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## The Bulletin, Undergraduate Catalog 1989-91 (1989)

Moorhead State University

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# The Bulletin

MOORHEAD  
STATE UNIVERSITY

**Undergraduate Catalog 1989-91**



# Table of Contents

<b>Accreditation</b>	<b>2</b>
<hr/>	
<b>Academic Programs</b>	<b>3</b>
<hr/>	
Baccalaureate Degrees • Liberal Arts and Professional Majors • Education Majors • Fine Arts Degree • Pre-Professional Studies • Two Year Degrees • Graduate Studies • Fifth Year Programs • Certification • Licensure • Tri-College University • Special Programs • Foreign Study Programs	
<b>Facilities and Services</b>	<b>7</b>
<hr/>	
Residence Halls • Dining • Student Union • Library • Science • Planetarium • Bookstore • Center for the Arts • Alcohol/Drug Program • Counseling • Services for the Disabled • Speech Language and Hearing Clinic • Veterans Office • Reading Clinic • Career and Placement Services • Foundation • Alumni	
<b>Admissions</b>	<b>10</b>
<hr/>	
Freshman • Transfer • International • Special • Deadlines • Post-secondary Options	
<b>Student Information</b>	<b>12</b>
<hr/>	
Student Services • Senate • Student Advisors • Activities and Organizations • Athletics • Parking • Housing Policies • Health	
<b>Financial Information</b>	<b>14</b>
<hr/>	
Expenses • Status • Reciprocity • Financial Aid • Scholarships	
<b>Academic Information</b>	<b>20</b>
<hr/>	
Graduation Requirements • Liberal Arts Requirements • Associate Degree Requirements • Types of Credit • Grading Policies and Procedures • Academic Probation and Suspension • Academic Honors • Registration • Change of Program • Withdrawal • Confidentiality • Appeal of Academic Policies	
<b>Departments, Curricula and Courses</b>	<b>29</b>
<hr/>	
<b>Administration / Faculty</b>	<b>173</b>
<hr/>	
<b>Index</b>	<b>183</b>
<hr/>	

*Moorhead State University is committed to providing equal education and employment opportunities to all persons and does not discriminate on the basis of race, religion, color, creed, veteran's status, national origin, sex, sexual preference, age, marital status, physical and mental disability, status due to receipt of public assistance, or any other group or class against which discrimination is prohibited by Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendment of 1972, Minnesota Statutes Chapter 363, and other applicable state or federal laws. Inquiries regarding compliance should be referred to Barbara Seiler, Affirmative Action Officer, 236-2229.*

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

## ACCREDITATION

### **North Central Association**

**Undergraduate Program.** Moorhead State University is accredited by the North Central Association of Colleges and Secondary Schools to offer undergraduate four year college programs leading to the Bachelor of Science and the Bachelor of Arts degrees.

**Graduate Program.** Moorhead State University is accredited by the North Central Association of Colleges and Secondary Schools at the master's degree-granting level.

### **National Council for Accreditation of Teacher Education**

Moorhead State University is accredited by the National Council for Accreditation of Teacher Education as a five-year teacher education institution offering the degrees of Bachelor of Science and the Master of Science in Education.

### **American Chemical Society**

Moorhead State University's chemistry department is on the approved list of the American Chemical Society.

### **Council on Social Work Education**

Moorhead State University is accredited by the Council on Social Work Education to offer a Bachelor of Social Work.

### **National Association of Schools of Art**

The Moorhead State University department of art is an accredited institutional member of the National Association of Schools of Art and Design. Moorhead State offers the Bachelor of Fine Arts degree.

### **National Association of Schools of Music**

Moorhead State University's music department is accredited by the National Association of Schools of Music, and offers the Bachelor of Music degree.

### **National League for Nursing**

Moorhead State University's nursing program is accredited by the National League for Nursing, Board of Review, Council of Baccalaureate and Higher Degree Programs, and offers the Bachelor of Science in Nursing degree.

**All provisions within this bulletin are subject to change without notice.**

## INTRODUCTION

Moorhead State University, with an enrollment of some 9,000 full- and part-time students, offers more than 90 programs and majors which lead to baccalaureate or master's degrees or certification as well as 20 areas of pre-professional studies. As a part of the higher education system established by the State of Minnesota, the university provides the advantages of quality education at the lower costs made possible by the support of Minnesota's citizens.

