in a juried academic journal
7. Evidence of outstanding academic writing

The applicant must request that the educational and testing institutions send official scores and transcripts directly to the College of Graduate Studies and Research. Upon receipt of these materials, the College of Graduate Studies and Research will forward the applicant's file to the graduate coordinator. Applications are reviewed continuously. Students must submit an application to take graduate courses prior to taking the first graduate course, and applicants must apply for admission and be admitted to the program prior to completion of ten graduate credits applied toward the degree.

**GIFTED EDUCATION AND TALENTED DEVELOPMENT:
EDUCATIONAL SPECIALIST**

An educational specialist degree is earned by completing 30 credits, a thesis, competency exam and a practicum.

Research Core (6 credits minimum)

- ESSP 600 Introduction to Educational Research (3)
- ESSP 601 Quantitative Methods in Educational Research (3)
- ESSP 602 Qualitative Methods in Educational Research (3)
- ESSP 610 Special Education Methods and Research (3)
- ESSP 699 Thesis (1-3)

Gifted Education and Talented Development Core (16 credits minimum)

- ESSP 515 Introduction to Talent Development (3)
- ESSP 606 Creativity and Intelligence (3)
- ESSP 635 Social and Emotional Needs of Gifted, Talented, and Creative Individuals (3)
- ESSP 638 Curriculum and Instruction for Classroom Talent Development (3)
- ESSP 641 Advanced Differentiation of Curriculum and Instruction for Talent Development (3)
- ESSP 642 Programs, Systems, and Models Gifted Education (3)
- ESSP 650 Seminar in Talented Development (3)
- Practicum (3 credits minimum from the following courses)
- ESSP 651 Practicum (3)
- ESSP 667 Individual Study (3)

Electives

As needed to complete the degree

**GIFTED EDUCATION AND TALENTED DEVELOPMENT:
MASTER OF SCIENCE**

Earned by completing 30 credits and a thesis; or, 34 credits and a Creative Project or Alternate Plan Paper and competency exam.

Gifted Education and Talented Development Core (21 credits)

- ESSP 515 Introduction to Talent Development (3)
- ESSP 606 Creativity and Intelligence (3)
- ESSP 635 Social and Emotional Needs of Gifted, Talented, and Creative Individuals (3)
- ESSP 638 Curriculum and Instruction for Classroom Talent Development (3)
- ESSP 641 Advanced Differentiation of Curriculum and Instruction for Talent Development (3)
- ESSP 642 Programs, Systems, and Models Gifted Education (3)
- ESSP 650 Seminar in Talented Development (3)

Research Core (6 credits minimum)

- ESSP 600 Introduction to Education Research (3)
- ESSP 610 Special Education Methods and Research (3)
- ESSP 694 APP (1-2) **OR**
- ESSP 699 Thesis (3)

Electives

As needed to complete the degree

**TEACHING AND LEARNING FOR OPTIMAL TALENT
DEVELOPMENT:
MASTER OF SCIENCE**

Earned by completing 30 credits and a thesis; or, 34 credits and Creative Project or Alternate Plan Paper and competency exam. Courses are a flexible combination of student selected GEDT courses, practical research courses and professional development courses (PDC's). The PDC's are graduate courses in any area of student interest.

Gifted Education and Talented Development Core (9-12 credits – 12 credits required for certificate in GEDT – from the following courses)

- ESSP 515 Introduction to Talent Development (3)
- ESSP 606 Creativity and Intelligence (3)
- ESSP 638 Curriculum and Instruction for Classroom Talent Development (3)
- ESSP 641 Advanced Differentiation of Curriculum and Instruction for Talent Development (3)

And other approved GEDT courses as selected

Research Core (6 credits minimum)

- ESSP 600 Introduction to Education Research (3)
- ESSP 602 Qualitative Methods in Educational Research (3)

- ESSP 603 Action Research Methods (3)
- ESSP 610 Special Education Methods and Research (3)
- ESSP 694 APP (1-2) **OR**
- ESSP 699 Thesis (3)

Professional Development Courses (15 credits)

Students will meet with an advisor to select professional development courses (PDC's) that allow them to expand their knowledge base, learn new teaching strategies, refine or acquire new teaching methodologies, and develop areas of interest. PDC's may focus on particular area or they may focus on general teaching and learning and encompass a variety of domains and subject areas. These courses may be found within or outside the College of Education.

GIFTED EDUCATION AND TALENTED DEVELOPMENT: CERTIFICATE

A certificate is earned by completing any four (12 credits) of the core courses in the GEDT core. The certificate can be applied to a Degree should students choose to enroll in one of the degree programs in GEDT.

Gifted Education and Talented Development Core (12 credits)

- ESSP 515 Introduction to Talent Development (3)
- ESSP 606 Creativity and Intelligence (3)
- ESSP 635 Social and Emotional Needs of Gifted, Talented, and Creative Individuals (3)
- ESSP 638 Curriculum and Instruction for Classroom Talent Development (3)
- ESSP 641 Advanced Differentiation of Curriculum and Instruction for Talent Development (3)
- ESSP 642 Programs, Systems, and Models Gifted Education (3)
- ESSP 650 Seminar in Talented Development (3)
- ESSP 600 Introduction to Education Research (3)

SPECIAL EDUCATION: EBD AND LD

Within Special Education, candidates can earn a Certificate which leads to licensure in either EBD or LD. Candidates can also earn a Master of Science in these two areas.

Admissions Criteria for Master's Degree and Certificate in Special Education: EBD and LD

All candidates must submit the following:

1. A completed application form (the standard university application form — required by the Graduate College).
2. Official college transcripts (required by the Graduate College and provides information about previous course work and degrees).
3. Demonstration of teacher license or certificate. *Students who do not already hold a teaching license must take the following SEP 509, 511, 513, and 514 courses as well as the special education courses to qualify for full LD or E/BD licensure.

To be admitted to the EBD or LD Certificate Program: Candidates must have a GPA above 2.5 from the most recent 2 years of study.

To be admitted to the Master of Science program: Students must complete course work required for licensure with a GPA of 3.2 or above. Applicants must then submit an application to the College of Graduate Studies. A cohort of 15 students will be accepted each semester. Applicants will be given priority based on GPA, course work, and the writing sample.

Students who are interested in pursuing a Masters degree in the area of general education but who do not need LD or EBD licensure should apply for the Master of Science: Teaching and Learning for Optimal Talent Development. Here, you will create a special education focus with Professional Development Courses.

SPECIAL EDUCATION: MASTER OF SCIENCE

- (Thesis Plan - 34 credits)
- (Capstone Creative Project - 34 credits)
- (Alternate Plan Paper - 34 credits)

SPECIAL EDUCATION: CERTIFICATE (LICENSURE)

- Emotional/Behavioral Disorders (27 credits)
- Learning Disabilities (23 credits)

All work for a graduate degree must be completed within a six-year period. All Masters programs are 34 credits. For the EBD and LD licensure, students must complete all course work up to and including the student teaching requirements. Masters candidates must complete the research required requirements and the Capstone Project. The required courses for each program are:

EDUCATIONAL STUDIES: SPECIAL POPULATIONS

Emotional/Behavioral Disorders: MS and Certificate

Prerequisites:

- ESSP 548 Behavior Management (4)
ESSP 605 Individuals with Exceptional Needs

Special Education Core Courses Required for Certificate/Licensure

- ESSP 619 Education of Students with Mild Disabilities (4)
ESSP 639 Transition Planning for Students with Mild Disabilities (3)
ESSP 645 Formal and Informal Clinical Procedures (3)
ESSP 646 Instructional Interventions (4)
ESSP 661 Special Education Law (3)

Courses Required for Emotional/Behavioral Disorders Certificate/Licensure

- ESSP 657 Behavioral Disorders Diagnosis and Remediation of Students with Social/Emotional Problems (4)
ESSP 658 Seminar: Current Issues and Trends Emotional/Behavioral Disorders (3)
ESSP 667 Graduate Student Teaching: Emotional/Behavioral Disorders (3)

Courses Required for MS

- ESSP 600 Introduction to Educational Research (3)
ESSP 610 Special Education Methods and Research (3)

Electives

*Chosen as needed in consultation with an advisor.

Learning Disabilities: MS and Certificate

Prerequisites

- ESSP 548 Behavior Management (4)
ESSP 605 Individuals with Exceptional Needs (3)

Special Education Core Courses Required for Certificate/Licensure

- ESSP 619 Education of Students with Mild Disabilities (4)
ESSP 639 Transition Planning for Students with Mild Disabilities (3)
ESSP 645 Formal and Informal Clinical Procedures (3)
ESSP 646 Instructional Interventions (4)
ESSP 661 Special Education Law (3)

Courses Required for LD Certificate/Licensure

- ESSP 648 Graduate Student Teaching: LD (3)
ESSP 649 Seminar: Current Issues and Trends LD (3)

Courses Required for MS

- ESSP 600 Introduction to Educational Research (3)
ESSP 610 Special Education Methods and Research (3)

Electives

*Chosen as needed in consultation with an advisor.

COURSE DESCRIPTIONS

ESSP 507 (3) The Special Education Learner in the Regular Classroom

This course prepares special education teachers to instruct learners with exceptional needs in a classroom environment shared with regular class students. It supports a team approach to instructional delivery, using assistive technology, accommodations and modifications, adapted curriculum and collaborative staffing.

ESSP 508 (4) Individuals with Diverse and Exceptional Needs

This course is 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.

ESSP 509 (4) Learning and Human Development for Diverse Learners

This course is designed to introduce 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.

ESSP 510 (4) Assessment, Evaluation and Individualized Planning for Diverse Learners

This course will provide students with assessment skills and information. Emphasis will be placed on learning and administering a variety of norm-referenced and criterion reference test instruments and applying them appropriately.

ESSP 511 (4) Differentiation & Accommodation in an Inclusive Classroom: Diverse Learners

This course is designed to describe and demonstrate strategies that teachers can use to differentiate the curriculum to meet the special learning needs of students in an inclusive classroom setting. This course will also examine the latest knowledge related to intelligence, creativity, holistic education, and classroom differentiation.

ESSP 512 (4) Due Process, Planning & Design of the Individual Education Program

This course will provide students with knowledge and skills related to IEP's, alternative dispute process for the state of Minnesota, and legal issues and requirements.

ESSP 513 (4) Professional Growth and Development for Teachers of Diverse Learners

This course will introduce students to methods and strategies for personal and professional growth and development. Students will engage in reflective inquiry, identify professional dispositions, and describe environment effects on learning and human development.

ESSP 514 (4) Literacy Methods for an Inclusive Classroom: Diverse Learners

This course is designed to provide 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.

ESSP 515 (3) Introduction to Talent Development

Introduction to the field of gifted education and talent development. Focus on History, Definitions, Practices, Characteristics, Needs, Special Populations, and Models.

ESSP 520 (3) Education of Young Children with Exceptional Needs

Legal, historical, and foundational issues in the education of young children with disabilities as well as characteristics, service needs, and models of service for young children with disabilities with emphasis on young children with moderate/severe disabilities.

ESSP 530 (3) Teaching Individuals with Physical and Multiple Disabilities

ESSP 548 (4) Behavior Management and Learning Environments for Diverse Learners

Applied practical approaches to improve academic and personal social behavior of special needs students in general education and special education settings. Principles of applied behavior analysis including reduction and enhancement procedures will be explored.

ESSP 580 (4) Characteristics and Assessment of Children with Autism

This class will take an in-depth look at the characteristics of children with autism as well as the historical treatment of these children. This class will look at current assessment methods used to develop education programs, and will also explore issues related to advocacy.

ESSP 581 (4) Teaching Children with Autism: Planning & Intervention for Students with Autism

This course will focus primarily on educational program development for children with autism. Students will learn to build visual schedules and write social stories to affect the behavior of students with autism. Students will learn the importance of individualized program development and legal issues surrounding appropriate programming.

ESSP 590 (1-3) Workshop in Special Education

ESSP 591 (1-2) In-Service: Special Education

ESSP 600 (3) Introduction to Educational Research

Introduction to quantitative, qualitative, and action research methodologies as applied to educational research and evaluation. Development of skills for interpreting and evaluating published studies, for evaluating programs, and for developing original or secondary research plans using one or a combination of the three methodologies.

ESSP 601 (3) Quantitative Research Methods

Focus in quantitative methods in educational research in applied educational settings.

ESSP 602 (3) Qualitative Research Methods

Focus on qualitative methods in educational research in applied educational settings.

ESSP 603 (3) Action Research in Education

This course will familiarize teachers with methods used in action research. Action research is a systematic observation of one's own teaching situation, environment, or pedagogical practice with the expectation that a new understanding will result in a plan of action that in turn, will ultimately lead to change.

ESSP 605 (3) Intro to the Psychology and Education of Exceptional Children and Youth

Current practices in the identification, placement, and education of exceptional children and youth. Emphasis on patterns of social, cognitive, language, and psychological development of exceptional children. Social, political, and economic advocacy issues.

ESSP 606 (3) Creativity and Intelligence

Conceptions, foundations, theories, and practical applications of creativity and intelligence.

ESSP 610 (3) Special Education Methods and Research

Interpretation and application research and theoretical articles related to education. Students will learn how to use a concise, objective, academic style of writing to create a review of literature for theses or Capstone projects.

ESSP 611 (3) Professional and Scholarly Writing and Planning in Education

Teaches objective academic writing and the basics of program and curriculum planning design.

ESSP 619 (4) Education of Students with Mild Disabilities

History, theory, definitions, philosophies, programming models and service delivery trends for students with learning disabilities and/or emotional/behavioral disorders. Students will be exposed to specific techniques for teaching students with disabilities in inclusive settings.

ESSP 621 (3) Assessment of Young Children with Exceptional Needs**ESSP 622 (3) Working with Parents and Infants with Exceptional Needs****ESSP 623 (3) Working with Young Children with Cognitive Delays****ESSP 624 (2) Working with Young Children with Social/Emotional Delays****ESSP 625 (2) Curr/Methods Working w/Young Children w/Development Needs Group Settings****ESSP 626 (2) Organization and Administration of Special Education: Early Childhood****ESSP 627 (1-8) Graduate Student Teaching: Early Childhood Special Education****ESSP 630 (3) Emotional Intelligence and Learning**

Teaching for wisdom, emotional IQ, and intrapersonal intelligence, as they relate to human potential, self-actualization, and learning.

ESSP 635 (3) Social and Emotional Needs of Gifted, Talented, and Creative Individuals

Theory and practice for promoting healthy development of talented individuals.

ESSP 638 (3) Curriculum & Instruction for Classroom Talent Development

Focus on high-end teaching and learning strategies from which all students can benefit. Emphasis on gifted education pedagogy in the general classroom.

ESSP 639 (3) Transition Planning for Students with Mild Disabilities

In-depth examination of the problems, trends, and procedures used in planning career development, pre-vocational, and vocational programs for the mildly disabled. Program models, assessment, job analysis, placement, and employer-school relations are covered.

ESSP 640 (2) Administration and Supervision of Special Education

Procedures in establishing and improving educational programs for exceptional children.

Prerequisite: ESSP 4/548

ESSP 641 (3) Advanced Differentiation of Curriculum and Instruction for Talent Developme

Focus on development of differentiated curricular and instructional strategies, and programming options to promote optimal individual student growth and talent development. Multiple talent areas explored on a continuum of services.

ESSP 642 (3) Programs, Systems, and Models in Gifted Education

In-depth examination of gifted education and talent development programs, their implementation, applications, benefits and weaknesses. Focus on standards of the field.

ESSP 645 (3) Formal/Informal Clinical Procedures

Interpretation and implementation of psychological reports, formative and summative assessment data, enabling incorporation of relevant information/data into an evaluation report. Applied practical understanding, development, usage, and interpretation of information assessment tools determining identification and instructional design.

ESSP 646 (4) Instructional Interventions

Pedagogy for teaching students with learning disabilities with an understanding of instructional theories and trends. Applications include sequences/adaptations of instruction/curriculum, technology integration, collaborative techniques, and meta-cognitive strategies. Focus is in reading, written language, and mathematics.

ESSP 648 (3) Graduate Student Teaching: Learning Disabilities

Field experiences in off-campus programs providing services to students with learning disabilities. Designed to professionalize the educational experience and ensure license standards competency. Must be taken with ESSP 649. Prerequisite: All course work related to special ed licensure must be completed. Professor permission required.

ESSP 649 (3) Seminar: Current Issues and Trends-Learning Disabilities

Summative conversations incorporating current issues and trends in the area of learning disabilities. Must be taken with ESSP 648. Prerequisite: All course work related to special ed licensure must be completed. Professor permission required.

ESSP 650 (3) Seminar in Talent Development

Examination of critical issues facing the field of gifted education and talent development while developing proposals for thesis or action research in this area.

ESSP 651 (1-3) Practicum:

Professional experience in a field setting requiring reflection and analysis.

ESSP 657 (4) Emotional/Behavior Disorders: Program Design and Implementation

The purpose of this course is the effective applications of procedures for teaching students with emotional/behavioral disorders in school settings. Students will build individual programs through the use of Functional Behavioral Assessments focusing on Positive Behavioral Supports.

ESSP 658 (3) Seminar: Current Issues and Trends in E/BD

Review of theory, correct best practices, research trends, and issues relative to the delivery of educational services to students with emotional/behavioral disorders. Must be taken with ESSP 667. Prerequisite: All course work related to special ed licensure must be completed. Professor permission required.

ESSP 661 (3) Special Education Law

This graduate course is designed to assist educators to develop knowledge of the due process requirements outlined in Minnesota Rule and Statute as well as a working understanding of federal special education law under the Individuals with Disabilities Act (IDEA) and Section 504 of the Rehabilitation Act. Understanding the requirement of due process and federal special education law is critical in today's schools, both for teachers as well as administrators.

ESSP 662 (3) Spirituality and Human Development in Education

Examines both sacred and secular views of spirituality and explores the nature of reality. Also examined are self-actualization, spiritual journey, human development, and education.

ESSP 667 (3) Graduate Student Teaching: E/BD

Field experiences in off-campus programs providing services to students with learning disabilities. Designed to professionalize the educational experience and ensure license standards competency. Must be taken with ESSP 658. Prerequisite: All course work related to special ed licensure must be completed. Professor permission required.

ESSP 677 (1-3) Individual Study**ESSP 691 (1-3) In-Service****ESSP 694 (1-2) Preparing the Capstone Project**

Designed to assist student in preparation of their capstone project as part of their graduation requirements. In this experience, students receive one-on-one contact with their advisor.

ESSP 699 (1-6) Thesis

ENGINEERING MS

College of Science, Engineering & Technology

Department of Electrical and Computer Engineering and Technology
135 Trafton Science Center S • 507-389-5747

Chair: William B. Hudson, Ph.D.

Graduate Coordinator: Han-Way Huang, Ph.D.

Thomas Hendrickson, Ph.D.; Lindsay Hess, Ph.D.; Han-Way Huang, Ph.D.; William B. Hudson, Ph.D.; Rajiv Kapadia, Ph.D.; Muhammad Khaliq, Ph.D.; Paul Lindfors, Ph.D.; Julio C. Mandojana, Ph.D.; Ramakrishna Nair, Ph.D.; George O’Clock, PE, Ph.D.

Department of Mechanical and Civil Engineering
205 Trafton Science Center E, 507-389-6383

Chair: Saeed Moaveni, Ph.D.

Graduate Coordinator: Jerzy Fiszdon, Ph.D.

Vance Brown, Ph.D.; Karen Chou, Ph.D.; Jerzy Fiszdon, Ph.D.; Charles W. Johnson, Ph.D.; Saeed Moaveni, Ph.D.; Vojin Nikolic, Ph.D.; Deborah Nykanen, Ph.D.; Jim Wilde, PE, Ph.D.

The Engineering Programs offer a Master of Science in engineering degree program. Students in this program may design their own program of studies by choosing courses from Electrical Engineering, Mechanical Engineering, Civil Engineering, Physics, Mathematics, and Computer Science. The program is designed to serve the following: those engineers in business and industry who want to continue their formal engineering education at the postgraduate level; new engineering graduates who want to increase their depth of knowledge and develop an area of specialization; those graduates from other related science and engineering disciplines who want to broaden their backgrounds by pursuing engineering studies at the graduate level.

Admission. Applicants must meet the general admission requirements of the College of Graduate Studies. A BS in Engineering or a closely related field from an accredited program with a minimum GPA of 3.0/4.0 is required. GRE scores are also required and the quantitative section score must be at least 700/800.

Financial Assistance. A limited number of graduate teaching assistantships are available for those individuals with substantial laboratory experience in Electrical or Mechanical Engineering or related fields. Research assistantships will be available to exceptional candidates. Half-time and quarter-time assistantships include tuition waivers (18 credits maximum). Application for financial assistance must be made by February 28 and announcements will be made prior by the end of April for the Fall semester.

MSE Program Options

The MSE offers three program options:

- A Thesis Option — The thesis program requires 32 credit hours of which at least 3, but no more than 6 semester credit hours may be devoted to the thesis.
- B Alternate Plan Paper — This plan requires a total of 34 semester credit hours with 1 credit hour devoted to the preparation of an alternate plan paper.
- C Design Option — The design option requires 32 credit hours of which at least 3, but no more than 6 semester credit hours may be devoted to the design.

In all cases MSE students must:

- 1. Obtain a minimum of 50% of all credit hours at the 6XX level
- 2. Take between 26 and 33 credits from courses in Electrical Engineering, Physics, Mathematics, Mechanical Engineering, Civil Engineering, or Computer Science
- 3. Pass the comprehensive examination
- 4. Obtain the approval of their major advisor and committee of their planned program of graduate study
- 5. Students choosing Thesis or Design options must present results of their work to their committee.

Combined Degree (BS and MS) Program:

Students planning on completing their MSE degrees at MSU may be granted permission to take classes that would count toward their MSE. In order to be granted permission for this option, students must declare their intent to complete their MSE following their BS in engineering degrees and be “conditionally qualified” for a graduate program. Upon being accepted, students will be assigned a graduate committee by the department. Students need to be aware that acceptance into this option does not guarantee them automatic admission into the graduate school. In particular, students must complete their BSME, BSEE, or BSCE with a 3.0 GPA, and apply to be admitted as per the existing graduate school policy. Please contact the Department Graduate Coordinator for detailed information.

General Requirements:

Each student must pass the comprehensive exam in order to graduate. The comprehensive exam will be given twice a year and each student has two opportunities to pass the exam. Students planning to take the comprehensive exam must submit a completed Written Comprehensive Examination Request and Report form to the graduate coordinator. This request must be made one month before the exam in each semester. Students must complete at least 24 credits before they can take the comprehensive exam. The exact date will be posted on Department Bulletin Boards.

Required Thesis or Alternate Plan Paper

EE694	APP(1) or ME694 APP (1)
EE699	Thesis/Design (3-6) OR
ME699	Thesis/Design (3-6)

COURSE DESCRIPTIONS

MECHANICAL ENGINEERING

ME 516 (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.

Prerequisite: ME 324, ME 329

ME 518 (3) Mechanical Systems Design

The application of mechanics to the design and analysis of motion and force transmitting systems. Optimal design.

Prerequisite: ME 417

ME 520 (4) Computer Aided Engineering

Lectures and laboratory work on electronic computers and their application to engineering design problems. Computer-aided design and introduction to the use of advanced computer codes for engineering design and analysis.

Prerequisite: ME 324, ME 417

ME 523 (3) Intermediate Mechanics of Materials

Stresses and deformation of curved beams, beams on elastic foundations, indeterminate problems, torsion of noncircular bars, introduction to plates and shells, thick walled cylinders, and failure theories.

Prerequisite: ME 417

ME 525 (3) Thermal Analysis & Control of Electronic Equipment

Thermal consideration in the design of heat-exchange equipment. Review of heat transfer modes; contact resistance; air handling. Numerical methods. Cooling techniques; fins, extended surfaces, cold plates, heat pipes, immersion cooling, thermoelectric coolers. Enhanced heat transfer.

Prerequisite: ME 324

ME 527 (3) Kinematics & Dynamics of Mechanisms

Computer-oriented methods of synthesis. Burmester’s theory. Fixed and moving centres and their application to synthesis. Dynamics of mechanisms. Force and moment balancing of linkages.

Prerequisite: ME 417

ME 528 (3) Design Project I

ME 529 (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.

Prerequisite: ME 324, ME 329

ME 533 (3) Design for Manufacture & Assembly

ME 538 (3) Design Project II

ME 539 (3) Air Conditioning & Refrigeration

Refrigeration cycles and equipment, refrigeration properties, heating and cooling loads, psychometric analysis of air conditioning. Distribution of air conditioning medium and air quality as applied to design.

Prerequisite: ME 324 ME 329

ME 541 (3) Vehicle Dynamics

ME 543 (3) Theory of Elasticity

Fundamental equations in three dimensions, plane stress and plane strain, flexure and torsion of bars of various shapes.

Prerequisite: ME 417

ME 550 (3) Finite Element Method

Energy method and residual approaches, 2D and 3D problems, in stress analysis, application to steady and transient heat flow, hydrodynamics, creeping flow, solution methods.

Prerequisite: ME 323 and ME 324

ME 562 (3) Vibrations

Free and forced vibration in linear single degree of freedom systems, design and analysis of multiple degree of freedom systems with and without damping, and vibration of coupled systems.

Prerequisite: ME 323, ME 341

ME 563 (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.

Prerequisite: ME 341

ME 564 (3) Mechatronics**ME 572 (3) Intermediate Heat Transfer**

Basic concepts; physical and mathematical models for heat and mass transfer. Applications to conductive, convective, radiative, and combined mode heat transfer.

Prerequisite: ME 324

ME 582 (3) Transport Phenomena**ME 591 (1-4) In-Service**

Individual studies of problems of special interest. Open only to advanced students.

ME 597 (1-6) Internship**ME 599 (1-6) Individual Study****ME 601 (3) Advanced Computational Methods in Engineering**

Numerical methods for solving linear systems of equations, solution of non-linear equations, data interpolation, numerical differentiation, numerical integration, numerical solution of ordinary and partial differential equations.

ME 602 (3) Advanced CAE

Investigation, review, and application of emerging computer aided tools for engineering. Advanced FEA; optimization.

Prerequisite: ME 323, 324

ME 612 (3) Reinforced Polymers

Mechanics, materials analysis, fabrication, characterization, performance of Reinforce Polymers.

Prerequisite: ME 303

ME 623 (3) Experimental Stress Analysis

Review of elastic stress-strain relationships; application of fundamental concepts of static and dynamic strain measurements by electrical means; theory and use of resistance gages, strain gage circuits and recording instruments; rosette analysis. Introduction to phototlasticity.

Prerequisite: ME 323

ME 633 (3) Dynamics of Ground Vehicles

Theory and engineering principles of non-guided ground vehicles, both road and off-road. Analysis and evaluation of performance characteristics, handling behavior and ride quality. Emphasis is on fundamental principles and a unified method of approach to the analysis of various types of ground vehicles.

Prerequisite: ME 341

ME 640 (3) Advanced Design of Mechanical Devices

Systematic design of mechanisms, the creation of force functions, mechanisms with two or more degrees of freedom, systematic development of adjustable mechanisms, methods to achieve high speed in automatic machines.

Prerequisite: ME 327

ME 651 (3) Transport Phenomena

A survey of the transport of momentum, energy, and mass. Continuum approach. Equations of change. Applications.

ME 655 (3) Advanced Fluid Mechanics

Detailed analysis of incompressible fluids, viscous/inviscid, laminar/turbulent and developing flows.

Prerequisite: ME 321

ME 665 (3) Combustion

Thermodynamics and chemical kinetics of combustion. Structure, propagation, and stability of flames. Environmental aspects.

Prerequisite: ME 321, 329

ME 669 (3) Advanced Energy Systems

Advanced selected topics in energy conversion, theory, design, and applications. Individual projects dealing with various aspects of advanced energy systems and associated energy sources.

Prerequisite: ME 324, 329

ME 672 (3) Conduction Heat Transfer

Analytical and numerical techniques for analysis of problems involving steady-state and transient heat conduction in solids.

Prerequisite: ME 324

ME 677 (1-6) Individual Study**ME 691 (3) In-Service: Technical Elective****ME 694 (1) Alternate Plan Paper Research****ME 699 (1-4) Thesis****ELECTRICAL ENGINEERING****EE 539 (4) Electronics for Non-Electrical Engineering Majors****EE 553 (3) Advanced Communication Systems Engineering**

Fundamentals of RF, microwave, and optical communication systems. Advances information theory. Digital modulation techniques. Phase-lock loop receivers and frequency synthesizers. Characterization of digital transmission systems. Equalization. Synchronization. Coding. Data compression. Nonlinear system analysis. Amplitude and phase distortion. AM-PM conversion. Intermodulation and cross-modulation. Advanced spread spectrum systems.

EE 562 (3) Advanced Digital Systems

A study of finite-state machine design, hardware description language, processor datapath design, principles of instruction execution, processor control design, instruction pipelining, cache memory, memory management, and memory system design.

EE 567 (2) Principles of Engineering Design I**EE 571 (3) Advanced Control Systems**

Develops design and analysis techniques for continuous and discrete time control systems, including pole placement, state estimation, and optimal control.

Prerequisite: EE 358 and 368

EE 572 (3) Digital Signal Processing

Develops design and analysis techniques for discrete signals and systems via Z-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.

Prerequisite: EE 341

EE 575 (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.

Prerequisite: EE 303 and EE 332

EE 576 (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.

Prerequisite: EE 408

EE 577 (2) Principles of Engineering Design II**EE 578 (1-4) Topics in Engineering****EE 579 (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.

Prerequisite: EE 303

EE 580 (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 including 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.

Prerequisite: EE 4/575 or concurrent with EE 4/575

EE 581 (1) VLSI Design Laboratory

Laboratory to accompany EE 584 VLSI design. Individual IC design projects will be assigned using IC layout tools and simulation software. Culminates in a group project fabrication under MOSIS.

Prerequisite: concurrent with EE 584

EE 584 (3) VLSI Design

VLSI technology. MOS and Bipolar transistor theory, SPICE models. Transistor structure and IC fabrication processes; layout design rules. Custom CMOS/BICMOS logic design and layout topologies; cell layout/chip partitioning/clocking. Bipolar/MOS analog circuit design and layout. Group design project. Library research study.

Prerequisite: EE 303 and EE 333

EE 591 (1-4) In-Service**EE 597 (1-6) Internship****EE 600 (3) Design Methods**

Application of EE computer modeling and simulation tools. Design of experiments, Taguchi methods, automated data acquisition, and analysis methods.

EE 601 (3) Linear Systems Analysis

This course covers the analysis of continuous and discrete multivariate systems, linear models of stochastic and non-stochastic systems, and analog and digital sampled data systems. Issues examined include controllability, stability, observability, tensor properties, signal spectra, state equations, optimization, and computer simulation. A variety of case studies of advanced systems also examined.

Prerequisite: BS EE including undergraduate level systems analysis course work

EE 603 (3) Non-Linear System Analysis

This course covers the analysis of non-linear continuous and discrete systems and devices. Topics covered include non-linear circuit analysis, non-linear stochastic and non-stochastic system models, limit cycles, oscillators, stability, non-linear wave functions. Computer simulation will be utilized in conjunction with selected case studies in advanced non-linear systems.

Prerequisite: BS EE including undergraduate level systems analysis course work

EE 611 (3) Computer Hardware Algorithms

Study of major paradigms used in the evaluation and execution of algorithms. Algorithm analysis will include complexity measure, hardware requirements, organization and storage system requirement.

EE 612 (3) Computer Architecture Design

A treatment of computer architecture covering new technological developments, including details of multiprocessor systems. Special emphasis will be devoted to new concepts. Architectures of FPGAs and CPLDs will be explored and Hardware Description Languages such as VHDL and VERILOG will be used in project assignments.

EE 613 (3) Parallel Processors

Computer architecture for parallel processors designed for high computation rates. Primary emphasis is on image processing, pattern recognition, etc. Performance of various systems with regard to interconnect network, fault tolerance, and programming.

EE 614 (3) Advanced Embedded System Design

This course covers the programming model of a contemporary microprocessor/microcontroller. The course encompasses the interfacing and applications of parallel and serial I/O devices using the parallel and serial ports such as SPI, I2C, and CAN. Industrial standard interface such as USB and Ethernet would be discussed. Development tools would be reviewed and used in projects. Multi-tasking and real-time kernel would be presented and projects would be assigned. Memory technologies and expansion issues would be reviewed and taught.

EE 621 (3) Advanced Engineering Electromagnetics

Wave equations, solutions, wave propagation and polarization, reflection and transmission, rectangular wave guides and cavities, strip line and microstrip lines, and geometric theory of diffraction.

Prerequisite: EE 350 or equivalent

EE 622 (3) Microwave Engineering

Active and passive microwave devices, microwave amplifiers and oscillators, microwave filters, cavity resonators, microwave antennas, microwave receivers, microwave transmitters.

EE 623 (3) Radiation & Optical Electronics

Coherent and incoherent radiation, optical resonators, laser oscillators and amplifiers, propagation in optical fibers, integrated optical dielectric wave guides, semiconductor lasers, wave propagation in anisotropic, and non linear media, detection and noise.

Prerequisite: EE 350 or equivalent

EE 632 (3) Noise & Information Theory

Selected topics in the theory of probability and statistics. Spectral analysis. Rayleigh, Rician, Gaussian, and Poisson processes. Noise figure. Signal-to-noise ratio requirements for analog and digital communications, remote sensing, radar and sonar. Random signals in linear and nonlinear systems. Signal-to-noise enhancement techniques. Source encoding. Shannon's theorems.

EE 633 (3) Digital Communications

Digital communication system modulation techniques. A/D conversion. Additional noise sources from sampling and encoding. Error detection and correction. Speech encoding. Data compression. Data networks. Companding. Multiplexing. Packet switching. Performance of digital baseband. Digital Signal Processing. Digital system design trade-offs.

EE 642 (3) Advanced Integrated Circuit Engineering

Principles of silicon integrated circuit fabrication processes and design limitations. Process modeling, crystal growth, oxidation, implantation, diffusion, deposition. Processing of bipolar and MOS devices and circuits. Photolithography and design rules. Introduction to GaAs technology. Use of SUPREME.

Prerequisite: EE 4/575

EE 643 (3) Advanced Vlsi Design

Design and layout of passive and active electronic devices in silicon integrated circuits, both digital and analog. CMOS and bipolar circuit design principles will be developed. Assembly techniques and process control measurements and testing for yield control will be introduced.

Prerequisite: EE 4/584

EE 651 (3) Biomedical Engineering I

Mathematical modeling of living systems. Entropy and information. Thermodynamic constraints. Feedback and feedforward mechanisms in metabolic processes. Metabolic heat generation and loss. Energy flow in living systems. Atomic and molecular bonds in biological systems. Engineering analysis of the cardiovascular, renal, immune, endocrine and nervous systems; analysis of specific disease states.

EE 652 (3) Biomedical Engineering II

Physiological transport phenomena (intercellular, intracellular and membrane transport), strength and properties of tissue, bioelectric phenomena, muscle contraction, cardiovascular and pulmonary mechanics, design of artificial organs, diagnostic tools, therapeutic techniques in the treatment of cancer, material compatibility problems in prosthetics, and ethical dilemmas in biomedicine.

Prerequisite: EE 651

EE 663 (3) Advanced Communication Systems

Fundamentals of RF, microwave, millimeter wave, and optical communication systems. Link power budgets. Bandwidth constraints. Phase-locked loop receivers. Matched filters. Spread spectrum communication systems. Modulation formats. Comparison of active and passive sensing systems. Signal processing.

EE 674 (3) Advanced Control Systems II

Develops analysis and design techniques for multivariable feedback systems. Definitions of poles and zeros of multivariable systems are established. Study of design methods such as LQG, Youla parametrization and H optimal control.

EE 677 (1-4) Individual Study

Regular courses offered on demand by agreement with individual faculty members on an individual basis.

EE 691 (1-4) In-Service**EE 694 (1) Alternate Plan Paper**

Alternate plan paper preparation.

EE 695 (1-5) Research

Thesis research.

EE 699 (1-4) Thesis/Design Option

Thesis preparation.

ENGLISH MA**(options: Literature, Technical Communication, Teaching English as a Second Language)****ENGLISH EDUCATION MS****(discipline-based)****CREATIVE WRITING MFA**

College of Arts & Humanities
Department of English
 230 Armstrong Hall • 507-389-2117
 Fax: 507-389-5362
 Web site: www.english.mnsu.edu

Chair: Donald F. Larsson, Ph.D.
 Director of Graduate Study: Kathleen Hurley, Ph.D.

John Banschbach, Ph.D.; Suzanne Bunkers, Ph.D.; Donna Casella, Ph.D.; Terry Davis, MFA; William Dyer, Ph.D.; Tina Edstam, Ph.D.; Terrance Flaherty, Ph.D.; Gwen Griffin, Ph.D.; Kathleen Hurley, Ph.D.; Mary Susan Johnston, Ph.D.; Donald Larsson, Ph.D.; Nancy Mackenzie, DA; Randall McClure, Ph.D.; JoAnna Mink, DA; Roland Nord, DA; Anne O'Meara, Ph.D.; Dave Popowski, Ph.D.; Kay Puttock, Ph.D.; Richard Robbins, MFA; Roger Sheffer, DA; Harry Solo, Ph.D.; Stephen Stoyhoff, Ph.D.; Richard Terrill, MFA; Lee Tesdell, Ph.D.

English at Minnesota State University offers five graduate programs; each is designed to meet the needs of a particular audience, so each has its own entrance requirements, curriculum, reading list, comprehensive examination format, and thesis/alternate plan requirements. It is important that prospective students discuss which program best meets their needs with the department chair, the department director of graduate study, or the individual program director. Students may begin work any semester in any of the programs, except in the MFA in Creative Writing, which admits each Fall.

Graduate Assistantships. Graduate teaching assistantships are available during the academic year to full-time students. Assistants receive about \$8,000 over two semesters and full tuition remission for up to 18 credits. For more information, contact the Department of English.

ENGLISH MA**LITERATURE OPTION**

Contact: Dr. Mary Susan Johnston
 (Thesis Plan - 30 credits)

Students choosing this option will find the degree appropriate preparation for doctoral work in English, for community college and private school teaching, and for entrance into advanced professional programs of study. In addition, this program develops skills of organization; written, oral, and electronic communication; and analytical and critical thinking that are valued by employers in a wide range of fields in business, government, and non-profit organizations.

Entrance requirements include a minimum of 30 undergraduate semester credit hours earned in language, literature, or related courses. Twenty credits should have been earned in upper-division courses. It is highly recommended that candidates have three credits in a major figure and an upper-level linguistics course. Students may be granted provisional admission with deficiencies. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Successful applicants who have not taken an upper-division theory/criticism class before entering are required to take a graduate-level theory course such as the Literary Criticism or Film Criticism as part of their program.

Literature/Film/Theory (15 credits)

- ENG 650 Bibliography and Research in Literature (3)
 Choose four courses from the following:
 ENG 603 Seminar: Selected Authors (3)
 ENG 605 Seminar: Shakespeare (3)
 ENG 608 Seminar: British Literature to 1800 (3)
 ENG 609 Seminar: British Literature after 1800 (3)
 ENG 610 Seminar: American Literature to 1865 (3)
 ENG 611 Seminar: American Literature after 1865 (3)
 ENG 612 Seminar: Women in Literature (3)
 ENG 635 Seminar: World Literature (3)

Electives (11-12 credits)

Choose any of 5/600 level English courses, selected in consultation with an advisor.

Thesis

ENG 699 Thesis (3-4)

Additional Requirements:

All courses in the student's master's program must be in English with the exception of courses specifically approved by the literature faculty and the Graduate Committee in English. Of the 30 credits required for the master's degree, 15 must be at the 600 level. Students must take comprehensive examinations at the end of their program and orally defend the thesis. By the end of the program, the student is expected to demonstrate reading knowledge of a modern language by coursework or by examination. Two years of a modern language is generally sufficient to satisfy this requirement.

TECHNICAL COMMUNICATION OPTION

Contact: Dr. Nancy MacKenzie
 (Thesis Plan - 30 credits)
 (Alternate Paper Plan - 34 credits)

Students choosing this option will find the degree prepares them to be professional information developers, technical writers, and editors who are skilled at using the written and spoken word, along with visuals, to effectively inform and instruct a wide range of audiences.

Entrance requirements include at least 18 semester hours in one or more of the following areas: literature, linguistics, speech communication, or mass communications. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Technical Communication (20 credits)

- ENG 575 Editing Technical Publications (4)
 ENG 577 Technical Documentation, Policies and Procedures (4)
 ENG 673 Research and Theory for Technical Communicators (3)
 ENG 678 Technical and Scientific Prose (3)
 ENG 679 Topics in Technical Communication (3)
 ENG 680 Topics in Computer-Assisted Writing (3)

Electives (3-10 credits)

Choose any 5/600 level English or related course, selected in consultation with an advisor.

Internship (3)

ENG 698 Internship (3)

Thesis or Alternate Plan Paper (1-4)

ENG 699 Thesis (3-4)
 ENG 694 Alternate Plan Paper (1-2)

Additional Requirements:

The degree requires that 50% of all coursework must be taken at the 600 level. Students also must demonstrate reading knowledge of a modern language or demonstrated competence in a computer programming language, and take a two-part written examination reflecting command of both theory and practical application. An oral defense is required of thesis writers.

TEACHING ENGLISH AS A SECOND LANGUAGE (TESL) OPTION

Contact: Dr. Stephen Stoyhoff
 (Thesis Plan - 30 credits)
 (Alternate Plan Paper - 34 credits)

Students choosing this option will find the degree appropriate preparation for teaching English as a second/foreign language, program administration, curriculum consulting, and publishing and materials development. It is designed for both native and non-native speakers of English.

To enter the program, students must have an undergraduate major or minor in a relevant field (for example, English, linguistics, or a modern language other than English). Candidates in the TESL track who are native speakers of English must have a minimum of two years of a foreign language at the college level. This language requirement for native speakers may be met in residence, but courses taken to fulfill the language requirement will not count toward the degree. Candidates whose native language is not English must have a TOEFL score of 550. The GRE is not required for this program.

This is an interdisciplinary program with required coursework in both English and Modern Languages. It is also possible to earn certification in teaching English as a second language in grades K-12. For Master's candidates with an undergraduate

ENGLISH

licensure degree, the MA in TESL includes most of the courses needed for TESL certification. See the Department of Modern Languages for details.

Alternate Plan Paper Option (34 credits)

Required TESL Courses (24 credits)

MODL 570 Theories and Methods of TESL I (4)
MODL 571 Theories and Methods of TESL II (4)
ENG 582 English Structure/Pedagogical Grammar I (3)
ENG 627 Research Seminar in TESL (3)
ENG 629 Second Language Literacy Development (3)
ENG 686 Second Language Testing (3)
ENG 689 Studies in English Linguistics (3) **OR**
ENG 630 History of English (3)

Linguistics and TESL Courses (10 credits)

Choose 3 courses from the following (at least one from the Linguistics list and one from the TESL list):

Linguistics Courses:

ENG 583 English Structure/Pedagogical Grammar II (4)
ENG 623 Language and the Teaching of English (3)
ENG 630 History of English (3)
ENG 682 English Grammar and Discourse (3)
ENG 684 Sociolinguistics (3)
ENG 689 Studies in English Linguistics (3)

TESL courses:

ENG 585 Language and Culture in TESL (4)
ENG 631 Language Planning and Language Policy (3)
ENG 633 Second Language Acquisition (3)
ENG 634 Topics in TESL (3)
ENG 685 Materials for TESL (3)

Alternate Plan Paper: Completed as part of ENG 627

Thesis Option (30 credits)

Required TESL courses (24 credits, see above)

Linguistics and TESL Courses (3 credits)

Choose one course from Linguistics and TESL courses above.

Thesis (3 credits)

ENG 699 Thesis (3)

Additional requirements:

The degree requires that 50% of all coursework be taken at the 600 level. Students must also pass a comprehensive examination based on coursework and a reading list. An oral presentation of the thesis will normally be required as well.

ENGLISH EDUCATION MS

(DISCIPLINE-BASED)

Contact: John Banschbach

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

The MS in English Education is designed for teachers of English language arts, curriculum directors, and department chairpersons. This program combines formal study of language, composition, literature, and professional education with individual reading and research. In the program, teachers and administrators develop a course of study appropriate to their individual professional goals.

Teaching licensure in the language arts is a prerequisite for this degree. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. An MAT with an emphasis in English is available. Please see the section concerning the MAT program listed in this bulletin.

Coursework for the degree includes 3 semester credits in Professional Education in addition to EDFN 600. Please consult the general description of the Master of Science Degree at the beginning of the Graduate Bulletin for a list of courses in Professional Education that may be used.

Research (3 credits)

ENG 600 Introduction to Educational Research

Linguistics (3-4 credits)

ENG 581 History of the English Language (4)
ENG 582 English Structure/Pedagogical Grammar I (4)
ENG 585 Language and Culture in TESL (4)
ENG 623 Language and the Teaching of English (3)
ENG 631 Language Planning and Language Policy (3)

ENG 632 Bilingualism and Second Language Contact (3)
ENG 633 Second Language Acquisition (3)
ENG 682 English Grammar and Discourse (3)
ENG 684 Sociolinguistics (3)
ENG 687 Theory and Practice of Translation (3)
ENG 689 Studies in English Linguistics (3)

Literature Methodology (2-4 credits)

ENG 525 Topics in Children's Literature (2-4)
ENG 563 Adolescent Literature (2)
ENG 564 Teaching Literature in the Middle School (3)
ENG 661 Topics in Children's and Young Adult Literature (3)

Other coursework in English (7-16)

Graduate-level courses focused on teaching English include, but are not limited to, the following list: Children's Fantasy, Composition Theory, Workshop for Teaching Assistants, Teaching Creative Writing, Writing for Children, Teaching Writing, topics in Computer-Assisted Writing, Language and the Teaching of English, English and the Profile of Learning, and Children's Literature in Britain (a three-week course conducted in England).

Each semester the Department of English offers several other graduate-level courses in language study, creative writing, and British, American and World Literature. Most of these can be taken as part of a student's regular program.

Professional Education (3 credits)

Choose any 5/600 level Professional Education course (in addition to EDFN 600) in consultation with an advisor.

Related Study (6 credits)

Choose any 5/600 level related course outside of English and Professional Education.

Research Project (1-4 credits)

ENG 694 Alternate Plan Paper (1-2) **OR**

ENG 699 Thesis (3-4)

Additional Requirements:

The degree requires that 50% of all coursework be taken at the 600 level. Students must take a three-part written examination on issues in English education, education, and the student's chosen specialty.

CREATIVE WRITING MFA

Contact: Richard Robbins, MFA

(Thesis Plan - 48 credits)

The MFA program in Creative Writing meets the needs of students who want to strike a balance between the development of individual creative talent and the close study of literature and language. Candidates in the program will find it appropriate training for careers in freelance writing, college-level teaching, editing and publishing, arts administration, and several other areas.

Admission. Application Deadline: February 1. Applicants must submit a writing portfolio (10 pages of poetry or 20 pages of prose) and a 1-2 page personal statement directly to the Department of English, Creative Writing Program. To enter the program without deficiency, candidates must have the equivalent of at least a minor in English (18 semester credits in language, literature, linguistics). Students who enter with a small number of deficiencies may be allowed to make them up within their graduate program. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Research (2 credits)

ENG 672 Research and Publication in Creative Writing (2)

Writing Seminars/Workshops

(minimum 12 credits)

Choose 12 credits from the following:

ENG 542 Advanced Prose Nonfiction Writing (4)
ENG 543 Advanced Fiction Writing (4)
ENG 544 Advanced Poetry Writing (4)
ENG 546 Screenwriting (4)
ENG 594 English Workshop (4)
ENG 642 Seminar: Prose Nonfiction Writing (3)
ENG 643 Seminar: Fiction Writing (3)
ENG 644 Seminar: Poetry Writing (3)
ENG 649 Topics in Creative Writing (1-3)

Form and Technique (6 credits)

ENG 696 Form & Technique in Prose (3)
ENG 697 Form & Technique in Poetry (3)

Contemporary Genres (6 credits)

ENG 646 Contemporary Prose (3)
ENG 647 Contemporary Poetry (3)

Career Related (6 credits)

Choose 6 credits from the following:

ENG 516 Film Criticism (4)
ENG 541 Literary Criticism (4)
ENG 545 Advanced Critical Writing (4)
ENG 574 Research and Writing Technical Reports (4)
ENG 575 Editing Technical Publications (4)
ENG 577 Technical Documentation, Policies, and Procedures (4)
ENG 625 College Composition Theory (3)
ENG 649 Topics in Creative Writing (1-3)
ENG 680 Topics in Computer-Assisted Writing (3)
ENG 687 Theory and Practice of Translation (3)
ENG 690 Workshop for Teaching Assistants (1)
ENG 693 Introductory Workshop for Teaching Assistants (2)
ENG 698 Internship (1-8)

Electives (maximum of 12 credits)

Choose any three 600 level literature courses selected in consultation with an advisor.

Thesis

ENG 699 Thesis (4)

Additional Requirements:

All courses must be in English with the exception of those specifically approved by the Graduate Committee in English; 60% of all coursework must be taken at the 600 level. Students must take a two-part written examination based on a reading list. Students also are required to present a reading/oral defense as part of their thesis project, a book-length collection of writing in the student's chosen genre.

COURSE DESCRIPTIONS**ENG 500 (4) Chaucer**

Readings in the major works of Chaucer, including *The Canterbury Tales* and *Troilus and Criseyde*.

ENG 501 (4) Milton

Study of Milton's development as a poet and prose writer, from his minor poetry to *Paradise Lost*, *Paradise Regained*, *Samson Agonistes*, *Areopagitica*, and selections from *On Christian Doctrine*.

ENG 503 (2-4) Selected Authors

Content changes. May be repeated.

ENG 516 (4) Film Criticism

Trends in film theory and criticism. Practice in critical analysis.

ENG 525 (2-4) Topics in Children's Literature

Topics in genres such as fantasy and historical fiction and thematic topics such as survival or journeys. May be repeated with different subject matter.

ENG 526 (2-4) Selected Periods

Selected periods of literary study.

ENG 532 (2-4) Selected Studies: Novel

Content changes. May be repeated.

ENG 535 (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.

ENG 541 (4) Literary Criticism

Theories of literature and its production and use.

ENG 542 (4) Advanced Prose/Non-Fiction Writing

Advanced workshop in writing personal essays and literary journalism.
Prerequisite: writing course or consent of instructor

ENG 543 (4) Advanced Fiction Writing

An advanced course in writing short stories and novels.
Prerequisite: writing course or consent of instructor

ENG 544 (4) Advanced Poetry Writing

An advanced course in writing poems.
Prerequisite: writing course or consent of instructor

ENG 545 (4) Advanced Critical Writing

An advanced course in writing critical essays.
Prerequisite: writing course or consent of instructor

ENG 546 (4) Screenwriting

Introduction to writing for the screen
Prerequisite: writing course or consent of instructor

ENG 563 (2) Adolescent Literature

Motivation and interests of and materials for adolescent readers.

ENG 564 (3) Teaching Literature in Middle School

Survey of books suitable for the Middle School classroom, covering a variety of topics and genres.

ENG 571 (4) Visual Technical Communication

Analysis and training focused on concepts and practices of visual design as they relate to technical and professional communication.

ENG 572 (4) Topics in Technical Communication

Topics in theory and practice of technical communication. Hands-on course which implements the theories discussed. May be repeated with different subject matter.

ENG 573 (4) Desktop Publishing

Overview of publishing and typography, conventions of desktop publishing, and hardware and software application tools for desktop publishing. Students need not have prior experience with DTP, but some word processing and microcomputer experience will be helpful. Course will meet in both PC and Macintosh labs.

ENG 574 (4) Research and Writing Technical Reports

Practice in writing various types of reports for a variety of purposes and audiences. Includes study of primary and secondary research methods.
Prerequisite: Eng 271 or equivalent

ENG 575 (4) Editing Technical Publications

Editing the content, organization, format, style, and mechanics of documents; managing the production cycle of documents, and discovering and learning microcomputer and software applications for technical editing tasks.

ENG 576 (4) Online Documentation

Introduction to the conventions and strategies for publishing on-line documentation and for managing on-line documentation projects. Topics include analyzing users and tasks, designing and writing documents to be published on-line, testing on-line documents, and managing on-line documentation projects.

ENG 577 (4) Technical Documentation, Policies, & Procedures

Creating both on-line and hard copy 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, and usability testing.

ENG 581 (3) History of 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 582 (4) English Structure and Pedagogical Grammar I

The English sound system and English sentence structure studied for the purpose of discovering how they can be taught to students of English as a second or foreign language.

ENG 583 (4) English Structure and Pedagogical Grammar II

The English sound system and English sentence structure, and content-based language instruction.

ENG 585 (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 U.S. and abroad.

ENG 592 (2-4) Selected Topics

Topics in literary study. May be repeated with change of topic.

ENG 594 (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 595 (1-4) Special Studies

Specialized, in-depth study of topics such as Holocaust literature, environmental literature, or regional literature.

ENG 603 (3) Sem: Selected Authors

Studies in selected authors in British, American, Multicultural, or World Literature. May be repeated with different subject matter.

ENG 605 (3) Sem: Shakespeare

Study of works of Shakespeare, including comedies, histories, tragedies, tragic-comedies, and some shorter poetic works, including sonnets.

ENG 608 (3) Sem: British Literature to 1800

Studies in topics/periods in British Literature to 1800. Emphasizes close readings of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 609 (3) Sem: British Literature after 1800

Studies in topics/periods in British Literature after 1800. Emphasizes close readings of primary works, analyzing pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 610 (3) Sem: American Literature to 1865

Analysis of topics/periods in American Literature before 1865. Emphasizes close reading of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 611 (3) Sem: American Literature after 1865

Analysis of topics/periods in modern and contemporary American Literature, i.e. fiction, nonfiction, poetry, and drama. Emphasizes close reading of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 612 (3) Sem: Women in Literature

Study of selected works by women writers up through the twentieth century with attention to their works within cultural contexts. May be repeated with different subject matter.

ENG 623 (3) Language & Teaching of English

Study of language issues for teachers of English. Intended for those teaching in "mainstream" classrooms populated by a majority of native speakers of English as well as those teaching English as a second or foreign language.

ENG 625 (3) College Composition Theory

Introduction to the major theories of the nature of composition and their pedagogical application.

ENG 626 (3) Bibliography & Research in TESL

Introduction to the types and principles of research in teaching English as a second or foreign language. Intended as an introduction to graduate study in the field and an orientation to the MA in TESL.

ENG 627 (3) Research Seminar in TESL

Critique/work group for class member's alternate plan paper's and master's thesis goals. Provides students with an opportunity to be immersed in the research process and to select, organize, analyze, evaluate, and record information.

ENG 629 (3) Second Language Literacy Development

Study of literacy from a socioliterate perspective. Intended to promote acquisition of multiple literacies.

ENG 630 (2-3) Studies in Language & Literature

Topics in a broad range of English studies. May be repeated with different subject matter.

ENG 631 (3) Language Planning/Policy

Study of governmental efforts to influence or regulate language use, viewed from a world-wide perspective.

ENG 632 (3) Bilingualism/2nd Language Contact

Study of the social environments where more than one language is spoken and the effects upon individuals of living in such environments.

ENG 633 (3) Second Language Acquisition

Study of how languages other than one's mother tongue are learned.

ENG 634 (3) Topics in TESL

Topics in the area of teaching English as a second language. May be repeated with a different subject matter.

ENG 635 (3) Sem: World Literature

Studies in selected national literature or in topics/periods of world literature. May be repeated with different subject matter.

ENG 640 (3) Form and Technique in Prose

Study of the underpinnings of fictional and non-fictional genres.

ENG 641 (3) Form and Technique in Poetry

Study of the technical underpinnings of poetry.

ENG 642 (3) Sem: Prose Non-Fiction Writing

Workshop in writing personal essays and literary journalism. Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 643 (3) Sem: Fiction Writing

Workshop in fiction writing.

Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 644 (3) Seminar: Poetry Writing

Workshop in poetry writing.

Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 646 (3) Contemporary Prose

Study and analysis of selected works in fiction and nonfiction since 1945.

ENG 647 (3) Contemporary Poetry

Study and analysis of poetry since 1945.

ENG 649 (1-3) Topics in Creative Writing

Topics relating to creative writing. May be repeated with different subject matter.

ENG 650 (3) Bibliography & Research in Literature

Cornerstone course of the Main Literature program, providing the research and critical tools to enable students to develop a concrete focus for the thesis.

ENG 661 (2-3) Topics in Children's & Young Adult Literature

Topics of interest to the teacher or professional working in the field of children's and young adult literature. May be repeated with different subject matter.

ENG 662 (2-3) Topics in English Education

Topics such as writing assessment, teaching poetry, and teaching writing in the secondary schools. May be repeated with different subject matter.

ENG 670 (1-3) Independent Writing

Individualized study in writing. (Creative writing majors may take up to 3 credits total.)

ENG 672 (2) Research & Publication in Creative Writing

Exploration of the business of creative writing and the tools for writing and research in the field.

ENG 673 (3) Research & Theory Technical Communications

Seminar for students engaged in conducting a major research project in the technical communication field. Emphasizes theoretical approaches to research, development and implementation of the individual research project, and presentation and publication opportunities in professional writing.

ENG 677 (1-4) Individual Study

Focused study on a topic not covered in regularly scheduled courses.

ENG 678 (3) Technical & Scientific Prose

Analysis of fiction and literary nonfiction that treats technical and scientific themes.

ENG 679 (3) Topics Technical Communication

Topics relating to rhetorical theory in the workplace, including examination of how workplace cultures shape writing assumptions and approaches. May be repeated with different subject matter.

ENG 680 (1-3) Topics in Computer-Assisted Writing

Topics relating to the use of computers in pedagogy or technical communication. May be repeated with different subject matter.

ENG 682 (3) English Grammar and Discourse

Advanced study of English syntax.

ENG 684 (3) Sociolinguistics

Study of the interaction of language use and social structures.

ENG 685 (3) Materials for TESL

Location and assessment of commercial materials and creation and publication of original materials to support instruction in English as a second or foreign language.

ENG 686 (3) Second Language Testing

Introduction to language tests and the assessment of various language abilities.

ENG 687 (3) Theory & Practice Translation

Literary and non-literary translation.

ENG 689 (1-4) Studies English Linguistics

Studies in theoretical and applied linguistics. May be repeated with different subject matter.

ENG 690 (1-2) Workshop: Teaching Assistants

Continued workshop in composition pedagogy for first-year teaching assistants.

ENG 691 (1-3) Colloquium

Advanced studies in language, literature, film, or theory. Permission required.

ENG 693 (2) Introductory Workshop for TA's

Introductory workshop in composition pedagogy for first-year teaching assistants.

ENG 694 (1-2) Alternate Plan Paper

Independent capstone experience, focusing on secondary research sources; paper may have other guidelines specific to the program option.

ENG 698 (1-6) Internship

On-site field experience, the nature of which is determined by the specific needs of the student's program option.

ENG 699 (1-4) Thesis

Independent capstone experience, guidelines of which are determined by the requirements of a particular program option.

ENVIRONMENTAL SCIENCES MS

College of Science, Engineering & Technology

Biological Sciences

242 Trafton Science Center S • 507-389-2786

Graduate Coordinator: Beth Proctor, Ph.D.

The Graduate Program in Environmental Sciences offers the student the opportunity for study in the areas of environmental quality, restoration and natural resources. These areas encompass a broad range of practical problems which cross the boundaries of applied natural sciences, mathematics, economics, management and law.

This program provides flexibility and a multidisciplinary basis. This is accomplished by drawing on the expertise from many departments at Minnesota State University, Mankato. The focus of research and/or teaching available in the Environmental Sciences Program includes: Environmental Monitoring, Environmental Toxicology, Environmental Microbiology, and Environmental Assessment.

The Master's Thesis Option is strongly encouraged, however, a non-thesis option is also available.

Admission. In addition to meeting the general admission requirements of College of Graduate Studies and Research, students must have completed the following courses with a minimum grade of C: One year of Chemistry, College Algebra, General Ecology, and Plant Science or Animal Diversity. Students lacking some of the admission requirements may be conditionally admitted to the program. Conditionally admitted students are given one academic year to complete coursework deficiencies.

Graduate Assistantships. Environmental Sciences is a Program in the Department of Biological Sciences. Graduate assistantships are available through the Department of Biological Sciences.

Occupational Outlook. There are diverse opportunities for employment in the area of environmental sciences. Numerous opportunities exist in environmental analysis and monitoring of environmental media (water, soil, air, indoor air, organisms, food, biological fluids, etc.). There are positions available in the regulation and monitoring of agricultural activities such as management of feed lots and septic systems; and in water planning on the county, regional, and state level. Moreover, there are positions in industrial (work place environment), data management, chemical evaluation, quality control and quality assurance and geographic information systems (GIS).

There is also a need for persons with Environmental Science coupled with emphasis in Business, Economics, Political Science, and/or Urban and Regional Studies.

Potential employers include the Environmental Protection Agency (EPA); U.S. Geological Survey; the Department of Agriculture; the Food and Drug Administration (FDA); other federal, state and local government agencies, as well as private industry. Many of these employers study chemicals to determine if they are harmful, their mode of action, how they move in the environment, and whether they are carcinogenic or teratogenic (causing cancer or birth defects). The Environmental Sciences Program works with the EPA, as well as other federal and state agencies, to secure grants which support faculty and graduate student research. These contacts may lead to internships and/or permanent employment opportunities for graduates.

Professional positions are usually available for persons with hands-on experience in analytical instrumentation used in the detection of environmental contaminants, environmental modeling, data management including quality control and quality assurance, and geographic information systems. Employment is often secured through contacts with advisors, industry, internships and other links between the

Environmental Sciences Program with state and federal agencies and institutions. Students also interview for jobs at meetings held by such professional organizations as the American Chemical Society. The Career Development and Counseling Center at Minnesota State University, Mankato is another source of job information and offers workshops that help students prepare credentials and interview skills.

Advising, Thesis Track (30 Credits). At the end of the first academic year the student should select a permanent advisor, an area of emphasis and a research thesis topic. The student with his/her advisor should select members from the graduate faculty to serve on the advisory committee. The advisory committee usually consists of 3-5 graduate faculty members. The advisory committee must include two members of the Department of Biological Sciences. The advisory committee is chaired by the student's advisor reviews and approves the coursework, research and thesis. A thesis will prepare students for the more technical fields or doctoral programs.

Advising, Alternate Plan Paper (34 Credits). At the end of the first academic year, the student should select a permanent advisor and an area of specialization. The student with his/her advisor should select members from the graduate faculty to serve on the advisory committee. The advisory committee usually consists of 3-5 graduate faculty members. The advisory committee must include two members of the graduate faculty from the Department of Biological Sciences. The advisory committee reviews and approves the student's course work and Alternate Plan Paper.

ENVIRONMENTAL SCIENCE MS**Required Core (16 credits)**

ENVR 540	Environmental Regulations (3)
ENVR 550	Environmental Pollution and Control (3)
ENVR 560	Analysis of Pollutants (4)
BIOL 510	Human Ecology (3)
ENVR 600	Environmental Assessment (3)

Required Environmental Science**Electives (6 credits)**

Choose **two** courses from the following:

URSI 604	Zoning & Legal Issues (3)
URSI 609	Applied Urban Analysis (3)
URSI 661	Long-Range & Strategic Planning (3)
URSI 662	Operational Planning (3)
GEOG 673	GIS For Planners (3)
GEOG 681	Environmental Issues (3)
POL 669	Public Policy Analysis (3)
POL 670	Urban Law (3)

Required Electives

The remaining coursework will be drawn from other programs across University offerings.

Required Thesis or Alternate Plan Paper

ENVR 694	APP (1-2)
ENVR 699	Thesis (3-6)

Additional Requirements:

A maximum of 9 credits can be taken of ENVR 600- level courses such as, independent study, internship, seminar, in-service, thesis and/or alternate plan paper. All courses must be approved (in advance) by the student's advisor and must be pertinent to the student's career goals. Independent study and internship credits from other programs **cannot** be used for electives in Environmental Sciences. Fifty percent of the coursework must be at the 600 level (excluding thesis and APP credits).

COURSE DESCRIPTIONS**ENVR 540 (3) Environmental Regulations**

This lecture course introduces students to major federal environmental statutes, including the Clean Water Act; Clean Air Act; Safe Drinking Water Act; Resource, Conservation and Recovery Act; CERCLA (Superfund); Federal Insecticide, Fungicide and Rodenticide Act; Toxic Substances Control Act; Endangered Species Act; and Food, Drug and Cosmetic Act. In addition, several state of Minnesota environmental statutes will be discussed.

(F)

ENVR 550 (3) Environmental Pollution & Control

This is a lecture course focusing on the sources and control of pollutants in air, soil, water, and groundwater. Hazardous waste treatment and the effects of pollutants on human health are also discussed.

(F)

ETHNIC AND MULTI-CULTURAL STUDIES

ENVR 560 (4) Analysis of Pollutants

This is a lecture/lab class designed to give students “hands-on” experience with various methods of environmental analysis coupled with the development of a research proposal. The class research project requires the collection and analysis of samples using methods approved by the Environmental Protection Agency. Quality control and Quality Assurance methods are emphasized.
(S)

ENVR 583 (1-2) Seminar

Each major will present a seminar on his/her research and also have the option to attend semester-long seminars on special topics.

ENVR 591 (1-2) In-Service

ENVR 600 (3) Environmental Assessment

This lecture course introduces students to the National Environmental Policy Act and requirements for Environmental Impact Statements and Environmental Assessment Worksheets at the federal and state level. Phase I Environmental Assessment of land and buildings, an International Perspective on Environmental Assessments, and Economic and Social Impact Assessment are also discussed.

ENVR 619 (2-3) Selected Topics in Environmental Science

ENVR 677 (1-6) Individual Study

Individual Research Project.
(F,S)

ENVR 694 (1-2) Alternate Plan Paper

(F,S)

ENVR 698 (1-12) Internship

Experience in applied Environmental Sciences according to a prearranged training program.
(F,S)

ENVR 699 (1-6) Thesis

(F,S)

ETHNIC AND MULTI-CULTURAL STUDIES MS

*College of Social & Behavioral Sciences
Department of Ethnic Studies
109 Morris Hall • 507-389-2798*

Chair: Yueh-Ting Lee, Ph.D.

Wayne Allen, Ph.D.; Hanh Huy Phan, MS; Yueh-Ting Lee, Ph.D.; Joann Quinones-Perdomo, Ph.D.; Luis Posas, Ph.D.

The Department of Ethnic Studies, an interdisciplinary program, is academically committed to promoting multicultural and ethnic knowledge, values, and skills both within and outside the United States and to preparing our students for effective functioning across the culturally diverse and global community. The Ethnic and Multi-Cultural Studies Program (EMCS) with an MS degree is offered to meet the diverse needs of students concerning scholarly academic work, practical application of knowledge and personal growth. Our EMCS graduate program will provide students with multi-ethnic and cross-cultural knowledge, values, and skills from American and global perspectives.

First, students will gain factual knowledge by taking courses focusing on different ethnic, racial, and cultural groups as well as discrimination, immigration, stereotypes, and other important issues. Second, they will learn how to understand and appreciate the different values and beliefs each cultural or ethnic group has. Third and most importantly, students in this program will be expected to gain the following skills – e.g., (a) research skills, writing skills, and/or computer/statistical analysis skills, (b) human resources management and leadership skills, (c) counseling skills, and (d) cultural competency skills or cross-cultural training, and diversity management skills. There is a strong emphasis on competency in applied skills because advocacy must have practical application as its foundations to be credible.

Admission requirements:

1. An undergraduate GPA of at least 3.0 on a 4.0 scale;
2. A baccalaureate degree from an accredited college or university;
3. At least 9 credits in ethnic and cross-cultural areas. This requirement may be waived if the applicant can show relevant work (related to other social sciences) or other experiences that provide the necessary background to pursue graduate work in EMCS;

4. Have knowledge of or skills in two languages (i.e., English plus preliminary level of another language – i.e., six credits of undergraduate language courses), but this may be subject to arrangement and discussion between the applicant and the Department); and
5. When students do not meet the normal admission requirements, they may be recommended for admission by the department subject to removal of deficiencies or other conditions.

Credits

Thesis Plan – 33 credits

Alternate Plan Paper – 34 credits

Required Core from the following (15 credits, 12 credits must be 600 level):

ETHN 500 Cultural Pluralism (3) **OR**
ETHN 510 Foundation of Oppression
ETHN 502 Ethnic Research Method/Skills (3) **OR**
ETHN 501 Applied Cultural Research **OR**
ANTH 531 Applied Cultural Research
ETHN 603 Seminar in Ethnic/Cross-Cultural Studies (3) **OR**
ANTH 603 Seminar in Applied Anthropology
ETHN 650 Helping Across Culture (3) **OR**
CSP 648 Counseling in a multicultural society)
ETHN 660 Cross-Cultural Training and Diversity Management (3)
ETHN 695 Ethnic-Race Implications (3)
ETHN 697 Internship (1-6)

Required supporting core (9 credits) – one course from each of three groups. Two courses must be on the 600 level*

Group 1. Choosing one of the following research courses:

ANTH 602 Seminar in Research Method (3)
POL 600 Research Method (3)
PSY 610 Research Design and Statistics (4) **OR**
GEOG 576 Spatial Statistics (3)*
SOC 605 Seminar in Sociological Research (3)
WOST 620 Feminist Research (3)

Group 2. Choosing one of the following HR management/leadership courses:

EDAD 644-03 Seminar on leadership studies (3) **OR**
EDAD 668 Human Resources Management (2) **PLUS**
EDAD 669 Human Resources Topics (1)
POL 662 Human Resources Management (3)
PSY 563 Survey of Industrial/Organizational Psychology (4)*
URSI 650 Urban Administration Services (3)

Group 3. Choosing one of the following counseling courses:

CSP 665 Counseling Theories (3) **OR**
CSP 571 Interpersonal Helping Skills (3)* **OR**
CSP 618 Introduction to Professional Community Counseling (3)
REHB 640 Theories in Rehabilitation (3) **OR**
REHB 651 Rehabilitation Counseling Techniques (3)
PSY 683 Behavioral Assessment (4)

Required Electives (6-9 credits)

ETHN 520 African American Studies (3)
ETHN 530 American Indian Studies (3)
ETHN 540 Asian American Studies (3)
ETHN 550 Latino/Hispanic Studies (3)
ETHN 560 Urban Minority Problems (3)
ETHN 570 Women of Color (3)
ETHN 580 Social Justice in Ethnicities and Gender (3)
ETHN 586 Racial and Ethnic Politics (3)
ETHN 590 Racial/Ethnic Families in the U.S. (3)
ETHN 595 Selected Topics (3)
ETHN 630 Liberation Theory (3)
ETHN 640 Environmental Justice (3)
ETHN 696 Individual Studies (3)*

Required Written Comprehensive and Oral Exam plus thesis or APP

ETHN 698 Alternate Plan Paper (1-2)
ETHN 699 Thesis (3-6)

At least 18 credits (or 6 courses) must be 600 level, excluding APP or thesis. Students are allowed to take only ONE 500 level as part of their supporting cores in Part II. If they take a 500 level (see) in Part II as a supporting core in part II, students must take ETHN 696 – Individual Studies (see *) in their required electives in Part III.

COURSE DESCRIPTIONS

ETHN 500 (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 co-existence with other ethnic groups.

(F, S)

ETHN 501 (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 culture change with special attention to its affect on disadvantaged groups of people. Students will also design their own applied projects.

Prerequisite: ANTH 101, 103, or 230 or consent; ETHN 100, 101, or 150 or consent

ETHN 502 (3) Ethnic Research Methods/Skills

This course details with scientific methods and investigative skills in Ethnic Studies. From an interdisciplinary perspective, students are expected to learn how to do research on ethnic and cross-cultural issues (e.g., hypothesis, different methods, data collection/analysis, and report writing). Other professional skills/issues are also discussed.

ETHN 510 (3) Foundations of Oppression

Students will examine the forces which create and maintain prejudice, discrimination, and racism. Special attention will be given to the work of Paulo Freire.

(F) Prerequisite: ETHN 500 or consent

ETHN 520 (3) African American Studies

This course examines contemporary topics in the lives of African Americans. These topics include but are not limited to: slavery, Reconstruction, Post-Reconstruction, Separate-But-Equal, Desegregation, and Resegregation.

(S) Prerequisite: ETHN 500 or consent

ETHN 530 (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.

Prerequisite: ETHN 500 or consent

ETHN 540 (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.

Prerequisite: ETHN 500 or consent

ETHN 550 (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.

Prerequisite: ETHN 500 or consent

ETHN 560 (3) Urban Minority Problems

This course is concerned with racial/ethnic minorities who live in large urban (inner city) areas. It is especially concerned with the roles that culture and discrimination play in the shaping of America's ghettos, barrios, reservations, and Chinatowns.

(S)

ETHN 570 (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 struggles against oppression.

(S)

ETHN 580 (3) Social Justice in Ethnicity and Gender

Survey of institutional sexism and racism including their impact on U.S. society. Special attention will be given to their interconnectedness.

(F)

ETHN 581 (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 ways in which African Americans and their white supporters mobilized for equality in the face of massive white resistance and seeming federal indifference.

ETHN 586 (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 U.S. politics. Major topics include: public 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.

ETHN 590 (3) Racial/Ethnic Families in the U.S.

This course will examine different definitions of "family" through time in the U.S.. It will focus on changes in the African-, Native-, Hispanic/Latino-, and Asian-American families. It will also compare and contrast differences and similarities among ethnic minority families as well as between them and white ethnic families.

ETHN 595 (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).

Prerequisite: ETHN major

ETHN 596 (1-3) Workshop**ETHN 598 (1-6) College Teaching Internship**

Students assist a faculty member in teaching an Ethnic Studies 100 or 101.

ETHN 603 (3) Seminar in Ethnic/Cross-Cultural Studies

This course focuses on ethnic/cross-cultural field development, professional ethics/values, skills compoment and practice, including such guidelines as preparations for resumes and curriculum vitae, research proposals, formal (oral) presentation, grant proposals, thesis plans, articles and books.

ETHN 630 (3) Liberation Theory

This course examines the writings of various authors to gain a theoretical perspective of such issues as racism, sexism and oppression, and how these authors have formulated a plan for change in the U.S. and in the world.

ETHN 640 (3) Seminar on Environmental Justice

This examines the relevant issues surrounding environmental justice, with a particular emphasis on political ecology, resource colonialism, environmental racism, applied ethnic studies, and local environmental movements and minority advocacy and focuses on professional application and advocacy through practice.

ETHN 650 (3) Helping Across Cultures

Scholars preparing for and/or working in the helping professions or related careers will address the issues and experiences of culturally different persons. Special attention will be given to preparation for effective cross-cultural interactions.

(S) Prerequisite: ETHN 500 or consent

ETHN 660 (3) Cross-Cultural Training and Diversity Management

This course is designed for those students or professionals who prepare for and/or work in the diverse organizations/institutions, corporations, communities in and outside America. Theories, techniques and skills for cross-cultural training/consultation and diversity management are covered.

ETHN 695 (3) Ethnic-Race Implications

Graduate scholars will address the meaning and significance of US race and ethnicity within global perspectives. Special attention will be given to the writings of scholars of color.

(F) Prerequisite: ETHN 500 or consent

ETHN 696 (1-3) Individual Study

Specialized independent study and research.

(F,S) Prerequisite: one 500 level ETHN course

ETHN 697 (1-10) Internship

Supervised 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.

(F,S) Prerequisite: Two 500/600 level ETHN courses

ETHN 698 (1-2) Alternate Plan Paper

Concluding research project. May largely use secondary sources.

(F,S)

ETHN 699 (3-6) Thesis

Concluding research project. Requires toward original research.

(F,S)

EXPERIENTIAL EDUCATION MS

College of Education

Department of Educational Leadership

115 Armstrong Hall • 507-389-1116

Department home page: www.mnsu.edu/edld/

See **EDUCATIONAL LEADERSHIP**

FAMILY CONSUMER SCIENCE

College of Allied Health & Nursing

Department of Family Consumer Science

B102 Wiecking Center • 507-389-2421

Chair: Kelley Brigman, Ph.D.

Joye Bond, Ph.D.; Betty Young, Ph.D.

The Department of Family Consumer Science (FCS) has suspended its graduate programs; therefore, it does not currently offer a master's degree in FCS. However, the Department does offer a variety of graduate-level courses which may be taken to enhance undergraduate work, to complete dietetics requirements, or as electives in other graduate programs.

Students may also work with an FCS advisor to complete a Master of Science degree in Multidisciplinary Studies with a concentration in FCS or a specific FCS content area: FCS Education, Family Life and Child Development, or Food and Nutrition. For further information please see section on Cross-disciplinary Studies MS.

COURSE DESCRIPTIONS**FCS 500 (3) Culturally Diverse Family Systems**

An analysis of culturally diverse family systems in America; emphasis on relationships within the family and with the larger community across the family life cycle. F

FCS 501 (3) Family Life Development

The course is a study of development through the family life cycle. Emphasis on developmental interaction and family systems concepts. S

FCS 508 (3) Family Life Dynamics

See Sociology 508.

FCS 515 (1-2) Student Organization

The teacher-coordinator's role as a vocational club advisor.

FCS 536 (3) Historic Costume**FCS 537 (1-3) Topic: Textiles/Clothing**

Topics of current interest. May be repeated. Demand

FCS 539 (3) Nutrition for Physical Activity and Sport

This course 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.

FCS 540 (3) Nutrition II

An advanced nutrition course in the function and interaction of nutrients in metabolic processes. Contains a nutrition research component and research case study, focusing on metabolism in persons selected by the student.

FCS 542 (3) Clinical Dietetics I

The role and influence of dietetics in society, nutritional assessment and care plans, dietetic principles applied to normal and malnourished states. Case-based approach. F Prerequisite: FCS 440

FCS 544 (3) Experimental Food Science

Foods research: proposal writing, execution, and interpretation of results of original foods experiments. Presentation of results orally and by posters. Investigation of subjective and objective evaluation techniques.

S Prerequisite: FCS 340, HLTH 475 (or STAT 154)

FCS 545 (2) Food Preservation**FCS 546 (3) Lifespan Nutrition**

Study of nutritional needs of pregnancy, infancy, childhood, and adulthood. Experi-

ence in group dynamics in providing nutritional education to a target population. F Prerequisite: FCS 140 or 240 or consent

FCS 548 (3) Clinical Dietetics II

The pathophysiological, nutrient assessment, planning, and counseling aspects of biliary, surgical, endocrine, cardiovascular, and renal conditions. Case-based approach.

S Prerequisite: FCS 442, CSP 471, PSYC 476 or concurrent

FCS 551 (2) Integrating Service Values Into Practice**FCS 552 (3) Integrating Foodservice Software Into Practice****FCS 572 (2) Residential Management**

An in-depth exploration into planning and managing a variety of residential property facilities. Specifically addresses employment as a manager of such properties.

V Prerequisite: FCS 270, 370

FCS 574 (4) Residential Management for Families and Special Needs

The system approach to analyzing family situations to make decisions and correlate resources in the resolution of family managerial problems. Emphasis on the application of managerial skills to lifestyle situations: young-families, elderly, special needs, singles, and low income. S

FCS 575 (2) Family Policy

Family related issues affected by government policies and other regulatory practices; legislation involving incentives, financing, subsidies, etc. The role of related public and management issues.

S Prerequisite: FCS 270, 370

FCS 578 (2) Family Finance

Introduce students to the how's and why's of family financial management to reduce mistakes made in successfully managing financial aspects of life. For non-business majors. V

FCS 582 (2) Teaching Family Life/Parenting Education

Analyze issues and concerns related to family life education. Investigate teaching strategies and methods of evaluation. Preparation of appropriate lesson plans. F

FCS 583 (2) Adult Education in FCS

Philosophy and objectives of adult education in family consumer sciences with emphasis on informal teaching-learning environments; procedures for planning and developing programs with an advisory committee; and teaching experiences with the adult learner.

F (every year), S (even-numbered years)

FCS 587 (1-3) Topic: Family Consumer Science Education

Current issues and/or research findings to be announced as offered. May be repeated. V

FCS 588 (3) Parenting Education

A systems perspective on parent-child relationship. This course covers parent-child issues during the stages of human development. It also focuses on special needs children and families, cross-cultural issues, and family violence. Emphasis is on research and theory and parenting education strategies. F

FCS 590 (1-3) Workshop

Workshop topics vary as announced in class schedule. May be repeated. V

FCS 595 (3-4) Intern: Early Child Family

A scheduled work assignment that will include on-site experiences with parents in early childhood family education.

D Prerequisite: consent

FCS 596 (2-3) Selected Topics: FLCD

Topics announced as offered. May be repeated. V

FCS 597 (1-6) Internship

A scheduled work assignment with supervision in private business, industry, and government agency appropriate to each area of concentration.

D Prerequisite: consent

FCS 598 (1-6) Internship

A scheduled work assignment with supervision in private business, industry, and government agency appropriate to each area of concentration.

D Prerequisite: consent

FCS 600 (3) Issues Family Relationships

This course provides a graduate-level foundation in family science. It covers a broad range of family issues within a theoretical framework. Suitable for all graduate students who plan to work with families in human sciences or education.

V

FCS 616 (2) Child Development Issues in Family

Integration of child development issues within the context of home and family with emphasis on analysis of research and application of concepts.

V

FCS 675 (2) Consumer Education

Knowledge about consumer economics which will help create positive changes in the marketplace. Emphasis is placed on teaching consumer information techniques in schools, buying skills, money management, and consumer citizenship responsibilities.

V

FCS 677 (1-4) Individual Study

Opportunity for independent study with guidance of graduate faculty.

D Prerequisite: a statistical course: consent

FCS 680 (1-3) Methods & Evaluation of Family Consumer Science

Recent trends in methods and evaluation based on research and experimental programs with application to the educational environment including vocational education programs.

V

FCS 681 (1-3) Family Consumer Science Curriculum

Analysis of curriculum trends in family consumer science programs including vocational education programs. Application of curriculum development principles.

V

FCS 683 (2) Seminar: Adult Education

Understanding and facilitating adult learning in the Family Consumer Science discipline.

V

FCS 686 (1-3) Trends in Family Consumer Science

Examine current issues and identify trends in the content area of family consumer science. May be repeated.

V

FCS 691 (1-4) In-Service

In-service courses are those courses designed to upgrade qualifications of individuals in their professional endeavors. May be repeated.

V

FCS 692 (2) Seminar: Research

Fundamentals of research design, data collection method, and research strategies related to Family Consumer Science discipline.

V Prerequisite: a statistical course

FCS 694 (1-2) Alternate Plan Paper**FCS 698 (1-5) Internship****FCS 699 (3-6) Thesis****FRENCH MS****FRENCH EDUCATION MS**

(DISCIPLINE-BASED)

College of Arts & Humanities
Department of Modern Languages
227 Armstrong Hall • 507-389-2116

Chair: Kimberly Contag, Ph.D.
Graduate Coordinator: John J. Janc, Ph.D.

John J. Janc, Ph.D., Doctorat de 3me cycle.

Modern Language graduate study at Minnesota State University, Mankato enables students to pursue the Master of Science in French (Secondary Teaching) or the Master of Science Community College Track in French. The Department of Modern Languages also offers graduate courses in French for the Master of Arts in Teaching (MAT in French) degree. The MAT program is designed for those who want to teach at the secondary level but lack certification. The Modern Language courses associated with the MAT degree are also listed below.

Admission. Complete the general admission requirements of the College of Graduate Studies and Research. Students must demonstrate a minimum oral proficien-

cy level of intermediate high according to ACTFL Proficiency Guidelines Contact the department for information.

Graduate Assistantships. A number of graduate teaching assistantships are available during the academic year. A graduate assistant in the Department of Modern Languages teaches classes in elementary French, Spanish, or ESL and receives a salary. For more information, contact the College of Graduate Studies and Research or the Department of Modern Languages.

Graduate Study Abroad. Graduate credit can be earned in French on department-sponsored Study Abroad Programs conducted at institutions in France. For more information, consult the Department of Modern Languages.

FRENCH MS**COMMUNITY COLLEGE OPTION**

(Thesis Plan - 30 credits)

(Alternate Plan Paper -34 credits)

Students interested in teaching at the Community College level should see their advisor about identifying methods courses to strengthen their teaching ability. Licensure is not required to teach at the Community College level, but courses in teaching skills are recommended. This program prepares students of French for teaching in higher education. Fifty percent of the credits must be taken at the 600 level, excluding thesis or APP credits.

Required Major Teaching Field (16-22 credits)

Choose any 500/600 level French courses selected in consultation with an advisor.

Required Modern Language Methods (4 credits)

MODL 560 Methods of Teaching Modern Languages, unless an equivalent course was taken at the undergraduate level.

Required Professional Education credits (6 credits)

Choose any 500/600 level Professional Education courses selected in consultation with an advisor.

Required Electives (2-6 credits)

Choose any 500/600 level elective courses selected in consultation with an advisor.

Required Thesis or Alternate Plan Paper

694 Alternate Plan Paper (1 or 1-2)

699 Thesis (3 or 3-4)

FRENCH EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

This degree does not lead to teacher licensure. Students who desire licensure should consult the Master of Arts in Teaching (MAT) program. Emphasis in French is available.

This program is primarily for teachers of French who are interested in pursuing an advanced degree in the language and in increasing their proficiency. The degree requires courses totaling 30 credits (with thesis) or 34 credits (with alternate plan paper). Fifty percent (50%) of the credits must be taken at the 600 level (excluding thesis and APP credits).

Required French (18-22 credits)

Choose any 500/600 level French courses selected in consultation with an advisor.

Required Professional Education (6 credits)

Choose any 500/600 level Professional Education courses selected in consultation with an advisor.

Required Electives (6 credits)

Choose any 500/600 level elective courses selected in consultation with an advisor.

Required Thesis or Alternate Plan Paper

694 Alternate Plan Paper (1 or 1-2)

699 Thesis (3 or 3-4)

COURSE DESCRIPTIONS**FRENCH (FREN)****FREN 502 (3-4) French Civilization**

A survey of the historical, philosophical, literary, and artistic development of France from the beginning to the present.

Prerequisite: undergraduate French major

GEOGRAPHY

FREN 504 (2-4) French Syntax

Systematic review of French grammar.
Prerequisite: undergraduate French major

FREN 505 (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.
Prerequisite: undergraduate French major

FREN 506 (2-4) Business French II

Study of France's position in the European Economic Community and of the development of French business law with an 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.
Prerequisite: undergraduate French major

FREN 515 (1-3) Composition

Practice in descriptive, narrative, and expository writing. Acquisition of vocabulary and advanced grammatical structures.
Prerequisite: undergraduate French major

FREN 516 (1-4) Conversation

Practice in advanced conversational skills.
Prerequisite: undergraduate French major

FREN 517 (1-3) Modern France

In-depth study of different aspects of contemporary French civilization.
Prerequisite: undergraduate French major

FREN 520 (1-4) French Seminar

In-depth study of an author, genre, movement, theme, or period.
Prerequisite: undergraduate French major

FREN 532 (1-4) French Literature I

Study of the major authors, works, and movements of two successive centuries of French literature.
Prerequisite: undergraduate French major

FREN 542 (1-4) French Literature II

Study of the major authors, works, and movements of two successive centuries of French literature.
Prerequisite: undergraduate French major

FREN 552 (1-4) French Literature III

Study of the major authors, works, and movements of two successive centuries of French literature.
Prerequisite: undergraduate French major

FREN 594 (1-6) Supervised Study in French-Speaking Countries

Topics will vary. Study for credit must be approved by the department prior to departure.
Prerequisite: undergraduate French major

FREN 597 (1-6) Internship

Prerequisite: undergraduate French major

FREN 614 (1-3) Paris Et L'Ile De France

Visits to the major churches, cathedrals, castles, monuments, museums, and neighborhoods in and around Paris.
Prerequisite: undergraduate degree in French

FREN 660 (2) Research Methods: French

Methods and tools of literary research.
Prerequisite: undergraduate degree in French

FREN 677 (1-4) Individual Study

Topics will vary.
Prerequisite: undergraduate degree in French

FREN 680 (1-3) Topics in French Literature

Topics will vary. May be repeated.
Prerequisite: undergraduate degree in French

FREN 681 (1-3) Topics in French Culture & Civilization

Topics will vary. May be repeated.
Prerequisite: undergraduate degree in French

FREN 682 (1-3) Topics in French Language Study

Topics will vary. May be repeated.
Prerequisite: undergraduate degree in French

FREN 693 (1-6) Supervised Study in a French-Speaking Country

Topics will vary. Study for credit must be approved by the department prior to departure.
Prerequisite: undergraduate degree in French

FREN 694 (1) Alternate Plan Paper

Prerequisite: undergraduate degree in French

FREN 697 (1-6) Internship: Community College Option

FREN 699 (3-6) Thesis

Prerequisite: undergraduate degree in French

MODERN LANGUAGE (MODL)

MODL 560 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL, scale in target language.

MODL 561 (1) Applied Modern Language Teaching Methods

A field experience in a secondary school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

MODL 562 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL, scale in target language.

MODL 563 (1) Applied FLES Methods

A field experience in an elementary setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462.

MODL 565 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.

GEOGRAPHY MS

GEOGRAPHY EDUCATION MS

(DISCIPLINED-BASED)

College of Social & Behavioral Sciences

Department of Geography

7 Armstrong Hall • 507-389-2617

Chair: Martin Mitchell, Ph.D.

Branko Colakovic, Ph.D.; Donald Friend, Ph.D.; Cecil Keen, Ph.D.; Jiyeong Lee, Ph.D.; Jose Javier Lopez, Ph.D.; Cynthia Miller, Ph.D.; Martin Mitchell, Ph.D.

Geography, as taught at Minnesota State University, Mankato, deals with phenomena in earth space and their areal extent, intensity and variation. Graduate programs in geography are designed to help students develop advanced skills in research design and analysis, as well as competence in using specific tools of geographic inquiry. In addition, the department provides necessary continuing education for a variety of elementary, high school and post-secondary teachers and other professionals, such as planners.

Geography graduate study emphasizes knowledge and understanding of environments and processes derived from the basic structure of Earth, as well as the cultural attributes and diversity of its peoples. Geography also examines links among economies, cultures and intellectual models that attempt to explain perceptions of Earth, along with the geographer's concepts and strategies for analyzing these interconnections.

In addition to a diverse and experienced faculty, the department supports its own reference collection of books, periodicals and maps. The department maintains a fully equipped cartography laboratory, including computer-assisted cartography software and equipment. The department supports a geographical analysis laboratory in which students have access to GIS software and hardware along with appropriate peripheral equipment. GPS software and equipment are also available. MSU's Weather Analysis Laboratory for Teaching and Educational Resources

(WALTER) is an independent unit equipped with state-of-the-science weather observation and display equipment. Two satellite dishes feed multiple data streams to a console of computers using VISTA, Storm-Sentry and Storm-Pro (from DTN-Kovouras), Satellite imagery (from NVG), data analysis programs like LEADS (from IPS) and the EWB visualization program (from SSESCO). A time-lapse Sky-Cam and local observational instruments complete the total weather picture available. The facility provides one of the best teaching/learning environments in the Midwest. The University library holds many of the major U.S. geographical journals. The library's map and atlas holdings are formally organized in its Map Collection, which is a depository for maps produced by federal government agencies including (but not limited to) the U.S. Geological Survey, the Defense Mapping Agency, and the U.S. Department of Agriculture (including the Forest Service).

Admission. Applicants for admission to graduate programs in geography must have maintained a grade point average of 2.75/4.0 for the last two years of undergraduate work for a four-year degree. Applicants having grade point averages below the minimum who present convincing evidence of potential for success in graduate studies may be considered for provisional admission. Letters of recommendation from at least two individuals familiar with the applicant's undergraduate academic performance are required as is a statement of intent by the applicant. Scores from the GRE are not required for admission unless the undergraduate grade point average is below 2.75 for the last two years of work for the baccalaureate degree.

Financial Assistance. Several graduate assistantships are available through the Department of Geography. Most are funded directly from the College of Graduate Studies and Research. Typically, assistantships carry an obligation of about ten hours per week. Further information about the availability of assistantships and about the status of applications for assistantships should be sought from the department chair.

GEOGRAPHY MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core and Research (6 credits)

GEOG 678 Geographic Research & Writing (3)

GEOG 680 Philosophy of Geography (3)

Required Electives (24-26 credits)

Choose any 500/600 level elective courses in consultation with an advisor. 15 credits must be taken in Geography.

Required Thesis or Alternate Plan Paper

GEOG 694 Alternate Plan Paper or Internship (1-2)

GEOG 699 Thesis (3-6)

GEOGRAPHY EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. Please see the section concerning the MAT program that is listed in this bulletin.

Required Geography (3 credits)

GEOG 680 Philosophy of Geography (3)

Required Professional Education (6 credits)

KSP 640 Assessment and Evaluation (3)

KSP 675 Curriculum Appraisal (3)

Required Education outside Geography and Professional Education (6 credits)

Choose any 500/600 level Education courses taken in disciplines outside Geography and Educational Studies: K-12 and Secondary Programs in consultation with an advisor

Required Geography Electives (9-11 credits)

Choose any 500/600 level Geography elective courses in consultation with an advisor. A minimum of 6 credits need to be taken in a specialized geography area (e.g. physical geography)

Required Electives (4-7 credits)

Choose any 500/600 level elective courses in consultation with an advisor

Required Thesis or Alternate Plan Paper

GEOG 694 Alternate Plan Paper (1-2)

GEOG 699 Thesis (3-6)

COURSE DESCRIPTIONS

GEOG 509 (1-3) Selected Topics

The instructor will develop a specific course on a geographic topic, such as soils, landforms, water resources, energy, housing, population geography, or some other topic for the class.

GEOG 510 (3) Climatic Environments

A qualitative regional climatology of the world, including the Pleistocene Ice Ages and urban impacts upon climate. Emphasis is on the characteristics of particular climates and understanding the factors that control their spatial distribution.

Prerequisite: GEOG 101 or con

GEOG 512 (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.

Prerequisite: GEOG 317

GEOG 520 (3) Conservation of Natural Resources

Survey of natural resources emphasizing energy, metallic, fisheries, and water resources. Also addresses timber, wetlands, and wildlife on public and private lands.

GEOG 525 (3) Economic Geography

Examines national and international economic geographical order and trade activities. Topics include economic development, competition, and impacts on the environment and people

GEOG 530 (3) Historical Geography: The U.S.

The evolving patterns of settlement, cultures, landscapes, and economies of the United States from the colonial period to 1990. An introduction to historical geography as a sub field of geography, including career opportunities in related professions.

GEOG 535 (3) Urban Geography

Hypotheses and generalization related to urban functions, structure, land use, distribution, growth, and decline. Emphasis will be mostly on the United States' urban places

GEOG 536 (2) Rural Development

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 carving out research projects on rural environments.

GEOG 537 (3) Political Geography

Spatial problems and structure of governments, focusing on countries of the world. Covers such topics as boundary problems, strategic locations, and geopolitical explanations of international relations and conflict.

GEOG 540 (1-4) Field Studies

Various excursions to study physical and cultural landscapes inside and outside Minnesota.

GEOG 545 (3) Latin America

Regional geography covering the ecological and human environment of Central and South America and the Caribbean. Students can pick specific topics to study in detail. The geographic relations between the USA and Latin America are also covered.