**Mission.** The mission of Moorhead State University is to provide academic programs of high quality in an educational environment that supports, in both students and faculty, intellectual and scholarly development, that develops the skills and talents of students, that gives them the capacity to live usefully and the desire to act responsibly, and that will make them learners all their lives. The dominant mission of the University is to facilitate teaching and learning that foster an openness to a range of ideas and human possibilities; to encourage and support research and artistic endeavors that identify the University as an intellectual and cultural center; and to serve as a resource for the application of knowledge that will enhance the quality of life in its service area.

**History.** Established in 1885 as a Normal School, the university began on six acres donated by State Senator Solomon G. Comstock. The first ten students graduated from its two year curriculum in 1890. Major historical changes occurred in 1921, when it became Moorhead State Teachers College, authorized to offer the four year degree of Bachelor of Science in Education; in 1946, when the Bachelor of Arts was added; in 1957, when the official name became Moorhead State College; and in 1975, when the school became Moorhead State University.

**The Campus.** Most of the 22 major buildings on the 104-acre campus have been constructed since 1957 including nine residence halls, the library, student union, food service, Center for the Arts, the Science-Industrial Studies Center, a classroom building and the Nemzek Hall complex for men's and women's physical education, health and athletics, a biology building and the administration building.

**The Faculty.** There are more than 350 members of Moorhead State University's faculty. Over 60 percent of them have doctorates or other terminal degrees. Class sizes with these faculty members average 21 students to one faculty member.

**Student Enrollment and Retention.** Fall quarter enrollment reached 8,752 taking courses on the campus in 1988 (latest available data). This number

includes 2,258 full-time students living in campus residence halls, 4,635 full-time commuters and 1,768 part-time students.

Each fall for the past five years, an average of 1,320 new freshmen and 680 new transfer students have entered the university to enroll in degree programs or begin curricula that may eventually be completed in other institutions. More than 500 other new students enter MSU during the winter, spring and summer quarters.

For information about the academic progress of students and the numbers who complete degrees, consult the Registrar's Office.

**The Community.** Moorhead, Minnesota and Fargo, North Dakota are education-minded communities with Moorhead State University and Concordia College on one side of the Red River, North Dakota State University on the other. The two cities support a symphony orchestra, community opera and community theatre and several art galleries. This university regularly offers a Performing Arts Series, monthly art exhibits and a number of dramatic and musical programs.

The character of this metropolitan community of nearly 124,000 is also determined by its rural traditions. Situated in the rich farming land of the Red River Valley, Fargo-Moorhead is the hub for wholesale and retail trade, communications, transportation, industry and medical care in the Upper Midwest.

## ACADEMIC PROGRAMS

**Baccalaureate Degrees.** The four-year degrees available from Moorhead State University include the Bachelor of Arts, Bachelor of Science, Bachelor of Science in Nursing, Bachelor of Music and the Bachelor of Social Work. Each requires the satisfactory completion of 192 credits of college courses and includes 64 credits in liberal arts, from 48 to 96 credits in a major concentration and the remainder in electives. While no minor is required, you may choose from more than 60 possible minor programs. Information about the liberal arts requirement may be found in the Academic Information section and requirements for the various majors and minors are listed in the Departments and Curricula section of this catalog.

**Liberal Arts and Professional Majors.** Liberal Arts and other non-teaching major programs include:

Accounting  
American Studies  
Anthropology  
Art  
Biology  
Business Administration  
Chemistry  
Community Health  
Computer Information Systems  
Computer Science  
Criminal Justice  
Cytotechnology  
Economics  
Energy Management  
English  
English/Mass Communications  
Finance  
French  
German  
History  
Hotel-Motel-Restaurant Management  
Individualized Major  
Industrial Chemistry  
Industrial Illustration  
Industrial Technology  
International Business  
Languages  
Legal Assistant  
Management  
Marketing  
Mass Communications  
Mathematics  
Medical Technology  
Music  
Music Industry  
Nursing (open to registered nurses)  
Office Administration  
Philosophy  
Physical Education  
Physics  
Political Science  
Psychology  
Social Work  
Sociology  
Spanish  
Speech Language & Hearing Science  
Speech Communication  
Theatre  
Vocational Rehabilitation Therapy