GEOG 546 (3) Canada

Students will develop a knowledge of the environmental, cultural, historical, and economic geographies of Canada. Readings of best-selling fiction and scholarly works written by Canadians will provide a Canadian perspective on the nation's past, present, and future.

GEOG 550 (3) Europe

Cultural, environmental, and economic background of Europe west of the former USSR. Following a general geographic survey, the course will cover major regions and countries.

GEOG 554 (3) Russian Realm

Survey of the area of the former Soviet Union. Examines regional patterns of the physical environment, natural resources, population distribution, cities, and economic activity. Relates people to the land.

GEOG 556 (3) Africa

A survey of the physical and cultural resources and economic development of the continent with emphasis on current problems. Topics discussed will focus on Africa south of the Sahara.

Prerequisite: Jr. or Sr. status

GEOLOGY

GEOG 558 (3) West Pacific Rim

Examines the ecological and human environments of eastern and southeastern Asia, mainly China, Japan, and off-shore nations. The course will be supported with field information.

GEOG 560 (3) Geography Teaching Methods

The course will cover resource materials and current techniques in classroom teaching.

GEOG 564 (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.

GEOG 571 (4) Field Mapping with GPS

This course will cover basic strategies for conducting field surveys and gathering from the real world data appropriate to mapping the earth's surface. Emphasis will be upon simple but reliable techniques, ranging from compass-and-pacing to global positioning systems (GPS).

Prerequisite: GEOG 101, or 470/570

GEOG 573 (4) Geographic Information Systems

Comprehensive examination of computer-assisted systems for manipulation and analysis of spatially-referenced data, including data structure and organization, input and output problems, data management, and strategies for analytical work.

Prerequisite: GEOG 373

GEOG 576 (3) Spatial Statistics

Descriptive statistics, probability, hypothesis testing, introduction to non-parametric statistics, correlation, introduction to regression analysis, spatial statistics and principles of data representation in graphs, tables and statistical results.

GEOG 577 (1-3) Topics in Techniques

This offering will include a variety of selected technical topics in geography, including (but not 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.

Prerequisite: permission of instructor

GEOG 579 (1-3) GIS Practicum

This offering will include supervised project work in raster-based and/or vector-based GIS, using problems and data drawn from local or regional agencies or other professional-level organizations with whom the Geography Department maintains a relationship. Students must have completed one of the prerequisite courses, or a course or professional-level experience.

Prerequisite: GEOG 373, or 473/573, or permission of instructor

GEOG 580 (1-3) Seminar

Topics vary in physical, cultural, economic, political, and historical geography, as well as environmental conservation and geographic techniques.

GEOG 597 (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.

Prerequisite: permission required

GEOG 609 (1-3) Selected Topics

The instructor will develop a specific course on a geographic topic (land forms, soils, waters, natural resources, cities, agriculture, or any other topic of a geographic nature).

GEOG 610 (1-4) Issues in Physical Geography

Discussion and analysis of contemporary issues in the field of physical geography. Designed to allow in-depth focus on current problems/issues that geographers will encounter in their professional practice. Topics vary according to instructor.

GEOG 620 (1-4) Issues in Cultural Geography

Discussion and analysis of contemporary issues in the field of cultural geography. Designed to allow in-depth focus on current problems/issues that geographers will encounter in their professional practice. Topics vary according to instructor.

GEOG 650 (1-4) Issues in Regional Geography

Discussion and analysis of contemporary issues in the field of regional geography. Designed to allow in-depth focus on current problems/issues that geographers will encounter in their professional practice. Topics vary according to instructor.

GEOG 670 (1-4) Issues in Geographic Techniques

Discussion and analysis of contemporary issues in the field of Geographic Techniques. Designed to allow in-depth focus on current problems/issues that geographers will encounter in their professional practice. Topics vary according to instructor.

GEOG 673 (3) GIS for Planners

To introduce URSI and Park and Rec. graduate students to geographical analysis in urban and regional planning through the use of GIS technology, particularly Arc/Info. Students will be introduced to various urban planning projects taking place in various local agencies. *This course is not for Geography students.

GEOG 677 (1-4) Individual Study

A study assignment for a student to meet specific objectives for the student's needs. It could be a term paper, readings, reports, field report, or mapping project.

Prerequisite: permission of instructor

GEOG 678 (3) Geographic Research & Writing

Required of MS professional degree candidates. To acquaint students with the geographer's perspective and methods of inquiry; to examine types of geographic research; to develop student's ability in producing research papers; to give students experience in writing research papers and to provide students experience in professional oral presentation.

GEOG 680 (3) Philosophy of Geography

The history and development of geographic thought from ancient times to the late 20th century.

GEOG 681 (3) Environmental Issues

This course surveys various environmental issues within the United States with an emphasis on state and federal legislation and policies. The forces prompting environmental legislation, its subsequent implementation and modification by the courts, and various perspectives about the problems, their possible solutions, and the assessment of current efforts are discussed.

GEOG 690 (1-4) Topics in Meteorology/Climatology

The focus of this/these course(s) will be on Meteorology/Climatology. This course may be repeated up to three times.

GEOG 694 (1-2) Alternate Plan Paper

Student culminating experience in lieu of a thesis.

GEOG 698 (1-6) Internship

An applied work and learning practicum. The student will provide a written report on his/her own learning. The work supervisor will be consulted regarding students' accomplishments.

GEOG 699 (1-6) Thesis

A culminating project related to basic or applied research

GEOLOGY

College of Science, Engineering & Technology

Department of Chemistry and Geology

242 Trafton Science Center N • 507-389-1963

Geology is the science of the earth. It concerns itself with the materials that constitute the earth, their disposition and structure; the processes of work both on and within the earth; and both the physical and biological history of the earth.

The following graduate courses are offered and may be used to supplement existing graduate programs or may be part of a multidisciplinary studies program.

COURSE DESCRIPTIONS

GEOL 501 (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 geological 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.

Prerequisite: GEOL 100 or 121 or 122 V

GEOL 550 (3) Hydrogeology

This course introduces physical and chemical studies of hydrogeology. The main area of discussion will include the physical and chemical attributes of aquifers, movement of groundwater and solute through soils and rocks, and reactions between earth materials and pollutants in groundwater systems. The class includes extensive use of MODFLOW and MT3D, the two most commonly used groundwater modeling programs currently available.

GEOL 590 (1-4) Workshop

GEOL 591 (1-6) In-Service

A course designed to upgrade the qualifications of a person on the job. Content is variable. The course can be repeated for credit.

GEOL 677 (1-4) Individual Study**GERONTOLOGY MS**

College of Social & Behavioral Sciences

Gerontology Program

336 Trafton Science Center N • 507-389-6590

Director: Kathryn Elliott, Ph.D.

Graduate Coordinator: Kathryn Elliott, Ph.D.

Gerontology is the scientific study of the biological, psychological and social aspects of aging. The Gerontology program, in cooperation with the Center on Aging, coordinates the delivery of the curriculum in human aging and facilitates activities of education, research and service which create, disseminate and apply knowledge about aging. The primary purpose of the graduate curriculum in aging is to provide a knowledge base in gerontology which, when combined with professional knowledge and skills, prepares the student for practice in the aging network. The program offers both general and administrative tracks of study at the graduate level. In addition to the Master of Science in Gerontology, Minnesota State also offers a Graduate Certificate of Study in Gerontology and specialized coursework leading to original licensure as a nursing home administrator in Minnesota. The University is a member of the Association for Gerontology in Higher Education.

Admission. Applications for admission to the MS in Gerontology program may be submitted at any time. Although entrance in fall semester is preferred, permission may be granted for study to commence at other times during the academic year. Full admission requires a baccalaureate degree, a minimum 3.0 GPA, at least 16 credits of social and behavioral science and evidence of promise for successful graduate study and professional practice with older adults. The GRE is not required.

Financial Assistance. One or more graduate assistantships in Gerontology are normally available each year on a competitive basis. Other financial assistance may become available from time to time, e.g., research assistance or special project work. Contact the program director for current information.

GERONTOLOGY MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

One-half of the total credits for the degree must be 600 level credits (excluding the thesis or alternate plan paper credits). A minimum of 24 credits of Gerontology is required under either plan. Within these 24 credits, a maximum of three credits of internship and either four credits of thesis or two credits of alternate paper research may be included.

Required Core (15 credits)

Select a minimum of **one** course from each of the **three** core areas. Other core courses can be used as electives.

Social-psychological

ANTH 536 Anthropology of Aging (3)

PSYC 566 Psychology of Aging (3)

SOC 504 Sociology of Aging (3)

WOST 545 Women and Aging (3)

Bio Medical

BIOL 517 Biology of Aging (3)

HLTH 555 Health and Aging (3)

Policy/Applied Theory

GERO 585 Topics in Gerontology (1-3)

GERO 601 Seminar in Gerontology (1-3)

POL 564 Aging: Policy Issues (3)

SOWK 519 Social Work and Aging (3)

Required Research (9 credits)

GERO 600 Theories and Practice (3)

----- 6--- One 600 level research methods course (3)

GERO 697 Internship (3)

Required Gerontology Electives (8-14 credits)

Choose any 500/600 level Gerontology elective courses in consultation with an

advisor.

Required Thesis or Alternate Plan Paper

GERO 694 Alternate Plan Paper (2)

GERO 699 Thesis (4)

Other electives available in Gerontology

FCS 574 Residential Management for Families and Special Needs People (3)

GERO 580 Nursing Home Administration (3)

GERO 677 Individual Study (1-4)

HLTH 541 Death Education (3)

RPLS 582 Leisure Needs of the Aging (3)

SOC 505 Sociology of Death (3)

SOWK 519 Social Work and Aging (3)

Additional credits needed to meet degree requirements and to meet the specific educational objectives of the student are to be chosen from the Gerontology list and/or from the offerings of other departments with emphasis on course work at the 600 level. For example, one might include course work in program planning, administration and evaluation and/or graduate-level course work which is required for nursing home administration licensure. Early consultation with the Gerontology Program Director is required to assure careful program planning and maximum utilization of program options.

Certificate of Study in Gerontology

The Certificate of Study in Gerontology is granted on completion of 18 credits of approved course work in Gerontology. The program is intended for persons who wish to acquire a core of knowledge and skill in Gerontology but who may not wish to pursue a degree program with a Gerontology component. The certificate signifies completion of an approved multidisciplinary course of study in Gerontology. As such, it may have value to prospective employers who seek evidence of specialized study relevant to working with and on behalf of the elderly. Admission to the certificate program requires formal application to the Gerontology program. Upon admission, a program of study must be developed with and approved by the program director. Academic advising for the certificate program is provided by the director of the Gerontology program.

COURSE DESCRIPTIONS**GERO 580 (3) Nursing Home Administration**

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

GERO 585 (1-3) Topics in Gerontology

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

GERO 600 (3) Gerontology Theory and Practice**GERO 601 (3) Seminar in Gerontology**

Topic varies with offering. May be taken more than once.

GERO 677 (1-4) Individual Study

Prerequisite: consent

GERO 694 (1-2) Alternate Plan Paper

Prerequisite: consent

GERO 697 (1-6) Internship

Prerequisite: by application and consent

GERO 698 (1-6) Practicum: Nursing Home Administration

For students following the program of study for nursing home administration

Prerequisite: by application and consent

GERO 699 (3-6) Thesis

Prerequisite: consent

HEALTH SCIENCE**COMMUNITY HEALTH MS****SCHOOL HEALTH
EDUCATION MS****(DISCIPLINE-BASED)**

*College of Allied Health and Nursing
Department of Health Science
213 Highland Center N • 507-389-1527*

Chair: Judith K. Luebke, Ph.D., CHES
Graduate Coordinator: Judith K. Luebke, Ph.D., CHES

Steve Bohnenblust, Ed.D.; M. Dawn Larsen, Ph.D.; Linda Marshall, Ph.D.; Marge Murray-Davis, Ph.D.; Bikash Nandy, Ph.D.; John Romas, Ph.D.

The Department of Health Science offers graduate study in several broad areas: community health, school health, and alcohol and drug studies. The Community Health program is designed for the professional interested in health promotion in either public, private or volunteer organizations. The School Health Education degree is for licensed teachers seeking advanced study in health education. The Alcohol and Drug Studies Program prepares students for licensure as alcohol and drug counselors through the State of Minnesota Department of Occupational Health.

COMMUNITY HEALTH SCIENCE MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (21 credits)

HS 630 Techniques of Research (3)
HS 631 Seminar (3)
HS 665 Theory & Philosophy in Health Education (3)
HS 659 Health Care Administration (3)
HS 664 Health Program Planning & Evaluation (3)
HS 560 Epidemiology: Practice & Theory (3)
HS 575 Biostatistics (3)

Required Health Science and Related Electives (9-13 credits)

any 500/600 level electives selected in consultation with an advisor

Required Thesis

HS 699 Thesis (1-6, minimum of 3)

SCHOOL HEALTH EDUCATION MS**(DISCIPLINE-BASED)**

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (21 credits)

HS 630 Techniques of Research (3)
HS 631 Seminar (3)
HS 510 Current Health Issues (3)
HS 665 Theory & Philosophy in Health Education (3)
HS 661 Curriculum Trends (3)
HS 560 Epidemiology: Practice & Theory (3)
HS 575 Biostatistics (3)

Required Professional Education Electives (6 credits)

any 500/600 level Professional Education electives selected in consultation with an advisor

Required Health Science and Related Electives (3-7 credits)

any 500/600 level electives selected in consultation with an advisor

HS 699 Thesis (1-6, minimum of 3)

COURSE DESCRIPTIONS**HLTH 500 (3) Women's Health**

This course will explore current issues, controversies, and concerns affecting women's health. Relationships between social, cultural, psychological, environmental, and physical factors of women's health status will be examined.

HLTH 510 (3) Current Health Issues

An in-depth review of significant current health concerns and controversies in health

science, using the elements of reasoning as the framework for critiquing the issues.
Prerequisite: HLTH 475

HLTH 520 (5) Health Teaching Methods**HLTH 541 (3) Death Education**

Explores the relationship of death concerns to the process of meaningful living. Utilizes a variety of learning strategies to examine death attitudes, values, and related behaviors.

HLTH 550 (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.

HLTH 551 (3) Stress and Health

Emphasis is on recognition of, and enhancing awareness about, how stress affects human health and performance. Stress management techniques such as relaxation, effective communication, cognitive-behavioral approaches, eating behaviors, regular exercise, and time management are explored.

HLTH 554 (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.

Prerequisite: HLTH 260

HLTH 555 (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.

HLTH 556 (3) Assessment of Chemical Dependency

This course is designed to provide students with practical knowledge and application techniques in assessing an individual with a chemical use/dependency problem. Various assessment techniques will be presented and discussed as to appropriate utilization. This course meets the criteria for Rule 25 training in Chemical Dependency Assessment.

Prerequisite: HLTH 225

HLTH 559 (1-3) Critical Topics in Health

An in-depth study of specific topics of current interest in the Health Science discipline.

HLTH 560 (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.

HLTH 565 (3) Health Care Delivery in the United States

An examination of the system of delivery of health care in the United States from an historical, social, political, and economic perspective.

HLTH 567 (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.

HLTH 569 (3) Chemical Dependency: Dual Diagnosis

This course is designed to provide students with practical knowledge and application techniques in assessing an individual with a chemical use/dependency problem. Various assessment techniques will be presented and discussed as to appropriate utilization. This course meets the criteria for Rule 25 training in Chemical Dependency Assessment.

Prerequisite: HLTH 225

HLTH 575 (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.

HLTH 580 (4) Community and Program Development for Health

Focuses upon knowledge and skills necessary for community organization and program development. The course identifies and explores methods and techniques needed for organizing a community for implementing health promotion.

Prerequisite: HLTH 260, 361, 460

HLTH 588 (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.

HLTH 590 (1-4) Workshop

Intensive educational experience on selected topics related to skill development, content update, or material development. Typically offered in a concentrated format.

HLTH 630 (3) Techniques of Research in Health

Examines and applies research methods common to health science. Requires an extensive literature review. This course should be taken near the end of a graduate program when the student is ready to begin work on the thesis or alternate plan paper. The student must have completed a plan of study prior to enrollment.

HLTH 631 (3) Seminar

Course requires completion of thesis proposal or alternate plan paper, extensive literature review, and oral presentation for group review.
Prerequisite: HLTH 630

HLTH 632 (3) Alcohol Education

Designed to examine the health effects of alcohol with the primary emphasis on the prevention of alcohol-related problems. Those factors influencing the use and abuse of alcohol will be covered.

HLTH 640 (3) Health and Sick Role Behavior

Reviews concepts of health and illness as they affect individuals, families, and communities. Cross-cultural perspectives and the influence of economics, political, religious, geographical, and educational factors on health will be emphasized.

HLTH 659 (3) Health Administration

Specific managerial components will be emphasized such as organizational patterns, fiscal administration, and personnel management common to the health care system. Administrative functions of policy settings, planning coordination, public issue involvement, and community relations will be included. Particular attention is given to the human side of management.

HLTH 661 (3) Curriculum Trends

Current philosophies and models of health curriculum design are explored. Requires the development of a model curriculum consistent with recent developments in school health education.

HLTH 662 (3) Human Sexuality

Explores current issues, controversies, and concerns affecting sexual health. Relationships between social, cultural, psychological, environmental, and physical factors of sexuality will be examined.

HLTH 664 (3) Health Program Planning & Evaluation

Provides a thorough background on the practical aspects of health planning, including development, adoption, and implementation of health plans.

HLTH 665 (3) Theory and Philosophy of Health Education

Directed toward providing a solid theoretical and philosophical foundation for professional health education practice. Current and historical health education, theoretical and philosophical models, and concepts are explored. Application of these models and concepts to professional practice is emphasized.

HLTH 666 (3) International Health

An examination of health status and health care delivery systems of developing, transitional, and developed nations. Includes social, economic, and political analysis of health policy formation.

HLTH 668 (3) Grant Proposal Writing for Health Professionals

Designed to make students familiar with the steps of grantsmanship, explore the various sources of grants available to health professionals, and develop skills and competencies to successfully write grant proposals.

HLTH 677 (1-4) Individual Study

An in-depth project on a topic of particular interest to the student. Project must be approved by the faculty supervisor and department chairperson and proposal filed with department.

HLTH 690 (1-3) Selected Topics in Health

Provides an in-depth investigation of a topic of particular concern at the time of offering. Topics will deal with timely issues regarding health promotion, disease prevention, and/or socio/political concerns regarding health in the modern world.
Prerequisite: may depend on topic

HLTH 696 (1-6) Internship: Health Science

A concentrated work experience for those students preparing for a career in community health.
Prerequisite: core courses completed

HLTH 697 (1-12) Internship: Chem Dependency

A concentrated pre-professional experience for those preparing for a career in chemical dependency. All core course work must be completed prior to placement.

Student must schedule placement one semester in advance.

Prerequisite: 3.0 GPA in Chemical Dependency, core courses completed

HLTH 699 (2-4) Thesis

Credit for students working on their thesis. Permission of advisor and department chairperson required.

Prerequisite: all core courses and HLTH 631 completed

HISTORY MA**HISTORY MS****HISTORY EDUCATION MS**

(DISCIPLINE-BASED)

College of Social & Behavioral Sciences

Department of History

110B Armstrong Hall • 507-389-1618

Chair: Margaretta Handke, Ph.D.

Graduate Coordinator: Charles Piehl, Ph.D.

Melodie Andrews, Ph.D.; Derek Catsam, Ph.D.; Kathleen Gorman, Ph.D.; Erwin Grieshaber, Ph.D.; Richard Hall, Ph.D.; Tao Peng, Ph.D.; Larry Witherell, Ph.D.

History, the interpretive study of the past, enhances the understanding of the present and guides planning for the future. As one of the liberal arts, history provides excellent preparation for many careers, including teaching, journalism, law, theology, government work, librarianship, historical society work and archives. Graduate study in history at Minnesota State University offers Master of Arts and Master of Science degrees.

With a graduate faculty of 9 professors, the Department of History offers courses about the United States, Europe, and other areas of the world including Africa, Latin America and Russia. Although the departmental emphasis is on teaching, the faculty collectively has considerable research and writing experience and has an excellent reputation for preparing students for advanced work. The extensive history holdings in Memorial Library consist of a variety of source materials including books, government documents, periodicals, and microfilmed newspapers. Lecture courses and research opportunities may be supplemented by internships that provide an introduction to public history.

Admission Requirements. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, an applicant must have completed at least 16 undergraduate semester credits in history, of which at least 6 must be in U.S. history and 6 in European history. Minimum GPA requirements on a 4.0 scale are 2.75 for all undergraduate work or 3.0 for the last 60 undergraduate semester credits.

Advising. The department graduate coordinator is the initial advisor of all students. Entering students are required to consult with the coordinator before registering for any graduate courses. The permanent advisor is selected when the student submits a plan of study. Regular student/advisor consultation throughout the program is recommended.

Financial Assistance. As a rule, the department offers at least three graduate assistantships each academic year.

HISTORY MA

(Thesis Plan - 30 credits)

Required Core (12 credits)

HIST 625 Historiography (3)

HIST 655 Research & Writing (3)

Choose one of the following:

HIST 600 Reading Seminar: Eur. History (3)

HIST 602 Reading Seminar: Third World (3)

HIST 604 Reading Seminar: U.S. History (3)

Choose one of the following:

HIST 608 Research Seminar: Eur. History (3)

HIST 610 Research Seminar: U.S. History (3)

Required Non-Departmental Electives (6 credits)

Choose any non-history electives selected in consultation with an advisor.

Required Thesis or Alternate Plan Paper

HIST 699 Thesis (3-6)

Required History Electives (6-15 credits)

Choose courses in consultation with an advisor.

HISTORY

Required:

Knowledge of a foreign language acceptable to the History Department Graduate Committee must be demonstrated prior to the earning of any thesis credits. Fulfillment of this requirement may be by completion of a college level sequence of one academic year with an average grade of at least B.

Required:

A minimum of 21 credits in History is required under the Thesis Plan.

HISTORY EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (12 credits)

HIST 625 Historiography (3)

HIST 655 Research & Writing (3)

Choose one of the following:

HIST 600 Reading Seminar: European History (3)

HIST 602 Reading Seminar: Third World (3)

HIST 604 Reading Seminar: U.S. History (3)

Choose one of the following:

HIST 608 Research Seminar: European History (3)

HIST 610 Research Seminar: U.S. History (3)

Required Professional Education Electives (6 credits)

Choose professional education electives selected in consultation with an advisor.

Required General Electives Other than History and Professional Education Courses (6 credits)

Choose any elective courses other than History or Professional Education in consultation with an advisor.

Required History Electives

Choose any courses in consultation with an advisor

Required Thesis or Alternate Paper Plan

HIST 699 Thesis (3-6)

HIST 694 Alternate Plan Paper Research (1-2)

Under the Alternate Plan, one Alternate Plan Paper at least 26 pages long is required. Normally, the paper should be initiated as a term paper in 500 or 600 level history courses, excluding History 625, 655 and 677. With the permission of the graduate coordinator and the student's advisor, the student may write the paper by registering for History 694: Alternate Plan Paper Research for 1 or 2 semester credits.

General Requirements:

A minimum of 18 credits in History is required under the Thesis Plan. A minimum of 21 credits in History is required under the Alternate Paper Plan.

HISTORY MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (12 credits)

HIST 625 Historiography (3)

HIST 655 Research & Writing (3)

Choose one of the following:

HIST 600 Reading Seminar: European History (3)

HIST 602 Reading Seminar: Third World (3)

HIST 604 Reading Seminar: U.S. History (3)

Choose one of the following:

HIST 608 Research Seminar: European History (3)

HIST 610 Research Seminar: U.S. History (3)

Required Electives

Choose any elective courses in consultation with an advisor.

Required General (Non-History) Electives, (6 credits) APP Option Only

Choose any courses in consultation with an advisor.

Required Thesis or Alternate Paper Plan

HIST 699 Thesis (3-6)

HIST 694 Alternate Plan Paper Research (1-2)

Under the Alternate Plan, one Alternate Plan Paper at least 26 pages long is required. Normally, the paper should be initiated as a term paper in 500 or 600 level history courses, excluding History 625, 655 and 677. With the permission of the graduate coordinator and the student's advisor, the student may write the paper by registering for History 694: Alternate Plan Paper Research for 1 or 2 semester credits.

General Requirements:

A minimum of 21 credits in History is required under the Thesis Plan. A minimum of 24 credits in History is required under the Alternate Paper Plan.

Other Degree Requirements. Each student is expected to complete satisfactorily both a written comprehensive examination and an oral examination. The written examination will cover a field of historical study. Each field is to be defined by area, chronological period and branch of history. Typical fields, for example, would include United States Political History to 1865, United States Social History 1865 to present, and European Economic History 1500-1700. The oral examination will be a defense of the thesis or alternate plan papers. Any candidate who performs unsatisfactorily may retake either or both examinations once.

COURSE DESCRIPTIONS

HIST 501 (4) Classical World of Greece & Rome

The history of Greece and Rome stressing political, social, and economic institutions and cultural and intellectual achievements.

HIST 502 (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.

HIST 503 (4) The Middle Ages

A history of the Middle Ages stressing political, social, and economic interactions and cultural achievements.

HIST 506 (3) Renaissance & Reformation

Intellectual, social, and cultural developments in Western Europe, 1300-1600.

HIST 507 (3) Scientific Revolution & Enlightenment

Europe during the 17th and 18th centuries when science and reason replaced religion as the intellectual authority.

HIST 512 (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.

HIST 514 (4) Early England to 1603

England from ancient times to the death of Elizabeth I.

HIST 515 (4) England since 1603

Political, social, and economic development of England and Great Britain since the death of Elizabeth I.

HIST 519 (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.

HIST 521 (4) Modern Russia

A history of Russia and surrounding areas from the fall of Tsarism in 1917 to the modern era.

HIST 524 (4) Scandinavian History

Political, economic, social, cultural, and emigration-immigration history of the Scandinavian countries, including major themes in the mass migration and history of Scandinavians in America. Emphasis on the period, 1500-present.

HIST 527 (4) Eastern Europe

A history of Eastern Europe from the middle ages to the present.

HIST 530 (1-4) United States: Selected Topics

HIST 531 (1-4) European History: Selected Topics

HIST 532 (1-4) World History: Selected Topics

HIST 534 (4) Modern East Asian History

A comparative history of the rise of the Chinese and Japanese nations from the 1840's to the present.

HIST 537 (4) African History

Review of African history from the earliest civilization of Africa to the present, including such topics as Empires of West Africa and East Africa, spread of Islam in Africa, Bantu migrations, European contact and slave trade, European Colonization and independent Africa.

HIST 542 (4) History of Latin America

Review of Latin America history from Ancient American Civilizations to the present.

HIST 550 (3) Minnesota to 1880

Survey of Minnesota's frontier history with emphasis on Indian-white contacts, exploration, and settlement.

HIST 551 (3) Minnesota since 1880

Modern political, economic, and social history of the state, emphasizing both its uniqueness and its relationship to national and regional developments.

HIST 554 (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.

HIST 555 (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.

HIST 558 (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 1850s.

HIST 559 (4) U.S. History 1861-1900

Examines issues of slavery and conflict between the North and the South leading up to, during, and after the Civil War, and the rise of a socially and culturally diverse manufacturing society by the 1880s.

HIST 562 (4) U.S. History 1900-1945

Reform/domestic themes and U.S. foreign policies during the Progressive Era, the "Roaring 20s," the Great Depression, and the New Deal, and the two World Wars.

HIST 563 (4) U.S. History 1945-Present

Social, political, and foreign affairs since World War II.

HIST 570 (4) American Frontier

Occupation of the area between the Mississippi and the Pacific from Spanish exploration to the late 19th century.

HIST 575 (3) The American South

A course which surveys the major themes in southern history and tackles the question whether the South has been un-American or ultra-American.

HIST 577 (3) Advanced African-American History

A course which deals with the main themes in African-American history and their interpretations.

HIST 581 (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.

HIST 583 (4) American Social and Cultural History

Topics in intellectual history or popular and traditional culture.

HIST 584 (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.

HIST 585 (4) History of American Immigration and Ethnicity

A historical study of the immigration and ethnic experience in America. It includes an examination of political, social, economic and legal changes that resulted in population movements to the U.S. Attention is given to anti-immigrant movements.

HIST 587 (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.

HIST 590 (1-4) Workshop

Specific titles to be announced in departmental course descriptions. P/N only.

HIST 600 (3) Reading Seminar in European History

Intensive reading on a specialized historical topic. May be repeated once under a different instructor and sub-title.

HIST 602 (3) Reading Seminar in Third World History

Intensive reading on a specialized historical topic. May be repeated once under a different instructor and sub-title.

HIST 604 (3) Reading Seminar in United States History

Intensive reading on a specialized historical topic. May be repeated once under a different instructor and sub-title.

HIST 608 (3) Research Seminar in European History

May be repeated once under a different instructor and sub-title.

HIST 610 (3) Research Seminar in United States History

May be repeated once under a different instructor and sub-title.

HIST 625 (3) Historiography

Survey of major historical writings and interpretations.

HIST 655 (3) Historical Research & Writing**HIST 677 (1-4) Individual Study****HIST 691 (1-4) In-Service****HIST 694 (1-2) Alternate Plan Paper****HIST 697 (1-6) Internship**

Practical work experience in teaching or in an historical agency.

HIST 698 (1-6) Internship

Practical work experience in an historical agency.

HIST 699 (3-6) Thesis**HUMANITIES**

College of Arts and Humanities

Humanities Program

230 Armstrong Hall • 507-389-2350

Director: William Dyer, Ph.D.

COURSE DESCRIPTIONS**HUM 550 (4) Humanities Seminar**

Studies of selected periods, issues, artifacts, or texts from an interdisciplinary perspective.

HUM 677 (1-6) Individual Study

Interdisciplinary study in an area for which student has basic preparation.

Prerequisite: approval of faculty

HUMAN PERFORMANCE

College of Allied Health and Nursing

Department of Human Performance

1400 Highland Center • 507-389-6313

See PHYSICAL EDUCATION

INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY MA

College of Social & Behavioral Sciences

Department of Psychology

332 Wiecking Center • 507-389-2724

Chair: Rosemary Krawczyk, Ph.D.

Graduate Coordinator: Dan Sachau, Ph.D.

Paul Brandon, Ph.D.; Michael Fatis, Ph.D.; Nancy Fenrick, Ph.D.; Phillip Goernert, Ph.D.; Daniel Houlihan, Ph.D.; Kimberly O'Farrell, Ph.D.; Edison Perdomo, Ph.D.; Lisa Perez, Ph.D.; Barry J. Ries, Ph.D.; Tilman Sheets, Ph.D.; Robert Widner, Ph.D.

The Department of Psychology offers programs of study leading to the MA degree in Industrial/Organizational Psychology and Clinical Psychology.

Application for graduate study in Industrial/Organizational Psychology should be initiated by contacting the College of Graduate Studies and Research. Admission will be expedited by also writing to the Department of Psychology Chairperson directly for detailed information on the Industrial/Organizational Psychology program. All applicants should arrange to take the GRE exams and have scores forwarded to the College of Graduate Studies and Research and the Admissions committee of the selected program.

INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

The program in Industrial/Organizational Psychology provides theoretical and technical training which enables students to diagnose and resolve problems related to organizational effectiveness. Graduates typically pursue careers in human resource management and/or Ph.D. programs in Industrial/Organizational Psychology.

Financial Assistance. In recent years, the Department of Psychology has been able to award graduate assistantships to some students accepted into the program. Assistantships are awarded on the basis of standardized test scores and past performance as a graduate assistant.

Admission

1. A bachelor's degree from an accredited institution
2. A minimum of 15 semester credits in psychology including introductory psychology, statistics, social psychology, personality theories, and experimental or cognitive psychology. Students with deficiencies in prerequisite courses are sometimes admitted, although it is generally preferable to complete such courses prior to beginning graduate studies.
3. GPA of at least 3.0 for the last two years of undergraduate work.
4. Transcripts from all institutions of higher learning attended.
5. GRE scores (see department for specific requirements).
6. Three letters of recommendation, preferably from psychology professors who are familiar with the student's work. For applicants working in managerial positions, one letter may be submitted by the applicant's supervisor.
7. A personal statement indicating the applicant's interests and experience related to Industrial/Organizational Psychology.

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY MA

(Thesis Plan - 42 credits)

Required Core (40 credits)

- PSYC 505 Motivation (4)
PSYC 519 Psychometric Theory (4)
PSYC 553 Human Factors (3)
PSYC 609 Internship (2)
PSYC 610 Research Design & Statistics (4)
PSYC 618 Multivariate Analysis (4)
PSYC 633 Job Analysis and Performance Appraisal (4)
PSYC 660 Employee Selection (3)
PSYC 662 Training & Development (3)
PSYC 689 Standards and Ethics (3)
PSYC 695 Research in Industrial/Organizational Psychology I (2)
PSYC 697 Research in Industrial/Organizational Psychology II (2)
PSYC 699 Thesis (3)

Required Elective Courses (2 credits)

Choose any 500/600 level elective courses in consultation with an advisor.

COURSE DESCRIPTIONS

PSYC 504 (4) Memory and Cognition

A survey of the research and theories describing how humans perceive, elaborate, store, recover, and use information. Emphasis is placed on understanding and evaluating the experimental strategies used to gather data about human mental processes.
Prerequisite: PSYC 201 and 207 or 211 F,S

PSYC 505 (4) Motivation

Major concepts of human motivation and emotion, presentation of learned cognitive and biological influences on sustained behavior.
Prerequisite: PSYC 201, 211, or 217, or consent V

PSYC 507 (4) Advanced Behavior Analysis

The science and technology of behavior analysis. The application of the principles of operant and respondent conditioning to the understanding and modification of human behavior. The primary mode of instruction is unit/mastery based on the text. There will also be a lab component involving human and animal experiments.
Prerequisite: PSYC 207 F,S

PSYC 509 (3) History of Psychology

Examination of the historical origins of the principal contemporary psychological theories.
Prerequisite: two of PSYC 404, 407, 413, or 421 F,S

PSYC 513 (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 effect of maturation and learning in altering those patterns are also considered.
Prerequisite: PSYC 201, 207, or 211 F

PSYC 519 (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.

Prerequisite: PSYC 201 F

PSYC 520 (4) Drugs and Behavior

Drug and alcohol use and abuse including history, biology, psychology, sociology, and clinical treatment and prevention of abuse.

Prerequisite: PSYC 521 or equivalent V

PSYC 521 (4) Biopsychology

Biological basis of psychological processes and behavior. Basic topics such as neuroanatomy and neuron function are presented as well as more general ones such as sensation and movement, sleep, memory and learning, schizophrenia and depression.
Prerequisite: PSYC 201, and either 207 or 211

PSYC 522 (4) Neuropsychology

This course will provide a detailed analysis of the relationship between human behavior and brain function. Basic topics will include cerebral asymmetry, memory, language, and attention as well as behavioral deficits such as learning disabilities, psychiatric disorders, and disconnection syndromes associated with neurological abnormalities.
V

PSYC 529 (3) Drug Dependence

Examination of psychological theories relevant to the prevention and treatment of drug abuse.

Prerequisite: PSYC 101 F

PSYC 533 (4) Child Psychology

Physical, social, emotional, intellectual, and personality development from conception to preadolescence. Focus on interplay between maturation and experience.

Prerequisite: PSYC 101 F,S

PSYC 536 (4) Adolescent Psychology

This class covers the development of the individual from the age of 11 to 19 years of age. Discussion will include aspects of both normal and abnormal development F,S

PSYC 537 (3) Youth and Sports

Psychological impact of sports on youthful participants.

V

PSYC 538 (3) Community Psychology

The application of psychological principles to the assessment, analysis, intervention, and prevention of social problems. Research from an applied behavior analysis perspective will be emphasized.

Prerequisite: 3 PSYC courses V

PSYC 541 (3) Attitudes

Examining cultural, social, and individual influences on attitude development and change through lectures and discussions of theories and findings and through experiential activities.

Prerequisite: PSYC 101

PSYC 542 (3) Group Psychology

Exploring factors affecting leadership and effective group processes through lectures and discussion of theories and findings and through experiential activities.

Prerequisite: PSYC 101 V

PSYC 543 (3) Advanced Social Psychology

An in-depth examination of social psychological research in laboratory and field settings.
Prerequisite: PSYC 201, 211, and 439

PSYC 548 (3) International Behavior

Images of foreign nations, cultures, people, and products in travel and cross-national contact. Effects of events, crises, news reporting, education persuasion, foreign policy decision-making, and strategies of international conflict resolution.

Prerequisite: 8 PSYC credits V

PSYC 551 (3) Methods of Enhancing Performance

The role of psychological factors in performance and psychological methods of performance enhancement. Factors examined will include attention, motivation, decision making, mental rehearsal, arousal, and self management.

Prerequisite: 8 PSYC credits F

PSYC 552 (3) Individual Differences

The nature, extent, and origins of mental, physical, and psychological differences among individuals.

Prerequisite: PSYC 201 V

PSYC 553 (3) Human Factors

The person-machine system: the strengths, operating limits, and tendencies of its human component.

Prerequisite: PSYC 201 and 211 or 217 F

PSYC 555 (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.

Prerequisite: 8 PSYC credits F,S

PSYC 556 (3) Personality

Major theories of normal personality formation, organization, and structure. Prerequisite: 8 PSYC credits

F,S

PSYC 557 (3) Cross Cultural Psychology

Subjective culture effects on communication, culture contact, interactions in socialization, education, workplace, travel, gender, and family.

Prerequisite: 8 PSYC credits V

PSYC 560 (3) Psychology of Women

Psychological study of women in historical and functional perspective. Role of hereditary, physiological, and socialization variables on women's thinking, feelings, and behavior.

Prerequisite: PSYC 101 S

PSYC 561 (3) Marketing Psychology

Analysis of product marketing and consumer purchasing strategies and their determinants.

Prerequisite: 8 PSYC credits V

PSYC 562 (3) Management Psychology

Managerial behavior, problems, and effects in planning, problem-solving, decision-making, supervision, leadership, conflict, communication, appraisal, motivation, training, and information systems in organizational environments.

Prerequisite: 8 PSYC credits S

PSYC 563 (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.

Prerequisite: PSYC 201, 211, or 217 F

PSYC 564 (3) Environmental Psychology

Exploring environmental influences on group and individual perceptions, cognition, attitudes, and behaviors through lectures and discussion of theories and findings and through experiential activities. V

PSYC 566 (3) Psychology of Aging

Aging process and development during the adult years, psychology and psychological concerns of the aging individual, and dealing with death.

Prerequisite: PSYC 101 S

PSYC 573 (3) Teaching of Psychology

Methods of teaching psychology.

Prerequisite: PSYC 101 V

PSYC 576 (3) Behavior Therapy

Principles and procedures of behavior therapy in clinical areas. Emphasis is placed on procedures for developing more appropriate behaviors through positive and negative reinforcement, modeling, and cognitive procedures. Decreasing problematic behaviors through decelerating consequences and exposure techniques is also presented.

Prerequisite: PSYC 211 or 217 V

PSYC 578 (4) Behavior Medicine

The interface of behavioral and medical science is explored. Research on environmental and learning factors in the etiology and treatment of physical disease and rehabilitation is examined. Specific topics include pain management, medical compliance, behavior disorders in nursing homes, and chronic illnesses.

Prerequisite: Three courses in PSYC V

PSYC 590 (1-3) Workshop

Topics to be announced. May be retaken for credit. V

PSYC 591 (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.

Prerequisite: Permission of instructor. Academic and experience in human services strongly recommended.

PSYC 609 (1-4) Industrial/Organizational Psychology Internship

Enrollment limited to students in good standing in the industrial/organizational track.

PSYC 610 (4) Research Design & Statistics

Research methodology and statistical procedures involving descriptive and inferential techniques for simple and multivariate situations involving parametric and non parametric variables using manual and computer methods.

PSYC 613 (4) Behavioral Research Methodology

Covers methods for analyzing treatments and experimental (as well as quasi-experimental) manipulations that focus on the behavior of the individual subject, multiple N=1, and small group designs.

Prerequisite: PSYC 615

PSYC 618 (4) Multivariate Analysis

Overview of multivariate statistical analyses including: multiple regression, ANCOVA, MANOVA, discriminate function analysis, and factor analysis.

Prerequisite: PSYC 610

PSYC 621 (1) Seminar Topics I

Topics in contemporary psychology. Each instructor selects topic. Sixteen contact hours in seminar format. May be repeated for credit.

Prerequisite: permission of instructor

PSYC 622 (2) Seminar Topics II

Topics in contemporary psychology. Each instructor selects topic. Thirty-two contact hours in seminar format. May be repeated for credit.

Prerequisite: permission of instructor

PSYC 623 (3) Seminar Topics III

Topics in contemporary psychology. Each instructor selects topic. Forty-eight contact hours in seminar format. May be repeated for credit.

Prerequisite: permission of instructor

PSYC 624 (4) Seminar Topics IV

Topics in contemporary psychology. Each instructor selects topic. Sixty-four contact hours in seminar format. May be repeated for credit.

Prerequisite: permission of instructor

PSYC 633 (3) Job Analysis & Performance Appraisals

An overview of techniques used to measure employee performance. Topics include: Job analysis methods and use of results, criterion development, performance appraisal methods, rater training, bias and accuracy in performance appraisal, organizational and contextual issues.

Prerequisite: PSYC 519

PSYC 649 (3) Behavior Theory and Philosophy

This course will be a seminar examining the philosophy of science underlying the field of behavior analysis and some of the implications of this approach to human behavior. The course is intended for graduate students in psychology. It will be based on student presentations.

PSYC 650 (3) Schools of Psychotherapy

The major schools of psychotherapy are considered from the perspective of their philosophy of science and empirical support. Research strategies and implications for prescriptive intervention are addressed.

Prerequisite: Admittance to clinical program or consent of instructor

PSYC 651 (4) Adult Psychopath & Therapy

The diagnosis of adult behavior disorders using the DSM-IV classifications procedures. Behavioral case formulation is emphasized. Students develop skills in cognitive and behavioral intervention strategies.

Prerequisite: admitted to clinical master's program or permission of instructor.

PSYC 653 (3) Behavioral Consultation

Detailed collaborative approaches to treatment and referral for mental health practitioners. Appropriate for those going into clinical, school, and counseling psychology, as well as those in special education, guidance and student personnel, and administration.

PSYC 654 (4) Clinical Case Management

Techniques of diagnostic assessments, clinical management, and intervention applied to behavior disordered patients. This course emphasizes interviewing, report writing, and treatment planning.

Prerequisite: admitted to clinical master's program or permission of instructor

K-12 AND SECONDARY PROGRAMS

PSYC 660 (3) Employee Selection

Overview of issues and techniques used to make hiring and promotion decisions in organizations. Topic includes: introduction of the selection process, legal and affirmative action issues, validity issues in selection, validity generalization, utility and decision making, and use of selection methods.

Prerequisite: PSYC 610

PSYC 662 (3) Training & Development

An overview of theories and techniques used to improve employee satisfaction, employee productivity, and organizational effectiveness. Topics include: identifying problems, intervention techniques, training, determining the effectiveness of training, and intervention programs.

Prerequisite: PSYC 547

PSYC 677 (1-4) Individual Study

Individualized learning under faculty supervision. May be retaken for credit.

Prerequisite: 12 graduate credits

PSYC 682 (4) Child Psychopathology & Therapy

This course presents behavioral assessments and interventions for children and adolescents who are exhibiting a variety of psychological disorders such as oppositional defiant disorder, attention deficit disorder, fears/phobias, depression, and adjustment disorders. Data based cognitive behavioral interventions with youths, their families, and their environments will be emphasized.

Alt E Prerequisite: PSYC 683 S

PSYC 683 (4) Behavioral Assessment

An introduction of the basic theoretical principles and techniques of behavioral assessment in clinical psychology for targeting specific behaviors as the beginning step in treatment, and as a system for evaluating outcomes. Techniques include direct observation, self-monitoring, behavior rating scales, behavioral interviews, task analytic, and cognitive-behavioral measures.

F

PSYC 686 (3) Clinical Assessment

This course is designed to be a comprehensive assessment course. Multiple tests will be covered in the areas of intelligence, adaptive behaviors, behavior management measures, personality, and psychopathology. The end goal of the course is competence in administering a complete battery of tests and writing a professional report on the results.

PSYC 689 (3) Standards and Ethics

Details the principles and standards put forth by the APA to guide the profession of psychology. The course is oriented towards those going into either a career in therapy (i.e., clinical, counseling, or school psychology) or industrial/organizational psychology.

PSYC 691 (2) Clinical Practicum I

Students are placed in clinical settings under the supervision of a licensed psychologist. Placements vary among hospitals, private clinics, and county mental health agencies. Clinical Practicum I covers the first 150 clock hours of the 300 hours needed to fulfill the practicum requirement.

Prerequisite: admitted to clinical master's program OR permission of Director of Clinical Training

PSYC 692 (2) Clinical Practicum II

Extension of Practicum I. Students complete the second 150 hours of the 300 hours of supervised practice.

Prerequisite: admitted to clinical master's program, OR permission of Director of Clinical Training

PSYC 694 (1-2) Alternate Plan Paper

Individualized student paper based on an extensive review of literature in some area of psychology.

PSYC 695 (2) Research in Industrial/Organizational Psychology I

Developing research proposals/projects, ethic committee review, implementing consulting projects, data collection, report writing, presentation to professional societies, and submitting funding requests.

Prerequisite: consent

PSYC 696 (3) Research Clinical Psychology I

Students participate on laboratory teams with clinical faculty. Teams develop research proposals and write ethics committee proposals. Projects include clinical field studies, survey studies, and single subject intervention. Students are expected to present findings at meetings of professional associations.

Prerequisite: permission of instructors, Director of Clinical Training, and admission to clinical program

PSYC 697 (2) Research in Industrial/Organizational Psychology II

Continuation of Research in Industrial/Organizational Psychology I.

Prerequisite: consent

PSYC 698 (3) Research in Clinical Psychology II

Continuation of Research in Clinical Psychology I.

Prerequisite: Permission of instructors, Director of Clinical Training, and admission to clinical program

PSYC 699 (3-6) Thesis

Individualized student research paper which involves a literature review and original research.

K-12 AND SECONDARY PROGRAMS

CERTIFICATE AND LICENSURE PROGRAMS:

Post-Baccalaureate Teacher

Licensure Program

(Rapid Response)

Master of Arts in Teaching (MAT)

Library Media Specialist

Educational Technology

MASTER'S AND SPECIALIST DEGREE PROGRAMS:

Educational Technology MS

Teaching and Learning MS

Library Media Education MS

Curriculum and Instruction SP

Library Media Education SP

College of Education

Educational Studies: K-12 and Secondary Programs

313 Armstrong Hall • 507-389-1965

Graduate Coordinator: Scott Page, Ph.D.

Johnson Afolayan, Ph.D.; Debra Anderson, Ed.D.; Frank Birmingham, Ph.D.; Darrol Bussler, Ph.D.; Don Descy, Ph.D.; Dorothy Engan-Barker, Ph.D.; Arthur Ganss, Ph.D.; Patricia Hoffman, MS; Sandra Mullins, Ed.D.; Guynel Reid, Ph.D.

The K-12 and Secondary Programs (KSP) department prepares undergraduate and graduate students for initial licensure as professional educators in K-12, middle school, and high school classrooms, in educational technology, and in library media education. It serves practicing teachers and other professional educators seeking continued development through advanced programs in Curriculum and Instruction, Education Technology, Library Media Education, and Teaching and Learning. Program emphasis is placed upon facilitating undergraduate and graduate students to strengthen and broaden their knowledge, skills, and dispositions needed to function effectively as educators.

Admissions: Applicants should have complete files a minimum of one month before the term of anticipated entry. Applications are accepted for any term or summer session. International students should complete their files and applications three months before the term of session of anticipated admittance. Students wishing to enroll in any KSP graduate or licensure program must be admitted to the College of Graduate Studies and Research and to the program. Official admission must be obtained through a departmental admission committee before 16 credits are accumulated. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, requirements for specific degree programs and for licensure endorsements are described in the sections which follow. Detailed admission information is covered under each degree program below.

Graduate studies is not merely a continuation of undergraduate work. It demands scholarship at a higher level of achievement; it places greater emphasis on research and creativity; and it requires much more initiative and responsibility. To be considered for admission, the candidate must complete the following:

- Apply to the College of Graduate Studies and Research (www2.mnsu.edu/graduate/).
- Submit official college/university transcripts from all institutions attended which document an earned Bachelor's degree (note: for some programs the applicant must hold a Bachelor's degree in a licensable field or a current license).
- Demonstrate an undergraduate cumulative grade point average of 3.0 or above and a Miller Analogy Test Score of 50 or above. In lieu of the Miller Analogy Test Score, a score of 500 on one or more portions (verbal, quantitative, or analytical) of the Graduate Record Exam may be submitted.

Additional Requirements. Students must complete a minimum of 50% of all graduate credit at the 600 level, excluding thesis or APP credits; and must maintain a grade point average of "B" or above in all coursework. Satisfactory completion of a comprehensive examination during the semester (or prior to) of graduation is required.

Financial Assistance. A limited number of graduate assistantships are available for full-time students within the Department of Educational Studies: K-12 and Secondary Programs. Contact the department administrative assistant at 507-389-1965 for more information.

Teacher Licensure

College of Education

Gail Orcutt, Licensure Coordinator

118 Armstrong Hall • 507-389-1216

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 Education, 118 Armstrong Hall, coordinates the licensure process. In addition to meeting all program requirements, the PPST examination of skills in reading, writing, and mathematics needs to be successfully completed, as well as the Praxis II and Content examination. Minnesota state law requires that all students 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 \$26 fee for the criminal background check. The fee for issuance of a State of Minnesota teaching license is \$47.

GRADUATE PROGRAMS

The Educational Studies: K-12 and Secondary Programs offers five certificate or licensure programs, three Master of Science degree programs with multiple options, and two Specialist degrees. A complete list and description of the programs along with the contact person for each program follows.

GRADUATE CERTIFICATE/LICENSURE PROGRAMS

POST-BACCALAUREATE TEACHER LICENSURE PROGRAM (RAPID RESPONSE PROGRAM)

The Post-Baccalaureate Teacher Licensure Program is offered for those who have completed a Bachelor's Degree in a licensable field. Candidates entering this program will be placed into a cohort of 15-25 candidates and work closely with a cohort of faculty. The program is a 12-15 month comprehensive standards-based licensure program, with course work offered on weekends and integrates technology into the curriculum. This program also offers each candidate the opportunity to complete a Master of Arts Degree. The Post-Baccalaureate Licensure Program is approved by the Minnesota Board of Teaching. The contact person is Dr. Scott Page (507-389-1607 or 389-1965) or e-mail: scott.page@mnsu.edu

5-12 Licensure

Business Education (collaborative with Winona), Community Arts and Literature, Family Consumer Science, Health Science, Mathematics, Science (Life Science, Chemistry, Earth and Space Science, Physics), Social Studies.

K-12 Licensure

Dance and Theatre Arts, English as a Second Language, Vocal Music and Instrumental Music, Physical Education, Visual Arts, World Languages and Cultures (Spanish, German, and French), Developmental Adapted Physical Education, Library Media Specialist.

Admission Requirements. For admission into the Post-Baccalaureate Teacher Program, candidates must have earned a Bachelor's degree in a licensable field or its equivalent in an area from an accredited college or university. Applicants must satisfy the following requirements:

1. Apply to the College of Graduate Studies and Research (www2.mnsu.edu/graduate/).
- Submit official college/university transcripts from all institutions attended which document an earned Bachelor's degree (note: for some programs the applicant

must hold a Bachelor's degree in a licensable field or a current license).

- Demonstrate an undergraduate cumulative grade point average of 3.0 or above and a Miller Analogy Test Score of 50 or above. In lieu of the Miller Analogy Test Score, a score of 500 on one or more portions (verbal, quantitative, or analytical) of the Graduate Record Exam may be submitted.
2. A two to five page statement describing your philosophy of education, purpose for applying, educational achievements or honors, and academic interests.
 3. Complete the Pre-Professional Skills Test prior to approval of the Plan of Study (State Statute 8700.0210). This test assesses reading, writing, and mathematics. Prior to being recommended for teacher licensure, students must have passed all three portions of the examination.
 4. Apply and be admitted to professional education.

Required Professional Education (K-12 and Secondary) (28 credits)

KSP 502 Media Utilization for Secondary Education (2)

KSP 603 Foundations of Education (4)

KSP 604 Teaching and Learning in the Inclusive Classroom (3)

KSP 605 Human Development and Learning (3)

KSP 606 Reading and Writing in the Middle/Secondary Secondary School (2)

KSP 607 Philosophy and Practices of the Middle School (3)

KSP 608 Planning, Instruction, and Evaluation in the Secondary School (3)

KSP 660 Practicum in Teaching Middle School (4)

KSP 662 Practicum in Teaching Secondary (4)

Deficiencies in Content Area for Licensure

Candidates must meet with a content specialist to determine if any content courses are needed for licensure in their specific content area. With guidance from the content specialist, candidates can choose any level of content courses needed for licensure. These courses should be selected carefully with the content specialist and your graduate advisor in the KSP department. These courses should be used to make up deficiencies in the teaching major.

Note: Students will be recommended for licensure when all requirements of this certificate are fulfilled. Upon successful completion of the coursework and student teaching, candidates must take and pass the Praxis II content and pedagogy examinations before applying and obtaining a Minnesota Teaching License.

MASTER OF ARTS IN TEACHING (MAT)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

(Creative Project - 34 credits)

The MAT degree program is designed for students who are seeking initial teaching licensure and for those who already have a Bachelor's Degree in a licensable field. This is a 24 month comprehensive standards-based licensure program, with coursework offered evenings Monday through Thursday. Upon successful completion of this program, candidates are eligible for both a teaching license and a Master of Arts Degree. The MAT program is accredited by NCATE and approved by the Minnesota Board of Teaching. The contact person is Dr. Scott Page (507-389-1607 or 389-1965) or e-mail: scott.page@mnsu.edu. Licensure areas approved by the Board of Teaching include:

5-12 Licensure

Business Education (collaborative with Winona), Community Arts and Literature, Family Consumer Science, Health Science, Mathematics, Science (Life Science, Chemistry, Earth and Space Science, Physics), Social Studies.

K-12 Licensure

Dance and Theatre Arts, English as a Second Language, Vocal Music and Instrumental Music, Physical Education, Visual Arts, World Languages and Cultures (Spanish, German, and French), Developmental Adapted Physical Education, Library Media Specialist.

Admission Requirements

- Apply to the College of Graduate Studies and Research (www2.mnsu.edu/graduate/).
- Submit official college/university transcripts from all institutions attended which document an earned Bachelor's degree (note: for some programs the applicant must hold a Bachelor's degree in a licensable field or a current license).
- Demonstrate an undergraduate cumulative grade point average of 3.0 or above and a Miller Analogy Test Score of 50 or above. In lieu of the Miller Analogy Test Score, a score of 500 on one or more portions (verbal, quantitative, or analytical) of the Graduate Record Exam may be submitted.
- Once admitted, students should obtain a checklist describing the steps for completing the program from the College of Graduate Studies and Research.

Required Professional Education (K-12 and Secondary) (28 credits)

KSP 502 Media Utilization for Secondary Education (2)

K-12 AND SECONDARY PROGRAMS

- KSP 603 Foundations of Education (4)
- KSP 604 Teaching and Learning in the Inclusive Classroom (3)
- KSP 605 Human Development and Learning (3)
- KSP 606 Reading and Writing in the Middle/Secondary School (2)
- KSP 607 Philosophy and Practices of the Middle School (3)
- KSP 608 Planning, Instruction, and Evaluation in the Secondary School (3)
- KSP 660 Practicum in Teaching Middle School (4)
- KSP 662 Practicum in Teaching Secondary (4)

Required Research Courses (6-9 credits)

- KSP 609 Research Methods (3)
- KSP 610 Scholarly Writing (3)
- KSP 611 Teacher as Researcher: Classroom Inquiry (3)

Required Alternate Plan Paper, Creative Project, or Thesis

- KSP 694 Alternate Plan Paper (1-2)
- KSP 695 Creative Projects (1-2)
- KSP 699 Thesis (3-6)

Deficiencies in Content Area for Licensure

Candidates must meet with a content specialist to determine what, if any, content courses are needed for licensure in their specific content area. With guidance from the content specialist, candidates can choose any level of content courses needed for licensure. However, candidates must select 6 credits in the content area at the 500/600 level. These courses should be selected carefully with the content specialist and your graduate advisor in the KSP department. These courses should be used to make up deficiencies in the teaching major. In some cases it may be necessary to exceed the minimum of 6 credits in the Teaching Field.

Note: Students will be recommended for licensure when all requirements of this degree are fulfilled. Upon successful completion of the coursework and student teaching, candidates must take and pass the Praxis II before applying for and obtaining a Minnesota Teaching License (see the Teacher Licensure section at the beginning of the program descriptions).

LIBRARY MEDIA SPECIALIST (31 credits)

A library media specialist is a teacher who is qualified to work at a specialized professional level in media (library science, audiovisual education, and other emerging instructional technologies) in an elementary/secondary school or school district. Additional preparation is necessary if the candidate does not currently have a Minnesota Teaching license. See the Graduate Studies Web site for additional information. The contact person is Dr. Frank Birmingham (507-389-5210 or 389-1965) or e-mail: frank.birmingham@mnsu.edu.

Admission Requirements

Licensure Programs for all students may have either degree or non-degree status. Depending on an individual student's previous preparation, licensing may be obtained during a Master's program, but additional preparation is often necessary. Students who plan to become full-time school librarians/media specialists should recognize that licensing courses of study are minimal programs that meet most state licensing requirements but do not meet the accreditation requirements of American Library Association.

Anyone wishing to be fully qualified to accept a school position should plan to enter a graduate degree program. Licensure programs offer instruction in the fundamental principles and practices of school library media programs and provide the basics preparation for advanced professional study.

Minnesota State licensing for school library media personnel on the graduate level is offered for the following endorsement: Library Media Specialist.

Minnesota Board of Teaching requires competencies included in the following courses:

Prerequisite:

- KSP 301 Informational Media Utilization (2)

Required Core (33 credits)

- KSP 516 Information Resources (2)
- KSP 517 Materials for Children (3)
- KSP 518 Materials for Young Adults (3)
- KSP 519 Evaluation and Selection (2)
- KSP 522 Design & Production of Resources (2)
- KSP 541 Organization of Information
- KSP 624 Digital Production (2)
- KSP 628 Distance Learning (2)
- KSP 629 Electronic Communication (2)
- KSP 631 School Library Media Leadership (3)
- KSP 635 Media Services and Learning (4)

- KSP 643 Instructional Systems Development (2)
- KSP 698 Internship (4)

A 200-hour internship is required. Students are not required to take specific courses if competency can be satisfactorily demonstrated. Requirements for licensure, in addition to courses, include a valid teaching license or completion of the Rapid Response or MAT program.

EDUCATIONAL TECHNOLOGY

Admission Requirements

Applicants should have a 3.0 for the last two undergraduate years of the baccalaureate degree. Applicants should have complete files a minimum of one month before the term of anticipated entry. Applications are accepted for any term or summer session. International students should complete their applications and files three months before the term of session of anticipated admittance. A teaching license is not required.

A. Certificate in Educational Technology

The Certificate program in Educational Technology is designed for the individual who is interested in improving learning by increasing their knowledge of educational technology and educational technology integration techniques. The certificate is designed to increase the participant's knowledge of current technologies, proper techniques and educational theories to appropriately integrate technology and technology standards into the curriculum.

The Educational Technology Program is an interdisciplinary graduate program granting individuals a Master of Science Degree in Educational Technology. Individuals are fully prepared to seek professional positions in instructional resource development, educational technology administration or instructional design.

Program emphasis is placed on interactive methods of communications including Internet and Web development, Instructional Television (ITV) and multimedia instructional materials design and development. A wide variety of teaching methods are employed including classroom, interactive instructional television and, web-based instruction. Students are able to tailor their program to meet their individual needs.

A Certificate in Educational Technology and an Advanced Certificate in Educational Technology are also available. See the Graduate Studies Bulletin or Web site www.LME.mnsu.edu/et/edtech for additional information. The contact person is Dr. Don Descy (507-389-5244 or 389-1965 or e-mail: don.descy@mnsu.edu).

Required Technology (10 credits)

- KSP 522 Design & Production of Resources (2)
- KSP 619 Foundations of Educational Technology (3)
- KSP 620 Trends in: Educational Technology (2)
- KSP 629 Electronic Communications (2)
- KSP 680 Technology Tour (1)

B. Advanced Certificate in Educational Technology

The advanced certificate in Educational Technology is an additional 8 credits above the introductory certificate level. The program is designed for individuals desiring to increase their knowledge of educational computer technology, computer networking and educational computer technology integration techniques.

Required Technology (12 credits)

- KSP 522 Design & Production of Resources (2)
- KSP 619 Foundations of Educational Technology (3)
- KSP 620 Trends in: Educational Technology (2)
- KSP 629 Electronic Communications (2)
- KSP 661 Networking (2)
- KSP 680 Technology Tour (1)

Required Computer Science (6 credits)

- COMS 591 Computers in the Classroom (3)
- COMS 592 Computer-based Instructional Systems I (3)

MASTER OF SCIENCE IN EDUCATIONAL TECHNOLOGY

(Alternate Plan Paper - 34 credits)

The Master of Science degree in Education Technology is designed to prepare individuals in education, business, industry, and the military.

1. utilize microcomputers, digital video, the Internet, multimedia and other forms of media technology as resources for and delivery of instruction of training;
2. serve as managers or coordinators of the uses microcomputers, telecommunication, computer laboratories, and related technology in educational and/or training settings and/or
3. be developer of instructional materials including digital video and multimedia for the new technologies. The degree program may be designed to meet individual needs.

Required Technology (15-20 credits)

KSP 522 Design & Production of Resources (2)
 KSP 619 Foundations of Educational Technology (3)
 KSP 620 Trends in: Educational Technology (2)
 KSP 643 Instructional Systems Design (2)
 KSP 661 Networking (2)
 KSP 680 Technology Tour (1)
 KSP 698 Internship (1-2)

Elective Courses

KSP 615 Selected Topics: Advanced Internet (2)
 KSP 624 Digital Production (2)
 KSP 628 Distance Learning (2)
 KSP 629 Electronic Communication (2)
 KSP 635 Media Services and Learning (4)

Required Computer Science (6 credits)

COMS 591 Computers in the Classroom (3)
 COMS 592 Computer-based Instructional Systems I (3)

Elective Courses

COMS 593 Computer-based Instructional Systems II (3)

Required Research Courses (3-4 credits)

KSP 609 Research Methods (3)
 KSP 694 Alternate Plan Paper (1-2)

Elective Research Courses

KSP 610 Scholarly Writing (3)
 KSP 611 Teacher as Researcher: Classroom Inquiry (3)
 KSP 618 Library Strategies for Graduate Students (1)

Required Education (8-10)

KSP 579 Grant Writing and Program Funding (3) **OR**
 EDAD 675 Organizational Development (3)
 EDLD 644 Ethnicity and Leadership (3)
 EDAD 681 Planning and Facilities (3)

Elective Courses

KSP 665 Curriculum Leadership (2)
 KSP 666 Interdisciplinary Curriculum (3)
 KSP 673 Private Funding for Public Institutions (3)

***Required Subject Specialty (1-10 credits)**

May be taken in any discipline

Additional Requirements:

Students must complete a minimum of 50% of all graduate credit at the 600 level, and must maintain a grade point average of "B" or above in all coursework. Satisfactory completion of a comprehensive examination during the semester (or prior to) of graduation is required.

TEACHING AND LEARNING MS

(Thesis Plan - 30 credits)
 (Alternate Plan Paper - 34 credits)
 (Creative Project - 34 credits)

The Department of Educational Studies: K-12 and Secondary Programs offers a Master of Science in Teaching and Learning degree program. This is a two year program for licensed teachers who desire to improve their teaching effectiveness and understanding of education. Core courses are aligned with the National Board of Professional Teaching Standards. Students choose from one of three focal areas in curriculum and instruction, middle/secondary school, and environmental education for in-depth study.

This program is a cohort model, allowing groups of 20-25 participants to work closely with each other and the cohort faculty. A major goal of the program is to help individuals develop as reflective and inquiring teachers. Participants are encouraged to consider their goals, values, beliefs, and assumptions about education as a foundation for exploring the practice of teaching. They are also encouraged to think about schools, and curriculum and instruction in a broader social, political and historical context. Together, these experiences help participants become leaders within their schools and enable them to initiate school and classroom reform.

Admission Requirements. Applicants for the Master of Science degree program must have a valid Minnesota teaching license. To be considered, the applicant must complete the following:

- Apply to the College of Graduate Studies and Research (www2.mnsu.edu/graduate/).

- Submit official college/university transcripts from all institutions attended that document an earned Bachelor's degree.
- Demonstrate an undergraduate cumulative grade point average of 3.0 or above and a Miller Analogy Test Score of 50 or above. In lieu of the Miller Analogy Test Score, a score of 500 on one or more portions (verbal, quantitative, or analytical) of the Graduate Record Exam may be submitted.
- Once admitted, students should obtain a checklist describing the steps for completing the program from the College of Graduate Studies and Research.

See the Graduate Studies Bulletin or Web site: www2.mnsu.edu/graduate/ for additional information. The contact person is Dr. Debra Anderson (507-389-5710 or 389-1965) or e-mail: debra.anderson@mnsu.edu.

Coursework. A major goal of the program is to foster critical and reflective thinking by developing inquiring teachers. The coursework within the program is designed to integrate technology by offering on-line or web-based curriculum, and is offered on weekends and/or week nights which will allow candidates the flexibility and opportunity to work closely with each other and the cohort faculty. The coursework is divided into three distinct Blocks over six semesters.

Block One: Introduction (6 credits)

Required:

KSP 600 Introduction to Graduate Studies and Technology (3)
 KSP 601 Education for a Multicultural Society (3)

Block Two: Coursework (21-30 credits)

The coursework in this block is composed of three areas:

Focal Area and electives (15-24 credits) (see below) and
 Related Area Elective Courses (Not in COE) (6 credits)

Focal Areas of Study

The courses listed under each focal area (Curriculum and Instruction, Middle and Secondary Education, and Environmental Education) are meant to be suggestions only. Courses are to be selected in consultation with an advisor. They may be selected from K-12 and Secondary courses in consultation with KSP faculty.

Required for all focal areas (6 credits)

KSP 614 Introduction to Curriculum: Theory and Leadership (3)
 KSP 654 Secondary School Curriculum (3)

Focal Area A:**Curriculum and Instruction**

The Curriculum and Instruction focal area emphasizes curriculum planning and improvement of teaching skills. The program is available to all teachers who wish to broaden their knowledge base, enhance their classroom performance and better serve the needs of their students.

KSP 612 Improvement of Instruction (3)
 KSP 663 Curriculum Development (3)
 KSP 665 Curriculum Leadership (3)
 KSP 675 Curriculum Appraisal

Focal Area B:**Middle and Secondary Education**

The Middle and Secondary Education focal area emphasizes curriculum planning, improvement of instruction, and philosophy of middle and secondary education. The program is available to all teachers who wish to broaden their knowledge base, enhance their classroom performance and better serve the needs of their students.

KSP 605 Human Development and Learning (3)
 KSP 607 Philosophy and Practices in the Middle School (3)
 KSP 625 Philosophy of Education in Historical Context (3)
 KSP 640 Assessment and Evaluation: Advanced Applications (3)
 KSP 666 Interdisciplinary Curriculum (3)

Focal Area C:**Environmental Education**

The Environmental Education focal area emphasizes current curriculum and social issues surrounding environmental education. The program is available to all teachers who wish to broaden their knowledge base, enhance their classroom performance and better serve the needs of their students.

KSP 579 Grant Writing and Program Funding (3)
 KSP 620 Trends in: Environmental Education (3)
 KSP 645 Seminar: Environmental Education (2)
 KSP 648 Readings in Environmental Education (1-2)
 KSP 649 Environmental Education Programs (1-3)
 KSP 650 Curricular Materials in Energy Education (1-4)

K-12 AND SECONDARY PROGRAMS

Block Three: Research Core (6-9 credits)

Required:

- KSP 609 Research Methods (3)
KSP 611 Teachers as Researchers: Classroom Inquiry (3)

Electives:

- KSP 610 Scholarly Writing (3)
KSP 694 Alternate Plan Paper (1-2)
KSP 695 Creative Project (3)
KSP 699 Thesis (3-6)

Additional Requirements. In addition students must successfully complete a written comprehensive examination during the semester (or prior to) of graduation; and take a minimum of 50 percent of all coursework at the 600 level. To satisfy degree requirements students must choose to complete a thesis, alternate plan paper, or creative project.

LIBRARY MEDIA EDUCATION MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 35 credits)

(Creative Project - 35 credits)

The Master of Science in Library Media Education is a professional degree program that will enable the graduate to enter the library media profession fully qualified for the elementary and secondary school. It should be understood by the student applying for graduate school that graduate work is not merely a continuation of undergraduate work. Graduate work demands scholarship which is clearly at a higher level of achievement; it places greater emphasis on research and creativity; and it requires much more initiative and responsibility. See the Graduate Studies Web site for additional information. The contact person is Dr. Frank Birmingham (507-389-5210 or 389-1965) or e-mail: frank.birmingham@mnsu.edu. All master's and specialist degrees, and licensure programs in Library Media meet all requirements for NCATE accreditation according to standards developed by AASL and AECT.

Admission Requirements. Student must meet all graduate college requirements and have a 3.0 grade point average for the last two years of undergraduate work. Students are urged to write the content person details and meet with an advisor before beginning a program. Previous teaching licensure is generally required for this degree. See the Graduate Studies Bulletin or Web site: www2.mnsu.edu/graduate/ for additional information.

A note about a graduate degree in library media education: Although the state of Minnesota does not require a graduate degree in media for licensure as a school library media specialist, many states do require master's degree. Additionally, *Information Power*, the national guidelines for school library media programs, recommends that the master's degree be considered the entry level degree for professionals in school library media centers. The K-12 and Secondary Programs department also believes that a master's degree with a strong undergraduate general education background provides the best preparation for school library media professionals.

The specific objectives of the MS in Library Media are:

1. to assist students in recognizing the role which libraries and information services play in our society
2. to develop in students an awareness of the similarities and differences among the various library specializations in their societal contribution with special emphasis upon where and how school library media fits into the whole
3. to provide students with the skills and competencies needed to select and acquire, organize and distribute, produce and utilize library media resources, and to manage library media programs with special emphasis upon school library media resources and programs
4. to introduce students to the principles and methodology of research and to its effective utilization and
5. to introduce or further the development of professionalism in students

Required Technology (10 credits)

- KSP 522 Design & Production of Resources (2)
KSP 624 Digital Production (2)
KSP 628 Distance Learning (2)
KSP 629 Electronic Communication (2)
KSP 643 Instructional Systems Design (2)

Required Management and Organization (7 credits)

- KSP 516 Information Resources (2)
KSP 541 Organization of Information
KSP 631 School Library Media Leadership (3)

Required Philosophy and Vision (6 credits)

- KSP 617 Information and Society (2)
KSP 635 Media Services and Learning (4)

Required Materials (8 credits)

- KSP 517 Materials for Children (3)
KSP 518 Materials for Young Adults (3)
KSP 519 Evaluation and Selection (2)

Required Electives outside Education (2 credits)

Choose any 500/600 level course selected in consultation with an advisor.

Required Research (4 credits)

- KSP 609 Research Methods (3)
KSP 694 Alternate Plan Paper (1)

The plan for this paper will be developed by the student while enrolled in KSP 609, Research Methods.

Additional Requirements. Students must complete a minimum of 50 percent of all graduate credit at the 600 level, and must maintain a grade point average of "B" or above in all coursework. Satisfactory completion of a comprehensive examination during the semester (or prior to) graduation is required.

CURRICULUM AND INSTRUCTION SP (30 credits)

The Specialist Degree in Curriculum and Instruction is available for professionals who are seeking an advanced level of preparation as curriculum directors, or department chairs managing the human and curriculum materials within a school or department. Within the Specialist program a student obtains an in-depth knowledge in a specific area; i.e., research, curriculum development and/or appraisal. The contact person is Dr. Debra Anderson (507-389-5710 or 389-1965) or e-mail: debra.anderson@mnsu.edu

Additional Requirements. See the Graduate Studies Bulletin or Web site: www2.mnsu.edu/graduate/ for additional information.

Program Research Core (6 credits)

- KSP 579 Grant Writing and Program Funding (3)
KSP 681 Quantitative Research Methods (3) **OR**
KSP 682 Qualitative Research Methods (3)

Required C & I Course (8 credits)

Choose 8 credits of 500/600 level KSP courses chosen in consultation with an advisor.

Required Practicum Course (3 credits)

- KSP 660 Practicum (1-6)

Related Area Electives (8 credits)

8 elective credits in a related academic area, chosen in consultation with an advisor.

Electives (5 credits)

Choose any 500/600 level elective courses in consultation with an advisor.

LIBRARY MEDIA EDUCATION SP (30 credits)

The Specialist Degree in Library Media Education is available for library media professionals who are seeking an advanced level of preparation as media administrators managing the human and materials resources of the media program. An individual's program seeks to expand his/her competencies and/or develop in-depth Specialization in a specific area. Within the Specialist program a student obtains an in-depth knowledge in a specific area; i.e., administration, materials, production. The program may or may not lead to additional certification or licensure. The contact person is Dr. Frank Birmingham (507-389-5210 or 389-1965) or e-mail: frank.birmingham@mnsu.edu. All master's and specialist degrees, and licensure programs in Library Media meet all requirements for NCATE accreditation according to standards developed by AASL and AECT.

Admission Requirements. This degree prepares people to serve as school library media administrators. Applicants must have competencies equal to those required for Minnesota's library media specialist licensing. Within the specialist degree program, a student may expand in-depth knowledge in a specific area. Students are urged to write the content person details and meet with an advisor before beginning a program. Previous teaching licensure is generally required for this degree. See the Graduate Studies Bulletin or Web site: www2.mnsu.edu/graduate/ for additional information.

Program Requirements. A maximum of 10 graduate credits may be transferred into a degree program from other regionally accredited colleges or universities. All transfer credits need prior approval from both the student's graduate Examining Committee and the College of Graduate Studies and Research before transfer of credits can be granted.

Prerequisite. Library Media Specialist license, Media Generalist license, or competencies equal to those required for Library Media Specialist license.

Required Research (4 credits)

KSP 609 Research Methods (3)
KSP 681 Quantitative Research Methods (3)
KSP 682 Qualitative Research Methods (3)

Required Library Media Education (minimum 8 credits)

KSP 698 Internship (2)
KSP 699 Thesis (3-6)

Required Library Media Specialization (minimum 4 credits)

Choose a minimum of 4 credits in student's area of specialization.

Required Library Media Education or Educational Administration or K-12 and Secondary Programs (10 credits)

Choose courses in consultation with an advisor.

Required External Electives (minimum 3 credits)

Choose a minimum of 3 credits outside the College of Education.

General Requirements

A preliminary oral exam, a final comprehensive exam, and an oral thesis defense.

COURSE DESCRIPTIONS

KSP 502 (2) Media Utilization for Secondary Education

Instructional media used in the secondary classroom is demonstrated and used by the students. Resource selection and evaluation is stressed. Electronic media, computer aided instruction, telecommunications, and standard classroom media applications are stressed. Ethical issues of copyright discussed.

KSP 503 (2) Media Utilization for K-12 Education

KSP 504 (2) Curriculum Applications of Technology in Education

KSP 507 (2) Teaching in a Multicultural Society
Adaptation of curriculum, classroom organization, and teaching practices.

KSP 508 (3) Teaching to the K-12 ELL Student

For teachers of students whose dominant language is other than English.

KSP 515 (2) Materials for Younger Children

Examination of print and audiovisual media for younger children birth to age seven. Identification of selection sources to identify materials. Evaluation of resources and practice in using them. Use of electronic search engines to identify resources, including, but not limited to, research collections, discussion groups, and electronic periodicals.

KSP 516 (2) Information Resources

Examination of information resources used in K-12 school library media programs. Categories include, but are not limited to, encyclopedias, dictionaries, atlases, government publications, biography sources, indexes, on-line public access catalogs (OPACS), ERIC, and electronic reference resources.

KSP 517 (2-3) Materials for Children

Print, audiovisual and electronic media: their selection, evaluation, and use with children in grades K-6. Three credit section includes storytelling.
Prerequisite: KSP 401/501

KSP 518 (3) Materials for Young Adults

Print and audiovisual media selection and use.

KSP 519 (2) Evaluation and Selection

KSP 522 (2) Design and Production of Resources

Design and production of instructional media for the classroom. Design and production of media for a professional presentation. Basic 35mm color slide and print photography. Utilization of computers in instructional settings. Presentation of designed resources.

KSP 523 (3) Sexist Influences in Human Development

Examination of issues of gender and sexism in society and education, including focus on the experience of women of color.

KSP 525 (2) Reading and Writing in the Secondary School

Concepts, objectives, procedures, and reading in subject matter field.
Prerequisite: KSP 310

KSP 529 (2) Utilization of Internet Resources

The student will understand the Internet and learn how to utilize Internet resources and apply them to K-12 media programs.

KSP 530 (2) WWW Construction for Educators

This course will teach professional educators how to design and produce World Wide Web (WWW) pages of their own and how this knowledge can be transferred to the classroom.

KSP 541 (2) Organization of Information

Dewey Decimal Classification system, Introduction to the Library of Congress Classification, Sears and LC Subject Headings, Commercial processing.
Prerequisite: KSP 516

KSP 550 (3) Human Relations in a Multicultural Society

Study of interpersonal communication skills, self-esteem, classroom relationships, and cultural diversity applied to educational settings. This course meets the state of Minnesota human relations requirements for teacher licensure.

KSP 551 (1-2) Cultural Diversity Clinical Experience

Opportunity for "hands-on" learning experience working with students of culturally diverse backgrounds, one-to-one, small group, tutoring, activities supervision and lesson planning, and implementation.
Prerequisite: KSP 220 or KSP 4/550

KSP 561 (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 579 (3) Grant Writing and Program Funding

Procedures for designing research, writing proposals and requests for grants, contracts and funding from external sources; grant administration.

KSP 580 (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.

KSP 583 (2) Supervision of Student Teaching

To assist K-12 classroom teachers in developing their skills for supervising pre-service and student teachers.

KSP 586 (1-3) Topics in Environmental Education

How to develop energy activated for educational purposes.

KSP 589 (1-3) Selected Topics

Specific focus on an educational topic that may be taught as a regular course such as: Topic: Web Resources for the Classroom (usually a group requests a specific topic).

KSP 590 (1-6) Workshop

Specific focus on an educational topic that is conducted for a special group. May be repeated.

KSP 591 (1-4) In-Service

Special courses designed to meet changing educational trends.

KSP 600 (3) Introduction to Graduate Studies and Technology

Introduction to the programs and requirements of graduate studies in education at Minnesota State University, scholarly writing, and the classroom technologies necessary for the master teacher.

KSP 601 (3) Education in a Multicultural Society

Theory and Experience: covers the history of educational policy and legal issues related to multicultural education in the United States schools while it gives students opportunity to immerse themselves in a culture unfamiliar to them.

KSP 603 (4) Foundations of Education

Study and application of developing positive relationships in diverse learning communities within social, historical and philosophical perspectives. Based on the premise that building a learning community and developing positive relationships with colleagues and learners is basic to teaching and learning.

KSP 604 (3) Teaching and Learning in the Inclusive Classroom

Theories of human development with a concentrated study of cognitive development, applied to learning in the multicultural and inclusive classroom.

KSP 605 (3) Human Developing and Learning

This course is intended to prepare future educators and enhance the knowledge of present educators and counselors. The focus of this course is to provide foundational knowledge on physical, emotional, social, and cognitive development enhancing learning development of youth in grades 5-12.

KSP 606 (2) Reading in the Middle/Secondary School

Reading as it applies to Middle and Secondary schools will be the focus of this course. The course will focus on the current issues and trends in methodologies, linguistics, grammar, composition and applications of reading throughout the course.

K-12 AND SECONDARY PROGRAMS

KSP 607 (3) Philosophy and Practices in the Middle School

This course is designed to provide inexperienced and experienced educators with greater insight into the unique position of the middle school in the U.S. system of public education. Throughout the course students will explore topics of concern regarding middle school education.

KSP 608 (3) Planning, Instruction, and Evaluation in the Secondary School

This course is designed to guide K-12 and 5-12 student through the design and implementation of a standards-based curriculum from the analysis of standards, designing performance packages base upon the standard, designing a course, and pedagogical methods.

KSP 609 (3) Research Methods

The research process is one that is complicated, and nonlinear, and very often difficult for students to understand and see its strengths and weaknesses. This course will introduce students to research methodologies as applied to research and evaluation. The course will focus on developing skills and applying different methodologies in a research plan.

KSP 610 (3) Scholarly Writing

Designed to provide a learning experience in utilizing techniques and procedures in scholarly writing.

KSP 611 (3) Teacher as Researcher: Classroom Inquiry

Teachers use observations and informal data to learn more about their own classrooms. Designed to provide learning experiences in using research techniques and procedures in actual field research.

KSP 612 (1-4) Improvement of Instruction

KSP 613 (1-2) Discipline and Classroom Management

An in-depth examination of concepts and practices involving classroom management and discipline.

KSP 614 (3) Introduction to Curriculum: Theory and Leadership

An examination of the role of leader, theories of leadership and their applications in school improvement.

KSP 615 (1-4) Selected Topics

Selected topics explored for secondary teaching. May be repeated.

KSP 616 (2) Multi-Ethnic Curriculum Materials and Resources

Provides teachers with information needed to develop curriculum and instruction materials, locate resources and enhance awareness of the multi ethnic heritage of this nation.

KSP 617 (2) Information and Society

Social, cultural, and educational role of the library; librarianship as a profession; current issues in information science.

KSP 618 (1) Library Strategies

Identification and practice in use of print and electronic resources in graduate programs.

KSP 619 (3) Foundations of Educational Technology

KSP 620 (1-3) Trends in:

The trends format provides teachers and others opportunity to study recent research and current developments with an interdisciplinary nature to include a variety of topics. This course may be in a shortened hands-on format. May be repeated.

KSP 623 (2) Photography

Introduction to photography. Choice of film-prints and slides. Color film exposure-meters. Color filtration-filters and mounts. Commercial sources. Darkroom equipment and facilities. Utilization of K-12 classroom. Slide duplication. Computer graphics/Quick take photography. Field trips-making the most of yearbook and other PR formats. Future trends.

KSP 624 (2) Digital Production

How to use camcorders, video discs, and xapshot camera. Learn production techniques including camera shots, sound, lighting. Post-production techniques including logging, editing, dubbing, special effects.

KSP 625 (3) Philosophy of Education in Historical Context

Explores how belief systems, expressed in philosophical schools of thought, have shaped the development of the U.S. public school from the Colonial Period to the present.

KSP 626 (2) Advanced Reference Materials

Specialized sources in the sciences, arts, and humanities. Patron interviewing techniques. Pre: KSP (KSP 416/516)

KSP 627 (2) Advanced Materials for Children

In-depth examination of authors of a particular genre. Examination of the Caldecott award winning titles. Children's magazines. Examination of award winning titles form other countries. Electronic resources: netscape and microcomputer software. Pre: KSP (KSP 417/517)

KSP 628 (2) Distance Learning

Teaching and learning over distance education systems with the main stress on Instructional Television teaching. Instructional systems approach to the development of coursework will be examined. Proper selection of content will be stressed.

KSP 629 (2) Electronic Communication

E-mail, listservs, online resources, electronic services, search tools, future services.

KSP 631 (3) School Library Media Leadership

Function and role of media specialist. Components of effective school library media program: resources, personnel, spaces, budget, planning, organizing and policy development.

KSP 632 (3) Educational Issues in Global Context

Examines systems of education, both Western and non-Western, as they are shaped by social, cultural and political issues; focuses on understanding the United States system more completely by viewing it through a "global" lens.

KSP 633 (2) Censorship Issues

First Amendment, Library Bill of Rights, Freedom to View and Listen in relation to societal pressures, court cases, selection policies and reevaluation procedures.

KSP 635 (4) Media Services and Learning

Integrating media into the curriculum. Instructional role of media spec. Information literacy. Philosophy, function, and role of the library media program.

KSP 636 (1-6) Clinical Experience in Curriculum Development

Supervised practical experiences in curricular design and development. Admission by application only.

KSP 637 (2) Materials: Advanced Young Adult Literature

Examination of trends in recent young adult fiction. Selection, evaluation and use of young adult fiction. Reading and discussion of current young adult fiction.

KSP 639 (2) District Level Administration

Philosophy of district media service, relationships with school personnel, goal setting, and budget planning.

KSP 640 (3) Assessment and Evaluation:

Examination of current research, trends, issues and strategies related to the assessment/evaluation process as applied to educational settings, curriculum, programs, systems, or models. May be repeated.

KSP 641 (2) Technical Services

Organization and operation of a technical services department at a school district level.

KSP 642 (1-3) Library of Congress Classification

Work with LC classification schedules and worksheets. Assign LC subject headings. Become familiar with the work flow pattern used in processing university library media field. Requirements: interview of university cataloging staff, reaction papers, exams.

KSP 643 (2) Instructional Systems Development

Instructional systems approach to the development of coursework will be examined. Proper selection of content will be stressed. Selecting, evaluating, and/or production of course materials will be emphasized. Proper testing procedures will be stressed. Formative and summative evaluations will be done.

KSP 645 (1-2) Seminar:

Critical study of current research, issues, and teaching strategies related to secondary education in a shorten period of time. May be repeated.

KSP 646 (2) Library Automation

Students will be required to learn the following: Checklist for automation planning, examination of Winnebago and Follett automation software systems, MARC format-importance of consistency and global editing, circulation, bar coding and issues, using automation reports to their fullest, and networking and cooperation issues.

KSP 647 (2) Information Retrieval

Bibliographic databases, networks and selected databases and networks will be examined.

KSP 648 (1-2) Readings in Environmental Education

Investigation of environmental issues and problems through existing literature.

KSP 649 (1-3) Environmental Education Program

Research, compare, contrast environmental education programs.

KSP 650 (1-4) Curriculum Materials in:

Examines state and national education programs and materials with an opportunity to develop materials for classroom use. May be repeated.

KSP 652 (3) Development and Learning:

Focus of current research, issues and teaching strategies related to the developmental changes at a variety of levels (i.e., childhood, adolescence, adulthood). A foundational knowledge will be presented with an emphasis on the nature of cognitive and knowledge construction. May be repeated.

KSP 654 (3) Secondary School Curriculum

A look at evolving nature of the secondary school curriculum and the factors influencing development.

KSP 656 (2) Multicultural Materials

To identify books and other media with multicultural themes and topics for young adults.

KSP 657 (3) Advanced Human Relations

Designed to enhance practicing professionals' understanding of group dynamics and individual communication styles. This course focuses on facilitative interpersonal skills, conflict resolution, multi-cultural communication, and peace studies.

Pre: introductory course on human relations; e.g., KSP 450/550.

KSP 658 (2) Pre-Practicum Clinical Experiences I

Each student will learn about teaching and learning in a different educational setting, e.g., charter school, for period day, Middle School.

KSP 659 (3) Moral and Ethical Dimensions of Education

Course will enable students to become aware of the development of moral reasoning and the "best-practice" processes and experiences to prepare for "character development" of their students.

KSP 660 (1-6) Practicum in the Middle School

Special teaching projects of an experimental or creative nature in the students' field of preparation.

KSP 661 (2) Networking

Evaluation and selection of hardware and software for connectivity and networking of computer terminals. Cooperation among library systems examined.

KSP 662 (1-6) Practicum in the Secondary School

Special teaching projects of an experimental or creative nature in the students' field of preparation

KSP 663 (3) Curriculum Development

Various theories for organizing curriculum are investigated and experiences are provided in designing an articulate program.

KSP 664 (2) Curriculum Development in Environmental Education

Curriculum concept; goals for environmental education; selecting objectives, content, concepts, evaluation.

KSP 665 (3) Curriculum Leadership

An examination of the role of the leader, theories of leadership and their applications in school improvement.

KSP 666 (3) Interdisciplinary Curriculum

Rationale and models for developing cross-disciplinary curriculum (i.e., curriculum mapping, parallel teaching) and learning experiences will be explored.

KSP 667 (2) Materials: Popular Adult Literature

Examination of current popular adult literature-New York Times Best Sellers-Local bookstore best sellers.

KSP 668 (3) School Leadership: Social, Philosophic & Ethical Action

Focus on the social nature of human life and interaction as a basis for learning and for leading organizations such as schools. Students will complete a written educational philosophy for carrying out responsibilities in schools.

KSP 670 (3) Collegiate Institutions in the United States

An examination and review of history, foundations, current developments, and future role of two-year and four-year collegiate institutions in the United States and how they function to meet evolving needs.

KSP 671 (3) Learning and Teaching in Higher Education

Exploration and application of adult learning theory and research, including focus on development of critical and reflective thinking. Study of instructional strategies fostering active student engagement in classrooms.

KSP 672 (3) Spirituality, Human Development and Education

Exploration of broadly-based psychological and philosophical definitions of human spirituality and its influence on the processes of development and learning, as well as consideration of ways in which educational experiences can support the development of the spirit within.

KSP 673 (3) Private Funding for Public Institutions

Focus on understanding and applying U.S. tax laws and resultant deferred giving programs that can enhance, public/not-for-public institutions' ability to increase private funding resources.

KSP 675 (3) Curriculum Appraisal

An investigation and application of techniques for curriculum analysis and assessments.

KSP 677 (1-6) Individual Study

Opportunity for individual study on areas germane to the broader disciplines in education under direction of graduate faculty.

KSP 680 (1) Technology Tour**KSP 681 (3) Quantitative Research Methods**

This course will introduce students to quantitative research as applied to educational research and evaluation. The course will focus on developing skills and applying quantitative methodology in a research plan.

KSP 682 (3) Qualitative Research Methods

This course will introduce students to qualitative research as applied to educational research and evaluation. The course will focus on developing skills and applying qualitative methodology in a research plan.

KSP 686 (1-4) Curriculum Design

Supervised practical experiences in curriculum design and development. Permission required.

Pre: consent.

KSP 689 (3) Introduction to Technology in Education

All formats of information technology for educational settings-learning about interactive video, microcomputers, computer networks, Internet, electronic information including bibliographic data bases, electronic newspapers, online encyclopedias, and distance education.

KSP 690 (1-3) Workshop

Short term graduate workshops dealing with specific subjects germane to the broader disciplines in education.

KSP 691 (1-4) In-Service

An intensive, often semester-long, study in areas germane to the broader disciplines within K-12 and Secondary Education.

Pre; graduate students

KSP 693 (1) Evaluation and Selection of Education Software

Evaluation of educational software for K-12 schools. Selection of software for elementary and secondary collections. Integration of software into the curriculum.

KSP 694 (1-2) Alternate Plan Paper

For students completing a Masters degree with the alternate plan option.

KSP 695 (1-2) Creative Projects

For students completing a Master's degree with the creative projects option.

KSP 698 (1-8) Internship

Under-supervision of both graduate faculty within the K-12 and Secondary Department and appropriate cooperating supervisors of external agencies, the student will complete an internship experience which allows opportunity to apply and strengthen knowledge and skills acquired within the graduate program. (Six credits of internship are required for Media Generalist Licensure).

KSP 699 (3-6) Thesis

For students completing a Masters or Specialist degree with the using the thesis option.

MANUFACTURING ENGINEERING TECHNOLOGY MS

College of Science, Engineering & Technology
Department of Automotive and Manufacturing Engineering Technology
205 Trafton Science Center E • 507-389-6383 •
Fax: 507-389-5002

Chair and Graduate Coordinator: Harry Petersen, Ph.D.

Ann Goebel, MS; Bruce Jones, Ph.D.; Andrzej Markowski, Ph.D.; Gary Mead, MS;
Paul Sullivan, Ph.D.

Manufacturing Engineering Technology is a Master of Science program intended for students with an undergraduate degree in engineering technology or engineering who have a desire to obtain a specialized education in modern manufacturing. Students with other undergraduate majors may also enter the program but may have a considerable number of deficiencies which must be made up at the undergraduate level. The emphasis of the program is the technology and organization of manufacturing in a competitive global world.

Admission. Students seeking admission to the Manufacturing program must be admitted to the College of Graduate Studies and Research and in addition must have completed undergraduate coursework which includes: Calculus I, Calculus II, a Computer Science programming language, Electronic Circuit Analysis, Computer Aided Design (CAD), Materials and Metallurgy, Statics, Materials Processing and Manufacturing Automation.

Applicants who do not have the prerequisites completed will be conditionally admitted to the program with the undergraduate courses listed as deficiencies. These deficiencies must be made up before the student submits a plan of study before the completion of the first 16 graduate credits.

Financial Assistance. The department typically has one to two graduate assistants. Duties include research assisting and laboratory supervision. Application forms are available from the College of Graduate Studies and Research or from the Department of Automotive and Manufacturing Engineering Technology. Completed forms and any support materials should be sent to the department chairperson. Applications can be completed at any time. The department typically makes its decision in May for assistantships which begin in August.

MANUFACTURING ENGINEERING TECHNOLOGY MS

(Thesis Plan - 32 credits)

(Alternate Plan Paper - 34 credits)

Required Core (16 credits)

MET 525 Project and Value Management (4)

MET 600 Manufacturing Research Methods (2)

MET 645 CAD Applications (2)

AND one of the following:

MET 678 Manufacturing Processes (2)

MET 692 Manufacturing Seminar (1-3)

MET 697 Internship (1-4)

Choose additional electives in MET to total 16 credits.

Required Concentration (10 credits)

Choose 10 credits in a concentration area in another department such as automotive engineering technology, business, computer science, or one of the natural sciences. The area chosen should reflect the background and occupational goals of the individual and must be approved by the student's graduate committee.

Required Electives (6-8 credits)

These courses can be from any graduate level courses.

Required Thesis or Alternate Plan Paper

MET 694 Alternate Plan Paper (1-2)

MET 699 Thesis (2-4)

Additional Requirements:

Each student must obtain practical experience in manufacturing through an internship, independent study, alternate plan paper or manufacturing work experience. A minimum of 50% of all graduate level coursework applied toward the degree must be at the 600 level, excluding thesis/alternate plan paper credits. Each student must successfully complete a final written comprehensive examination.

COURSE DESCRIPTIONS**MET 507 (4) Manufacturing Resource Planning and Control**

A study of industrial plant layout for maximum facility utilization. Topics include: factory layout, materials storage and handling, industrial equipment selection, and mechanization.

MET 523 (4) Ergonomics & Work Measurement

Investigation of work place design and environmental stress from heat, noise, vibration, repetitive motion, and illumination in personal machine systems. Topics: human-machining

MET 524 (2) Industrial Safety

Techniques of developing safety practices in an industrial and construction environment. Topics include OSHA, current legislation, cost analysis, minimization, depreciation and economic worth, personal protection, employee selection, psychological aspects, product safety, hazard materials, and catastrophe control.

MET 525 (4) Project & Value Management

A study of the optimal relationship between value and function of products and the cost and availability of resources. Topics include valuation, appraisal and capital budgeting, cost minimization, depreciation and economics worth, rates and rate bases, original and reproduction costs, and engineering economics.