**Education Majors.** Bachelor of Science degrees with teaching majors are offered as preparation for teaching at the elementary and secondary levels. Elementary Education majors must select a minor area of concentration or specialization. Education majors will choose one of the following specific academic areas:

Art Education  
Biology (Life Science)  
Business Education

Chemistry (Physical Science)  
Early Childhood Education  
Early & Exceptional Childhood Education  
Elementary Education  
English  
English/Speech Communications  
French  
German  
Health Education  
Industrial Education  
Mathematics  
Music  
Physical Education  
Physics (Physical Science)  
Social Studies  
Spanish  
Special Education  
Speech Communication/Theatre Arts  
Speech, Language and Hearing Science

**Bachelor of Fine Arts.** This 234 credit degree is offered as a professional program in the visual arts. See Art Department.

**Pre-Professional Studies.** Not all students complete their degrees at MSU, but many find it convenient to complete the first few years of college here before transferring to other institutions for advanced specializations. Such students are assigned to faculty advisors with knowledge of these advanced specializations who work closely with both individual students and institutions where training will continue after transfer. Special programs developed to assure adequate preparation for continued study include:

\*Agriculture  
\*Architecture  
Chiropractic  
Dentistry  
\*Engineering  
Foreign Service  
Forestry  
\*Geology  
Government Service  
\*Home Economics  
Law  
Medicine  
Meteorology  
Mortuary Science  
Nursing  
Occupational Therapy  
Optometry  
\*Pharmacy  
Physical Therapy  
Theology  
Veterinary Science  
Wildlife Management

*\*Cooperative Degree Programs*

In cooperation with North Dakota State University, MSU students can take the first three years of the six programs designated with asterisks (two years in pharmacy) at Moorhead State University before transferring to NDSU for completion of a degree. The

major advantages of this arrangement are that Minnesota residents can use scholarships and loans available only for this state and that professional courses at NDSU can begin immediately through the Tri-College University student exchange program instead of waiting until the third or fourth year.

**Two-Year Associate Degree.** Moorhead State University offers programs leading to the two year Associate in Arts (A.A.) or Associate in Science (A.S.) degree. Each requires 96 credits for completion but is so designed that students may continue to study for a baccalaureate degree should educational plans change. The curricula include a combination of liberal arts courses with one area of specialization. Required courses are listed under the respective Departments of Study for the following Associate Degree programs:

**A.A. Degree**

Liberal Arts

**A.S. Degree**

Career Education (see Multidisciplinary Studies)  
Medical Records Technology  
Secretarial Science

**Graduate Studies.** Graduate students at Moorhead State University may earn the Master of Arts in Studio Art, Master of Business Administration (MBA), Master of Liberal Arts (MLA), Master of Science or the Specialist degree. The Master of Science programs are available in Elementary Education, Reading, Special Education, Counseling and Human Development, Speech Pathology and Audiology, and the M. S. and Specialist in School Psychology. The education-based M. S. may also be earned with majors in Art, Music, or Education Theatre. The Master of Science in Public and Human Service Administration and the M. S. in Computer Science are available. Majors in Educational Administration at the M. S. and Ed. Spec. levels are offered through the Tri College University.

Complete information on graduate programs is provided in a separate Graduate Bulletin available from the Moorhead State University Office of Graduate Studies. Questions related to graduate programs should be directed to that office.

**Teaching License Programs.** Many enroll at Moorhead State University in programs that will provide professional licenses in various fields of education. Upon completing one of these programs, the student should apply for licensure through the Office of the Registrar. If the license program is combined with study for a postgraduate degree, the student must meet admission requirements established by the Office of Graduate Studies.

**Elementary or Secondary Teaching.** Those who hold baccalaureate degrees without teaching license may earn a Bachelor of Science degree from Moorhead State University or qualify for license by following procedures in the section on Education programs.

**Licensure in Special Fields.** Licenses for several specialties in education can be earned by persons who hold valid teaching licenses. Such licensure is made by the State of Minnesota on recommendation by the university after completion of a program approved by the State Department of Education. Study for licensure may be combined with an undergraduate or graduate degree program if required courses are offered at the appropriate undergraduate or graduate level.

The following special licensure programs are offered at Moorhead State University:

Athletic Coach  
Developmental/Adapted Physical Education  
Early Childhood Education  
Early Childhood Special Education  
Elementary Remedial Reading  
Emotionally/Behaviorally Disordered  
English as a Second Language  
Kindergarten  
Mild to Moderate Mentally Handicapped  
Mildly Handicapped  
Moderate to Severe Mentally Handicapped  
Pre-Kindergarten  
School Psychologist  
School Social Worker I  
Secondary Developmental Reading  
Secondary Remedial Reading  
Specific Learning Disabilities  
Speech Correction

*Because of variations in specific requirements for each license, candidates should first contact the Education Department for information and continue to work closely with an advisor. Minnesota licensure does not guarantee reciprocal licensure in other states. Therefore, students who intend to teach in other states should contact licensure boards in those states as early as possible to determine appropriate coursework for certification.*

**State University Common Market.** A student at Moorhead State University may attend another Minnesota State University — Bemidji, Mankato, Metropolitan, Southwest, St. Cloud or Winona — under provisions of a Common Market agreement outlined on the next page:

The student secures a Common Market passport from the Office of Admissions and Records, lists preferred courses with the signed approval of the faculty advisor, and returns the passport to the Registrar.

Eligibility is limited to sophomores and above with cumulative grade point averages of at least 2.0 and participation is limited to one quarter of attendance.



The passport and a transcript of the student's record will be forwarded to the host university, which will send an acceptance notice and registration instructions to the student.

No admission or matriculation fee is charged, and credits earned at the host university will be considered as resident credits and will be included in the student's grade point average at the home university.

**Tri-College University.** MSU belongs to a cooperative arrangement with Concordia College (Moorhead) and North Dakota State University (Fargo) through which students may take courses at the other colleges without paying any additional tuition or fees. At Concordia, an MSU student may take one course per term if that course is not offered at Moorhead State. At NDSU students may take as many courses each term as needed to satisfy covered programs or courses not offered at MSU.

Tri-College also offers regular bus service among the three campuses as well as reciprocal parking privileges. A comprehensive cooperative arrangement among the libraries gives students and faculty direct access to the resources of all three libraries. The Tri-College University also sponsors a Center for Environmental Studies and an Economic Education Center. One may earn a master's or specialist degree in educational administration through the Tri-College University (see Graduate Bulletin).

**Reserve Officers Training Corps Program.** Army and Air Force ROTC at Moorhead State is available to both male and female students. Participation is voluntary. Activities are conducted under separate departments and are listed as Military Studies for Army ROTC and Aerospace Studies for Air Force ROTC in many publications. Army ROTC offers freshmen classes at MSU. The Army ROTC sophomore, junior and senior classes must be taken at NDSU through the Tri-College agreement. Air Force ROTC offers freshmen and sophomore classes at MSU. The Air Force ROTC junior and senior classes must be taken at NDSU through the Tri-College agreement.

See the NDSU catalog for a description of the classes offered by ROTC. An NDSU catalog is in the Registrar's Office.

## **SPECIAL PROGRAMS**

### **Common Market Quarter-in-Washington.**

Moorhead State University, in cooperation with a number of private and public agencies, offers qualified students with a particular interest in government and political affairs an internship opportunity in the nation's capital. Students may spend a quarter in Washington either during their junior or senior year and maintain enrollment status at MSU. For further information contact the Political Science Department.

**Individualized Major.** A student who wishes to develop a personalized multidisciplinary major built around a chosen theme may do so with the help of a faculty advisor and the Office of Academic Affairs. Such a major consists of at least 70 credits of which at least 30 must be in a single department. Thirty of the 70 credits in the major must be at the 300 and 400 level; at least 15 of these upper level credits must be in the 30-credit area of concentration; and a minimum of 40 credits of the 192 required for graduation must be at the 300 and 400 level.

No more than 4 credits of internship may be included in the 70 credits required for the major.

An Individualized Major is particularly appropriate for a student whose interests and time do not fit one of the traditional majors and whose occupational plans do not require one.

An example of the Individualized Major is given under Individualized Majors in the Departments and Curricula section. Students who are interested in individualized majors are advised to wait until their sophomore year before submitting their plans. Contact Academic Affairs.

### **The New Center for Multidisciplinary Studies.**

The New Center for Multidisciplinary Studies is open to selected freshmen and sophomores. It offers courses in liberal arts and career planning. Review courses in mathematics, English and reading for students who need to brush up on basics are also available.