MET 526 (2) Logistics & Transportation

Fundamentals of Logistics: control of materials, WIP, finished goods; costs of logistics. Theory and step-by-step procedures used to analyze logistic systems, packaging and transportation, including global logistics.

MET 527 (3) Quality Management Systems

Organization, methodology, and responsibilities of quality assurance programs, primarily in manufacturing industries. Statistical analysis of quality current topics of quality.

MET 592 (1-3) Seminar: Manufacturing

Selected manufacturing topics.

MET 600 (2) Manufacturing Research Methods

Research topics and methods related to manufacturing. The course will look at the current state of manufacturing and explore the research methods and experimental design procedures that are used in the area of manufacturing. Students will evaluate past research and will also design a research project in manufacturing.

MET 645 (1-3) CAD Applications

An advanced graphics course which emphasizes the study of AutoCad® software, related software, and their applications. Emphasis is on CAD systems, software customizing, and a review of current trends in CAD as used in contemporary industry.

MET 677 (1-4) Individual Study**MET 678 (2) Manufacturing Processes**

A study of modern manufacturing processes. The recent developments in manufacturing affect everyone in the factory, from the designers and manufacturing engines to the machine operators. New technologies, automation, the use of the computers in design, process control, and inspection create complex industrial or plant environment.

MET 692 (1-3) Seminar: Manufacturing

Selected manufacturing topics.

MET 694 (1-2) Alternate Plan Paper**MET 697 (1-5) Internship: Industrial**

Manufacturing work experience in an area pertinent to the student's objective. Registration required prior to beginning employment.

MET 699 (2-4) Thesis

MATHEMATICS MA

MATHEMATICS: COMPUTER SCIENCE MS

MATHEMATICS MS

MATHEMATICS EDUCATION MS

(DISCIPLINE-BASED)

*College of Science, Engineering, & Technology
Department of Mathematics and Statistics
273 Wissink Hall • 507-389-1453*

Chair: Larry Pearson, Ph.D.
Graduate Coordinators: Dan Singer, Ph.D.
Mathematics Education: Kil S. Lee, Ed. D.

Ernest Boyd, Ph.D.; Maureen H. Fenrick, Ph.D.; Francis T. Hannick, Ph.D.; Mary Ann Lee, Ph.D.; Namyong Lee, Ph.D.; R. Bruce Mericle, Ph.D.; Larry Pearson, Ph.D.; Mezbahur Rahman, Ph.D.; Gary Rockswold, Ph.D.; Dan Singer, Ph.D.; Chia-Chi Tung, Ph.D.; Charles Waters, Ph.D.; Mary Wiest, Ph.D.; Mark Zuiker, Ph.D.

The Department of Mathematics and Statistics offers five programs leading to a master's degree in Mathematics and Statistics. The Master of Arts programs allow students to study pure mathematics or mathematics for community college teaching. The Master of Science programs allow students to specialize in secondary teaching, statistics or math and computer science.

Fourteen graduate faculty support the graduate programs. Faculty specialties include category theory, differential equations, geometry, group theory, matrix theory, mathematics education, modeling, numerical analysis, real and complex analysis, ring theory, statistics, applied statistics and topology.

The graduate programs are small enough to allow one-on-one interaction between faculty and students. Class sizes are small.

Graduates of the program have found employment in a variety of fields, including software engineering, graphic design, insurance, community college teaching, secondary mathematics teaching and as statisticians. Others have gone on to obtain a Ph.D. in mathematics.

Admission. In addition to completing the general admission requirement for the College of Graduate Studies and Research, applicants with grade point averages below 2.75 may qualify by presenting GRE verbal, quantitative and analytical scores of 500 on any one part or a minimum composite of 1350.

Facilities. The Department of Mathematics and Statistics is housed in Wissink Hall. This building is also home to the Academic Computing Center which houses over 400 up-to-date workstations on both PC and Macintosh platforms, and a computer-equipped classroom designed for the teaching of mathematics and statistic. The classroom computers are equipped with mathematical and statistical software including Mathematica, Matlab, SPSS, Geometer's Sketchpad, and Minitab. Students also have access to Unix mainframe machines. The internet is easy to access through the campus wide wireless network.

A new addition to the Memorial Library was recently completed. The library has a wide range of mathematical texts and journals. The library also supports MINITEX, a service which provides access to literature not found in the library's collection.

Financial Assistance. Approximately 15 graduate assistantships are available in the department each year. Graduate assistant duties include teaching or research assistantships.

MATHEMATICS MA

(Thesis Plan - 34 credits)
(Alternate Plan Paper - 34 credits)

Required Core Courses (29-31 credits)

Two of the following courses (6-8 credits). The remaining two courses shall be treated as deficiencies if they are not part of the student's academic background.

- MATH 517 Real Analysis I (3)
- MATH 547 Linear Algebra (3)
- MATH 570 Numerical Analysis (4)
- STAT 555 Theory of Statistics I (4) **AND**
- MATH 518 Real Variables II (3)
- MATH 605 Graphs and Algorithms (3)
- MATH 611 Real Analysis (3)
- MATH 620 Applied Mathematics (3)

- MATH 641 Topics in Modern Abstract Algebra (3)
- STAT 653 Linear Models (3)
- MATH 674 Computations in Linear Algebra (2)
- MATH 692 Point Set Topology (3)

Required Elective Courses (0-4 credits)

500/600 level courses that must be approved by the student's advisor.

Required Thesis or Alternate Plan Paper

- MATH 694 Alternate Plan Paper (1)
- MATH 699 Thesis (3)

Additional Requirements:

At least half of the credits applied to the program must be earned in 600 level courses excluding thesis or APP credits. Each student is assigned an initial advisor. After completing 16 credits the student must select a three-member examining committee and form a program of study. A student may choose to write an alternate plan paper or thesis. This program requires a comprehensive exam, and an oral defense of the alternate plan paper or thesis.

COMMUNITY COLLEGE TRACK

Students interested in teaching at the Community College level should see their advisor about identifying methods courses to strengthen their teaching ability. Licensure is not required to teach at the Community College level, but courses in teaching skills are recommended.

Required Core (27-29 credits)

Two of the following four courses (6-8 credits). The remaining two courses shall be treated as deficiencies if they are not part of the student's academic background.

- MATH 517 Real Analysis I (3)
- MATH 547 Linear Algebra (3)
- MATH 570 Numerical Analysis (4)
- STAT 555 Theory of Statistics I (4) **AND**
- MATH 518 Real Variables II (3)
- MATH 611 Real Analysis (3)
- MATH 620 Applied Mathematics (3)
- MATH 641 Topics in Modern Abstract Algebra (3)
- STAT 653 Linear Models (3)
- MATH 692 Point Set Topology (3)

Required Electives (2-6 credits)

500/600 level courses that must be approved by the student's advisor.

Required Thesis or Alternate Plan Paper

- MATH 694 Alternate Plan Paper (1)
- MATH 699 Thesis (3)

Additional Requirements:

At least half of the credits applied to a program must be earned in 600 level courses thesis or APP credits. After completing 16 credits the student must select a three-member examining committee and form a program of study. A student may choose to write an alternate plan paper or thesis. This program requires a comprehensive exam, and an oral defense of the alternate plan paper or thesis.

MATHEMATICS MS

(Thesis Plan - 34 credits)
(Alternate Plan Paper - 34 credits)

STATISTICS OPTION

Required Core (27-29 credits)

Two of the following four courses (6-8 credits). The remaining two courses shall be treated as deficiencies if they are not part of the student's academic background.

- MATH 517 Real Analysis I (3)
- MATH 547 Linear Algebra (3)
- MATH 570 Numerical Analysis (4)
- STAT 555 Theory of Statistics I (4) **AND**
- STAT 550 Regression Analysis (3)
- STAT 551 Experimental Designs (3)
- STAT 556 Theory of Statistics II (4)
- STAT 653 Linear Models (3)
- STAT 680 Topics in Statistics (3)
- STAT 696 Statistical Inference Packages (3)
- MATH 674 Numerical Linear Algebra (2)

Required Electives (2-6 credits)

500/600 level courses that must be approved by the student's advisor.

Required Thesis or Alternate Plan Paper

- MATH 694 Alternate Plan Paper (1)
- MATH 699 Thesis (3)

Additional Requirements:

At least half of the credits applied to a program must be earned in 600 level courses thesis or APP credits. After completing 16 credits the student must select a three-member examining committee and form a program of study. A student may choose to write an alternate plan paper or thesis. This program requires a comprehensive exam, and an oral defense of the alternate plan paper or thesis.

MATHEMATICS: COMPUTER SCIENCE MS

(Thesis Plan - 34 credits)

(Alternate Plan Paper - 34 credits)

Required Core (30-32 credits)

Two of the following four courses (6-8 credits). The remaining two courses shall be treated as deficiencies if they are not part of the student's academic background.

- MATH 517 Real Analysis I (3)
- MATH 547 Linear Algebra (3)
- MATH 570 Numerical Analysis (4)
- STAT 555 Theory of Statistics I (4) **AND**
- MATH 605 Graphs and Algorithms (3)
- MATH 620 Applied Mathematics (3)
- MATH 672 Numerical Solutions of Ordinary Differential Equations (2)
- MATH 674 Numerical Linear Algebra (2)
- COMS 520 Computer Organization II (4)
- COMS 560 Operating Systems (4)
- COMS 610 Algorithm Analysis (3)
- COMS 611 Theory of Computation (3)

Required Electives (0-4 credits)

500/600 level courses that must be approved by the student's advisor.

Required Thesis or Alternate Plan Paper

MATH 694 Alternate Plan Paper (1)

MATH 699 Thesis (3)

Additional Requirements:

At least half of the credits applied to a program must be earned in 600 level courses thesis or APP credits. After completing 16 credits the student must select a three-member examining committee and form a program of study. A student may choose to write an alternate plan paper or thesis. This program requires a comprehensive exam, and an oral defense of the alternate plan paper or thesis.

MATHEMATICS EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 34 credits)

(Alternate Plan Paper - 34 credits)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in a graduate program in teaching mathematics. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program listed in this bulletin.

Required Core (18 credits)

- MATH 517 Real Analysis I (3)
- MATH 641 Topics in Modern Abstract Algebra (3)
- MATH 661 Mathematical Problem Solving and Modeling for Teachers (3)
- MATH 662 Algebraic Structures in School Mathematics (3)
- MATH 663 Geometric Structures in School Mathematics (3)
- MATH 690 Research in Mathematics Education (3)

Required Professional Education Courses (6 credits)

Any 500/600 level Professional Education courses that must be approved by the student's advisor.

Required Electives (7-9 credits)

Any 500/600 level courses must be approved by student's advisor in order to fill the total required hours

Required Thesis or Alternate Plan Paper

MATH 694 Alternate Plan Paper (1)

MATH 699 Thesis (3)

Additional Requirements:

At least half of the credits applied to a program must be earned in 600 level courses thesis or APP credits. After completing 16 credits the student must select a three-member examining committee and form a program of study. A student may choose to write an alternate plan paper or thesis. This program requires a comprehensive exam, and an oral defense of the alternate plan paper or thesis.

COURSE DESCRIPTIONS

MATHEMATICS

MATH 511 (4) Introduction to Complex Variables

Algebra and geometry of complex numbers, analytic functions, power series, Cauchy's theorem and residue theorem.

Prerequisite: MATH 223 and 290

MATH 517 (3) Real Analysis I

Limits and continuity, sequences and series, differentiation and integration.

Prerequisite: MATH 223 and 290

MATH 518 (3) Real Analysis II

Topology of Euclidean spaces, continuous functions, sequences of functions, and differentiable mappings.

Prerequisite: MATH 417

MATH 522 (4) Partial Differential Equations

This course presents the theory, computations, and applications of partial differential equations and Fourier series.

Prerequisite: MATH 223 and 321

MATH 525 (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.

Prerequisite: MATH 223 and 247

MATH 535 (4) Modern Geometry

Geometry of spaces including Euclidean and non-Euclidean and applications of contemporary geometry.

Prerequisite: MATH 332 or Con

MATH 542 (4) Theory of Numbers

Euclidean algorithm, primes, composites, number theoretic functions, congruences, Diophantine equations, Euler and Fermat theorems, and algebraic number fields.

Prerequisite: MATH 345

MATH 546 (4) Abstract Algebra II

A continuation of MATH 345. The course will include topics from groups, rings, and fields.

Prerequisite: MATH 345

MATH 547 (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.

Prerequisite: MATH 345 or Con

MATH 555 (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 555

Prerequisite: MATH 223

MATH 556 (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 non-parametric methods. Same as STAT 556.

Prerequisite: MATH/STAT 555

MATH 570 (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.

Prerequisite: MATH 122, 247, and FORTRAN

MATH 571 (4) Numerical Analysis II

This course is a continuation of MATH 470. Topics included are the algebraic eigenvalue problem, least-squares approximation, solutions of systems of nonlinear equations, and numerical solutions of ordinary differential equations.

Prerequisite: MATH 470 and 223

MATH 580 (3) History of Mathematics

The development of selected topics from before the Hellenistic time period to the late twentieth century. Familiarity with the content of HIST 180 is beneficial.

Prerequisite: MATH 345

MATH 583 (3) Viewpoint of 5-8 School Mathematics

MATH 584 (3) Technology in 5-12 School Mathematics

This course is designed to inform secondary mathematics teachers about effective utilization of technology in the mathematics curriculum.

Prerequisite: MATH 345 and CI 447

MATH 588 (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 590 (1-4) Workshop

A short course devoted to a specific mathematical topic. May be repeated for credit on each new topic.

MATH 591 (1-4) In-Service

A course designed to upgrade the qualifications of persons on-the-job. May be repeated on each new topic.

MATH 595 (1-4) Selected Topics

A course in an area of mathematics not regularly offered. May be repeated on each new topic.

MATH 596 (3) Mathematical Logic

Propositional logic, first and second order logic, completeness, consistency, models of theories, and Godel's Incompleteness theorem.

Prerequisite: MATH 345 and PHIL 411

MATH 598 (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 605 (3) Graphs and Algorithms

Mathematical concepts of graph theory applied to problems that have algorithmic solutions.

Prerequisite: MATH 417, 375, and 447

MATH 606 (3) Topics in Discrete Mathematics

Can be used for any graduate level discrete mathematics course not offered as a regular course. Distinct offerings may be repeated for credit.

Prerequisite: MATH 375 and 447

MATH 608 (1-4) Seminar in Elementary Mathematics

An opportunity for a group of elementary teachers to study a mutual problem in mathematics.

MATH 611 (3) Real Analysis

Measure theory, integration, metric spaces, and Banach spaces.

Prerequisite: MATH 417

MATH 613 (3) Topics in Analysis

Can be used for any graduate level analysis course not offered as a regular course. Distinct offerings may be repeated for credit.

Prerequisite: MATH 417, or Con

MATH 618 (3) Functional Analysis

An introduction to the basic concepts and principles of functional analysis. Normed spaces, Banach spaces, Hilbert spaces, and approximation theory are studied.

Prerequisite: MATH 417 and 447

MATH 620 (3) Applied Mathematics

Applications of discrete and continuous mathematics to deterministic problems in the natural sciences, computer science, engineering, and economics. Applied problems will be developed within the mathematical framework of dimensional analysis, asymptotic analysis, perturbation theory, stability, and bifurcation.

Prerequisite: MATH 321, 417, and 447

MATH 621 (3) Topics in Applied Mathematics

Can be used for any graduate level applied mathematics course not offered as a regular course. Distinct offerings may be repeated for credit.

Prerequisite: MATH 417, 422, and 447

MATH 625 (3) Complex Variables

The theory of functions of one complex variable. Complex numbers, contour integration, analytic functions, residues, and power series.

Prerequisite: MATH 417

MATH 635 (3) Topics in Geometry

This course presents selected topics in projective, transformational, and differential geometry.

Prerequisite: Con

MATH 641 (3) Topics in Modern Abstract Algebra

A rigorous excursion through some of the topics of abstract algebra, which are essential components of the background of a masters level graduate student.

Prerequisite: MATH 345

MATH 645 (3) Topics in Algebra

This course will cover advanced topics such as (but not limited to) free abelian groups, group rings, noetherian/generalized noetherian rings, coherent/generalized coherent rings, homological algebra, homological dimension theory, representation theory of finite fields, galois theory of equations, field theory, valuation theory, and semigroups.

Prerequisite: MATH 641 or equivalent

MATH 661 (3) Mathematical Problem Solving & Modeling for Teachers

Heuristics in mathematical problem solving and mathematical modeling for teachers.

MATH 662 (3) Algebraic Structures in School Mathematics

Algebraic concepts and procedures interpreted and related from the perspectives of abstract algebra, cognitive research on the learning of algebra, and professional curriculum and instruction programs.

Prerequisite: MATH 345, or Con

MATH 663 (3) Geometric Structures in School Mathematics

The Van Hiele model of the development of geometric thought and recent developments of geometric theory and applications which are related to the school mathematics curriculum.

Prerequisite: MATH 332

MATH 672 (2) Numerical Solutions to Differential Equations

This course is an in-depth study of solving ordinary differential equations numerically. Both Runge-Kutta methods and general multi-step methods are discussed. Error control and step size changing for both stiff and nonstiff equations are analyzed.

Prerequisite: MATH 315 and 470

MATH 674 (2) Computations in Linear Algebra

This course will be an in-depth study of solving linear systems both directly and iteratively and solving the algebraic eigenvalue problem. Applications may also be included.

Prerequisite: MATH 447 and 470

MATH 677 (1-4) Individual Study

Independent individual study under the guidance and direction of a graduate faculty member.

Prerequisite: con

MATH 680 (1-4) Topics in Mathematics

A graduate course in an area of mathematics not regularly offered. May be repeated for credit on each new topic

Prerequisite: will vary with topic

MATH 689 (1-3) Readings in Mathematics

Independent readings in mathematics under the direction of a graduate faculty member.

Prerequisite: con

MATH 690 (3) Research in Mathematics Education

Examination of cognitive theories guiding research in mathematics education; analysis and interpretation of research procedures applied in experimental, qualitative, program evaluation, survey, meta-analysis, theory-generating, and action research studies in mathematics education.

Prerequisite: STAT 550 or 551 or con

MATH 691 (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 692 (3) Point-Set Topology

Topological spaces, continuity, product spaces, connectedness, separation, compactness, and metric spaces

Prerequisite: MATH 417

MATH 693 (3) Topics in Topology

Will cover topics at the discretion of the instructor, such as, but not limited to, those in the following list: algebraic topology, homotopy theory, homology theory, differential topology, topological groups, topological vector spaces, categorical topology, catastrophe theory, lie Groups, algebras of continuous functions, and uniform structures.

Prerequisite: MATH 692

MATH 694 (1) Alternate Plan Paper

Research under the supervision of the student's advisor leading to an alternate plan paper.

Prerequisite: con of advisor

MATH 695 (1-4) Workshop

A short course devoted to a specific mathematical topic. May be repeated for credit on each new topic.

MODERN LANGUAGES

MATH 698 (1-12) Internship

Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

Prerequisite: con

MATH 699 (1-4) Thesis

Research under the supervision of the student's advisor leading to a thesis.

Prerequisite: con of advisor

STATISTICS

STAT 550 (3) Regression Analysis

Simple and multiple regression, correlation, analysis of variance and covariance.

Prerequisite: MATH/STAT 354 or 455 or con

STAT 551 (3) Experimental Designs

Completely randomized, randomized block, fractional factorial, incomplete block, split-plot, Latin squares, expected mean squares, response surfaces, confounding, fixed effects, and random effects models.

Prerequisite: MATH/STAT 354 or 455 or con

STAT 555 (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 555.

Prerequisite: MATH 223

STAT 556 (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 556.

Prerequisite: MATH/STAT 455

STAT 588 (1-3) Seminar

The study of a particular topic primarily based upon recent literature. May be repeated for credit on each new topic.

STAT 591 (1-4) In-Service

STAT 598 (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 653 (3) Linear Models

Matrix theory, multivariate normal distribution of quadratic forms, estimation and hypothesis testing in the general linear model, and applications of linear models.

Prerequisite: MATH/STAT 455 or con

STAT 677 (1-4) Individual Study

Independent individual study under the guidance and direction of a graduate faculty member.

Prerequisite: con

STAT 680 (1-4) Selected Topics

A graduate course in a particular area of statistics not regularly offered. May be repeated for credit on each new topic.

Prerequisite: will vary with topic

STAT 694 (1) Alternate Plan Paper

Research under the supervision of the student's advisor leading to an alternate plan paper.

Prerequisite: con of advisor

STAT 696 (4) Statistical Inference Packages

Statistical package programs used in data collection, transformation, organization, summarization, interpretation and reporting, statistical description and hypothesis testing with statistical inference, interpreting outputs, chi-square, correlation, regression, analysis of variance, nonparametrics, and other designs, accessing and using large files (U.S. Census data, National Health Survey, etc.) Same as COMS 696

Prerequisite: one statistics course

STAT 698 (1-12) Internship

Provides a student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

Prerequisite: con

STAT 699 (1-4) Thesis

Research under the supervision of the student's advisor leading to a thesis. Prerequisite: con of advisor

MODERN LANGUAGES

College of Arts and Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Web site: www.mnsu.edu/dept/modernlangWelcome.html

Chair: Kimberly Contag

The Department of Modern Languages offers courses to prepare current and future educators pursuing the MAT in second language teaching K-12. These courses are major components of licensure in Spanish, French, German, and TESL. See degree requirements for KSP.

COURSE DESCRIPTION

MODL 560 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL scale in target language. For information contact the department.

MODL 561 (1) Applied Modern Language Teaching Methods

A field experience in a secondary school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

MODL 562 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL scale in target language. For information contact the department.

MODL 563 (1) Applied FLES Methods

A field experience in an elementary setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462.

MODL 565 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.

MODL 570 (4) Theory and Methods in TESL I

Introduction to theories of second language acquisition in children, description of program models for second language literacy and academic success. Discusses oral language development, literacy, content-based instruction, testing, and placement of LEP children.

MODL 571 (4) Theory and Methods in TESL II

Introduction to theories of second language acquisition and language processing in adults. Topics include the skills of listening, speaking, reading, writing, and vocabulary use for university student and adult education. Consideration of individual and sociocultural factors in language learning.

MODL 575 (1-4) Topics in TESL

Topics in learning and teaching English as a Second/Foreign Language. May be repeated for credit.

MODL 662 (1-4) Special Topics in TESL

Advanced seminar topics in learning and teaching ESL/EFL. May be repeated for credit.

MODL 672 (1) Teaching English as a Second Language Practicum

MODL 677 (1-4) Individual Study

Special topics in language education. May be repeated for credit.

MODL 694 (1-2) Alternate Plan Paper

Research and writing for the alternate plan paper.

MODL 697 (4-6) Internship: Community College Teaching

Classroom experience in post-secondary teaching.

MULTIDISCIPLINARY STUDIES MS

College of Graduate Studies and Research
Multidisciplinary Studies Program

125 Wigley Administration Center • 507-389-2321

Graduate Coordinator: Chris Mickle, MA

The Multidisciplinary Studies program is designed specifically for the highly motivated, self-directed student whose personal, educational or career goals require a program which has a high degree of individual discretion in design. Multidisciplinary Studies programs offer a flexible format that allows for interdisciplinary coursework across the university curriculum. Students take coursework in 3 separate disciplines. A 30 credit thesis or 34 credit alternate paper plan option is available.

Admission. Successful applicants must complete an application to the College of Graduate Studies and Research, have a baccalaureate degree from a regionally accredited college or university with at least a 3.0 grade point average for the last two years, and complete an application to the Multidisciplinary Studies program which includes a tentative plan of study and a statement of career goals and objectives. Upon receipt of all undergraduate and graduate transcripts verifying degree and GPA, the student's file is reviewed by a three-member graduate faculty committee. Students must complete a plan of study before completing 12 credits. A general transcript evaluation is required for all international transcripts. The department often requires at least 30 days to make an admission recommendation upon receipt of all required materials by the College of Graduate Studies and Research.

MULTIDISCIPLINARY STUDIES MS

(Thesis - 30 credits)

(Alternate Plan Paper - 34 credits)

INDIVIDUALIZED OPTION

Required: Concentrations in 3 Academic Disciplines (24-34 credits)

Select Courses in Academic Discipline 1 (8-12 credits)

Select Courses in Academic Discipline 2 (8-12 credits)

Select Courses in Academic Discipline 3 (8-12 credits)

At least one-half of the coursework must be completed at the 600 level (exclusive of thesis or alternate plan paper credits), and the program cannot include more than 6 independent study credits. At least one 600-level course is required in each discipline.

Required Research Course (3 credits)

Required Thesis or Alternate Plan Paper (1-6 credits)

Alternate Plan Paper (1-2 credits)

Thesis (3-6 credits)

MUSIC MM

MUSIC EDUCATION MM

(DISCIPLINE-BASED)

College of Arts & Humanities

Department of Music

202 Performing Arts Center • 507-389-2118

Chair: John Lindberg, Ph.D.

Graduate Coordinator: David Dickau, DMA

Gerard Aloisio, DMA; Stephen Bomgardner, DMA; Karen Boubel, Ph.D.; David Dickau, DMA; Linda Duckett, D.Mus.; Harry Dunscombe, DMA; Diana Moxness, DMA; Paul Moxness, DMA; Amy K. Roisum Foley, MM; Stewart Ross, Ph.D.; Doug Snapp, DMA; David Viscoli, DMA

Music graduate studies at Minnesota State University lead to the Master of Music degree. The Master of Music degree is a professional degree, most appropriate for students who desire to increase their knowledge as public school teachers, to teach at the college level, or to work toward their doctorate. It is also a degree useful for those who perform professionally, compose, or conduct.

Master of Music. The Master of Music is offered in two areas of concentration: Performance (instrumental, keyboard, or voice) and music education. A student may pursue a secondary emphasis in any of the above areas or in music history/theory.

In addition to meeting the general admission requirements of the College of Graduate Studies and Research, all prospective graduate students in music are expected

to have the equivalent of an undergraduate degree with a music major from an accredited institution. Competency based music tests must be passed before a Plan of Study can be approved. Written and oral comprehensive examinations are required for graduation. The student may present as his/her independent study project a Master's recital or a thesis, depending on area of specialization. The Thesis Plan requires 30 credits which allows up to 3 credits outside of music. The Alternate Plan Paper requires 30 credits and two starred papers in place of the Thesis.

Music 600 is required for all majors and should be completed early in the program. Students planning to major in performance must audition before the appropriate music faculty prior to entrance into the program; performance majors should be full-time students. Specific information regarding entrance tests as well as outlines of the requirements for both programs may be found in the graduate music handbook available from the Department of Music. Graduate assistantships are available which provide a stipend and a tuition waiver. To apply for a music assistantship, students should contact Dr. David Dickau, graduate music coordinator.

MUSIC MM

(All options - 30 credits)

Choose one of the following Options:

Keyboard (30 credits)

MUS 600	Introduction to Graduate Music Study (3)
MUS 601/611	Vocal/Instrumental Practicum (2)
MUS 662	Private Keyboard (12)
MUS 680	Keyboard Literature (3)
MUS 681	Applied Music Pedagogy (2)
MUS 699	Recital (2)
MUS	Music History (3)
MUS	Music Theory (3)

Voice (31 credits)

MUS 580	Diction for Singers (2)
MUS 600	Introduction to Graduate Music Study (2)
MUS 609	Vocal Practicum (2)
MUS 652	Private Voice (12)
MUS 681	Vocal Literature (2)
MSU 681	Applied Music Pedagogy (2)
MUS 699	Recital (2)
MUS	Music History (3)
MUS	Music Theory (3)

Language: Must take at undergraduate level if necessary; credits do not count for degree

Instrument (30 credits)

MUS 600	Introduction to Graduate Music (3)
MUS 610	Instrumental Practicum (2)
MUS 672	Private Instrument (Major Instrument) (12)
MUS 680	Instrumental Literature (3)
MUS 681	Applied Music Pedagogy (2)
MUS 699	Recital (2)
MUS	Music History (3)
MUS	Music Theory (3)

MUSIC EDUCATION MM

(DISCIPLINE-BASED)

Teaching licensure is a prerequisite to pursuing this degree which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. An emphasis in Music is available. Please see the section concerning the MAT program that is listed in this bulletin.

Required Core (15 credits)

MUS 600	Introduction to Graduate Music (3)
MUS 604	Survey of Music Research (3)
MUS 642	Topics in Music Education (3)
MUS 699	Thesis (3)
EDFN	(Course in College of Education) (3)

***Related Courses (9 credits)** (must include at least one course in theory and one in history)

General Courses (6 credits)

These may be in related fields in any college of university and must be approved by the graduate coordinator.

MUSIC

Alternate Plan

The alternate plan requires 34 credits of coursework. The thesis is replaced with two starred papers (see the graduate music coordinator for explanation), each of which is based on further research in courses taken. The following credits are required:

Required Core: (34 credits)

EDFN 600, 604, 642 (no thesis) 12
Related Music Courses 16
Electives 6

COURSE DESCRIPTIONS

MUS 519 (3) Advanced Score Reading and Conducting

Conducting and score reading skills for the advanced instrumental conductor.

MUS 522 (3) Music of the Renaissance

A survey of important music literature of the 14th through the 16th century with emphasis upon the cultural, economical and philosophical forces which shaped the musical trends and influenced the composer and his compositions.

MUS 523 (3) Music of the Baroque Era

A study of the composers and their literature which represented the changing styles as dictated by the musical tastes of the period. Special attention is given the evolution and/or development of the major musical forms and genres.

MUS 524 (3) Music of the Classic Period

A study in detail of the development of musical forms and style of the 18th century, the important composers of this period, the society in which they lived and how it affected their lives and works.

MUS 525 (3) Music of the 19th Century

A study of the dominant and varied musical energies of the 19th century as seen through the study of scores and the music of its composers.

MUS 526 (3) Music of the Modern Era

This course presents the major composers of the 20th century and representative musical compositions. Beginning with Mahler and Debussy, other composers include Stravinsky, Bartok, Schoenberg, Berg, Copland, Crumb, and Messiaen. Included are reading and writing assignments; students should plan to spend part of each week listening to assigned materials in the music library.

MUS 527 (3) Music Theatre

This team-taught course will acquaint students with the problems of presenting musical drama. Course content will include preparation and presentation of musical scenes. Several aspects of musical theatre will be discussed, including history, directing, acting, conducting, singing, and producing.

MUS 532 (3) Contemporary Theory

A study of 20th century compositional practices through the analysis of representative works of Stravinsky, Bartok, Schoenberg, Penderecki, and others. Some writing exemplifying specific techniques.

MUS 533 (3) Contrapuntal Techniques

Writing and analysis stressing the linear approach to composition, motivic development, and the imitation process. The invention, Fugue, and Chorale Prelude are examined.

MUS 534 (3) Form and Analysis

An examination of principles and patterns of musical design in representative works, principally from the Baroque, Classic and Romantic composers. The acquisition of analytical techniques which can be broadly applied.

MUS 535 (3) Arranging & Orchestration

Arranging music for the school band and orchestra.

MUS 541 (2) Music in Early Childhood

This course is designed to answer some of the questions concerning how young children learn music and how music can become a foundation for learning in all curricular areas. Prominent learning theories, child growth and development characteristics and effects of home/school environment will be discussed in relation to music experiences. Musical methodologies and materials will be encouraged.

MUS 542 (2) Music for Special Education

This course is designed for both the Special Education and Music Education major in that it addresses the uses of music in the education of the special learner. It will look into the area of Special Music Education both through the skills and competencies defined in a music curriculum (Music Education) and the particular needs of specific disability groups (Music Therapy). Observation in schools and residential settings plus actual field experiences are anticipated.

MUS 550 (3) Music Merchandising

The core course for music merchandising majors. It includes presentations about the music business with guest lectures by area business people in the music industry.

MUS 555 (2) Diction for Singers

Application of the International Phonetic Alphabet to song texts in English, French, Italian, and German.

MUS 556 (1) Diction for Singers II

A continuation of Diction for Singers I.

MUS 559 (2) The Art Song

This course deals with the art song as distinguished from the native song. It deals with song from the point of literary value and musical substance, and it seeks to give an overview of the art song from the Middle Ages to the present day, with emphasis given to works of the 19th and 20th centuries.

MUS 561 (1) Piano Pedagogy

MUS 579 (2) Instrument Repair and Maintenance

Through a series of laboratory projects and lecture/demonstration, the course is designed to train students in the expertise of performing minor repairs to all band instruments as well to be knowledgeable in the aspects of preventive maintenance.

MUS 581 (3) Advanced MIDI Production

MUS 585 (1-4) Selected Topics

Special courses taught periodically on subject areas not otherwise covered by existing graduate courses.

MUS 594 (1-6) Workshop

Special short course, usually available during summer sessions I and II.

MUS 597 (1-16) Internship

MUS 600 (3) Introduction to Graduate Music Study

The study of library sources and research procedures involved in locating music literature and materials for use in performance, teaching and/or advanced graduated studies.

MUS 601 (1-2) Practicum in Ensemble Practicum (Vocal)

Participation in choral and vocal ensembles.

MUS 611 (1-2) Practicum in Ensemble Practicum (Instrumental)

This course is for any graduate music student who performs with a regularly scheduled ensemble.

MUS 619 (3) Advanced Conducting

A course designed for school music directors that continues the development of both analytical and physical conducting skills.

MUS 630 (1-6) Individual Study

Independent work by graduate students comes under this course number. The student must first secure permission from the instructor desired for the individual study.

MUS 631 (1-3) Composition

Private lessons in music composition.

MUS 641 (3) Survey of Research in Music Education

An overview of current research practices and techniques. Potential research areas are investigated and developed.

MUS 642 (3) Topics in Music Education

An investigation of the current topics of concern to the music educator. Individual student reports on current trends and problems in music education. The course includes issues in music administration.

MUS 651 (1-3) Private Voice

Individual lessons: two credits for half hour lesson each week and four credits for one hour lesson each week.

MUS 661 (1-3) Private Piano

MUS 662 (1-3) Private Harpsichord

MUS 676 (1-4) Instrumental Literature

MUS 677 (1-2) Applied Music Pedagogy

MUS 678 (1-3) Private Instrument

Individual lessons: two credits for half hour lesson each week and four credits for one hour lesson each week.

MUS 694 (1-2) Alternate Plan Paper Research

MUS 698 (1-8) Internship

This course is available for students who are interested in assisting faculty in teaching and other academic pursuits. Permission of a faculty member is required before registering for this course.

MUS 699 (3-6) Thesis

Music students who write a thesis for their terminal project can register for this course. A faculty advisor must be selected before approval will be given.

NURSING MSN

College of Allied Health & Nursing

School of Nursing

360 Wissink Hall • 507-389-6826

or 800-627-3529 (MRS/TTY)

Fax: 507-389-6516

www.mnsu.edu/dept/nursing/welcome.html

Kaye Herth, Ph.D., FAAN, RN; Texas Woman's University – Houston, Dean, College Allied Health & Nursing

Carol Larson, PhD, RN, Associate Professor; Texas Woman's University - Denton, Associate Dean, School of Nursing

Sonja Meiers, Ph.D., RN, Associate Professor; U. of Minnesota; Director, MSN Program

Mary Bliesmer, DNSc, RN, Professor; Rush University – Chicago

Patricia Earle, Ph.D., RN, Associate Professor; University of Minnesota

Sandra Eggenberger, MS, RN, Associate Professor; University of California – San Francisco

Marilyn Kosmala, Ph.D., RN, Associate Professor; University of Illinois – Chicago

Norma Krumwiede, Ed.D., RN, Associate Professor; University of South Dakota

Nancy McLoone, MS, CPNP, RN, Assistant Professor; U of Minnesota, College of St. Catherine – St. Paul

Linda Rosenbaum, Ph.D., CNS*, RN, Associate Professor, University of Pennsylvania

Regina Smith, MSN, CS, RN, Assistant Professor, University of Florida – Gainesville

Marcia Stevens, DNSc, RN, Professor, University of California – San Francisco

Karen Willette-Murphy, Ph.D., RN, Associate Professor, University of Nebraska – Omaha

Diane Witt, MA, CNP, RN, Assistant Professor, College of St. Catherine – St. Paul

Patricia Young, Ph.D., RN, Associate Professor, University of Wisconsin – Madison Clinical Nurse Specialist

Minnesota State University, Mankato (MSU) offers a 47 semester credit graduate program designed to prepare professional nurses for advanced practice leading to a Master of Science in Nursing (MSN) degree. The program emphasizes Family Nursing with curricula options for the advanced practice nursing roles of Clinical Nurse Specialist (CNS) and Family Nurse Practitioner (FNP). Students choosing the CNS role option may elect to incorporate clinical teaching experiences with the clinical coursework. A post master's FNP curriculum is also available. The School of Nursing works collaboratively with several Minnesota initiatives.

The MSN program is designed to 1) provide advanced nursing education that is accessible and flexible; 2) respond to the ever changing health care needs of individuals, families, and populations across the continuum of life; 3) contribute to advancement of nursing practice and the discipline of nursing; and 4) collaborate for expanded clinical practice and research partnerships between education and service settings.

Admission. The potential applicant requests an application packet from the secretary for the MSN Program. Completed applications are due in to the MSN Program by January 15. Applicants submit materials simultaneously to both the College of Graduate Studies and Research (CGS&R) and to the School of Nursing (SON).

To the CGS&R:

1. Completed application form to Minnesota State University, Mankato.
2. Application fee (fee applies to MSU students, graduates, faculty and staff).
3. Verification of baccalaureate degree from an accredited college or university (official transcript).
4. Verification of Graduate Record Examination (GRE) scores is required for applicants with cumulative GPA less than 3.0.
5. Information required of international students, if appropriate.

To the SON:

1. completed MSN Program, SON application form
2. copy of current registration of RN licensure
3. verification of references requested

Completed applications are reviewed by the MSN Program Admission Committee using the following criteria:

1. BS/BA degree from an NLNAC/CCNE accredited school of nursing preferred (as verified by official transcripts). Baccalaureate degree in another field is acceptable with equivalency demonstrated in leadership/management, research, and public health nursing theory and clinical
2. Current RN licensure in at least one state with eligibility for licensure in Minnesota;
3. Cumulative grade point average of 3.0 or greater on a 4.0 scale. If GPA is less than 3.0, GRE is required with a minimum score of 450 in each of the three areas on the GRE, taken within last five years;
4. Minimum of two years of nursing practice experience as an RN;
5. Submission of a completed MSN Program Application, including goal statement and professional history/activities (addressing all categories as requested on the form);
6. References from three persons, including current employer, and two other persons of the applicant's choice (three reference forms are included in the MSN Program Application Packet);
7. Validation of computer competence (or plan to accomplish prior to enrollment).

Applicants are notified by March 15 of application outcome. An interview may be required.

Curriculum. The MSN curriculum is designed to build upon and extend the body of knowledge and competencies of baccalaureate education in nursing. The overall purpose of the master's program is to provide high quality graduate education for advanced practice nursing. The curriculum focuses on the systematic integration of knowledge, theory, and skills for advanced practice nursing with families and for leadership in health care systems and the nursing profession.

Outcomes. Upon completion of the program, students will be able to:

1. Synthesize theories and concepts from nursing and other disciplines for application in advanced practice nursing.
2. Use a process of scholarly inquiry in advanced practice nursing.
3. Apply the principles of ethical decision making in advanced practice nursing.
4. Demonstrate competence in advanced practice nursing with selected community-based client populations.
5. Assume responsibility for contributing to improvement of the delivery of health care and influencing health policy.
6. Provide leadership for ongoing development of the nursing profession.

Curriculum Components. The Master of Science in Nursing Program includes four required components:

1. Nursing science core courses;
2. Family nursing theory courses;
3. Advance practice (CNS or FNP) clinical courses;
4. A culminating experience thesis.

The curriculum reflects collaboration with other master's programs in nursing in Minnesota. Students access courses and learning experiences using a variety of distance education strategies including synchronous interactive television (ITV) and asynchronous on-line web based courses. Students select specific clinical populations and create various combinations of advanced practice role focused learning experiences.

Progression. All students must complete the program within six years of taking the first course which they apply to their graduate degree program. Students may progress either full time (9-11 credits per semester) or part time (4-10 credits per semester). Full time students may complete the CNS or FNP options in four semesters and one or two summers. The part time plan includes a minimum of six semesters and one or two summer session.

Accreditation. Core courses are open to nondegree seeking students on a space available basis by permission of the professor and the director of the graduate program. Interested students apply for nondegree status through the College of Graduate Studies and Research.

For further information about accreditation, contact: NLNAC, 61 Broadway, New York, NY, 212-363-5555, Web site: www.nlnac.org

Financial Assistance. Minnesota State University, Mankato offers numerous sources of financial assistance. Graduate assistantships provide part-time, academically-related employment to eligible graduate students. These carry stipends up to \$8,000, with maximum of nine credits per semester of resident graduate tuition, and resident rates for nonresident students. Federal Nurse Education Traineeships are available to students who commit to completing at least 6 credits each semester of the academic year. The award amount is determined by the amount of funding received annually. Other funding is available through national, state and local public and private sources.

NURSING

Transfer Credit

A maximum of ten semester hours of graduate credit, all of which must be related to the program (with a grade of "B" or better), may be transferred from other appropriately accredited colleges or universities. With adequate pre-planning, a maximum of 16 semester hours of appropriate graduate credit may be transferred from other Minnesota State Universities (Bemidji, Metropolitan, Moorhead, Southwest, St. Cloud, Winona) and applied to a program at MSU.

NURSING, MSN

(Thesis - 47 credits)

Nursing Science

Core Courses (19 credits)

- NURS 552 Advanced Health Assessment (1 credit theory; 2 credits lab practicum) (3)
NURS 553 Advanced Pharmacology (3)
NURS 554 Advanced Pathophysiology (3)
NURS 601 Nursing Science: Theoretical Basis for Nursing Practice (2)
NURS 602 Ethical Dimensions in Advanced Nursing Practice (2)
NURS 603 Advanced Nursing Roles (2)
NURS 604 Advanced Nursing Research* (2)
NURS 605 Health Policy and Nursing (2)

*Prerequisite: 300/400 level undergraduate statistics or graduate statistics course.

Family Nursing Theory Courses (9 credits)

- NURS 640 Family Nursing Theory (1)
NURS 641 Family Nursing I: Adult Health Primary Care (2)
NURS 642 Family Nursing II: Child & Adolescent Health (2)
NURS 643 Family Nursing III: Reproductive Family Health (2)
NURS 644 Family Nursing IV: Adult Health Promotion (2)

Advanced Practice Clinical Courses

Role Option(s) (15 credits)

Clinical Nurse Specialist

- NURS 645 Advanced Practice: CNS/FNP - Family I* (5)
NURS 648 Advanced Practice: CNS - Family II (5)
NURS 649 Advanced Practice: CNS - Family III (5)

Family Nurse Practitioner

- NURS 645 Advanced Practice: CNS/FNP - Family I* (5)
NURS 646 Advanced Practice: FNP - Family II (5)
NURS 647 Advanced Practice: FNP - Family III (5)

*Prerequisite: All core courses. N553 Advanced Pharmacology may be taken concurrently

Students may select additional electives within nursing or other disciplines to support their program of study.

Culminating Experience: Thesis (4 credits)

(All Students)

- NURS 699 Thesis (4)

The Culminating Experience (4 credits) includes successful defense of a thesis proposal (Preliminary Oral Dialogue with Committee), completion of proposed inquiry, and defense of completed thesis and response to curriculum outcomes (Culminating Final Oral Dialogue with Committee). Students submit findings of their thesis as a formal paper adhering to a specified format. Abstract of completed thesis is submitted for competitive review to the Mu Lambda, Sigma Theta Tau International Fall Research Forum Planning committee. The student's successful completion of the Culminating Experience is a prerequisite for graduation.

In consultation with the chairperson / advisor and examining committee, students develop and obtain approval for a thesis proposal which can contribute to nursing knowledge for use in clinical practice. The project can take a variety of forms including development and/or testing of clinical knowledge, new practice strategies; evaluation of systems of care; development of quality indicators; replication of a study; evidence-based inquiry; and secondary analysis of data bases. All proposals and applications for the conduct of research involving human subjects must be approved prior to data collection.

COURSE DESCRIPTIONS

NURS 552 (3) Advanced Health Assessment

This course offers theoretical and simulated clinical practice to develop advanced skills in health and physical assessment throughout the life span. Students complete

a client data base and identify nursing problems necessary in making clinical judgments and planning and caring for the health care needs of individual clients.

NURS 553 (3) Advanced Pharmacology for Advanced Practice Nursing

Course content begins with legal and ethical considerations for nurse prescribers, proceeds with presentation and analysis of core decision-making processes and advanced practices nurses use to select drugs, and finally explores clinical case management concepts involved in monitoring persons as they use prescribed drugs.

NURS 554 (3) Advanced Pathophysiology

This course provides a foundation in advanced physiology and pathophysiology at the cellular, organic and systemic level. This foundation serves as a basis for clinical assessment and management by advanced practice nurses. Key concepts and integration of function among systems will be emphasized. The impact of psychosocial variables on physiologic function will be explored.

NURS 590 (1-3) Workshop

Workshop(s) with various topics and titles.

NURS 601 (2) Nursing Science: Theoretical Basis for Nursing Practice

Concepts, theories, and models that inform advanced nursing practice are systematically examined and evaluated. Selected theories are analyzed and critiqued utilizing theory formation criteria. Students discuss application of nursing science and conceptual models to clinical area of focus and critically articulate use of theory-based practice in family and/or advanced nursing roles.

Prerequisite or co-requisite: upper division undergraduate Statistics or graduate level Statistics/Biostatistics

NURS 602 (2) Ethical Dimensions in Advanced Nursing Practice

Content includes analysis of several conceptualizations of ethical behavior, examination of the roots of ethical behavior, and evaluation of an ethic of caring in advanced nursing practice. Students explore caring and justice within the nurse-client relationship; and critically examine the antecedents, actions, and outcomes of ethical nursing practice.

NURS 603 (2) Advanced Nursing Roles

This course investigates the professional identification and activities necessary in advanced nursing roles. Theoretical concepts of leadership, management, consultation, clinical investigation, and education will be examined relative to the graduate nurse's responsibility for collaboration and consultation in nursing research, practice, and health policy development.

Prerequisite: core courses or permission of faculty

NURS 604 (2) Advanced Nursing Research

Research approaches, methodologies, and techniques of data analysis are critically addressed. Emphasis is placed on the development of analytic ability, integration of computer skills, and utilization of research in leadership and advanced practice roles. Students develop an individual research proposal concerning a nursing phenomenon within a specialty area. A 300 or 400 level undergraduate or a graduate level statistics course is pre- or co-requisite.

NURS 605 (2) Health Policy & Nursing

The purpose of this course is for students to appreciate the impact of public policy and legislation on health care systems and the leadership role of advanced practice nurses in shaping health policy and legislation supportive of health in the United States of America.

NURS 610 (2) Foundation & Philosophy of Holism & Healing

NURS 611 (2) Integrative Health I: Mind, Body, Spirit

NURS 612 (2) Integrative Health II: Mind, Body, Spirit

NURS 613 (2) Integrative Health Domain: Mind

NURS 614 (2) Integrative Health Domain: Body

NURS 615 (2) Integrative Health Domain: Spirit

NURS 631 (2-5) Advanced Practice: Clinical Teaching

Provides a focus on educational needs of nursing students as well as family clients. Classroom and clinical teaching experiences provide mentored practice in development and application of learning assessments, teaching strategies, and evaluation measures. Prerequisite: core courses, NURS 603, or permission of faculty

NURS 632 (2-5) Advanced Practice: Clinical Management

Students have the opportunity to focus on leadership/management issues and strategies related to clinical practice, as well as cost-effective delivery of client care in today's and tomorrow's health care system. Students will establish a mentor relationship with an experienced nurse manager or administrator.

Prerequisite: one or two leadership/management courses of the student's choice, NURS 603, permission of faculty

NURS 640 (1) Family Nursing Theory

This course applies family theories and transcultural nursing to advanced nursing practice. The family system is the unit of care as well as the context of care for individual family members. Family nursing practice is presented as a partnership with family systems which engage families actively in assessing the family's health and decision-making processes related to family health and health behaviors.

NURS 641 (2) Family Nursing I: Adult Health-Primary Care

In this course students are introduced to the management of acute and selected chronic health problems of adults and older adults across hospital, long-term care, community and home settings. The role of the health care delivery system and issues related to ethics, health policy, health promotion, and research are examined from the perspective of culturally diverse families as clients.

NURS 642 (2) Family Nursing II: Child & Adolescent Health

Theoretical concepts, assessments, and intervention strategies related to health among culturally diverse children and adolescents are critiqued. Health promotion/protection and nursing management of acute and selected chronic health problems of the child and adolescent are addressed.

NURS 643 (2) Family Nursing III: Reproductive Family Health

Theoretical concepts, assessments, and intervention strategies related to women's health are critiqued. Health promotion/protection and management of acute and selected chronic health problems of culturally diverse women are addressed. The role of the health care delivery system and issues related to ethics, health policy, and research are examined from the perspective of culturally diverse women as clients. This course focuses on family nursing practice as a partnership with family systems which engage families actively in assessing the family's health, decision making, processes related to family health and health behaviors and management of the health care needs of women. Prerequisite: NURS 621 and 622

NURS 644 (2) Family Nursing IV: Adult Health Promotion

Theoretical concepts of assessment, health promotion/protection, and holistic nursing are applied to management of acute and chronic health problems of culturally diverse adults, older adults and families. Issues of chemical dependency and family violence are addressed. This course provides a continuation of the management of the acute and selected chronic health problems of adults and older adults across hospital, long-term care, community, and home settings. Students integrate the conceptual complexities of health promotion/protection for adults and families utilizing knowledge from the biological, psychosocial, spiritual, and nursing sciences.

NURS 645 (5) Advanced Practice: CNS/FNP-Family I

This internship focuses on the application of knowledge gained in advanced health assessment, Family Nursing I: Adult Health and Primary Care, and other nursing science core courses in the management of the health care needs and problems of culturally diverse adults, older adults, and their families. Use of assessment skills leads to differential diagnosis and management of common health problems of adults and older adults and use of pharmacologic and other therapeutic interventions. The internship focuses on the beginning development of the family nurse practitioner (FNP) or family clinical specialist (CNS) role.

NURS 646 (5) Advanced Practice: FNP-Family II

A continuation of Advanced Practice: Family Nursing I. The clinical focus is the application of the Nursing Science Core and Family Theory Life Span courses to manage the health care needs of culturally diverse children, adolescents, and women. The clinical focus also includes the use of assessment skills leading to differential diagnoses and management of common health problems of children, adolescents, and women, using nonpharmacologic and pharmacologic interventions.

NURS 647 (5) Advanced Practice: FNP-Family III

A continuation of Advanced Practice: FNP-Family II. The clinical focus is application of Advanced Health Assessment, collaborative care, clinical management, health promotion, and holistic nursing for culturally diverse adults, children, and families. This clinical focus also includes the use of assessment skills leading to differential diagnoses and management of more complex health problems of children, adolescents, and women and men, using non-pharmacologic and pharmacologic interventions.

NURS 648 (5) Advanced Practice: Clinical Nursing Seminar: Family II

This course is the second in a series of three clinical courses which focuses on the development of competencies and outcomes expected of the nurse who selects the clinical nurse specialist option. Students continue to focus on a selected client/family population and expand their focus of care to include other factors which influence the quality and cost-effectiveness of client/family care. While students will focus on the three spheres that influence client/family care (client/family, nursing personnel, and the organization/network), the particular focus in this course is working with nursing personnel who have responsibility for client/family care. The four essential skill areas

(professional attributes, leadership, collaboration, and consultation) will be addressed and experiences in using these skills will be part of the design for advanced family nursing clinical in this course and the succeeding course.

NURS 649 (5) Advanced Practice: CNS Family III

This course is the third in a series of three clinical courses which focuses on the development of competencies and outcomes expected of the nurse who selects the clinical nurse specialist option. Students continue to focus on a selected client/family population and expand their focus of care to many factors which influence the quality and cost-effectiveness of client/family care. While students will focus on the three spheres that influence client/family care (client/family, nursing personnel, and the organization/network), the particular focus in this course is working the organization/network associated with the unit of care. The four essential skill areas (professional attributes, leadership, collaboration, and consultation) continue to be addressed and experienced as part of the design for this final advanced family nursing clinical.

NURS 650 (1) The Reflective Clinician**NURS 651 (2) Health Promotion and Illness Presentation: Nursing**

The course is designed for post-baccalaureate nurses seeking a health promotion-disease prevention emphasis in their nursing practice. Concept of health is explored. Theories and models of disease prevention and health promotion are described, analyzed and applied to research and nursing practice. Elective.

NURS 654 (2) Chronic Illness: Nursing Interventions

This course is designed of post-baccalaureate nurses in all settings who desire advanced nursing care knowledge in order to work with individuals and families with chronic illness. Topics explored are chronic illness, inherent stressors, current research, nursing management, program, organizations, policy, and care delivery issues. Elective.

NURS 677 (1-5) Individual Study

Course provides students with opportunity to investigate a problem or question related to an area of nursing practice. Students work with a nursing faculty advisor in writing the project and preparing to disseminate results of the project. With the advisor's approval, the project is submitted for oral defense as part of the requirements of the MSN degree. NOTE: This option is for students admitted to the MSN program prior to fall 2001.

NURS 699 (1-4) Thesis

Course provides students with the opportunity to focus on a research problem that is related to their area of nursing practice. Students work with a nursing faculty advisor (committee chairperson) in developing the thesis proposal, writing the thesis, and preparing to disseminate the results of the study. With the advisor's approval, the thesis is submitted for oral defense as part of the requirements for the MSN degree.

PHILOSOPHY

College of Arts and Humanities

Department of Philosophy

227 Armstrong Hall • 507-389-2012

Chair: Richard Liebendorfer, Ph.D.

Cathryn Bailey, Ph.D.; John Humphrey, Ph.D.; Richard Liebendorfer, Ph.D.; Craig Matarrese, Ph.D.; Hal Walberg, MA

Philosophy courses at Minnesota State University can be taken to supplement other disciplines. No graduate degree in philosophy is available; however, certain courses may be applicable for elective credit.

COURSE DESCRIPTIONS**PHIL 510 (3) Philosophy of Language**

Theories of meaning, speech acts and semantics, relation of language to the world.

PHIL 537 (3) Contemporary Philosophy

Major philosophers and philosophies of the late 20th Century.

PHIL 540 (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.

PHYSICAL EDUCATION

PHIL 550 (3) Special Topics

Intensive study of a single philosopher or topic.

PHIL 555 (3) Existentialism & Phenomenology

In-depth analysis of major European existentialists such as Kierkegaard, Heidegger, and Sartre.

PHIL 560 (3) Philosophy of the Arts

Aesthetic principles, theories, and the creative process. Theories of visual arts, music, literature, dance, etc.

PHIL 573 (3) Knowledge and Reality

Analysis of the status and justification of claims about the nature and limits of human knowledge and the nature of what may be held to be real.

PHIL 574 (3) Philosophy of the Mind

The nature of consciousness, mind and body relations, and freedom of action.

PHIL 580 (3) Philosophy of Science

Nature of explanations, causality, theoretical entities, and selected problems.

PHIL 590 (1-6) Workshop

Special event of less than semester duration.

PHIL 591 (1-6) In-Service

PHIL 677 (1-6) Individual Study

Individual study of a philosopher or problem.

PHIL 691 (1-6) In-Service

Individual service project

PHYSICAL EDUCATION MA

PHYSICAL EDUCATION MS

(DISCIPLINE-BASED)

*College of Allied Health and Nursing
Department of Human Performance
1400 Highland Center • 507-389-6313*

Chair: Harry Krampf, Ph.D.

Graduate Coordinator: Joe A. Walsh, Ed.D.

Rayla Allison, JD; Ken Ecker, Ph.D.; Sherry Folsom-Meek, Ph.D.; Kent Kalm, Ed.D.; Lynda Reeves, Ph.D.; Gary Rushing, Ed.D.; Patrick Sexton, Ed.D.; Mary Visser, Ph.D.

The strength of the graduate programs in the Department of Human Performance at Minnesota State University rests in flexibility. There are opportunities for students to pursue either the Master of Arts or the Masters of Science degree in Physical Education. The programs may be structured to the needs of the generalist planning either to enter or return to the public school setting, or for the student who desires specialization. The program affords in-depth study opportunities in the following concentrations: Developmental/Adapted Physical Education, Elementary/Secondary Physical Education, Exercise Science: Cardiac Rehabilitation-Clinical Exercise Physiology, Exercise Science: Exercise Physiology, Psychological Aspects of Sport, and Sport Administration.

Excellent interdisciplinary relationships exist across the University in departments offering graduate studies. Students are encouraged, where appropriate, to avail themselves of the various dimensions of expertise. The graduate program also offers a complement of summer classes, facilitating continuity in graduate pursuits.

Admission. The requirements of the College of Graduate Studies and Research must be completed for admission to program.

Graduate Assistantships and Financial Aid. The Department of Human Performance, in cooperation with athletics, campus recreation programs and a contractual agreement with Gustavus Adolphus College and Orthopaedic and Fracture Clinic, employs approximately 30 graduate assistants at stipends up to \$8,000 for the academic year. All graduate assistants must be full-time graduate students. Graduate assistants receive a tuition stipend and qualify for in-state tuition rates. Applications for graduate assistantships are accepted until positions are filled, but candidates are encouraged to apply by February 15 for the following fall semester. Graduate assistantship applications can be secured directly from the College of Graduate Studies and Research, or its Web site.

PHYSICAL EDUCATION MA

General Requirements - All Options:

Language Competency. A reading knowledge of one modern foreign language or research substitution is required in the MA programs. The student should consult with the graduate coordinator to determine specific requirements.

At least 20 credits must be in the Department of Human Performance, and at least 50% of the coursework must be taken at the 600 level (excluding thesis and APP credits).

Thesis Plan: Written and oral comprehensive exams and a thesis for credit are required.

Alternate Plan Paper: A capstone paper approved by the advisor is required and may be developed in connection with a graduate course in the Human Performance Department. A written comprehensive exam is required, and at discretion of student's advisor, an oral exam germane to the APP will be required.

Concentrated Options of Study

Students should be aware that changes may occur in a concentration core during their time on campus, since curriculum is always an on-going process. Therefore, the student should always be in consultation with the advisor in the event that the faculty submits new proposals that may reflect such changes. In such an event, students will always be afforded their rights to take advantage of such changes that will best serve them during their program of study. Choose an area of concentration from those listed below.

SPORT ADMINISTRATION*

(Thesis Plan - 30-32 credits)

(Alternate Plan Paper - 34-36 credits)

This program is designed to prepare the student for a career in some capacity of sports management at either a public school, college or professional/private sector of sport.

Required Sport Administration Core (18 credits)

HP 565 Legal Aspects of Sport (3)

HP 610 Statistical Methods (3)

HP 630 Techniques of Research (3)

HP 650 Principles of Sport Management (3)

HP 651 Sport Management Seminar (3)

HP 698 Intern: Sport Administration (3-10)

Required Thesis or Alternate Plan Paper

HP 699 Thesis (3-4 credits)

HP 694 Alternate Plan Paper (1-2 credits)

Required Electives (8-17 credits)

The student must choose the remaining electives in consultation with an advisor. HP 568, Sport Promotion and Marketing; 640, Planning Sports Facilities; 641, Psychology of Sport and Exercise; and HP 660, Financial Aspects of Sport, are strongly recommended.

*The Department is in the process of submitting a name change to Sport Management through proper curriculum channels.

ELEMENTARY/SECONDARY PHYSICAL EDUCATION

(Thesis Plan - 30-32 credits)

(Alternate Plan Paper - 34-36 credits)

The program is designed to refine teaching skills for the elementary, middle school, and high school physical educator,

Required Core (17 credits)

HP 513 Lifespan Motor Development (2)

HP 610 Statistical Methods (3)

HP 623 Current Trends (3)

HP 630 Techniques of Research (3)

HP 675 Motor Learning (3)

HP 698 Internship (3)

Required Thesis or Alternate Plan Paper

HP 694 Alternate Plan Paper (1-2 credits)

HP 699 Thesis (3-4 credits)

Required Electives (10-18 credits)

Choose any electives in consultation with an advisor. A graduate student's plan of study for the Master of Arts degree must include at least 10 credits of outside electives.

CARDIAC REHABILITATION/CLINICAL EXERCISE PHYSIOLOGY (CR/CEP)
(36-37 credits)

A 37-41 credit program leading to a Master of Arts degree, Cardiac Rehabilitation/Clinical Exercise Physiology provides the necessary laboratory, research and clinical experiences for employment in cardiopulmonary rehabilitation, adult fitness and corporate programs. Each year's class receives practical, hands-on experience in cooperation with area/regional hospitals in Mankato, Minneapolis/St. Paul, and Rochester, MN. The Cardiac Rehabilitation Program provides Phase 3 and 4 cardiac rehabilitation programming in health and exercise to patients each week. The required internship, during the middle and/or last semester of graduate work, provides additional opportunities in the student's area of study.

Required Core (minimum 15-16 credits)

HP 601 Advanced Physiology of Exercise (3)
 HP 605 Nutrition in Human Performance (3)
 HP 610 Statistical Methods (3)
 HP 630 Tech. of Research (3)
 HP 693 Seminar in Exercise Science (1)
 HP 694 Alternate Plan Paper (2 credits) **OR**
 HP 699 Thesis (3)

Required Concentration/Specialization (16-20 credits)

BIO 533 Cardiovascular Physiology (3)
 BIO 566 Pharmacology (3)
 HP 583 Cardiac Rehabilitation (3)
 HP 645 Physical Activity/Fitness and Chronic Disease (3)
 HP 655 ECG Interpretation (3)
 HP 698 Internship: Cardiac Rehabilitation (1-5)

Required Electives (5 credits)

choose any 5/600 level elective courses in consultation with an advisor

EXERCISE SCIENCE/EXERCISE PHYSIOLOGY

(36 credits)

This program is designed to provide comprehensive, laboratory-based study of the effects of physical activity on human structure and function across the life span. Degree requirements are structured so that the student may pursue study in an area of individual focus.

Required Core (20-21 credits)

HP 601 Advanced Physiology of Exercise (3)
 HP 602 Laboratory Techniques (2)
 HP 605 Nutrition in Human Performance (3)
 HP 610 Statistical Methods (3)
 HP 630 Techniques of Research (3)
 HP 693 Seminar in Exercise Science (1)
 HP 694 Alternate Plan Paper (2) **OR**
 HP 699 Thesis (3)
 CHEM 560 Biochemistry (3)

Required Electives (15-16 credits)

Choose three from the following (other courses may be selected with consent of an advisor)

HP 567 Wellness Program Development and Administration (3)
 HP 645 Physical Activity and Chronic Disease (3)
 HP 655 ECG Interpretation (3)
 HP 698 Internship: Exercise Physiology Lab (1-3)
 BIO 517 Biology of Aging and Chronic Disease (3)
 CHEM 561 Biochemistry II (3)
 PSYCH 551 Methods of Enhancing Performance (3)

Choose one of the following:

BIO 533 Cardiovascular Physiology (3)
 BIO 538 Endocrinology (3)
 BIO 566 Pharmacology (3)

*Chem 360 and/or 450 or equivalent transfer credit may be substituted for 560, resulting in 3 or more credits of additional graduate work by the student.

**Please note: Possible curriculum revision deliberations were being considered in the Exercise Physiology tract by the Human Performance faculty when the new graduate bulletin was going to press. Therefore, students should consult with the graduate coordinator and their advisor in the event of any possible changes that may have been approved through the proper university graduate faculty curriculum process.

DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION (MA/MS)

(Thesis Plan - 30-31)

(Alternate Plan Paper - 34-36)

Maximum of 15 hours of D/APE licensure courses can count toward MA/MS degree because over 50% of coursework must be 600-level. *If student already has D/APE licensure, D/APE coursework will consist of 600-level courses in D/APE, Special Education, and from other departments.

Required Core in D/APE (minimum 18-19 credits)

HP 511 Development Adapted Physical Education (3)
 HP 512 Assessment in Adapted Physical Education (2)
 HP 513 Lifespan Motor Development (2)
 HP 521 Teaching Sport to Individuals with Disabilities (2)
 HP 522 Teaching Adapted Aquatics (2)
 HP 545 PE for Students with Mental and Emotional Disabilities (3)
 HP 571 Consulting Techniques in D/APE (3)
 HP 698 Internship in DAPE (1-2)

Required (6 credits)

HP 610 Statistical Methods in Physical Education (3)
 HP 630 Techniques of Research (3)

Required Thesis or Alternate Plan Paper

HP 694 Alternate Plan Paper (1-2)
 HP 699 Thesis (3-4)

Required Special Education Electives (3 credits)

ESSP 605 Introduction to the Psychology and Education of Exceptional Children and Youth (3)

Required Human Performance Electives (9-12 credits)

Student should consult with major advisor. **See above note.

HP 604 Pediatric Motor Delays: Principles (2)
 HP 614 Pediatric Motor Delays: Best Practices (2)
 HP 624 Creative Arts Therapies for Individuals with Special Needs (3)
 HP 634 Consultation and Staff Development in Developmental/Adapted Physical Education (3)
 HP 654 Current Issues in Developmental/Adapted Physical Education (3)
 HP 664 Administration in Developmental/Adapted Physical Education (3)
 HP 674 Transition in Developmental/Adapted Physical Education (3)

PSYCHOLOGICAL ASPECTS OF SPORT

(Thesis Plan - 30-32)

(Alternate Plan Paper - 34-36)

The program is designed to develop a theoretical base in the discipline of sport psychology, and better prepare students and coaches to apply such knowledge to performance enhancement issues associated with competitive athletics and exercise settings.

Required Human Performance Core (15 credits)

HP 610 Statistical Methods (3)
 HP 630 Techniques of Research (3)
 HP 641 Psychology of Sport (3)
 HP 675 Motor Learning (3)
 HP 698 Intern: Sport Psychology (3)

Required Thesis or Alternate Plan Paper

HP 694 Alternate Plan Paper (1-2)
 HP 699 Thesis (3-4)

Required Psychology Core (9-10 credits)*

PSY 537 Youth and Sport (3)
 PSY 551 Enhancing Performance (3)

One other course in Psychology (3-4) in consultation with major advisor.

Required Electives (3-11 credits)

Choose electives in consultation with major advisor. EDLD 644, Ethics and Leadership and HP 677, IS: Sports in American Culture, are strongly recommended.

*Please note: As a result of changes in the Department of Psychology, it is possible that one of the required psychology courses may not continue to be offered. In the event that this happens, students should consult with their advisor for other possible substitution options as it pertains to the psychology requirements.

PHYSICAL EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30)

(Alternate Plan Paper - 34-36)

Teaching licensure is a prerequisite to pursuing this degree, and is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. Please see the section concerning the MAT program that is listed in this bulletin.

PHYSICAL EDUCATION

General Requirements - All Options:

At least 50% of the coursework must be taken at the 600 level (excluding thesis and APP credits).

Thesis Plan: At least 18 credits must be in the Department of Human Performance. A research paper is included.

Alternate Plan Paper: At least 20 credits must be in the Department of Human Performance. A capstone paper is required, with topic to be approved by major advisor. Topic may be related to course with student's program of study. However, the Alternate Plan Paper requires scholarly inquiry clearly beyond content of any course in student's program of study. A written comprehensive exam is required, and at the discretion of a student's advisor, and oral exam germane to the Alternate Plan Paper will be required.

Required Option:

Choose an area of concentration from the options listed below.

ELEMENTARY/SECONDARY PHYSICAL EDUCATION

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core (17 credits)

HP 513 Lifespan Motor Development (2)

HP 610 Statistical Methods (3)

HP 623 Current Trends (3)

HP 630 Techniques of Research (3)

HP 675 Motor Learning (3)

HP 698 Internship (3)

Required Thesis or Alternate Plan Paper

HP 699 Thesis (3-4)

HP 694 Alternate Plan Paper (1-2)

Required Electives (3-10 credits)

Choose electives from HP, Psych., Educ., Spec.Ed., RPLS and C&I at 600 level with consent of advisor

Required Professional Education

Electives (6 credits)

Choose 6 credits from electives in Prof. Education in consultation with an advisor

*SPORT ADMINISTRATION**

(Thesis Plan - 30-32)

(Alternate Plan Paper - 34)

This program is designed to prepare the student for a career in some capacity of sports management at either a public school, college or professional/private sector of sport.

Required Sport Administration Core (18 credits)

HP 565 Legal Aspects of Sports (3)

HP 610 Statistical Methods (3)

HP 630 Techniques of Research (3)

HP 650 Principles of Sport Management (3)

HP 651 Sport Management Seminar (3)

HP 698 Intern: Sport Administration (3-10)

Required Thesis or Alternate Plan Paper

HP 699 Thesis (3-4)

HP 694 Alternate Plan Paper (1-2)

Required Education Core (4 credits)

Four credits from the College of Education.

Required Electives (2-12 credits)

The student must choose the remaining electives in consultation with an advisor. HP 568, Sport Promotion and Marketing; HP 640, Planning Sport Facilities; HP 641, Psychology of Sport and Exercise; and HP 660, Financial Aspects of Sport are strongly recommended.

*The Department is in the process of submitting a name change to Sport Management through proper curriculum channels.

COURSE DESCRIPTIONS

HP 511 (3) Developmental/Adapted Physical Education

Legal and theoretical bases for teaching physical education to students with disabilities. First course in D/APE sequence.

HP 512 (2) Assessment in Adapted Physical Education

Evaluation of motor skills and fitness among students with disabilities.

HP 513 (2) Lifespan Motor Development

Study of early childhood motor development from infancy through preschool age, including information on delayed development.

HP 514 (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.

Prerequisite: Biol. 220, 230, HP 175

HP 519 (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.

Prerequisite: HP 109

HP 521 (2) Teaching Sport to Individuals with Disabilities

Contemporary sport opportunities for individuals with disabilities, with application to teaching and transition planning.

Prerequisite: 4/511 or instructor permission

HP 522 (2) Teaching Adapted Aquatics

Theory and practical experience in teaching swimming and other aquatic skills to individuals with disabilities.

HP 539 (3) Nutrition for Physical Activity and Sport

This course 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.

HP 545 (3) Physical Education for Students with Mental and Emotional Disabilities

Theory, strategies, and best practices for teaching physical education to students with mental retardation, emotional/behavioral disorders, autism, attention deficit disorder, and multiple disabilities accompanying mental retardation.

HP 565 (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.

HP 566 (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.

Prerequisite: HP 175, HP 414

HP 567 (2) Wellness Program Development and Administration

Designed to review the various physiological, psychological, and administrative components involved in a comprehensive health/fitness program.

Prerequisite: HP 414 and 466 or equivalent

HP 568 (3) Sport Promotion and Marketing

The application of principles of promotion and marketing to the sport and physical activity industry, including the areas of professional sports, corporate fitness, college/high school athletics, clubs and resorts, and more. Primary focus will be on the application of marketing principles to specific sport scenarios.

HP 570 (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.

Prerequisite: Psych. 101 or equivalent

HP 571 (3) Consulting Techniques in D/APE

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.

HP 582 (1) Coaching Practicum

Supervised experience in a public school varsity/junior varsity sport setting.

Prerequisite: first aid and coaching theory and athletic training

HP 583 (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.

Prerequisite: HP 4/514 and 4/567 or equivalent

HP 590 (1-4) Workshop

Content is variable and based on special topic.

HP 601 (3) Advanced Physiology of Exercise

Integration of the advanced concepts and relevant scientific information surrounding human performance physiology.

Prerequisite: HP 514

HP 602 (2) Laboratory Techniques in Exercise Physiology

Laboratory experiences for advanced exercise physiology students, including various fitness and clinical tests, lactate analysis, spirometry, and measurement of expired gases. Prerequisite: HP 4/514 or equivalent; HP 601

HP 604 (2) Pediatric Motor Delays: Principles

Focuses on legal bases, theoretical concepts, and current literature addressing pediatric motor delays. Consideration is given to infants, toddlers, and preschoolers with the generic label "developmentally delayed," and those having multiple disabilities, physical disabilities, and sensory/other health impairments. Prerequisite: 4/513 or equivalent; concurrent with 614

HP 605 (3) Nutrition in Human Performance

An in-depth study of the nutritional needs of athletes and other active individuals, including discussion of current research in the area. Prerequisite: HP 601

HP 610 (3) Statistical Methods

Introduction to the concepts of descriptive and inferential statistics, applied and theoretical research, and validity and reliability methods used in the disciplines of physical education, human performance, and exercise science. Prerequisite: at least an undergrad Measurement and Evaluation course

HP 614 (2) Pediatric Motor Delays: Best Practices

Focuses on various aspects of pediatric adapted physical education service delivery. Consideration is given to infants, toddlers, and preschoolers with the generic label "developmentally delayed," and those having multiple disabilities, physical disabilities, and sensory/other health impairments. Prerequisite: HP 4/513 or equivalent; concurrent with 614

HP 623 (3) Current Trends in Physical Education

Discussion and research relating to current emphases in early childhood/elementary/secondary school physical education.

HP 624 (3) Art and the Creative Process for Individuals with Special

Survey of dance, art, drama, and music therapies in relation to movement-centered activities. Application to specific populations will include discussion and experiential components.

HP 630 (3) Techniques of Research

Introductory course to the research processes involved in the fields of physical education, exercise science, and human performance. Coverage of various types of research designs and writing of the research paper is a major intent of this course. Prerequisite: required part of core for all master students in Dept. of Human Performance—must be a graduate student

HP 631 (1) Seminar in Exercise Physiology**HP 634 (3) Consultation and Staff Development in**

Study of consulting models. Role of developmental/adapted physical education in team approach, including interpersonal communication skills integral to the role of the developmental/adapted physical educator.

HP 635 (3) Gerontologic/Pediatric Exercise Physiology

Acute and chronic changes in physiological functioning children and older adults.

HP 637 (3) Sport Media, Sponsorship and 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 broadcast, and print media.

HP 638 (3) Managing Sporting Events

Advanced study of managing sporting events covering the policies, strategies and tactics used including planning, budgeting, organization, human resources, risk management, and operations of conducting a successful sporting event.

HP 640 (3) Planning Sport Facilities

Provide the student with information on the planning, development, and administration of sport facilities (i.e., physical education, athletics, recreation, fitness/wellness centers, etc.). The course will also address basics of sport equipment management.

HP 641 (3) Psychology of Sport and Exercise

Psychological parameters that affect performance in athletic and exercise settings. Emphasis on theoretical and scholarly literature associated with exercise and sport psychology. Practical application of psychological principles in sport and exercise dimensions will also be addressed. Prerequisite: UG degree and basic Psych. (101)

HP 642 (2) Issues in Sports Medicine

A seminar/discussion format course dealing with current issues within the multidisciplinary profession of sports medicine. A course directed toward disciplines dealing with all dimensions of the physically active individual.

HP 645 (3) Physical Activity and Chronic Disease

Identification and assessment of physical activity and fitness in health, lifespan, and various chronic diseases. Prerequisite: HP 601

HP 650 (3) Principles of Sport Management

This course will emphasize the management functions of planning, organizing, implementing, and controlling. Decision-making, problem-solving, communication, ethics, sport law, and leadership. Personnel management issues will also be addressed.

HP 651 (3) Sport Management Seminar

Examines a variety of topics related to the management of sport organizations. Topics include internship/career opportunities, social-cultural issues, ethical issues, mass communication, sport governance, economic issues, fund-raising, event/facility management, licensing, copyright issues, and labor relations.

HP 654 (3) Current Issues in Developmental/Adapted Physical

Current issues impacting developmental/adapted physical education; with emphasis on examining, comparing, contrasting, and identifying solutions to problems and issues with reference to state and federal physical education/motor development services.

HP 655 (3) Electrocardiographic Interpretation

Methods used in learning to interpret electrocardiograms plus a solid foundation of its application and history. Prerequisite: HP 601

HP 660 (3) Financial Aspects of Sport

Examines basic financial and managerial accounting concepts necessary to be financially literate in the business of sport. Budgeting and fundraising concepts will also be addressed. Analysis into the understanding of corporate financial workings in the sport industry will equip the student with essential management tools.

HP 661 (3) Administration and Management of Intramural-Recreational Sports

Philosophical base with emphasis on the principles, policies, and procedures for administration of intramural and recreational sports programs.

HP 664 (3) Administration in Developmental/Adapted Physical

Range of responsibilities and obligations integral to administering developmental/adapted physical education programs in compliance with federal and Minnesota mandates.

HP 674 (3) Transition in Developmental/Adapted Physical

Enhances development of transition-related competence of physical education teachers and related-service professionals. Legislative and research knowledge bases, extensions of existing curricula, and community-based resources are used.

HP 675 (3) Motor Learning

Acquaints the student with the terminology, theory, and principles of skill acquisition in the sport and physical activity setting...as well as factors influencing that acquisition. Critical Analysis of research literature will also be part of this course. Prerequisite: Psych. 101

HP 677 (1-4) Individual Study

Opportunity for in-depth studies when specific human performance course is not available to accommodate the student. Consultation with the faculty member is an important part of developing such topics that meet the individual study arrangement. Prerequisite: grad. student/professor consent

HP 680 (1-2) Systematic Readings in Physical Education and Human

An arranged readings course of selected professional literature relating to physical education, human performance, exercise science, and sport studies. The student in consultation with a professor determines the specific body of scholarly literature that will be emphasized during the course. Prerequisite: grad. student/professor consent

HP 691 (1-4) In-Service

Broad spectrum of foci available. Designed in consultation with requesting group. Prerequisite: grad. student/professor consent

HP 692 (1-10) Internship: Corporate and Community Fitness

Designed to provide the student with hands-on experience in the area of corporate and community fitness.

Prerequisite: completion of graduate core courses: Chem. 560, HP 601, 602, 610, 630, except for seminar or thesis

HP 693 (1) Seminar in Exercise Science

Studies the current problems and trends in selected fields of exercise science as well as current research being performed by department faculty, staff, and students. Prerequisite: graduate standing

HP 694 (1-2) Alternate Plan Paper

Course requires completion of alternate plan paper. Prerequisite: grad. student/professor consent

PHYSICS

HP 698 (1-10) Internship

Supervised field experience related to the student's academic specialization associated with the disciplines of human performance. Disciplines include the following: College Teaching, Sport Management, Public School Teaching, D/APE, Intramural-Recreational Sports Management, Elementary Physical Education, Exercise Physiology, and Sport Psychology.

Prerequisite: grad. student/professor consent

HP 699 (1-4) Thesis

Course requires completion of thesis paper. Prerequisite: grad. student/professor consent

PHYSICS MS

PHYSICS EDUCATION MS

(DISCIPLINE-BASED)

College of Science, Engineering, & Technology

Department of Physics & Astronomy

141 Trafton Science Center N • 507-389-5743

Chair: Mark Pickar, Ph.D.

Graduate Coordinator: Youwen Xu, Ph.D.

Paul Eskridge, Ph.D.; Robert Herickhoff, Ph.D.; Steven Kipp, Ph.D.; Igor Kogoutiouk, Ph.D.; Mark Pickar, Ph.D.; James Pierce, Ph.D.; Louis Schwartzkopf, Ph.D.; Hai-sheng Wu, Ph.D.; Youwen Xu, Ph.D.

The Department of Physics and Astronomy presents several opportunities for study at the graduate level. The Master of Science is offered as the professional degree in physics. This degree is designed for students wishing to prepare themselves for doctoral study, or for work in a research/industrial position. A student may choose to emphasize the instrumentation area by including appropriate Electrical Engineering, Electronic Engineering Technology, or Computer Science courses. Students interested in teaching at a community college may elect the MS Community College track. Teacher certification is not required for this track.

The Master of Science in Physics Education is designed for individuals interested in strengthening their background in secondary school teaching. Previous teacher licensure is usually required.

Admission. Interested students should complete the general admission requirements of the College of Graduate Studies and Research.

Degree Completion. A graduate student in physics should complete a Plan of Study during the first part of the second semester, prior to the completion of the first 11 graduate credits of the program at Minnesota State University. This will require close consultation between the student and the initial advisor. The comprehensive written exam must be taken by the end of the second semester. A student cannot start his or her thesis research before passing the comprehensive written exam. Please contact the Department of Physics and Astronomy graduate coordinator for additional information.

Financial Assistance. The Department of Physics and Astronomy has a limited number of graduate assistantships available. Information and application materials can be obtained from the department graduate coordinator. Consult the front of this bulletin for more information on financial aid and graduate assistantships.

PHYSICS MS

(Thesis Plan Only - 30 credits)

Required Core (12-15 credits)

PHYS 607 Intro. to Research (2)

PHYS 641 Math Physics I (4)

PHYS 642 Math Physics II (4)

PHYS 699 Thesis (1-6), minimum 3 credits

Required Physics Electives (8-11 credits)

Choose any 500/600 level Physics elective courses approved by the student's advisor.

Required General Electives (7 credits)

Choose any 500/600 level elective courses approved by the student's advisor.

Additional Requirements:

A reading knowledge of a foreign language or a demonstrated ability in computer programming is required. Fifty percent of all courses must be taken at the 600 level. A written exam and a thesis and its oral defense are required.

COMMUNITY COLLEGE TRACK

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Physics Electives Core (9-17 credits)

PHYS 697 Internship (4-8)

In addition, choose any 500/600 level Physics elective courses approved by the student's advisor. Students who would like to have "internship" listed as "Internship in College Teaching" should contact the Graduate Dean.

Required Education Electives (minimum 6 credits)

KSP 625 Philosophy of Education in Historical Context (3)

KSP 670 Collegiate Institutions in the United States (3)

KSP 671 Learning and Teaching in Higher Education (3)

Required General Electives (6 credits)

Choose any 500/600 level elective courses from outside of physics and outside of professional education, approved by the student's advisor.

Required Research Methods (3 credits)

Choose a research methods course approved by the student's advisor.

Required Thesis or Alternate Plan Paper

PHYS 694 Alternate Plan Paper (1-2)

PHYS 699 Thesis (1-6) minimum 3 credits

Additional Requirements:

A reading knowledge of a foreign language or a demonstrated ability in computer programming is required. Fifty percent of all courses must be taken at the 600 level excluding the thesis or APP credits. A written exam is required. A thesis and its oral defense is required, if the thesis option is chosen.

PHYSICS EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Teaching licensure is usually a prerequisite to pursuing this degree, since this degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program.

Required Physics Electives (9-17 credits)

Choose any 500/600 level elective courses approved by the student's advisor.

Required Education Electives (6 credits)

Choose any 500/600 level Education elective courses approved by the student's advisor from the following:

KSP 507, 605, 609, 612, 621, 625, 632, 640, 645, 654, 665, 666, 677, 681

EEC 520, 522, 602, 617, 631, 676

CSP 570

EDAD 652, 665

Required General Electives (6 credits)

Choose any 500/600 level elective courses approved by the student's advisor.

Required Research Methods (3 credits)

Choose a research methods course approved by the student's advisor.

Required Thesis or Alternate Plan Paper

PHYS 694 Alternate Plan Paper (1-2)

PHYS 699 Thesis (1-6) minimum 3 credits

Additional Requirements:

Fifty percent of all courses must be taken at the 600 level excluding the thesis or APP credits. A written exam is required. A thesis and its oral defense is required, if the thesis option is chosen.

COURSE DESCRIPTIONS

PHYSICS

PHYS 504 (2) Physics & Society

Relations between physics and other intellectual communities: e.g., philosophy, humanities, social sciences, the arts.

V Prerequisite: con

PHYS 517 (2) Biophysics

Thermodynamic relationships; energy flow in living systems; metabolic heat generation and loss; homeostasis; atomic and molecular bonds in nucleic acids, proteins, and carbohydrates; hormonal regulation; cell metabolism; negative feedback control in living systems; cancer therapy; imaging; disease states; new theories and paradigms.

V Prerequisite: PHYS 212 or 222 and MATH 122

PHYS 535 (3) Modern Physics I

Special Theory of Relativity. Quantum nature of waves and particles: photons, de

Brogie 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, and one-electron atoms. X-ray and optical excitation of multielectron atoms. Molecular spectra.

S Prerequisite: PHYS 212 or 222 and MATH 122

PHYS 536 (3) Modern Physics II

Topics include the nuclear force, interactions of nuclear particles with matter, radioactive decay, nuclear structure, nuclear reactions, fusion, fission, elementary particles, and the quark model.

F Prerequisite: PHYS 435/535

PHYS 539 (4) Electronics for Physics

PHYS 541 (4) Mechanics

Rectilinear motion of a particle, general motion of a particle in three dimensions. Newtonian mechanics including harmonic oscillations, forced oscillations, central forces and orbital motion, collisions, noninertial reference systems, dynamics of a system particles, rigid body motion, Lagrangian and Hamiltonian mechanics, normal coordinates.

F Prerequisite: PHYS 212 or 222 and MATH 223 and 321

PHYS 547 (3) Electricity & Magnetism I

Electrostatic fields, magnetostatic fields, steady currents, electromagnetic induction. Review of vector algebra.

F Prerequisite: PHYS 212 or 222 and MATH 223, 321, or 422

PHYS 548 (3) Electricity & Magnetism II

Electromagnetic waves, propagation and radiation of waves, and electrodynamics and relativity.

S Prerequisite: PHYS 447 or 547

PHYS 553 (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. S (of odd calendar years)

Prerequisite: PHYS 212 or 222 and MATH 122

PHYS 557 (3) Optics

Geometric optics, wave optics, properties of light and matter, optics of transformations, and quantum optics.

S (of odd calendar years) Prerequisite: PHYS 222 and MATH 122

PHYS 561 (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.

F Prerequisite: PHYS 435/535, 441/541, and MATH 321

PHYS 565 (3) Computer Applications in Physics

Numerical solutions of physics problems and computer simulations of physical systems. Interfacing computers with scientific equipment for experiment control, data acquisition, and data analysis.

F Prerequisite: PHYS 212 or 222 and familiarity with some programming language, or con

PHYS 567 (3) Semiconductor Device Physics

Introduction to theory and techniques of integrated circuit fabrication processes. Oxidation, photolithography, etching, diffusion of impurities, ion implantation, epitaxy, metallization, material characterization techniques, and VLSI process integration, their design and simulation by SUPREM. Same as EE 575.

F Prerequisite: PHYS 435/535 and 453/553

PHYS 568 (1) Semiconductor Device Physics Laboratory

Introduction to integrated circuit fabrication processes, device layout, mask design, and experiments related to wafer cleaning, etching, thermal oxidation, thermal diffusion, photolithography, and metallization. Fabrication of basic integrated circuit elements: pn-junctions, resistors, MOS capacitors, simulation or the fabrication process by SUPREM. Same as EE 580.

F Prerequisite: PHYS 467/567

PHYS 573 (3) Statistical Physics

Statistical mechanics, kinetic theory, thermodynamics. S (of even calendar years)

Prerequisite: PHYS 212 or 222 and MATH 223 and 321

PHYS 575 (2) Advanced Laboratory

Experiments in modern physics, including solid-state physics and optics. Requires more independent work than introductory laboratories.

S Prerequisite: PHYS 436 or 536 or con

PHYS 580 (2) Laboratory Experiences in Physical Science

For prospective teachers in elementary schools. Topics include weather, weather

forecasting and record keeping, simple machines, electricity, chemistry, sound, light, and others. May not count as a physics elective. Not available for P/N grading.

F, S, SS Prerequisite: PHYS 101

PHYS 582 (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 university. May not count as a physics elective.

S Prerequisite: one year of chemistry and one year of physics or con

PHYS 584 (2) Middle/Junior High Science Teaching

Current methods of teaching all sciences with emphasis on physical science, physics, chemistry, and earth science.

V Prerequisite: majority of required courses completed or con

PHYS 590 (2-4) Workshop

A short course devoted to a specific topic in physics. May be repeated for credit on each new topic.

V

PHYS 591 (1-8) In-Service

A course designed to upgrade the qualifications of a person on-the-job.

V

PHYS 595 (1-3) Selected Topics

A course in an area of physics not regularly offered. Topic and credit assigned by department each time offered.

V

PHYS 607 (2) Intro to Research

Use of the library, electronic and machine shop practices, vacuum and cryogenic techniques, research interests of faculty.

F

PHYS 641 (4) Mathematical Physics I

Vector and tensor analysis; coordinate systems; determinants, matrices, and group theory; infinite series; functions of a complex variable.

F

PHYS 642 (4) Mathematical Physics II

Differential equations; Sturm-Liouville theory; Bessel, Legendre, and other special functions; Fourier series; integral transforms; integral equations; calculus of variations.

S Prerequisite: PHYS 641

PHYS 675 (1-4) Selected Topics

A course in an area of physics not regularly offered. Topic and credit assigned by department each time offered.

V

PHYS 677 (1-4) Individual Study

Special arrangements must be made with an appropriate faculty member or the department office. May be repeated for credit on each new topic.

V

PHYS 680 (1) Curriculum Study in Physics

Presentation and discussion of curricular developments. V

PHYS 681 (2) Demonstration in Physics

Materials, techniques, and procedures.

V

PHYS 691 (1-4) In-Service

A course designed to upgrade the qualifications of persons on-the-job.

V

PHYS 692 (1-2) Seminar

May be repeated for credit on each new topic.

V

PHYS 694 (1-2) Alternate Plan Paper

PHYS 695 (1-6) Research

V

PHYS 696 (1-2) Independent Reading

Special arrangements must be made with an appropriate faculty member or the department office. May be repeated for credit on each new topic.

V

PHYS 698 (1-8) Internship

Provides student the opportunity to gain expertise and experience in a special field under the supervision of a qualified person.

V

POLITICAL SCIENCE

PHYS 699 (1-6) Thesis

V

ASTRONOMY

AST 520 (3) Stellar Astrophysics

Blackbody radiation; radiative transfer; atomic structure; spectroscopic notation; excitation; ionization; absorption and emission coefficients; line profiles; analysis of stellar spectra. AST 225 and PHYS 222 ALT-F

AST 521 (3) Stellar Structure

The gaseous state; degenerate matter; equations of stellar structure; polytropes; models of stellar interiors and atmospheres; stellar evolution; nucleosynthesis; stellar endpoints. AST 520 ALT-S

AST 530 (3) Galactic Structure

Structure, kinematics, and dynamics of our galaxy. AST 225, PHYS 222, MATH 223, and COMS 272 ALT-F

AST 531 (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. AST-530 ALT-S

AST 591 (1-6) In-Service

A course designed to upgrade the qualifications of persons on-the-job. V

AST 594 (1-6) Workshop

A short course devoted to a specific astronomical topic. May be repeated for credit on each new topic.

V consent

AST 595 (1-4) Selected Topics

AST 677 (1-6) Individual Study

Special arrangements must be made with an appropriate faculty member or the departmental office. May be repeated for credit on each new topic.

V consent

AST 691 (1-6) In-Service

A course designed to upgrade the qualifications of persons on-the-job. V consent

AST 694 (1-2) Alternate Plan Paper

V consent

POLITICAL SCIENCE MA

PUBLIC ADMINISTRATION MA

PUBLIC ADMINISTRATION/URBAN & REGIONAL STUDIES (JOINT) MA

College of Social and Behavioral Sciences

Department of Political Science

109 Morris Hall • 507-389-2721

Chair: Doran Hunter, Ph.D.

Graduate Coordinator: John Parham, Ph.D.

Abdalla Battah, Ph.D.; Jeff Bumgarner, Ph.D.; Sue Burum, J.D.; Doran Hunter, Ph.D.; Tom Ingot, Ph.D.; Avra Johnson, Ph.D.; Joe Kunkel, Ph.D.; John Parham, Ph.D.; Mark Robbins, Ph.D.; Carolyn Shrewsbury, Ph.D.; Fred Slocum, Ph.D.; Jackie Veceli, Ph.D.

Political Science, with its well-balanced curriculum and diverse and experienced faculty, offers two graduate programs for students pursuing academic and professional interests dealing with public policy questions and issues. The Department of Political Science offers Master of Arts and Master of Arts in Public Administration degrees. The Department of Political Science also collaborates with the Institute of Urban and Regional Studies to offer the Joint Program in Public Administration and Urban Studies.

Graduates of these programs are successfully pursuing a variety of challenging careers. Many occupy important positions with federal, state or local units of government. Others who have gone on to receive doctorates are teaching political science at colleges and universities, consulting, or doing policy analysis with large busi-

nesses and organizations. A large number are working in private enterprises, and several have pursued successful careers in practical and electoral politics.

Admission. The GRE is not required for admission to any of these programs.

POLITICAL SCIENCE, MA

(Thesis Plan - 34 credits)

(Alternate Plan Paper - 34 credits)

The Master of Arts in Political Science (MAPS) is intended both for those who desire to eventually pursue a Ph.D. in Political Science and those who desire a terminal degree. The MAPS is primarily a generalist degree in political science which also provides a wide range of possibilities for specialization or for interdisciplinary work. The student, in consultation with a faculty advisor, plans a program of study reflecting the student's specific interests.

Admission Requirements for the MAPS (Master of Arts in Political Science) are:

1. An undergraduate GPA of at least 3.0 on a 4.0 scale;
2. A baccalaureate degree from an accredited college or university;
3. At least 9 credits of undergraduate political science coursework. The requirement for 9 credits of undergraduate political science courses may be waived if the applicant can show relevant work related or other experiences that provide the necessary background to pursue graduate work in political science; and
4. When students do not meet the normal admission requirements, they may be recommended for admission by the department subject to removal of deficiencies or other conditions.

Required Core (7 credits)

POL 600 Research Methods (3)

POL 611 Orientation for Graduate Students (1)

POL 650 Seminar: Political Theory (3)

A minimum of 12 of the remaining credits must be Political Science.

Required Electives (maximum 21 -26 credits)

Choose any 500/600 level elective courses selected in consultation with an advisor.

Required Written Comprehensive and Oral Exams

Required Thesis or Alternate Plan Paper

POL 694 Alternate Plan Paper (1-2)

POL 699 Thesis (3-6)

At least 17 of the 34 credits must be in 600 level classes. A research tool of either a reading knowledge of a foreign language or an advanced statistics or other advanced research course is required but does not count toward the 34 credits required for the MAPS. The research tool must be approved by the student's committee.

PUBLIC ADMINISTRATION MA

(Thesis Plan - 34 credits)

(Alternate Paper Plan - 34 credits)

This program is designed for persons already in or preparing to enter public service. The program is designed to enable the student to perform management or staff functions in such areas as finance, budget analysis and personnel management. Students are prepared with a knowledge of political and legal processes of government and with an appreciation for managerial decision-making skills required by public agencies. MAPA students may choose between the Thesis Plan and the Alternate Plan. The Thesis Plan requires 34 credits (including credits taken for the thesis, but not including the research tool). The Alternate Plan requires 34 (not including the research tool) credits along with the submission of an alternate plan paper written as a part of the requirements of a designated course. For either plan, 18 credits of core courses are required.

Admission Requirements for the MAPA

(Master of Arts in Public Administration) are:

1. A minimum GPA of 3.0 on a 4.0 scale for the last 2 years of undergraduate coursework, OR; By using other factors (e.g. promising public or private sector work experience), demonstrate that the program can be successfully completed; and
2. A baccalaureate degree from an accredited college or university; and
3. All students need a reasonable background knowledge in government and quantitative methods. In some cases, the student's advisor may require that knowledge and skill deficiencies be remedied.