Admission to the New Center is based on the student's interest and ability to do college work, rather than high school rank or entrance examinations. Courses are organized by theme, often using insights from two or more subjects to provide an integrated understanding of a problem. Each course has a list of objectives, and instead of a traditional grading system, the number of credits a student earns is varied according to the number of objectives mastered. (See Multidisciplinary Studies for course descriptions.)

**External Studies.** Part time adult students may choose to become a member of the External Studies program. This program is designed to make a bachelor's degree more accessible to students who have obligations which make attending classes as a conventional daytime student difficult. Services are designed to provide help with some of the non-academic barriers that students who are not routinely on campus during business hours find to be problems. External Studies students generally take evening and Saturday classes, plus a few packaged courses, in order to complete their degrees. External Studies advisors work with students through mail and telephone contacts as well as in person.

A feature of the program is a process by which academic credit may be granted for prior learning by experience. A student who has acquired college level learning through work or volunteer experience and can demonstrate that learning for faculty advisors, may apply for credit for that learning.

See the Departments and Curricula Section for more information, or contact the External Studies Office.

**National Student Exchange.** Moorhead State University holds membership in the National Student Exchange, a cooperative relationship among some 80 schools from Maine to Hawaii, Minnesota to Florida. Through the NSE, a student may spend up to one full year in residence at a participating college as an exchange student. The largest single benefit is the privilege of paying tuition at the in-state rather than out-of-state rates.

Normal application deadline to accomplish exchanges for the year following is March 1. Inquiries should be made at the Office of Academic Affairs.

**Internship.** An internship is a supervised work experience for up to 16 college credits. The general objective of this program is to allow the student to gain applied experience that would not otherwise be possible in the classroom and to reinforce the choice of one's major field of study. (It is generally available only to junior and senior students. In order to be eligible for an internship, students must have at least one academic year quarter remaining in their academic programs.) A variety of internships are available in local, state and federal government agencies, public service organizations and private business. Interested students should address inquiries to internship advisors in the academic departments of their choice or to the university internship coordinator in the Career and Placement Services Office.

## **INTERNATIONAL STUDY OPPORTUNITIES**

**Student Teaching Abroad.** Each year the Student Teaching Abroad program makes it possible for 70 students to spend one quarter abroad completing their student teaching. Approximately one-half of these students are from Moorhead State. Schools located in Africa, Asia, Europe, South America and New Zealand are participating in the program.

**Oxford Program.** Moorhead State sponsors study abroad in interdisciplinary work in the humanities at the Centre for Medieval and Renaissance Studies, Oxford, England. Students may participate for a full academic year or half-year, earning credits awarded by Moorhead State applicable to selected majors and liberal arts requirements. The program is coordinated on campus through the Humanities Department.

**Eurospring.** Students may earn 16 humanities credits by studying at the Centre for Medieval and Renaissance Studies, Oxford, England, for five weeks and participating in a three-week tour of centers of Western civilization in Europe. Offered annually in the spring. Contact the Humanities Department for further details.

**International Business Program.** The Bachelor of Science degree in international business focuses its academic core on international management, finance, marketing and accounting along with comparative economics and foreign languages. Additionally, the program offers study abroad at Oxford, England and Portsmouth, England, and possibilities in China, at Tianjin University, near Beijing. Students may also combine international business studies with Scandinavian Studies at the University of Oslo and other programs. Finally, the program offers internship possibilities and placement in cooperation with the MSU placement office. For more information, contact Peter Geib, Business Administration.

**Portsmouth.** A student exchange has been developed with Portsmouth Polytechnic in Portsmouth, England. Students in various disciplines pay tuition at their home institution but trade universities for an academic year.

**China.** An opportunity exists to study Chinese language and culture at Nankai University, Tianjin, China. Contact Dean Robert Badal for further information.

**Japan.** The Minnesota State University System operates a campus in Yuwa, Japan. American students may take the opportunity to study Japanese language, culture and other liberal arts subjects.

**Oslo Year.** Students who complete one year of college-level study in Norwegian language may participate in a semester or entire year of study at the University of Oslo, Norway. Students may earn up to 48 credits in Norwegian language and culture or other subjects.

**Other international study opportunities.** For information about the programs listed or other opportunities to study abroad, contact individual program directors or the Office of International Programs, Flora Frick 154.

## **FACILITIES AND SERVICES**

**Residence Halls.** With nine residence halls offering a variety of living arrangements, there is a capacity for 2,200 students. Each of the halls is designed in floor units of 25 to 40 students under the direction of a student resident assistant.