Required Core (18 credits)

POL 600 Research Methods (3)

POL 606 Organization Theory (3)

POL 622 Seminar: Theory & Pract. Public Administration (3)

- POL 662 Human Resource Management (3)
 POL 663 Budget & Fiscal Management (3)
 POL 665 Seminar: Bureaucracy & Administrative Process (3)

Required Electives (10-15 credits)

Choose any 500/600 level electives selected in consultation with an advisor. Seven credits must be at the 600 level.

Required Thesis or Alternate Plan Paper

- POL 694 Alternate Plan Paper (1-2)
 POL 699 Thesis (3-6)

Written comprehensive and oral exams are required. An oral defense of the thesis is required.

Required Proficiency in Advanced Research Methods:

MAPA students must demonstrate proficiency in an advanced research methods area. The research requirement may be satisfied by taking POLS 669 Sem: Public Policy Analysis or, with the approval of the student's advisor, by taking some other advanced research course or by demonstrating a foreign language competency. These credits may not be applied towards the master's degree.

Extended Campus. The MAPA program is offered by the Political Science Department through extended campus in the Twin Cities. The extended campus program and its requirements are the same as the on-campus program described immediately above. The Department is committed to offering each of the MAPA core courses at least once every two years.

PUBLIC ADMINISTRATION/URBAN AND REGIONAL STUDIES (JOINT PROGRAM) MA

(Alternate Plan Paper Option Only - 45 credits)

In 1985, the Political Science Department and the Urban and Regional Studies Institute began to offer a joint master's program. This program was designed in response to the growing demand of municipal, state, federal, and private agencies for professionals with interdisciplinary backgrounds.

Admission to MAPA and Urban and Regional Studies Joint Program. Students interested in the Joint Program must be admitted by both departments. See Urban and Regional Studies for admission criteria for their department. The normal requirements for admission from the public administration side include meeting the admission criteria to the MAPA program as listed above. It is assumed all students have background knowledge and training for the courses in the MAPA core. A good working knowledge of the content of the following undergraduate courses is necessary: Introduction to Public Administration, Introduction to Political Analysis, and American Government.

Required Core (15 credits):

- POL 606 Organization Theory (3)
 POL 662 Human Resource Management (3)
 POL 663 Budget and Fiscal Management (3)
 URSI 602 Planning Process (3)
 URSI 609 Applied Urban Analysis (3)

Required Option (15 credits):

Choose one of the following options:

Generalist Management (15 credits):

- POL 622 Seminar: Theory and Practice of Public Administration (3)
 POL 628 Seminar in Public Management (3)
 POL 660 Seminar: Public Administration (3)
 POL 665 Seminar: Bureaucracy and Administrative Process (3)
 POL 669 Seminar: Public Policy Analysis (3)

Urban Management (15 credits):

- URSI 601 Urban Management Process (3)
 URSI 603 Organizational Environment (3)
 URSI 615 Urban Professional Seminar (3)
 URSI 650 Urban Administrative Services (3)
 URSI 653 Urban Management Seminar (3)

Required Electives (15 credits):

Selected in conjunction with the advisor and with approval of the student's committee.

Included in the elective credits is the Alternate Paper Plan (1-2).

Each student must also complete a research tool. This would normally be POLS 600(3)

Research Methods. Credits for the research tool do not count toward the required 45.

JURIS DOCTOR - MASTER OF ARTS IN PUBLIC ADMINISTRATION DUAL DEGREE PROGRAM

(Thesis Plan - 34 credits)

(Alternate Plan Paper - 34 credits)

The JD-MAPA dual degree program allows students interested in both law and public administration to concurrently enroll in the Juris Doctor (JD) program at William Mitchell College of Law and in the Master of Arts in Public Administration (MAPA) program at Minnesota State University, Mankato.

Unlike a joint degree, which combines two disciplines into one course of study and results in just one degree, the dual degree allows the student to earn two degrees, each from a different institution. Upon completion of the dual degree program, the student will take fewer classes than if the student were to pursue the JD and MAPA degrees separately.

Master of Arts in Public Administration

Please see Public Administration MA

J.D. William Mitchell College of Law**Required Core (36 credits):**

- Civil Procedure (5)
 Constitutional Law Liberties (3)
 Constitutional Law Powers (2)
 Contracts (6)
 Property I (3)
 Property II (3)
 Professional Responsibility (3)
 Torts I (2)
 Torts II (3)
 Writing and Representation: Advice and Persuasion (3)
 Writing and Representation: Advocacy (3)

Required Skills Courses (10 credits):

Please see William Mitchell College of Law Bulletin

Required Advanced Research and Writing (4 credits):

Please see William Mitchell College of Law Bulletin

Electives (40 credits):

Please see William Mitchell College of Law Bulletin

COURSE DESCRIPTIONS**POL 510 (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.

POL 514 (3) Early United States Political Thought

Political thought in United States from 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, states' rights, abolitionism, proslavery.

POL 515 (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.

POL 516 (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.

POL 520 (1-4) Topics in Political Methods

This course explores topics in political science research methods beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

POL 521 (3) Techniques of Research

Research methods commonly used in political science and public administration. Emphasis on such topics as the scientific approach, research design, qualitative research, and measurement issues. Prerequisite: POL 221 or permission of instructor

POL 523 (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 polling methods.

POL 530 (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.

POL 531 (3) International Relations

An advanced theoretical survey of the dynamics of politics and political change at the global level.

POL 532 (3) International Law

A study of the legal norms and institutions which influence international and transnational relations.

POL 533 (3) International Organization

Study of the function and process of the United Nations and other international organizations.

POL 534 (3) United States Foreign Policy

This course is a general overview of US foreign policy institutions, processes, and politics. US Foreign Policy is examined in historical, global, and domestic contexts.

POL 535 (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 national(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.

POL 539 (3) Comparative Social Policy: The Welfare State in Europe & the Americas

This course offers a cross-national perspective on the politics of social policy and the welfare state in industrialized parts of the world, including North and South America and different regions of Europe. It also explores distinct national patterns of public policy solutions to the common contemporary problems of social security, poverty, and health care by paying close attention to both domestic factors and the forces of globalization that work to constrain government decisions. This multidimensional approach is designed to enable students to better understand how politics works in different ways to produce collective or social choices.

POL 540 (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.

POL 541 (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.

POL 542 (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.

POL 543 (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.

POL 544 (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.

POL 546 (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.

POL 547 (3) Europe: Politics & Policy

The course discusses government institutions, political developments, and policy making structures of contemporary Europe, including the former communist countries of East/Central Europe and the Balkans. It will also cover the on-going 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 U.S.

POL 548 (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.

POL 549 (3) Comparative Criminal Justice Systems

A comparison of criminal justice philosophies, structures, and procedures found in various countries around the world. Same as Law Enforcement 434: Comparative Criminal Justice Systems.

POL 550 (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.

POL 551 (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.

POL 552 (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.

POL 553 (3) Constitutional Law

Review of selected United States Supreme Court decisions, past and present, relating to the powers of the President, Congress, and the federal courts, as well as the division of power between the states and the federal government. Focus is on case briefing and the rationale which underlies the decisions.

POL 554 (3) Civil Liberties

Review of selected United States Supreme Court decisions interpreting important freedoms contained in the Bill of Rights and the 14th Amendment. Focus is on the rationale which underlies decisions and their impact on American political social processes. Provides an opportunity to exercise and develop individual analytical abilities through analysis of Court's reasoning.

POL 560 (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.

POL 561 (3) Environmental Politics

A study of the natural environment as a public policy issue in the political process of the United States, with some attention given to comparative and international perspectives.

POL 562 (3) Collective Bargaining: Public Sector

A broadly based introduction to the issues, processes, and techniques of public sector labor relations.

POL 563 (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.

POL 564 (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.

POL 570 (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.

POL 572 (3) Urban Government

Politics of cities and metropolitan areas. Discusses the impact of race, class, gender, immigrant status issues, intergovernmental relations, and how citizens can influence urban politics.

POL 573 (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.

POL 574 (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.

POL 575 (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.

POL 576 (3) Southern Politics

This 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 580 (1-4) Topics in Participation & Behavior

This course explores topics in political participation and behavior beyond what is covered in the existing curriculum. Students study specialized topics of current importance in the field. Specific topics will change depending on the term and instructor. May be retaken with a change of topic.

POL 582 (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.

POL 583 (3) Political Parties

Parties in United States at the federal, state, and local levels. Cross-national comparisons. Decline and revival of parties. What parties do. Are two party systems best? Are third parties the answer? Party organization. Voting behavior. Legislative, executive parties. Minnesota focus.

POL 584 (3) Women & Politics

Politics impact on women: women's impact on politics and governance; primary focus on United States but some comparative considerations.

POL 585 (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.

POL 586 (3) Racial and Ethnic Politics

This course examines the interrelationships between race/ethnicity and politics in the United States with a focus on African Americans, Asian Americans, Hispanics, and Native Americans: their experiences, political attitudes and behaviors, and representation in government. We will examine how some issues, including crime, welfare, and immigration have taken a racial cast, as well as white attitudes toward racial and race-related policies.

POL 587 (3) Political Psychology

This course examines how psychological ideas and processes (such as intergroup and intragroup relations, stereotyping and authoritarianism) illuminate concepts, theories, and principles used in understanding political life. We will explore the contributions of psychology in political arenas such as presidential greatness and character, foreign policy decision-making, political tolerance, and mass violence and genocide.

POL 590 (1-6) Workshop

Selected topics. May be repeated with change of topic.

POL 600 (3) Research Methods

Concepts and methods of conducting applied social science research.

POL 606 (3) Organizational Theory

Theories and practices of complex public organizations.

POL 610 (3) Seminar: American Politics

This course explores topics important to the study of American politics. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 611 (1) Orientation for Graduate Student

Orientation to graduate programs in political science and public administration to facilitate a successful experience in the programs.

POL 620 (3) Seminar: Comparative Government

This course explores topics important to the field of comparative politics. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 622 (3) Seminar: Theory & Practice of Public Administration

A capstone course designed to test the student's ability to synthesize and apply information and concepts from the various areas in public administration such as budgeting, personnel administration, finance, organization theory, and policy evaluation. Ideally, this course should be taken at the end of a student's program in public administration.

POL 628 (3) Seminar: Public Management

An examination of modern principles and techniques of leadership and management. Emphasis is placed on the interactive style of leadership and behavioral concepts of management.

POL 630 (3) Seminar: International Relations

This course explores topics important to the field of international relations. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 640 (3) Seminar: Political Parties

This course explores topics important to the study of political parties. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 650 (3) Seminar: Political Theory

This course explores topics important to the field of political theory. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 660 (3) Seminar: Public Administration

This course explores topics important to the study of public administration. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 662 (3) Human Resource Management

Change is the constant in today's human resource management in public organizations. The technical framework for productivity improvement and employee development is placed in the context of the legal environment. Emphasis is on managing diversity.

POL 663 (3) Budget & Fiscal Management

An in depth study of public budgeting and fiscal management, with emphasis on the approaches to budgeting and background on public revenues and revenue management.

POL 665 (3) Seminar: Bureaucracy & Administrative Process

An examination of law and politics in the formal and informal decision-making processes of large state and federal administrative agencies. Emphasis is placed on formal rule making and adjudicatory processes.

POL 669 (3) Seminar: Public Policy Analysis

Focuses on evaluation of public policy and programs through a variety of qualitative and quantitative techniques, e.g., models, forecasting, cost-benefit analysis.

POL 670 (3) Seminar: Public Law

Topics in Public Law. Subject areas will vary from semester to semester. The course may be taken up to three times as topics change.

POL 671 (3) Seminar: Police Administration/Policy

Topics such as administrative philosophies, organizational structures, ethics, policy formation and implementation, discipline, productivity and staff development. May be repeated for up to nine credits as topics change.

POL 680 (3) Seminar: State-Urban Governance

This course explores topics important to the study of state and urban government and governance. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 691 (1-8) 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.

Prerequisite: consent of advisor

POL 692 (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.

RECREATION, PARKS AND LEISURE SERVICES

POL 694 (1-2) Alternate Plan Paper

For those choosing to write an alternate plan paper.

POL 695 (1-3) Topics in Public Administration

This course explores topics important to the study of public administration. Specific topics may change depending on the term and instructor. May be retaken with a change of topic.

POL 699 (3-6) Thesis

For those choosing to write a thesis.

PSYCHOLOGY

College of Social and Behavioral Sciences

Department of Clinical Psychology

23 Armstrong Hall • 507-389-2724

See **CLINICAL PSYCHOLOGY** or **INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**

PUBLIC ADMINISTRATION MA

PUBLIC ADMINISTRATION/

URBAN AND REGIONAL STUDIES (JOINT) MA

College of Social and Behavioral Sciences

Department of Political Science

109 Morris Hall • 507-389-2721

See **POLITICAL SCIENCE**

RECREATION, PARKS AND LEISURE SERVICES

College of Allied Health and Nursing

Department of Recreation, Parks and Leisure Services

213 Highland Center N • 507-389-2127

Chair: James Petersen, Ph.D.

Joy Joyner, Re.D.; Ronald Nickerson, Ph.D.; James Wise, Ph.D.

Recreation, Parks and Leisure Services graduate students may develop a recreation core within the Multidisciplinary Studies Master of Science degree program. For more information on this program, please refer to Multidisciplinary Studies, Individualized Option. Leisure is projected as one of the leading growth areas in the American economy in the future. The shortened work week, high-technology-driven professions, the wellness movement and the desire for an increased quality of life are among the forces making the prediction a reality.

Career opportunities in a variety of settings are currently available, including entry- and management-level positions demanding leadership skills and organizational, implementation and administrative competencies. Jobs occur with public, non-profit and private sectors and include positions in therapeutic, municipal, commercial and military recreation, travel and tourism, and special event administration, among many.

The department includes a flexible, up-to-date program of course offerings, along with many opportunities to gain practical experience through internships, workshops, seminars, in-service experience and field studies. Combining Recreation, Parks and Leisure Services courses with coursework in other areas, students may complete a **Master of Science in Multidisciplinary Studies** degree. See the section on the Individualized Option for Multidisciplinary Studies in this bulletin for degree requirements.

COURSE DESCRIPTIONS

RPLS 547 (3) Programming in Therapeutic Recreation

This course details the Therapeutic Recreation process: assessment, planning, implementation, and evaluation in relation to individual treatment programs in Therapeutic Recreation Service. Emphasis is on interpreting assessment data, writing measurable goals and objectives, implementing an actual program, and documenting program results in terms currently used in human service settings.

Prerequisite: RPLS 274

RPLS 550 (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.

Prerequisite: RPLS 274 and 447

RPLS 562 (2) Readings in RPLS

Exploring topics and authors in the field of recreation, parks, and leisure services, analyzing and synthesizing the information.

RPLS 565 (3) Event Management

This course introduces students to special event planning, development, budgeting, promotion, and evaluation. The use, recruitment, evaluation and recognition of volunteers as well as fund raising strategies are discussed and employed.

Prerequisite: RPLS 377

RPLS 571 (3) Research Design in RPLS

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, including a review of literature, is prepared. Computer skills are emphasized.

Prerequisite: COMS 100

RPLS 573 (3) Administration of Leisure Time Programs

Development of approaches in staffing, planning, organization, coordination, evaluation, and directing programs and personnel.

RPLS 574 (2) Camp Administration

Overview of administration functions in resident camps and day camp settings.

RPLS 575 (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 non-federal public lands. Attention is given to international oceanic resources and how the international community will manage these resources.

RPLS 576 (3) Recreation Vehicular Safety

This course covers the ever-expanding mechanized leisure experience field with emphasis upon laws and regulations governing the utilization of the resource base, legal and ethical use of equipment in today's complex society. Utilization of maintenance equipment in leisure-oriented facilities is stressed.

RPLS 577 (3) Commercial Recreation & Tourism

This course traces the evolution of commercial recreation and tourism, which has become the world's number one industry. Cultural, economic, geographic, and political forces will be examined as to their role in this rapidly expanding area.

RPLS 581 (3) Park Systems & 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.

RPLS 582 (3) Leisure Needs of the Aging

Leisure as an integral aspect of successful aging is the focus of this course which includes: leisure in relation to physical, intellectual, social, and psychological aspects of aging and successful leisure programming in community based settings and in long term care.

RPLS 583 (3) Legal Processes in Recreation, Parks, and Leisure Services

This course consists of an overview of legislation that directly or indirectly affects recreation, parks, and leisure services past and present, public and private. Students will become participants in the process at several points during the semester.

RPLS 585 (1-3) Selected Topics

RPLS 589 (3) Clinical Aspects of Therapeutic Recreation

This course is designed to develop student's ability to function as a member of the interdisciplinary treatment team and practice critical thinking, writing, and oral skills related to treatment decisions, ethical issues, professional issues, and health care delivery systems. Prerequisite: RPLS 274 and 547; EDFN 235 Human Development

RPLS 590 (2-4) Workshop

RPLS 591 (1-6) In-Service

Special offering for recreation, parks, and leisure services personnel in a variety of service-oriented areas.

RPLS 610 (2) Programming Leisure Time Activities

Planning leisure-time programs to meet the contemporary needs of a variety of client groups. Students will develop their personal and professional philosophy towards provision of leisure services. Various planning techniques incorporating concepts of building community coalitions and emphasizing collaboration and synergism will be emphasized.

RPLS 620 (3) Field Research Project

Research pursued within a recreation, parks, and leisure services agency or program.

RPLS 677 (1-6) Individual Study

Opportunity for advanced independent study and research designed by student and faculty advisor.

RPLS 691 (1-6) In-Service**RPLS 694 (1-2) Alternate Plan Paper****RPLS 697 (1-6) Internship**

Field experience focused on development of competencies in recreation, parks, and leisure service settings. For majors only.

RPLS 699 (3-6) Thesis**REHABILITATION COUNSELING MS**

*College of Allied Health and Nursing
Department of Speech, Hearing, and Rehabilitation Services
103 Armstrong Hall • 507-389-1414*

Chair: Bruce Poburka, Ph.D.

Graduate Coordinator: Patricia Hargrove, Ph.D.

Glen Peterson, Ph.D.; Andrew Phemister, Ph.D.; Gerald Schneck, Ph.D.

Master's level training in Rehabilitation Counseling prepares students for employment as counselors who provide services to individuals with a wide range of different disabling conditions and disabilities. Graduates of this nationally accredited (CORE) program work in federal, state, and not-for-profit community agencies, as well as business and industry settings in the for-profit sector.

Rehabilitation counseling involves integration of the client's life situation including personal, family, medical, psychological, social and career factors. In addition to counseling, rehabilitation counselors typically provide case management and case coordination services, working jointly with clients to access a variety of resources and services that are relevant to the individual's rehabilitation goal(s). Rehabilitation counselors frequently work in interdisciplinary relationships and team with other professional specialists such as physicians, therapists, psychologists, social workers, educators, vocational evaluators, job placement specialists, and employers.

This 48 credit program allows open entry (students can begin any academic term), but is structured for students who begin in the fall to graduate after approximately two years of full-time enrollment. Classes are conducted on Wednesdays and Fridays and part-time study is an option for students who intend to complete the program in more than two years. Completion of a 900 hour internship in a rehabilitation agency or a similar social service setting is generally the final requirement for graduation. In many instances students are able to obtain paid internships. Upon, or close to completion of the program, graduates are eligible to sit for the national certification (CRC) examination. Demand for master's level rehabilitation counselors is strong and graduates have a very good employment outlook in the profession of rehabilitation counseling.

Admission. Majors in this degree program are admitted upon application of the College of Graduate Studies and Research based upon GPA from the last 90 credits from a quarter system or 60 credits from a semester system of undergraduate work and/or graduate level work completed after earning an undergraduate degree, but prior to applying to this program.. Generally, a 3.0 GPA on a 4.0 scale is required, although students with less than a 3.0 GPA can request admittance on a provisional basis.

In addition to being admitted by the College of Graduate Studies and Research, applicants must be recommended for admission by faculty of the Department. Faculty recommendations will be based upon the applicant's 300-500 word Statement of Purpose and the applicant's three Letters of Recommendation which are provided by a combination of academic and professional sources. In some instances, applicants may be asked to participate in an interview or additional selection procedures. Priority for admission will be provided to those applicants who are applying to begin in the fall semester and whose application materials are received by March 1st, prior to the fall semester in which the applicant intends to begin the program. Other applicants will be considered if program vacancies exist. Full-time or part-time study are equally encouraged, based on student needs or preferences.

Financial Aid. Students are referred to the MSU Office of Financial Aid where information on financial aid resources can be provided. In some instances scholarships of varying amounts are available to Rehabilitation Counseling students. Program faculty will keep students informed of available scholarship opportunities. Some Rehabilitation Counseling students also obtain Graduate Assistant appointments in the Department or in other campus settings such as the Cultural Diversity Program, the Office of Disabled Students Services, the Learning Center, and others. Inquiries about Graduate Assistantships should be directed to the College of Graduate Studies and Research.

REHABILITATION COUNSELING MS (Thesis, Alternative Plan Paper or Portfolio - 48 credits)

Required Core

- REHB 612 Foundations of Rehabilitation (3)
- REHB 617 Medical Aspects of Disability (3)
- REHB 619 Psychosocial Aspects of Disability (3)
- REHB 625 Research and Issues in Rehabilitation (3)
- REHB 640 Theory in Rehabilitation (3)
- REHB 651 Rehabilitation Counseling Techniques (3)
- REHB 661 Case Management in Rehabilitation (3)
- REHB 681 Vocational Measurement and Evaluation Techniques (3)
- REHB 688 Career Planning and Development in Rehabilitation (3)
- REHB 692 Rehabilitation Counseling Practicum (3)
- REHB 698 Internship (3)

Required Elective

Elective in Cultural Diversity or Cultural Pluralism (graduate level course(s) selected by student in consultation with an advisor)

Research Portfolio

Most Rehabilitation Counseling students produce a Research Portfolio that is developed over the period of time that the student is completing coursework. The Research Portfolio usually serves as an alternative to a Thesis or Alternate Plan Paper. Any student who desires to complete a Thesis or Alternate Plan Paper has the option to do so, in consultation with the academic advisor.

COURSE DESCRIPTIONS**REHB 524 (3) Rehabilitation of the Chemically Dependent**

Exploration and development of research and entry-level skills in diagnosis, treatment planning, service provision, and after-care with chemically dependent persons, particularly those with co-existing physical and mental conditions.
(Fall)

REHB 590 (1-2) Workshop**REHB 612 (3) Foundations of Rehabilitation**

Rehabilitation principles practices, philosophy, and history of rehabilitation will be addressed in various settings. Trends, legislation, and service delivery systems will be investigated.
(Fall)

REHB 617 (3) Medical Aspects of Disability

Basic medical information essential to understanding the functional limitations and rehabilitation implications of individuals with disabling conditions. Information on the etiology, prognosis, potential complications, treatment procedures, rehabilitation strategies, and vocational implications will be addressed with respect to a representative sample of disabling conditions. In addition, an introduction to medical and therapeutic services, restorative techniques, and some medical terminology will be provided.
(Fall)

REHB 619 (3) Psychosocial Aspects of Disability

Overview of the psychological and social aspects of disability with an emphasis on diversity of experience among individuals with disabilities and their families. The impact of social and psychological aspects of disability on public attitudes, public policy, and law will be examined. The adjustment process experienced by individuals with disabilities and their families will be examined from the perspective of the personal and social context in which adjustment occurs.
(Fall)

REHB 625 (3) Research & Issues in Rehabilitation

Critical review of recent research findings and related practices in rehabilitation and allied disciplines.
(Spring)

REHB 640 (3) Theory in Rehabilitation

Beginning theory and related techniques of counseling and vocational development are presented utilizing lecture and role play to convey key concepts in rehabilitation counseling.
(Fall)

REHB 651 (3) Rehabilitation Counseling Techniques

Applied theory and techniques in rehabilitation counseling are presented, including specific applications to various disabilities in both groups and individual practice. Interactions are required in addition to regular class meetings.
(Spring)

SCIENCE EDUCATION

REHB 661 (3) Case Management in Rehabilitation

The student is involved in all phases of interviewing, counseling, diagnosis, assessment, planning, and analysis, transferable skills analysis, and integration of the knowledge and skills required of practicing rehabilitation counseling.
(Summer)

REHB 677 (1-4) Individual Study

A project performed, with prior approval, under the close supervision of a faculty member. Prerequisite: permission
(Summer, Fall, Spring)

REHB 681 (3) Vocational Measurement and Evaluation Techniques

Through readings and by taking and administering diverse tests, the student will gain knowledge of the theory and methods of test construction, appropriateness of individual tests, and practical applications of measurement and evaluation.
(Spring)

REHB 688 (3) Career Planning and Development in Rehabilitation

Overview of career development theories. Relates career development to the challenges and barriers associated with disability. Employment development, job seeking and job retention factors that pertain to employment, and career planning for individuals with disabilities who participate in rehabilitation programs are examined.
(Spring)

REHB 691 (1-6) Inservice

REHB 692 (3) Rehabilitation Counseling Practicum

Provides the student with an individualized learning opportunity related to development and enhancement of direct counseling competencies through supervised, applied counseling experience in a public or private agency that provides counseling and related rehabilitation services to individuals with disabilities. Enrollment in the rehabilitation counseling practicum requires successful completion (grade "B" or better) of REHB 651 - Rehabilitation Counseling Techniques or comparable counseling competence as demonstrated by a method determined through academic advisement. Typically, the rehabilitation counseling practicum will be completed prior to enrollment in the rehabilitation counseling internship or through academic advisement, concurrently with initiation of the internship.

REHB 694 (1-2) Alternate Plan Paper

Writing a paper utilizing substantial bibliographic research under the direction of a faculty member.

Prerequisite: permission
(Summer, Fall, Spring)

REHB 698 (1-12) Internship

The student provides a comprehensive array of professional rehabilitation services, including counseling and case management services at an accredited rehabilitation agency, facility, or program under the coaching of a qualified counselor-coach and university supervisor before entering professional employment.

Prerequisite: permission
(Summer, Fall, Spring)

REHB 699 (3-6) Thesis

Performance of a formal research paper under the direction of a graduate faculty member.

Prerequisite: permission
(Summer, Fall, Spring)

SCHOOL HEALTH EDUCATION MS

(DISCIPLINE-BASED)

*College of Allied Health and Nursing
Department of Health Science
213 Highland Center N • 507-389-1527*

See **HEALTH SCIENCE**

SCIENCE EDUCATION MS

(DISCIPLINE-BASED)

College of Science, Engineering and Technology

Advisors: Daryl Adams, Ph.D. Biology; Jeff Pribyl, Ph.D., Chemistry

The Master of Science in Science Education is a program for students who wish to further their knowledge in a multidisciplinary manner within the science areas. The program offers flexibility for the junior high school and high school science teacher who desires a broad background in the sciences.

Teaching licensure is a prerequisite to pursuing this degree, which is for teachers interested in enrichment in a teaching area. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. Please see the section concerning the MAT program that is listed in this bulletin.

Admission. Students must meet the admission requirements of the College of Graduate Studies and Research, and submit two letters of recommendations (one of which is their current principal or superintendent). The GRE is required.

Financial Assistance. Students are encouraged to contact an advisor about the availability of financial assistance through various science departments or Cultural Diversity assistantships.

SCIENCE EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Science Core (24 credits)

The program requires a minimum of 24 credits in science. The science credits, selected with the aid of an advisor, may be from the areas of astronomy, biology, chemistry, earth science, geology, mathematics, physics or environmental sciences. Credits must be earned in at least three of these disciplines with a minimum of 12 credits in one area. Within this program students may choose the thesis or the alternate plan.

Required Professional Education (6 credits)

Choose 6 credits of professional education courses in consultation with an advisor.

Required Thesis or Alternate Plan Paper

Students may elect to complete the thesis or alternate plan paper in any of the science areas listed above with the approval of their advisor.

694 Alternate Plan Paper (1-2)

699 Thesis (3-6)

In the alternate plan students must earn a minimum of 34 credits plus meet the alternate paper requirements outlined by their grad committee.

With the aid of an advisor, students will select various science and professional education courses to fulfill the above stated requirements before the completion of the first 10 credits. The course selection will be tailored to each student's background, current teaching duties and interests. All students must have 50% of their credits at the 600 level, excluding thesis or alternate plan paper credits.

SOCIAL WORK

College of Social & Behavioral Sciences

Department of Social Work

358 Trafton Science Center N • 507-389-6504

Chair: William A. Anderson, Ph.D.

William Anderson, Ph.D.; Annelies Hagemester, Ph.D.; Christine Black-Hughes, Ph.D.; Marilyn Frank, Ph.D.; Nancy Fritzsims-Cova, Ph.D.; Debra Gohagan, Ph.D.; Robin R. Wingo, MSW

Minnesota State University does not have a program leading to a graduate degree in social work. Selected graduate level offerings are scheduled on a regular basis to provide continuing education for human service workers and to supplement graduate coursework for related majors, but these courses do not lead to a graduate Social Work degree. Students who want to transfer credits to an accredited MSW program should check with the degree-granting institution.

COURSE DESCRIPTIONS

SOWK 512 (3) Social Welfare Issues & Policies

Theoretical and practical exploration of the interrelatedness of social services, social policy formation and analysis, and social work practice.

SOWK 515 (3) Child-Family Welfare Services

Social services designed to facilitate child development and family functioning.

SOWK 519 (3) Social Work and Aging

Issues, resources, and processes in working with the elderly and their families in the social service system.

SOWK 520 (3) Women's Issues in Social Work

Women's concerns as clients and workers in the social service system.

SOWK 525 (3) Social Work Health Care Setting

Service delivery issues and skills for working in hospitals, nursing homes, and community programs.

SOWK 530 (3) School Social Work

Service delivery issues, knowledge, and skills for providing social services within school services.

SOWK 565 (3) Analyzing the Small Community

Community study, application of research techniques; student-conducted research and analysis using a community setting.

SOWK 569 (3) Applied Social Work Research

Research issues and techniques, needs assessment, program, and practice evaluation.

SOWK 585 (1-6) Selected Topics

Topics announced when offered.

SOWK 590 (1-3) Workshop

SOWK 677 (1-3) Individual Study

Under faculty mentorship, students may pursue in-depth library or field research on topics of their choice.

SOWK 694 (2) Alternate Plan Paper

Individual research.

Prerequisite: grad school approval

SOWK 697 (1-10) Internship: Social Work

Internship in approved social agency.

SOCIOLOGY MA

SOCIOLOGY: CORRECTIONS MS

SOCIOLOGY: HUMAN SERVICES PLANNING & ADMINISTRATION MS

College of Social and Behavioral Sciences

Department of Sociology and Corrections

113 Armstrong Hall • 507-389-1561

Fax: 507-389-5615

www.mnsu.edu/dept/soccor/web/sc.html

Chair: William Wagner, Ph.D.

Afroza Anwary, Ph.D.; Steve Buechler, Ph.D.; Barbara Carson, Ph.D.; Joe Davis, Ph.D.; W.R. DeMaree, Ph.D.; H. Diane Graham, Ph.D.; Kimberly Greer, Ph.D.; Barbara Keating, Ph.D.; Leland McCormick, MA; Luis Posas, Ph.D.; Robert Redhead, MS; James Robertson, Dipl. in Law; Leah Rogne, Ph.D.; Thomas Schmid, Ph.D.; Pedro Thomas, Ph.D.; Steven Vassar, Ph.D.

Sociology and Corrections offers graduate work leading to the Master of Arts in Sociology and the Master of Science in Sociology: Corrections and Sociology: Human Services Planning and Administration. All of these programs emphasize flexibility and individual attention by a broadly trained faculty with a diversity of interests and a commitment to real-world problems and solutions.

General Admission Requirements. Students must meet the general admission requirements of the College of Graduate Studies and Research to be admitted to their program.

General Admission Requirements for the Department of Sociology and Corrections. In addition to courses specific to each program, admission to the graduate programs in this department require three letters of recommendation and a grade point average of 2.75 on a 4.0 scale for the undergraduate degree. Students not meeting the requirements may be admitted conditionally; such conditions to be determined by the program admission committee. The department also invites students to submit a curriculum vitae or resume and a statement explaining their interest in their chosen program (optional). Forms for the recommendations are available from the department. The application and transcripts should be sent to the College of Graduate Studies and Research. Letters of recommendation, curriculum vitae or resume, and statement of interest should be sent directly to the Department of Sociology and Corrections.

Admission to the Sociology MA program requires 24 quarter credits or 18 semester credits of sociology including courses in sociological theory, research methods and statistics; three letters of recommendation, and a grade point average of 2.75 on a 4.0 scale for the undergraduate degree.

Admission to the Sociology: Corrections MS program requires 24 quarter credits or 18 semester credits in the social and behavioral sciences including courses in sociology,

criminology, penology and research methods or statistics, three letters of recommendation, and a grade point average of 2.75 on a 4.0 scale for the undergraduate degree.

Admission to the Sociology: Human Services Planning and Administration MS program requires 24 quarter credit hours or 18 semester credit hours of social and behavioral sciences courses, three letters of recommendation, and a grade point average of 2.75 on a 4.0 scale for the undergraduate degree.

SOCIOLOGY MA

(Thesis Plan - 33 credits)

The Master of Arts in Sociology is designed for the person seeking a comprehensive, sociological understanding of the social world. The program strongly emphasizes the diversity of sociological theories and research methodologies. Upon this foundation, the program provides an in-depth apprenticeship in the discipline of sociology by combining core courses, diverse subject areas, and the opportunity for intensive academic specialization. This program can be effectively used as a terminal degree by those who choose to pursue careers in applied settings. It is also ideally suited for those planning on advanced graduate training and a career in teaching and research.

Required Core (18 credits)

- SOC 602 Seminar in Social Organization (3)
- SOC 603 Seminar in Social Psychology (3)
- SOC 604 Seminar in Sociological Statistics (3)
- SOC 605 Seminar in Research Methods (3)
- SOC 606 Seminar in Sociological Theory (3)
- SOC 699 Thesis (3)

Required Electives (15 credits)

Any 500/600 level elective courses selected in consultation with an advisor.

SOCIOLOGY: CORRECTIONS MS

(Thesis Plan - 33 credits)

The Master of Science in Sociology: Corrections is designed for a person seeking a leadership role in the active critique and transformation of corrections practice. A graduate of this program will have dedication to the application of the sociological perspective to correctional practices, a thorough understanding of the correctional system, a commitment to improving the justice system, and the ability to facilitate and maintain necessary processes for change. The graduate of this program is further expected to promote a commitment to the principles of social justice, respect, tolerance, dignity, and worth of all persons within corrections and the community at large.

Required Core (24 credits)

- COR 559 Issues in Corrections (3)
- SOC 602 Seminar in Social Organization (3)
- SOC 603 Seminar in Social Psychology (3)
- SOC 605 Seminar in Sociological Research (3)
- SOC 606 Seminar in Sociological Theory (3)
- SOC 607 Program Evaluation (3)
- COR 647 Correctional Theory & Practice (3)
- COR 699 Thesis (3)

Required Electives (9 credits)

Any 500/600 level Elective courses selected in consultation with an advisor. A list of approved electives is available in the department.

SOCIOLOGY: HUMAN SERVICES PLANNING AND ADMINISTRATION MS

(Thesis Plan - 33 credits)

The Master of Science in Sociology: Human Services Planning and Administration is designed for a person seeking a leadership role as an administrator in the field of human services. The graduate of this program will have a solid grounding in the knowledge, values, and skills appropriate for a broad range of human services programs. The program especially encourages creative and critical thinking skills which enable the graduate to produce positive changes in organizations.

Required Core (24 credits)

- SOC 517 Program Administration (3)
- SOC 566 Program Planning (3)
- SOC 602 Seminar in Social Organization (3)
- SOC 603 Seminar in Social Psychology (3)
- SOC 605 Seminar in Sociological Research (3)
- SOC 606 Seminar in Sociological Theory (3)
- SOC 607 Program Evaluation (3)
- SOC 699 Thesis (3)

Required Electives (9 credits)

Any 500/600 level Elective courses selected in consultation with an advisor.

COURSE DESCRIPTIONS**SOCIOLOGY****SOC 501 (3) American Society: Comparative Perspectives**

A comparative view of American Society, comparing and contrasting social, cultural, and demographic aspects of life in the United States across regions and states.

SOC 504 (3) Sociology of Aging

Social and social-psychological forces in later life. Problems and prospects of growing old in the United States.

SOC 505 (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.

SOC 506 (3) Applied Sociology

Applying sociology to create a career and make the world a better place. Explores how to investigate and implement solutions to problems of social process and social organization in workplace or other settings including community agencies, government, business, and other social institutions.

SOC 507 (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, morality, and migration. The causes and consequences of overpopulation are discussed with special attention to resource depletion and food shortages.

SOC 508 (3) Family Life Dynamics

An overview and analysis of major aspects of the American family, including cohabitation, mate selection, parenting, and changes in marriage, family, and sex role dynamics since 1970.

SOC 509 (3) Family Violence

Examines various forms of family violence, including dating violence, spouse abuse, and child abuse; reviews social theory and empirical research and explores social policy, appropriate responses, and possible solutions.

SOC 510 (3) Black American Families**SOC 511 (3) The Family Across Cultures**

Utilizes the comparative perspective to examine marriage and family in numerous international cultures. Focuses upon similarities and differences across cultures and how different family systems deal with universal aspects of family.

SOC 517 (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.

SOC 523 (3) Complex Organizations

Analysis of the development, structure, and functioning of social processes in large-scale, formal organizations.

SOC 525 (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.

SOC 530 (3) Sociology of Capitalism

Overview of the political economy of the United States as an advanced capitalist society with a focus on economic and political inequality, the class structure, the labor process, race and gender relations, the welfare state, the global dimensions of capitalism, and modern crisis tendencies.

SOC 535 (3) Marital Conflict: Causes & Consequences

Social, cultural, and interpersonal factors contributing to marital conflict and separation; consequences for spouses and children; effective conflict resolution; single parenting; remarriage and step-parenting; legal and social resources.

SOC 541 (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.

SOC 542 (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.

SOC 546 (3) Race, Culture & Ethnicity

Study of minority racial and cultural groups in US society. An examination of how the lives of the members of these groups are affected by racism, prejudice, and discrimination.

SOC 556 (3) History of Social Thought

A survey of ideas about the nature of society from the past to the present.

SOC 557 (3) Classical Sociological Theory

A study of the 18th century forerunners and the 19th century founders of sociology.

SOC 558 (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.

SOC 561 (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.

SOC 563 (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.

SOC 565 (3) Law & Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse.

SOC 566 (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.

SOC 569 (3) Survey Research

Techniques of survey research, interview, and questionnaire construction, field administration, and sampling methodology.

SOC 570 (3) Sociology of Parent-Child Interaction

Examines parent-child relationships in societal context; socialization theories; classic and contemporary research; parenting applications.

SOC 579 (3) Sociological Ethnography

Exploration of the methodological and theoretical issues in sociological ethnography; examination of ethnic, deviant, and other constructed social worlds and the means by which sociologists study these worlds.

SOC 580 (3) Social Observation

Participant observation, focused interviews, and qualitative analysis; students actively participate in a field research project.

SOC 582 (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.

SOC 583 (3) The Family: A Sociological Analysis

An examination of theory development and research findings about family systems with a special emphasis on societal influences (social, economic, political) on the changing family.

SOC 584 (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.

SOC 585 (2-6) Selected Topics

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

SOC 586 (3) Modifying Behavior in Social Settings

Principles and techniques of changing people's behavior in social, group, and agency environments.

SOC 590 (1-3) Worship

Workshop topics vary as announced in class schedule. May be retaken for credit.

SOC 591 (1-6) In-Service**SOC 601 (3) Topics in Sociology**

Topics vary as announced in class schedule. May be repeated for credit if topic varies.

SOC 602 (3) Seminar: Social Organization

Macro-analysis of society as a system. Examines cultural, structural, behavioral, and ecological patterns of organization. Includes a focus on complex organizations.

SOC 603 (3) Seminar: Social Psychology

A survey and analysis of major scientific approaches to human social behavior.

SOC 604 (3) Seminar: Social Statistics

Appreciation of basic multivariable methods in the analysis of sociological data. Includes computer applications using SPSS and application to various social issues.

SOC 605 (3) Seminar: Social Research

Advanced-level introduction or review of social science research methods, including entire research process: problem definition, literature review, hypothesis development, method development, data collection, analysis, interpretation, and communication; focuses on quantitative methods.

SOC 606 (3) Seminar in Sociological Theory

An overview of sociological theory that spans the classical and contemporary traditions within the discipline and focuses on current theoretical issues and controversies within the field.

SOC 607 (3) Program Evaluation

Quantitative and naturalistic paradigms as a knowledge base for program evaluation. Examines the social context and implication of evaluation to discuss mode and ethical considerations. Includes applied contribution of empirical research and current issues and trends.

SOC 609 (3) Seminar: Thesis Writing

Exploration of intellectual craftsmanship, existing models of thesis scholarship, the generic elements of the thesis, the writing process, and common obstacles to thesis completion in a collaborative and supportive context designed to foster significant progress on the thesis project throughout the semester.

SOC 677 (1-3) Individual Study

A maximum of six credits is applicable toward a degree program.

SOC 691 (1-4) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

SOC 695 (1-6) Internship: Human Services

Prerequisite: consent

SOC 696 (1-6) Internship: College Teaching

The internship in college teaching is designed to provide opportunity to acquire supervised teaching experience in the college classroom and to explore a career in college teaching. 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.

Prerequisite: consent

SOC 697 (1-12) Internship: Sociology

The internship 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.

Prerequisite: consent

SOC 699 (1-3) Thesis**CORRECTIONS****CORR 517 (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.

CORR 541 (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.

CORR 542 (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.

CORR 543 (3) Penology

Addresses the justifications for punishment, the historical development of punishment, the legal and policy issues concerning capital punishment, and the use of incarceration as a response to crime.

CORR 544 (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 of 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.

CORR 547 (3) Community Corrections

Philosophy, historical developments, and theoretical basis of probation, parole, and other community corrections programs. Evaluation of traditional and innovative programs in Community Corrections.

CORR 548 (3) Correctional Law

Examines the rights of inmates, probationers, and parolees.

CORR 549 (3) Correctional Counseling

Principles and methods of individual and group counseling with juvenile and adult offenders; development of interpersonal helping skills.

CORR 551 (3) Law & 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.

CORR 552 (3) Victimology

Historical overview of characteristics of victims, victim-offender relationships, societal victimization, victim's rights and services, and restorative justice.

CORR 553 (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.

CORR 559 (3) Issues in Corrections

A critical examination of current issues in the correctional field.

CORR 565 (3) Law & Chemical Dependency

Addresses aspects of criminal and civil law pertinent to substance abuse. Prerequisite: HLTH 225 or PSYC 73

CORR 585 (2-6) Selected Topics

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

CORR 591 (1-6) In-Service

Topics vary as arranged by students and instructor. May be retaken for credit.

CORR 607 (3) Program Evaluation

Quantitative and naturalistic paradigms as a knowledge base for program evaluation. Examines the social context and implication of evaluation to discuss mode and ethical considerations. Includes applied contribution of empirical research and current issues and trends.

CORR 647 (3) Correctional Theory & Practice

Critical analysis of the relationship between causal theory and correctional practice.

CORR 677 (1-3) Individual Study**CORR 698 (1-6) Internship**

The graduate-level internship in Corrections is designed to provide opportunity to apply classroom learning, practice and enhance research and administrative skills, and experience professional socialization.

CORR 699 (1-3) Thesis

SPANISH MS

SPANISH EDUCATION MS

(DISCIPLINE-BASED)

College of Arts and Humanities
Department of Modern Languages
227 Armstrong Hall • 507-389-2116

Chair: Kimberly Contag, Ph.D.

James Grabowska, Ph.D.; Karl H. Heise, Ph.D.; Enrique Torner, Ph.D.

Modern Language graduate study at Minnesota State University enables students to pursue the Master of Science in Spanish (Secondary Teaching) or the Master of Science Community College Track in Spanish. The Department of Modern Languages also offers graduate courses in Spanish for the Master of Arts in Teaching degree. The MAT program is designed for those who want to teach at the secondary level but lack certification. The Modern Language courses associated with the MAT Degree are also listed below.

Admission. Complete the general admission requirements of the College of Graduate Studies and Research. Must demonstrate a minimum oral proficiency level of intermediate high according to ACTFL Proficiency Guidelines. Contact the department for information.

Graduate Teaching Assistantships. A number of graduate teaching assistantships are available during the academic year. A graduate teaching assistant in the Department of Modern Languages teaches classes in elementary French, German, Spanish or ESL and receives a salary, a tuition stipend and automatic residency for tuition purposes. For more information, contact the College of Graduate Studies and Research or the Department of Modern Languages.

Graduate Study Abroad. Graduate credit can be earned in Spanish on department-sponsored Study Abroad Programs. For more information, consult the Department of Modern Languages.

SPANISH MS

COMMUNITY COLLEGE OPTION

(Thesis Plan - 30 credits)

(Alternate Plan Paper -34 credits)

Students interested in teaching at the Community College level should see their advisor about identifying methods courses to strengthen their teaching ability. Licensure is not required to teach at the Community College level, but courses in teaching skills are recommended. This program prepares students of Spanish for teaching in higher education. Fifty percent of the credits must be taken at the 600 level (excluding thesis and APP credits).

Required Major Teaching Field (16-22 credits)

Choose any 500/600 level Spanish courses selected in consultation with an advisor.

Required Modern Language Methods (4 credits)

MODL 560 Methods of Teaching Modern Languages (4)

Required Professional Education credits (6 credits)

Choose any 500/600 level Professional Education courses selected in consultation with an advisor.

Required Electives (2-6 credits)

Choose any 500/600 level elective courses selected in consultation with an advisor.

Required Thesis or Alternate Plan Paper

694 Alternate Plan Paper (1 or 1-2)

699 Thesis (3 or 3-4)

SPANISH EDUCATION MS

(DISCIPLINE-BASED)

(Thesis Plan - 30 credits)

(Alternate Plan Paper -34 credits)

This program is primarily for teachers of Spanish who are interested in pursuing an advanced degree in the language and in increasing their proficiency. The degree requires courses totaling 30 credits (with thesis) or 34 credits (with alternate plan paper). Fifty percent (50%) of the credits must be taken at the 600 level, excluding thesis or APP credits.

This degree does not lead to teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program.

Required Spanish (18-22 credits)

Choose any 500/600 level Spanish courses selected in consultation with an advisor.

Required Professional Education (6 credits)

Choose any 500/600 level Professional Education courses selected in consultation with an advisor.

Required Electives (6 credits)

Choose any 500/600 level elective courses selected in consultation with an advisor.

Required Thesis or Alternate Plan Paper

694 Alternate Plan Paper (1 or 1-2)

699 Thesis (3 or 3-4)

COURSE DESCRIPTIONS

SPANISH

SPAN 501 (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, etc.)

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 502 (1-4) Topics in Spanish Peninsular Literature

Topics vary: Don Quixote de la Mancha; Golden Age drama and poetry; Spanish literature since the Golden Age, etc. May be repeated for credit.

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 503 (1-4) Topics in Spanish American Literature

Topics vary. Major writers from Spanish America. Topics include Spanish American novel, Spanish American poetry, Spanish American drama, Spanish American short story, romanticism, and the Mexican novel, etc. May be repeated for credit.

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 593 (1-6) Supervised Study in Spanish-Speaking Foreign Countries

Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 594 (1-6) Supervised Study in Mexico: Themes in Spanish American

Topics will vary. May be repeated for credit. Study for credit must be approved by the department prior to departure.

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 595 (1-6) Supervised Study: Themes in Hispanic Literature

Topics will vary. May be repeated for credit

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 596 (1-6) Supervised Study: Themes in Hispanic Culture

Topics will vary. May be repeated for credit

Prerequisite: graduate status, undergraduate major or equivalent in Spanish

SPAN 600 (2) Research & Bibliography

An introduction to methods of literary research, including use of literary resources, literary theory, the MLA style, and paper writing strategies. Primarily for graduate students who are writing their thesis or alternate plan paper.