Room furnishings include draperies, lamps and all necessary furniture. Students provide only linen, blankets, towels, pillows and personal or decorative items.

Each hall is under the supervision of a Resident Director, but social, recreational and cultural activities are conducted by student government through constitutions adopted by the residents.

Following is a list of halls with dates of construction and student capacity:

Ballard Hall (1950) 174  
Dahl Hall (1958) 361  
Snarr Hall (1963-67) 489  
Grantham Hall (1965) 204  
Nelson Hall (1966) 398  
Holmquist Hall (1969) 200  
Neumaier Hall (1971) 403

No campus housing is provided for married students.

**Dining Facilities.** The university offers complete cafeteria service in Kise Commons. Meals are provided to students living in campus residence halls who select the meal plan. Off-campus students, faculty, visitors and guests are invited to use the dining facilities. Or, off-campus students may contract for all meals. Kise Commons includes three dining rooms seating a total of 590 people.

**Student Union.** Comstock Memorial Union is the community center of the university and is an integral part of its educational purpose.

Comstock Union offers a wide variety of services for use by all students, faculty, administration, alumni and their guests. It also provides a place for individuals to get to know and understand one another through informal association outside the classroom.

Funding for the CMU is, in part, provided by Student Union and Activities fees. The remaining income needed to support the union operation derives from service areas within the Union. Those services that are funded and administered by the Union are the Recreational Center, Outing Center, Design Center, The Exchange, Copies Plus, Job Service, Main Office area and the Underground, a pizzeria by day and a non-alcoholic bar and dance area by night.

Additional Union services include the Union Station Snack Bar, Deli, Bakery, meeting rooms, video rentals, lounges, telephones, vending machines, a multi-purpose ballroom and an extension of the MSU Bookstore—the Et Cetera Shop.

Other offices and organizations located in the Union are: KMSC (campus radio), the Advocate (campus newspaper), the Student Senate, Campus Activities Board, New Student Orientation, Associate Dean of Students, Student Organization Development Center, Student Organization office area, Multicultural Center, Emerging Leadership Program, and Career and Placement Services.

**Livingston Lord Library.** The Library has 330,000 volumes and is open 94 hours a week. Seating for about 850 students is available which provides a variety of study conditions. Facilities include microform collections and reading equipment, the Northwest Minnesota Historical Archives Collection, government document collection, copying equipment, listening and viewing equipment for collections of audio-visual materials. A computer catalog makes the collections easily accessible. Extensive interlibrary

loan arrangements make the collections of other libraries available to our students.

**Science Facilities.** Hagen Hall is the home for chemistry, physics and industrial studies with complete laboratory, classroom, office and research facilities. King Biology Hall features the most modern concepts for study and research, including greenhouses, animal rooms, culture room, herbarium, study-museum and laboratories.

**Planetarium.** Located in Bridges Hall and containing a Spitz Space Projection System 512, the Planetarium provides an environment for observing the appearance and motions of the sky at various seasons and from different locations. In addition to the primary star projector, auxiliary projections and equipment are used to produce a variety of additional effects lending realism and atmosphere to the presentations.

In addition to its use by astronomy classes, the planetarium provides demonstrations for elementary and secondary school classes and for the general public.

**Barlage Center for Science.** The Barlage Center for Science is a 220-acre living, breathing outdoor science classroom, located 15 miles east of Fargo-Moorhead off Highway 10. Goals of the Center for Science are to stimulate interest and involvement in science and to provide opportunities for research and experimentation at all educational levels. The program actively involves individuals of all ages in hands-on science experience and discoveries, and provides activities that help develop the investigative skills necessary to understand the natural, physical and social sciences.

University students are involved as interns and volunteers on special independent projects, or as part of their university science classes.

**University Bookstore.** The Moorhead State Bookstore is located on the first floor of MacLean Hall's east wing. The bookstore sells textbooks and supplies for all classes as well as a wide range of scholarly and popular books, magazines, novelties, student supplies and miscellaneous items.

**Center for the Arts.** The Departments of Art, Music and Speech-Theatre occupy this building. It includes a 900-seat auditorium, a seven-story stage area, an 80 foot gallery, 316-seat theatre in the round, music recital hall, band rehearsal room, electronic music studio, record listening room, 32 individual music practice rooms, two scene shops, drama rehearsal room, dressing rooms, costume shop, classrooms, offices and studios for painting, drawing, design, glass blowing, ceramics, sculpture, graphics, crafts and heat processing. The Center is the scene of year-round cultural activity, including the Performing Arts Series, musical performances and recitals, photographic and art exhibits, the Moorhead State University Theatre, the Straw Hat Players summer season and the Opera Workshop. A major addition to this building was completed in 1978.

**Alcohol/Drug Awareness Program.** Moorhead State University does not encourage the use of, and cannot condone the misuse of, alcoholic beverages or other drugs. The University does encourage the responsible use of alcohol and supports those students who wish to abstain. However, MSU respects the rights of those of legal age to consume alcohol off-campus.

Although University regulations are subject to change, the use or possession of alcoholic beverages or illegal drugs on the University campus, in the dormitories or at University sponsored events on campus is prohibited by Minnesota State Law. Students caught selling alcohol or illegal drugs on campus will be subject to disciplinary action as set forth in the Student Handbook section "Disciplinary Procedures." Drug and alcohol violators may be referred to the Alcohol/Drug Awareness Coordinator.

To assure that state programs and service objectives are met (within the framework of the MSU policy statement governing alcohol use), the University has designated a Coordinator of Chemical Dependency Programs and Services. Under the guidance and support of a faculty/student advisory board, this individual will coordinate campus-wide services dealing with alcohol and other substance use/abuse. You may contact the Coordinator at Hendrix Health Center.

**Counseling and Personal Growth Center.** The Counseling and Personal Growth Center provides a setting and staff where one may discuss any personal or academic concern. The Counseling Center staff assists students with their personal development in such areas as career and educational planning, personal and social adjustment and study skills improvement. Counseling Center services include individual counseling, life skill classes, career and personality testing, free peer tutoring, disabled student services, study skills programs, special programs for returning adult students and a comprehensive career library containing current career and educational information and related computer software.

**Services for the Disabled.** In compliance with recent legislation, all programs and services at Moorhead State University are accessible to disabled individuals. This accessibility, in some cases, may necessitate the rescheduling of classrooms or other program accommodations. Inquiries concerning available services or requests for assistance with special needs should be directed to the Coordinator of Services for Disabled Students in the Counseling Center, Flora Frick Hall, 236-2227, or the Disabled Services 504 Coordinator, Comstock Memorial Union, 236-2081.

**Speech Language and Hearing Clinic.** The Speech Language and Hearing Clinic provides service to students, faculty and staff members as well as their families, and children and adults from the community and surrounding area. Their services include detailed diagnostic evaluations, consultation and therapy and

referral to other agencies as individual needs are indicated. The Speech Language and Hearing Clinic is located in Grier Hall. Inquiries should be addressed to: Speech-Language-Hearing Clinic, 236-2286.

**Veterans Office.** The Veterans office provides counseling, GI Bill certifications and tutorial assistance and is concerned with recruiting veterans and veteran's dependents. Interested veterans should call 236-2876, or stop by the library, room 201C.

**Achievement Center.** Moorhead State University maintains the Achievement Center as a community service. During the summer, remediation in basic skill subjects is offered. Diagnostic and learning disabilities testing is available.

**Career and Placement Services.** Although leaving college and finding a career may seem far away, the staff of Career and Placement Services wishes to serve students as soon as they arrive. They help plan careers, not merely assist with the job search. The office provides a wide variety of services for students and alumni in the career awareness and development areas. Resources available include company and governmental job descriptions, projections on the job market and a career information library open to students, faculty and alumni. In addition, staff members are available to speak to classes or seminars on careers for particular majors or for college graduates in general.

Internship coordination is a special function of the office. A library of internship directories and files is available to students. Planning for internships before the junior year is advised and an orientation slide presentation is available to students seeking initial information concerning the internship program.

The office continues to provide placement services for graduates and alumni of MSU. These placement services consist of on-campus interviewing, notification of job vacancies and maintenance and upkeep of a credential file. Additional placement services deal with job interviewing techniques, resume and letter writing and the development of a job search strategy and are available to all MSU students and graduates.

All seniors are encouraged to register with Career and Placement Services and begin a credential file whether they will be seeking employment or going on to graduate school since the recommendations in the file may be invaluable at a later date. There is no charge for initial registration with the Career and Placement Services provided the registration is completed prior to graduation. Alumni will be charged a \$25 annual registration fee for active placement services.