Prerequisite: graduate status

SPAN 601 (1-4) Topic Spanish Language/Linguistics

Topics will vary. May be repeated for credit.

Prerequisite: graduate status

SPAN 602 (1-4) Topic Peninsular Culture

Topics will vary. May be repeated for credit.

Pre: Graduate status 603 (1-4) Topics in Spanish American culture topics will vary. May be repeated for credit.

Prerequisite: graduate status

SPAN 603 (1-4) Topics in Spanish American Culture**SPAN 604 (1-4) Topic: Peninsular Spanish Literature**

Topics will vary. May be repeated for credit.

Prerequisite: graduate status

SPAN 605 (1-4) Topics in Spanish American Literature

Topics will vary. May be repeated for credit.

Prerequisite: graduate status

SPAN 677 (1-4) Individual Study

Individual study, variable topics.

Prerequisite: graduate status

SPAN 692 (1-3) Independent Study

Variable topics.

Prerequisite: graduate status

SPAN 694 (1-2) Alternate Plan Paper

SPAN 697 (1-6) Internship: Community College Option

Preparation of teaching materials and minimum of 20 hours of classroom teaching at the intermediate level. Areas in which materials are to be developed and taught are listening comprehension, speaking, literature, culture, and writing.

Prerequisite: permission of instructor

SPAN 699 (3-6) Thesis

MODERN LANGUAGE (MODL)

MODL 560 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL, scale in target language.

MODL 561 (1) Applied Modern Language Teaching Methods

A field experience in a secondary school setting for students earning licensure in modern language teaching. Practicum students work with middle or high school students of French, German, or Spanish. Take concurrently with or following MODL 460.

MODL 562 (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: Student must demonstrate oral proficiency level of Intermediate-High on ACTFL, scale in target language.

MODL 563 (1) Applied FLES Methods

A field experience in an elementary setting for students earning licensure in modern language teaching. Practicum students work with elementary school students in French, German, or Spanish. Take concurrently with or following MODL 462.

MODL 565 (1-3) Workshop in Modern Language Education

Topics in modern language education. May be repeated for credit.

SPEECH COMMUNICATION MA, MS

SPEECH COMMUNICATION MFA

*College of Arts and Humanities
Department of Speech Communication
230 Armstrong Hall • 507-389-2213*

Chair: Daniel Cronn-Mills, Ph.D.

Graduate Coordinator: David Engen, Ph.D.

Sheryl Dowlin, Ph.D.; Martine Harvey, Ph.D.; Nanette Johnson-Curiskis, Ph.D.; Lisa Perry, Ph.D.; Warren Sandmann, Ph.D.; Kristen Treinen, Ph.D.; Leah White, Ph.D.

Speech Communication offers programs leading to the Master of Arts, Master of Fine Arts, and the Master of Science degrees. Programs are available for all students who have a bachelor's degree. Students must complete graduate courses in communication theory and research methods and may design the remainder of their program with the approval of the Graduate Coordinator in Speech Communication.

Admission. In addition to completing the minimum requirements for the College of Graduate Studies and Research, students must also have a GPA of 2.75 or better in overall undergraduate studies and a 3.0 for the last two years of undergraduate work. In one packet, students should submit the following items: three completed Recommendation for Master's Program forms from individuals qualified to judge competence in speech scholarship; a writing sample demonstrating research, sound analysis, organization and evidence such as a term paper, convention paper, professional report, etc., and a statement of personal, educational and professional goals.

The Graduate Coordinator examines applications and determines if requirements have been met. If an applicant does not meet the requirements, admission may be provisional. Probationary status will be provided for applicants with an undergraduate degree whose GPA is below admission standards under the following conditions: Acceptable performance on the GRE of 1380 and at least one subtest of 500 OR acceptance of a student petition and contingency of adherence to contract terms formulated by graduate faculty. Completion of the contract requirements will result in a change to a regular admission status.

SPEECH COMMUNICATION MA

(Thesis Plan 30-33 credits)

(Alternate Paper Plan 34 credits)

Required Speech Communication Core (6-9 credits)

SPEE 600 Seminar in Communication Theory (3)

SPEE 601 Communication Research Methods (3)

SPEE 603 Strategies: Basic Course (3)*

*required only of Graduate Teaching Assistants

Required Speech Communication Electives (12-15 credits)

Choose 5/600 level electives in consultation with an advisor

Required Supporting Field Electives (6-9 credits)

Choose any 5/600 level related elective in consultation with an advisor

Required Thesis or Alternate Plan Paper (2-6 credits)

SPEE 694 Alternate Plan Paper (2 credits)

SPEE 699 Thesis (3-6 credits)

Appropriate research tools such as ethnography, critical analysis, language, statistics or others may be required by the department. No P/N credit is acceptable in fulfilling major requirements except in the case of theses, practicums, internships, in-service courses and individual study, and then only by special permission of the department. Fifty percent (50 percent) of all coursework must be at the 600 level, not including thesis or alternate plan.

SPEECH COMMUNICATION MFA-FORENSICS

(Thesis Option - 48 credits)

Required Speech Communication Core (30 credits)

SPEE 510 Group Performance of Literature (3)

SPEE 530 Directing Forensic Activities (3)

SPEE 600 Seminar in Communication Theory (3)

SPEE 601 Communication Research Methods (3)

SPEE 630 Forensics Practicum (3)

Choose one course from:

SPEE 512 Organizational Communication (3)

SPEE 545 Conflict Management (3)

Choose one course from:

SPEE 513 Advanced Intercultural Communication (3)

SPEE 621 Advanced Interpersonal Management (3)

Choose one course from:

SPEE 500 American Public Address (3)

SPEE 501 Rhetoric of Western Thought (3)

SPEE 620 Modern Rhetorical Criticism (3)

Choose one course from:

SPEE 504 Teaching Speech Communication (3)

SPEE 633 Communication for Professionals (3)

SPEE 699 Thesis (3-6; max of three applied to program)

Required Speech Communication Electives (9 credits)

Choose 5/600 level electives in consultation with an advisor.

Required Supporting Field Electives (9 credits)

Choose any 5/600 level related electives in consultation with an advisor.

Appropriate research tools such as ethnography, critical analysis, language, statistics or others may be required by the department. No P/N credit is acceptable in fulfilling major requirements except in the case of thesis, practicums, internships, in-service courses and individual study, and then only by special permission of the department. Fifty percent (50 %) of all coursework must be at the 600 level, not including thesis or alternate plan.

SPEECH COMMUNICATION MS

(Project Option - 34 credits)

Required Speech Communication Core (6-9 credits)

SPEE 600 Seminar in Communication Theory (3)

SPEE 601 Communication Research Methods (3)

SPEE 603 Strategies: Basic Course (3)*

*required only of Teaching Assistants

Required Speech Communication Electives (9-12 credits)

Choose 5/600 level electives in consultation with an advisor

TEACHING ENGLISH AS A SECOND LANGUAGE

Required Supporting Field Electives (6 credits)

Choose any 5/600 level related elective courses

Required Project/Internship (12)

SPEE 697 (12)

COMMUNICATION ARTS AND LITERATURE MAT

See the Chair of either the Department of Speech Communication or the Department of English.

COURSE DESCRIPTIONS

SPEE 500 (3) American Public Address: A Tradition

Survey of significant American speakers and their speeches from the colonial period to the Twentieth Century.

SPEE 501 (3) Rhetoric of Western Thought

The course explores the history of rhetoric and communication from the ancient Greeks to the present day. The course is designed for students interested in expanding their understanding of rhetoric as a force in contemporary intellectual, political, and academic fields.

SPEE 503 (3) Gender and Communication

SPEE 504 (3) Teaching of Speech Communication

This course is designed to fulfill the Secondary Licensure requirement. The course covers teaching methods and materials needed to develop speech communication units for the secondary speech communication courses.

SPEE 510 (3) Group Performance of Literature

SPEE 512 (3) Organizational Communication

This course is designed to develop an understanding of speech communication in the organizational context. The course will aid each individual in working more effectively within any type of organization through exposure to major theories and works in the area of organizational communication.

SPEE 513 (3) Advanced Intercultural Communication

This course explores the reasons we have difficulty communicating with people from other cultures, why misunderstandings occur, and how to build clearer and more productive cross-cultural relationships.

SPEE 530 (3) Directing Forensic Activity

Methods and techniques in the development of competitive speech programs.

SPEE 540 (1-3) Special Topics

A course designed for students who have a general interest in speech communication. Content of each special topics course will be different. May be retaken for credit.

SPEE 545 (3) Conflict Management

SPEE 600 (3) Seminar in Communication Theory

An introduction to the communication field focusing on theory construction and the function of communication theory/models in the human experience. Contemporary theories of communication will be reviewed.

SPEE 601 (3) Communication Research Methods

Graduate students will gain a basic understanding of the Social Science research process as it applies to the field of communication. Quantitative and qualitative research designs, methods, and data analysis procedures will be reviewed. Students will research and prepare a research proposal document.

SPEE 603 (3) Stategies: Basic

Open only to teaching assistants of basic course in Speech Communication. Covers course design, course evaluation, methodologies for skill development, and related topics.

SPEE 619 (3) Rhetorical Criticism

SPEE 620 (3) Modern Rhetorical Criticism

This course includes the skills in the analysis, application, and evaluation of argumentative communication.

SPEE 621 (3) Advanced Interpersonal Communication

This course explores and critically examines interpersonal communication theory development, current research and leading theoretical perspectives, and potential applications in contemporary interpersonal communication contexts and relationships.

SPEE 630 (3) Forensics Practicum

This course is designed to help prepare students for their professional roles as directors or assistant directors of collegiate or high school forensics programs.

SPEE 633 (3) Communication for Professionals

This course is designed to enhance the communication skills of professionals. Students will learn theory and techniques of presentation for academic conferences, professional meetings, business and industry presentations, interviews, and group meetings. The use of technology in professional communication will be highlighted.

SPEE 640 (1-3) Special Topics

This course provides both graduate students and faculty the opportunity to work together with a specific theme that is timely and relevant to the field. May be repeated for credit.

SPEE 677 (1-6) Individual Study

Advanced independent study.

SPEE 690 (1-4) Workshop

Topics vary as announced in class schedules.

SPEE 694 (1-2) Alternate Plan Paper

Review and interpretation of a body of research.

SPEE 697 (1-12) Internship

Provides first-hand experience in applying communication theories in the workplace under the direction of an on-site supervisor.

SPEE 699 (3-6) Thesis

Original research which meets accepted research standards.

TEACHING ENGLISH AS A SECOND LANGUAGE (TESL) MA

College of Arts and Humanities

Department of Modern Languages

227 Armstrong Hall • 507-389-2116

Chair: Kimberly Contag, Ph.D.

Patricia Wilcox Peterson, Ph.D.; Harry Solo, Ph.D.; Stephen Stoyoff, Ph.D.

Programs in teaching English as Second Language include the MA in English, TESL track, and the ESL licensure program in the Department of Modern Languages.

The TESL licensure program prepares students to teach English as a second language (ESL) in grades K-12. It is available on the graduate level for two categories of students. The TESL licensure program may be taken as part of the MAT degree in the College of Education for persons holding a baccalaureate degree and applying for initial licensure. All 24 credits of TESL coursework listed below are required for ESL licensure in the MAT program. Candidates should apply to the College of Education for admission to the MAT program and should check the education requirements for the degree. For teachers already holding a valid license in another content area, an ESL endorsement may be added to an existing license by taking the licensure courses listed below. Such candidates do not need to complete the educational coursework required for initial certification, but they must check with the College of Education to determine any possible student teaching obligation.

TEACHING ENGLISH AS A SECOND LANGUAGE, LICENSURE PROGRAM

Required for licensure:

ENG 689 Studies in English Linguistics (3)
MODL 570 Theory and Methods of TESL I (4)
MODL 571 Theory and Methods of TESL II (4)
MODL 672 Teaching English as a Second Language Practicum (1)
ENG 582 English Structure and Pedagogical Grammar I (4)
ENG 583 English Structure and Pedagogical Grammar II (4)
ENG 585 Language and Culture for TESL (4)

Required for the MAT degree:

See the K-12 and Secondary Programs section for admission requirements for the MAT degree and a list of required professional education courses. Licensure includes student teaching in ESL. 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.

Policies/Information:

GPA Policy. A grade of "C" or better must be earned for licensure credit.

P/N Grading Policy. Work done for licensure must be done for a letter grade.

COURSE DESCRIPTIONS

MODL 570 (4) Theory and Methods in TESL I

Introduction to theories of second language acquisition in children, description of program models for second language literacy and academic success. Discusses oral language development, literacy, content-based instruction, testing, and placement of LEP children.

MODL 571 (4) Theory and Methods in TESL II

Introduction to theories of second language acquisition and language processing in adults. Topics include the skills of listening, speaking, reading, writing, and vocabulary use for university student and adult education. Consideration of individual and sociocultural factors in language learning.

MODL 575 (1-4) Topics in TESL

Topics in learning and teaching English as a Second/Foreign Language. May be repeated for credit.

MODL 662 (1-4) Special Topics in TESL

Advanced seminar topics in learning and teaching ESL/EFL. May be repeated for credit.

MODL 672 (1) Teaching English as a Second Language Practicum**MODL 677 (1-4) Individual Study**

Special topics in language education. May be repeated for credit.

THEATRE ARTS MA**THEATRE ARTS MFA**

College of Arts and Humanities
Department of Theatre and Dance
201 Performing Arts Center • 507-389-2118
www.msutheatre.com

Chair: Paul J. Hustoles, Ph.D.

Thomas Bliese, MFA; Julie Kerr-Berry, Ed.D.; Jennifer Engler, MFA; David McCarl, MFA; Gary Erickson, MM; Nina LaNoir, Ph.D.; Steve Smith, MFA

Theater and Dance offers graduate programs leading to the Master of Fine Arts and Master of Arts. With its emphasis on professional preparation in acting, directing, design or technical production, graduate studies in Theatre at Minnesota State University provides many opportunities for students seeking to enrich and broaden their backgrounds and interests.

The Department of Theatre and Dance is production-oriented and offers six main-stage productions during the academic year, along with a four-play summer season and two laboratory theatres. Approximately 12 graduate assistantships are available each year. For more information, contact Professor Hustoles.

THEATRE ARTS MFA

(Thesis Plan - 48 credits)

The Master of Fine Arts in Theatre represents a minimum of 48 credits beyond the bachelor's degree. The MFA is a terminal degree for the creative artist in theatre and provides training for increased professional competencies in the specialized areas of Theatre Arts. The basis for granting the degree is artistic as well as academic competence. Specific study plans are to be arranged in concurrence with the student's major advisor.

A unique feature of the Minnesota State University Master of Fine Arts in Theatre Arts degree program is the professional internship requirement. Each student is required to complete an internship in the student's major specialty with a theatrical company approved by the Department of Theatre and Dance.

Admission. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, the Master of Fine Arts in Theatre Arts degree has special entrance requirements. A student must have:

1. a 3.0 GPA (based on 4.0) for the last two years of undergraduate work
2. a major in Theatre Arts or its equivalent
3. three letters of recommendation
4. resume of theatre work
5. acting and directing applicants must submit
 - a. prompt book samples of plays directed by applicant
 - b. photographs and tape recordings of plays directed or acted in by applicant

- c. appropriate reviews or criticisms of acting or directing by applicant
6. design/technical production applicants must submit
 - a. renderings
 - b. working drawings and/or patterns
 - c. photographs/slides of completed work

PERFORMANCE CURRICULUM**Required Performance Core (32 credits)**

THEA 511	Music Theatre (3)
THEA 514	Stage Dialects I (1)
THEA 515	Stage Dialects II (1)
THEA 581	Theatre History I (3)
THEA 582	Theatre History II (3)
THEA 601/609	Project Practicum (6)
THEA 680	Theatre Research (3)
THEA 681	Theatre Theory and Criticism (3)
THEA 697	Internship (6)
THEA 699	Thesis (3)

Choose one of the following performance tracks:

Acting Track**Required Acting (16 credits)**

THEA 516	Acting Scene Studies (3)
THEA 518	Acting Styles (3)
THEA 519	Acting For Radio/TV (3)
THEA 612	Advanced Speech I (1)
THEA 613	Advanced Speech II (1)
THEA 617	Advanced Acting Techniques (3)
THEA 621	Advanced Theatre Movement I (1)
THEA 622	Advanced Theatre Movement II (1)

Directing Track**Required Directing (16 credits)**

THEA 530	Theatre Management (3)
THEA 535	Advanced Directing Methods (3)
THEA 5xx	Acting Elective (3)
THEA 630	Design for Directors (1)*
	*repeat four times
THEA 635	Advanced Directing Methods II (3)

DESIGN CURRICULUM**Required Design Core (39 credits)**

Choose two of the following three:

THEA 540	Scene Design I (3)
THEA 560	Costume Design I (3)
THEA 570	Lighting Design I (3) AND
THEA 581	Theatre History I (3)
THEA 582	Theatre History II (3)
THEA 601-609	Project Practicum (6)
THEA 670	Advanced Design Laboratory (3)
THEA 675	Portfolio Seminar (1)
THEA 680	Theatre Research (3)
THEA 681	Theatre Theory and Criticism (3)
THEA 697	Internship (5)
THEA 699	Thesis (3)

Choose one of the following design tracks:

Scenic Design Track**Required Scenic Design (9 credits)**

THEA 541	Scene Design II (3)
THEA 545	Scene Painting (3)
THEA 551	Drafting for the Theatre (3)

Costume Design Track**Required Costume Design (9 credits)**

THEA 561	Costume Design II (3)
THEA 564	Costume History (3)
THEA 565	Advanced Makeup (3)

Lighting Design Track**Required Lighting Design (9 credits)**

THEA 551	Drafting for the Theatre (3)
THEA 571	Lighting Design II (3)
THEA 575	Sound Design (3)

THEATRE ARTS

Technical Design Track

Required Technical Direction (9 credits)

THEA 551 Drafting for the Theatre (3)

THEA 555 Technical Direction

THEA 5xx Theatre Elective

Additional Requirements

Master of Fine Arts students must fulfill a residence requirement of two years (4 semesters) and have a minimum of 26 credits at the 600 level; must pass a written comprehensive examination during the final semester of residency; complete four projects representing different styles of theatre productions. No P/N grades are acceptable in fulfilling major requirements. An internship performing professional theatre activities and a written thesis documenting artistic work must be complete in order to qualify for the degree.

THEATRE ARTS MA

(Thesis Plan - 30 credits)

Programs are available for students who have an undergraduate major or minor in theatre or its equivalent. Thirty credits of graduate level work is required to complete the Master of Arts degree. A minimum of 17 credits must be at the 600 level. In addition to Theatre Research, specific plans of study are to be devised with the concurrence of the student's advisor. No P/N grades are acceptable in fulfilling major requirements.

Students planning programs concentrating on theatre are advised to consult with the Department of Theatre and Dance chairperson.

COURSE DESCRIPTIONS

THEA 511 (3) Music Theatre

Introductory survey of American Musical Theatre history and repertoire as well as performance techniques for the singing actor.

ALT-F Prerequisite: CON

THEA 512 (1) Theatre Speech I

Study and exercises in vocal development emphasizing the demands of stage speech.

S Prerequisite: CON

THEA 513 (1) Theatre Speech II

Theatre speech including study of the International Phonetic Alphabet.

F Prerequisite: CON

THEA 514 (1) Stage Dialects I

A study and practice of dialects most often used in performance.

ALT-S Prerequisite: CON

THEA 515 (1) Stage Dialects II

A continuation of Stage Dialects I.

ALT-F Prerequisite: CON

THEA 516 (3) Acting Scene Studies

Advanced scene studies with a focus on analysis and the varied approaches to developing motivations.

ALT-S Prerequisite: CON

THEA 517 (3) Acting Techniques

The development of individual performance craft and advanced acting methodologies.

ALT-F Prerequisite: CON

THEA 518 (3) Acting Styles

Advanced scene studies in classical and stylized dramatic literature.

ALT-S Prerequisite: CON

THEA 519 (3) Acting for Radio/TV

Development of performance craft for the media.

ALT-S Prerequisite: CON

THEA 525 (1) Styles of Motion

Specialized training in a variety of physical techniques.

ALT-S Prerequisite: CON

THEA 526 (1) Stage Combat

An exploration of basic skills involved in unarmed combat and a variety of historical weapons systems with primary emphasis on theatricality and safety.

F Prerequisite: CON

THEA 530 (3) Theatre Management

Exposes students to the functions of theatre managers through case studies, discussions, practical application and readings.

ALT-S Prerequisite: CON

THEA 535 (3) Advanced Directing Methods

Advanced studies in script analysis, actor psychology, and staging techniques culminating in performance projects with critical analysis.

S Prerequisite: CON

THEA 540 (3) Scene Design I

Development of techniques and skills in the creation of scenery.

F Prerequisite: CON

THEA 541 (3) Scene Design II

Refinement of model building and drawing skills in theatrical design.

S Prerequisite: THEA 540

THEA 545 (3) Scene Painting

Provides information on materials and techniques of scenic painting with a large amount of lab time for experimentation with technique.

ALT-F Prerequisite: CON

THEA 551 (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.

ALT-F Prerequisite: CON

THEA 555 (3) Technical Direction

Explores duties and construction techniques of the theatre technical director including budgeting, stage machinery, theatrical systems, and project management.

ALT-F Prerequisite: CON

THEA 560 (3) Costume Design I

Theory and techniques in costume design and execution.

F Prerequisite: CON

THEA 561 (3) Costume Design II

Advanced costume design theory and techniques.

ALT-S Prerequisite: THEA 560

THEA 564 (3) Costume History

Survey of costume history from ancient Egypt to 1900.

ALT-S

THEA 565 (3) Advanced Make-Up

Practical application of advanced makeup techniques.

ALT-S Prerequisite: CON

THEA 570 (3) Lighting Design I

The study of lighting equipment, usage, techniques, and stage lighting design.

S Prerequisite: CON

THEA 571 (3) Lighting Design II

Solving particular lighting design challenges.

ALT-F Prerequisite: THEA 570

THEA 575 (3) Sound Design

Production and sound effects, electronic sound reinforcement of live performance, choice and operation of sound equipment, as well as basic music styles and terminology.

S Prerequisite: CON

THEA 581 (3) Theatre History I

Survey of theatrical history from its origins to 1700.

ALT-S

THEA 582 (3) Theatre History II

Survey of theatrical history from 1700 to the present.

ALT-S

THEA 600 (1-4) Summer Stock

Technical work or acting in summer theatre productions.

Summer Prerequisite: CON

THEA 601 (1-2) Practicum: Directing

A considerable production responsibility which utilizes skills in script analysis, actor coaching, design coordination, and general production management.

F,S Prerequisite: CON

THEA 602 (1-2) Practicum: Acting

A considerable production responsibility dealing with the preparation and performance of a major acting role including a character study, a rehearsal diary, research materials on the author, play and character analysis, and post-production evaluation of the project.

F,S Prerequisite: CON

THEA 603 (1-2) Practicum: Theatre Management

Special assignments in stage management, house and/or concessions management, public relations, recruitment, and related areas.
F,S Prerequisite: CON

THEA 604 (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, necessary drafting details, and a final evaluation of the finished project.
F,S Prerequisite: CON

THEA 605 (1-2) Practicum: Tech Theatre

A considerable production responsibility dealing with some technical aspect including technical drawings, budget management, and construction techniques.
F,S Prerequisite: CON

THEA 606 (1-2) Practicum: Costume Design

Full and assistant costume design assignments for production offered to aid in development of techniques and creativity.
F,S Prerequisite: CON

THEA 607 (1-2) Practicum: Costume Construction

The construction of costumes for theatre productions, used to increase student's skills in advanced costume construction.
F,S Prerequisite: CON

THEA 608 (1-2) Practicum: Lighting Design

Preparation and execution of a major lighting design assignment with appropriate schedules, supervision of hanging, focusing, and cues, with a final evaluation of the finished product.
F,S Prerequisite: CON

THEA 609 (1-2) Practicum: Sound Design

Preparation and execution of a major sound design assignment including all sound effects, reinforcement, and amplification.
F,S Prerequisite: CON

THEA 612 (1) Advanced Theatre Speech

Advanced study and exercises in vocal development.
S Prerequisite: CON

THEA 613 (1) Advanced Theatre Speech II

Advanced theatre speech including study of the International Phonetic Alphabet.
F Prerequisite: CON

THEA 615 (1-4) Touring Theatre Supervision

Supervision or directing of theatre tour.
Prerequisite: CON

THEA 617 (3) Advanced Acting Techniques

Advanced study and development of individual performance, craft, and acting methodologies.
F Prerequisite: CON

THEA 621 (1) Advanced Theatre Movement I

Individual exploration of ballet, jazz, modern, or tap dance based upon the student's expertise.
F Prerequisite: CON

THEA 622 (1) Advanced Theatre Movement II

Continuation of Advanced Theatre Movement I.
S Prerequisite: CON

THEA 630 (1) Design for Directors

Theory and Practice of basic design principles geared for the theatrical director. The course may be repeated to include set, costume, lighting, and sound design.
F, S Prerequisite: CON

THEA 635 (3) Advanced Directing Methods II

Continuation of Advanced Directing Methods I.
S Prerequisite: CON

THEA 670 (3) Advanced Design Laboratory

Advanced study and practical application techniques in either scene, costume, or lighting design.
F, S Prerequisite: CON

THEA 675 (1) Portfolio Seminar

Exploring the techniques of building a working design/technical portfolio and resume.
F Prerequisite: CON

THEA 677 (1-4) Individual Study

Advanced independent study.
F,S Prerequisite: CON

THEA 680 (3) Theatre Research

Techniques in advanced theatre research and appropriate project and thesis.
F Prerequisite: CON

THEA 681 (3) Theatre Theory and Criticism

Survey of drama and theatre critics from Aristotle to the present.
S Prerequisite: CON

THEA 697 (1-6) Internship**THEA 699 (1-3) Thesis****URBAN AND REGIONAL STUDIES MA****URBAN PLANNING MA****URBAN AND REGIONAL STUDIES/PUBLIC ADMINISTRATION (JOINT) MA**

*College of Social and Behavioral Sciences
Urban and Regional Studies Institute
106 Morris Hall • 507-389-1714*

Chair: Anthony Filipovitch, Ph.D.
Graduate Coordinator: Anthony Filipovitch, Ph.D.

William Bernhagen, Ph.D.; Janet Cherrington, Ph.D.; David Laverny-Rafter, Ph.D.; Miriam Porter, DPA.; H. Roger Smith, Ph.D.; Perry Wood, Ph.D.

The Urban and Regional Studies Institute offers multidisciplinary professional degree programs oriented toward examining and understanding the broad range of problems and opportunities associated with the nation's urban and regional areas. Since its beginning in 1966, the Institute has been training students who have chosen to become involved in the processes of solving problems in a variety of urban environments. As one of the first such graduate multidisciplinary urban studies degree program in the nation, the Institute has developed a generalist, problem solving philosophy for professionals in local government management and planning careers.

Students are offered flexibility in establishing their individual program. In addition to formal coursework, students are encouraged to undertake independent study, become involved in community service projects, participate in field studies and accept internships in local agencies. For complete details concerning the academic program, the graduate student should contact the Urban and Regional Studies Institute.

The Institute has received the Stephen B. Sweeney Award from the International City/County Management Association as the program that had made the most significant contribution to the training of men and women for local government leadership careers. There are three master's degree programs of study available through the Institute, including the Master of Arts in Urban and Regional Studies, Master of Arts with a Joint Major in Urban and Regional Studies/Public Administration, and Master of Arts in Urban Planning.

The fields of urban management and planning are rapidly expanding and require a professional education. Applicants who hold the master's degree receive a preference in hiring. The U.S. Department of Commerce has projected a continual increase in opportunities and higher salaries in the coming decade. On the job, managers and planners enjoy a great deal of professional mobility. They frequently provide leadership in complex assignments; they are in constant contact with the general public and with co-workers. They gain satisfaction in solving important problems.

Admission. In addition to meeting the general admission requirements of College of Graduate Studies and Research, admission to the program as a degree-seeking student requires: 1) Undergraduate course in research methods/statistics, or equivalent; 2) Undergraduate GPA of at least 3.0/4.0 in last two years of coursework; 3) Two recommendations assessing potential for successful graduate study; 4) Personal statement describing applicant's interests and experience. Admission to the program on a provisional basis may be approved for applicants with a GPA of at least 2.6 in the last two years of coursework and who demonstrate special circumstances and potential. Absence of specific undergraduate coursework in urban studies or statistics will result in the assigning of deficiency coursework which must be completed before graduation.

Financial Assistance. Applicants seeking university sources of financial assistance should apply to the Office of Financial Aid. **See Sources of Financial Assistance at the front of the Bulletin.** Special awards are also available to qualified Institute

URBAN AND REGIONAL STUDIES

students for research and teaching assistantships, fellowships, and cooperative work/graduate study positions. These awards are administered by the Institute based upon criteria established by alumni donors, local/state/federal agency grants and faculty and professional association gifts. Although applications to the Institute for financial assistance will be accepted anytime, most complete consideration will be afforded to those complete applications received before April 1 for consideration of awards for the following academic year. Financial assistance awards are normally made for one academic year. Students in good standing may apply for professional internship appointments during the second year of graduate study.

URBAN & REGIONAL STUDIES MA

(Thesis Plan - 33 credits)

(Alternate Paper Plan - 36 credits)

The Master of Arts is a multidisciplinary degree program oriented toward examining and understanding the broad range of problems and opportunities associated with the nation's urban and regional areas. Students in the MA degree program may prepare themselves for professional careers in local government, or use the MA degree as preparation for Ph.D. study. The program requirements are designed to provide flexibility while ensuring a multidisciplinary, problem-solving perspective.

Required Core (12 credits)

URSI 601 Urban Management Process (3)
URSI 602 Planning Process (3)
URSI 603 Organizational Environment (3)
URSI 615 Urban Professional Seminar (3)

Required Research (3 credits)

URSI 609 Applied Urban Analysis (3)

Required Related Electives (18-21 credits)

Elective credits to be selected in conjunction with advisor and approved by student's committee. Optional internship ordinarily in second year. Thesis option requires thesis credits.

URBAN PLANNING MA

(Alternate Plan Paper Option Only - 45 credits)

The Master of Arts in Urban Planning is a 2 year professional program oriented towards a systematic, creative approach to analyzing and planning neighborhoods, small towns, cities, suburbs, metropolitan areas, regions, and states. While most planners work for government at the state and local level, planners work in the non-profit and private consulting areas as well.

Required Core (27 credits)

URSI 602 Planning Process (3)
URSI 603 Organizational Environment (3)
URSI 604 Zoning & Legal Issues (3)
URSI 615 Urban Professional Seminar (3)
URSI 661 Long-Range & Strategic Planning (3)
URSI 662 Operational Planning (3)
URSI 665 Advanced Planning Seminar (3)
URSI 667 Planning Studio (3)
URSI 697 Internship (3)

Required Research (3 credits)

URSI 609 Applied Urban Analysis (3)

Required Related Electives (15 credits)

Elective credits to be selected in conjunction with advisor and approved by student's committee. GEO 673, GIS for Planners, is expected for students with no previous GIS training.

URBAN AND REGIONAL STUDIES/PUBLIC ADMINISTRATION (JOINT PROGRAM) MA

(Alternate Plan Paper Option Only - 45 credits)

This is a professional program training students to provide staff leadership in local governments (cities and counties). Local government managers are distinctive in that they have a close working association on a daily basis with both their elected superiors and the residents of the communities they serve. Even in small communities, local government managers must demonstrate a range of capabilities and master a diversity of relationships found only among the few most highly placed administrators at other levels of government. This program provides a broad overview of the management and policy issues which face local government.

Required Core (12 credits)

URSI 602 Planning Process (3)
POL 606 Organizational Theory (3)
POL 662 Human Resource Management (3)
POL 663 Budget & Fiscal Management (3)

Required Research (3 credits)

URSI 609 Applied Urban Analysis

Required Specialization (15 credits)

Choose either the Urban Management Specialization or the Public Administration Specialization

Urban Management

URSI 601 Urban Management Process (3)
URSI 603 Organizational Environment (3)
URSI 615 Urban Professional Seminar (3)
URSI 650 Urban Administrative Services (3)
URSI 653 Urban Management Seminar (3)

Generalist Management

POL 622 Sem: Theory and Practice of Public Ad.
POL 665 Bureaucracy and Adm. Process (3)
POL 669 Public Policy Analysis (3)
POL 660 Sem: Public Administration (3)
POL 628 Seminar in Public Administration (3)

Required Related Electives (15 credits)

Elective credits to be selected in conjunction with advisor and approved by student's committee. Optional internship ordinarily in second year.

COURSE DESCRIPTIONS

URBS 511 (3) Urban Policy Analysis

Prepares students to analyze problems, identify alternative solutions, and utilize techniques of analysis.

URBS 513 (3) Urban Program Evaluation

Reviews processes and techniques related to evaluation of public programs.

URBS 515 (3) Urban Housing Policy

Public policy and programs and non-profit initiatives that address issues of housing supply, quality, and costs.

URBS 517 (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 planning perspective.

URBS 531 (3) Urban Design Principles

Basic working knowledge and vocabulary of urban design concepts and techniques in an applied problem-solving context.

URBS 533 (3) Urban Development

Theory and applications of principles of landscape architecture or urban design.

URBS 535 (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 537 (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 551 (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 553 (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 555 (3) Regional & County Development

Regional and county planning content and procedures, including basic research, land use planning, and implementation of regulations.

URBS 557 (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 571 (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 580 (1-3) Colloquium

Presentations of research and major trends in urban professions. Prerequisite: permission of instructor

URBS 581 (1-3) Selected Topics:

Varying topics dealing with emerging trends and contemporary needs of students resulting from professional changes.

URBS 583 (1-6) Workshop

Varying topics dealing with emerging trends and contemporary needs of students resulting from professional changes.

URBS 585 (1-6) Community-Based Problem Solving

Problem solving in communities and direct involvement into specific areas of study of student interest.

Prerequisite: permission of instructor

URBS 601 (3) Urban Management Process

Survey course which examines the professions and processes of urban management, including community leadership, organizing, and delivering community services.

URBS 602 (3) Planning Process

Survey of the history, concepts, values, and ethics of public-sector planning. Emphasis on practical and comprehensive approach to developing and implementing plans.

URBS 603 (3) Organization Environment

Changing nature of management of urban and human behavior in the municipal organization. Emphasis on the development of decision-making and communication skills.

URBS 604 (3) Zoning & Legal Issues

Zoning theory, concepts, and techniques, with emphasis on administration of zoning in a planning office.

URBS 609 (1-4) Applied Quantitative Analysis

Use of microcomputers to analyze data and communicate results to citizens and elected officials. Includes introduction to wide range of applied analytical tools.

URBS 615 (3) Urban Professional Seminar

Reading and research class with emphasis on student projects, analysis of contemporary urban problems, and major skills and concepts of urban professions.

Prerequisite: URBS 601 or 602 or permission of instructor

URBS 650 (3) Urban Administrative Services

Provides an overview of urban administrative services with an emphasis on urban finance systems and human resource management. Examines the economic and human resource environment for local government managers' decision-making.

URBS 653 (3) Urban Mgmt Seminar

Discussion, research, presentation, and critique of standard and emerging concepts of urban management.

URBS 661 (3) Long Range & Strategic Planning

Comprehensive planning process in urban areas, including basic studies, capital improvement programming, and exercises.

URBS 662 (3) Operational Planning

Current planning, including zoning, subdivision regulations, annexations, and special projects.

URBS 665 (3) Advanced Planning Seminar

Discussion, research, presentation, and critique of standard and emerging concepts of urban and regional planning.

Prerequisite: URBS 661 or 604

URBS 667 (3) Planning Studio

An advanced learning experience working in small group settings on applied projects and problem solving.

Prerequisite: URBS 661 or 604

URBS 689 (1-4) Individual Study

Individual learning experiences arranged with faculty on a learning contract basis.

Prerequisite: permission of instructor

URBS 694 (1-2) Alternate Plan Paper

Prerequisite: permission of instructor

URBS 697 (1-6) Internship

Scheduled work assignments varying in length and content under the supervision of selected professional sponsors.

Prerequisite: permission of instructor

URBS 699 (1-3) Thesis

The collection and dissemination of original research in compliance with accepted research standards.

Prerequisite: permission of instructor

WOMEN'S STUDIES MS

College of Social & Behavioral Sciences

Department of Women's Studies

109 Morris Hall • 507-389-2077

Chairperson: Maria Bevacqua, Ph.D.

Graduate Coordinator: Maria Bevacqua, Ph.D.

The Master of Science in Women's Studies is an interdisciplinary program which can be developed with each student's specific interests in mind. Based in the humanities and social sciences, it combines individual coursework, internships, cross-disciplinary seminars, and individual and cooperative research projects in a comprehensive program which is expressly feminist and oriented toward training activists. This program attracts students from the region, throughout the United States and from abroad. Women's Studies at Minnesota State University, Mankato is actively committed to anti-sexist, anti-classist, anti-racist and anti-heterosexist work. Students may combine interests in areas such as counseling, public policy, community action and teaching with feminist theory, methodology and knowledge. Departmental faculty areas of interest include feminist theory, lesbian studies, feminist pedagogy, research methodologies, feminist curricular change efforts, issues of class and classism, women in poverty, social policy, gender stratification, violence against women, women and work, women and aging, politics of health and film studies.

A graduate degree in Women's Studies is beneficial to any work experience in which women are affected – in other words, all. Women's Studies graduates are currently employed as battered women's shelter personnel, directors of human service programs including displaced homemaker services and community action and advocacy services, family therapists, Women's Studies instructors, newspaper editors, freelance and radio journalists, community organizers, cultural workers, K-12 teachers and college administrators. Other students have used their Women's Studies degrees as a rich preparatory base for doctoral work and law school.

Admission. In addition to meeting the general admission requirements of the College of Graduate Studies and Research, a background in Women's Studies coursework and/or experience in community-based women's programs or organizations is required.

Financial Assistance. All applicants are encouraged to seek university sources of financial assistance through application to the Office of Financial Aids. **See Sources of Financial Assistance at the front of the Bulletin.** Graduate assistantships are available in the Department of Women's Studies, Women's Center, the Memorial Library and other campus offices. Second year students who meet requirements may apply for some teaching opportunities in Women's Studies.

WOMEN'S STUDIES MS

(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

Required Core

WOST 600 Collective Action/Analysis (3)

WOST 610 Graduate Seminar (3)

WOST 620 Feminist Research (3)

WOST 640 Ideology and Feminist Thought (3)

Choose one of the following:

WOST 697 Internship: College Teaching (1-6; minimum: 3 credits)

WOST 698 Internship (1-6; minimum: 3 credits)

Women's Studies Electives

WOST 540 Feminist Pedagogy (3)

WOST 545 Women and Aging (3)

WOST 555 Women, Sex and Identity (3)

WOST 560 Selected Topics (1-4)

WOST 590 Workshop (1-4)

WOST 677 Individual Study (1-6) **OR**

Any electives from the interdisciplinary program course inventory listed below

Required Thesis or Alternate Plan Paper

WOST 694 APP (1-2)

WOST 699 Thesis (3-6; minimum: 3 credits)

Additional Requirements: Students are required to take a 500 or 600 level seminar outside the department. Please consult with your advisor.

Comprehensive written examinations are required of all students. Students take examinations after all coursework has been completed and before writing their

thesis or alternate plan paper. Students must request the examination two weeks prior to the examination scheduled for Spring Semester. Further information is available through the department.

INTERDISCIPLINARY PROGRAM COURSES

ANTH	533	Anthropology of Gender (3)
ART	519	Gender in Art (3)
CSP	670	Issues in Counseling Women (3)
EDLD	644	Women in Leadership
ENG	612	Seminar: Women in Literature (3)
ETHN	570	Women of Color (3)
ETHN	580	Social Justice in Ethnicity and Gender (3)
HLTH	500	Women's Health (3)
HIST	587	U.S. Women's History (4)
POL	584	Women and Politics (3)
PSYC	560	Psychology of Women (3)
SOWK	520	Women's Issues in Social Work (3)
SOC	509	Family Violence (3)
SOC	585	Women, Crime, and Social Control (3)

COURSE DESCRIPTIONS**WOST 540 (3) Feminist Pedagogy**

We explore the key philosophical and methodological issues in feminist pedagogy with an emphasis on application of the material learned. In addition to readings, discussions, and lectures, students develop a teaching philosophy, design a course, write a syllabus, prepare a lesson plan, teach a session, design evaluations, and develop a curriculum vitae.

WOST 545 (3) Women and Aging

Exploration of the forces of ageism in women's lives with the goal of naming and deconstructing interacting systems of oppression. Focus on work, health, sexuality, relationships, creativity, and policy issues affecting women across the life cycle. Cross cultural emphasis.

WOST 555 (3) Women, Sex, and Identity

An exploration and overview of lesbian/bisexual/transgender identities. Possible topics include historical and cross-cultural perspectives; lesbian/bisexual/transgender identities in relation to class, race, age, ethnicity, and disability; lesbian feminism, images and stereotypes; legal status and lesbian/bisexual/transgender cultures.

WOST 560 (1-4) Selected Topics

Offered according to student demand and instructor availability/expertise, topics courses provide curriculum enrichment on an ongoing basis.

WOST 565 (1) Women and Spirituality

The purpose of the conference is to bring together people of diverse spiritual

traditions and to create an atmosphere where ideas about traditions and spiritual growth can be shared. Participation of all people from diverse cultural, spiritual, racial and ethnic backgrounds is encouraged.

WOST 600 (3) Collective Action and Analysis

First in a series of required graduate "core" courses in Women's Studies, this course builds a common foundation in the theoretical and methodological skills in our field. Emphasis is on analytical skills and group dynamics as well as subject content including collective action strategies.

WOST 610 (3) Graduate Seminar

This seminar serves as a critique/work group for class members' thesis and publication goals. We examine the formation of critical consciousness
Prerequisite: WOST 600

WOST 620 (3) Feminist Research

We explore theoretical and epistemological issues in feminist research, as well as developing the practical "nuts and bolts" skills needed to conduct our own research. Research skill workshops include Internet and WEB resources in research and constructing a research design. Class members organize and participate in a research conference.

WOST 640 (3) Feminist Theories

This course examines the development of theories and strategies used by various groups of women to create social change in the 20th century. Special focus on the major theories and issues in international women's movements during this time period.

WOST 677 (1-6) Individual Study

Concentrated study and research in areas of student's special interests/ expertise under supervision of a faculty member. Prerequisite: must be enrolled in the MS program in WOST and have permission of the instructor

WOST 694 (1-2) Alternate Plan Paper

Preparation of an alternate plan paper under supervision of the student's graduate advisor.

WOST 697 (1-6) Internship (College Teaching)

Students assist a faculty member in teaching Women's Studies 110 or 220.
Prerequisite: must be enrolled in the MS program in WOST

WOST 698 (1-6) Internship (Community)

Placement in a community or university-based internship provides the student with experience and practical skills in a particular field of work or service and/or provides an opportunity to pursue a specific research interest. Prerequisite: must be enrolled in the MS program in WOST

WOST 699 (3-6) Thesis

Preparation of a thesis under supervision of the student's graduate advisory committee.
Prerequisite: must be enrolled in the MS program in WOST

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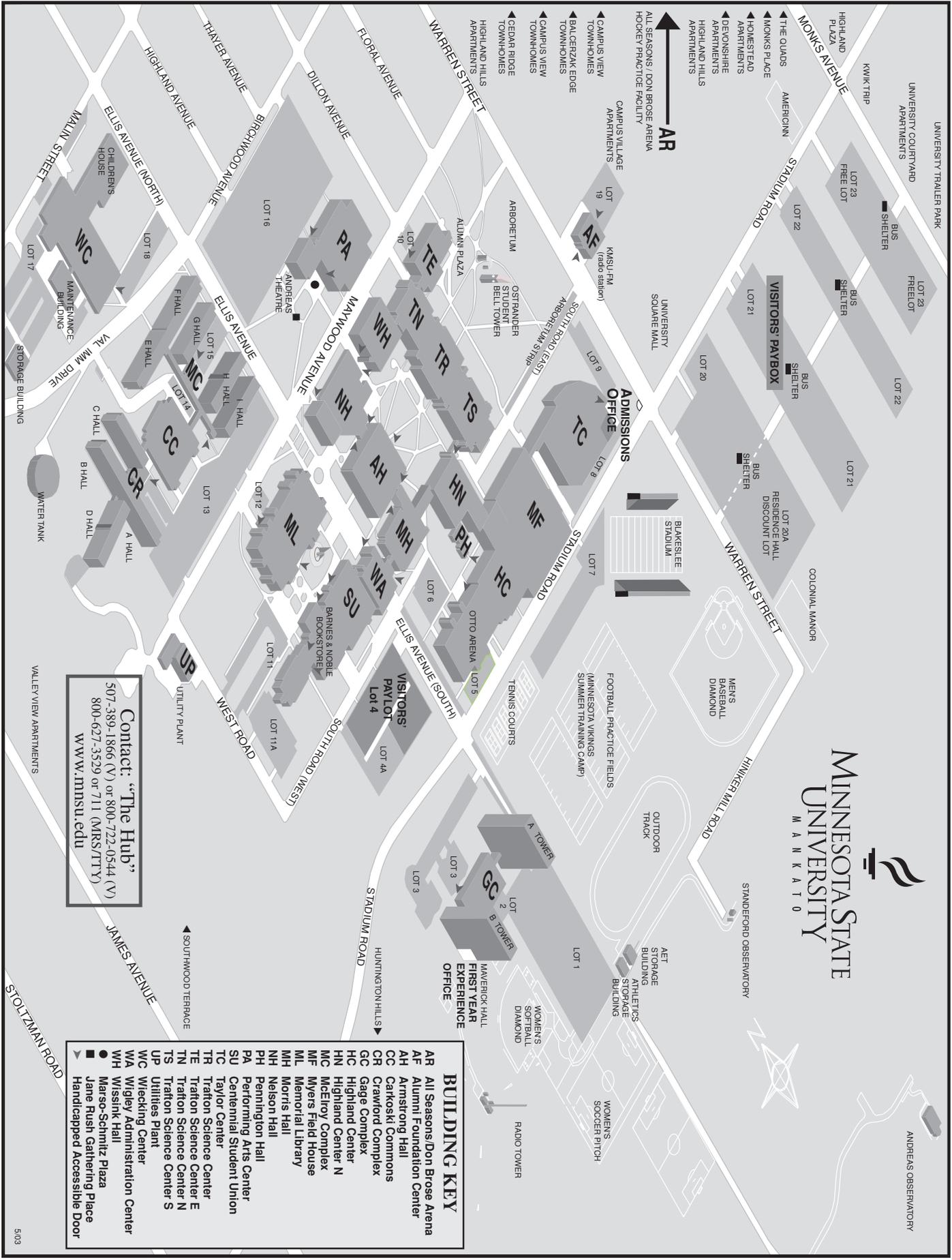
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CAMPUS MAP

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Abbreviation	Building Name
AR	All Seasons / Don Brose Arena
AF	Alumni Foundation Center
AH	Armstrong Hall
CR	Carloski Commons
CC	Crawford Commons
GC	Gage Complex
HC	Highland Center
HN	Highland Center N
MC	McElroy Complex
MF	Meyers Field House
ML	Memorial Library
MH	Morris Hall
NH	Nelson Hall
PA	Pennington Hall
PH	Performing Arts Center
SU	SU Centennial Student Union
TC	Taylor Center
TR	Tration Science Center
TE	Tration Science Center E
TN	Tration Science Center N
TS	Tration Science Center S
UP	Utilities Plant
WC	Wrecking Center
WA	Wiegley Administration Center
WH	Wissink Hall
WH	Wissink Plaza
●	Marsch-Schultz Plaza
●	Jane Rush Gathering Place
▶	Handicapped Accessible Door