**Moorhead State University Foundation.** Incorporated in 1970, the Foundation serves as the umbrella for all development, fund raising and alumni programs of the university. Headed by a 24 member board comprised of business and professional leaders, faculty, administration, alumni, the

Foundation coordinates all MSU fund raising and acknowledgement of gifts and grants. Its primary goal is scholarship contributions.

**Alumni Association.** The purpose of the Alumni Association is to promote and provide services to the university, its students and alumni. All graduates or former students who have attended Moorhead State University for at least one year may be members of the Association. The Alumni Association is governed by an elected 24 member board of directors.

Activities of the association include: providing grants to students, faculty and organizations; sponsoring special projects, such as homecoming and awards; raising money for scholarships; and serving as a liaison between the community and the university.

## ADMISSIONS

**Freshman Applicants: Application Procedures for Freshmen.** Complete the Minnesota College Admission form available from all high school counselors or from the Moorhead State University Office of Admissions. Bring the admission form and application fee to your high school counselor, who will complete the application and submit it to the university. Students starting prior to Fall Quarter 1990 will pay a \$10 application fee. Students starting Fall Quarter 1990 or later will pay a \$15 application fee. Note: See Financial Aid section for information about separate application.

**Acceptance.** Either rank in the upper half of your high school graduating class or achieve a composite standard score of 20 or better on the ACT examination or equivalent scores on the SAT (900) or PSAT (90). Meeting one of the requirements, class rank or entrance score, is sufficient for admission.

If you do not meet one of the above guidelines, you may still apply and receive individual consideration for admission to Moorhead State, provided other evidence of college ability can be shown. You may be eligible for admission to MSU's New Center for Multidisciplinary Studies. The procedure for admission to the New Center is similar to the Freshman procedure, but also requires completion of the "New Center Questionnaire," available from the Admissions office.

Following acceptance to Moorhead State, financial aid and housing application forms will be mailed. They should be completed and returned as soon as possible.

**Transfer Applicants: Application Procedures for Transfers.** To transfer from another institution you must have earned a cumulative average of "C" (2.0 GPA) or better in all college courses attempted. With a scholastic average below "C", you will be notified of the procedure for submitting an appeal to the Admissions Committee. If admitted on probation, you become subject to suspension if your cumulative grade point average is below 2.0 at the end of the

quarter during which the total credits attempted at MSU exceeds 24.

Request an application for Admission with Advanced Standing from the Office of Admissions and submit the completed form along with the application fee to the Office of Admissions. Students starting prior to Fall Quarter 1990 will pay a \$10 application fee. Students starting Fall Quarter 1990 or later will pay a \$15 application fee. Request each previous post-secondary educational institution to forward an official transcript of credits directly to the Office of Admissions. If transcripts are not in the same name as the application (due to a legal name change), it is the responsibility of the applicant to have the name corrected on the transcripts so that the application and transcripts can be matched.

If fewer than 32 quarter (21 semester) credits of college study have been completed, request your high school to forward an official transcript to the Office of Admissions. If you apply for admission before completion of studies at another college, you may receive provisional acceptance based on a current transcript, but you must have a final transcript forwarded before enrollment.

Following acceptance, you will receive financial aid and housing application forms, which should be completed and returned as soon as possible.

**Application Procedures for Freshman International Students.** Students applying from a nation where English is not the native language, will be required to produce evidence of English proficiency through the Test of English as a Foreign Language (TOEFL) examination. All international students must earn a score of at least 500 on the TOEFL examination. All foreign academic credentials will be thoroughly evaluated to determine academic eligibility for Moorhead State University.

**Application Procedures for Transfer International Students.** All international students must have earned a score of at least 500 on the TOEFL examination. To transfer from another institution, you must have earned a cumulative average of "C" (2.0 GPA) or better in all college courses attempted. Transfer international students are required to pay tuition and fees for their first quarter of attendance before they will be allowed to register for classes. The tuition and fee charge will be for sixteen credits. An additional charge or refund will be given later in the quarter if you enroll for more or fewer credits.

Please address all inquiries for application materials to the International Student Affairs Office, Moorhead State University.

**TOEFL Testing.** The TOEFL will be offered to applicants on the MSU campus. This administration of the TOEFL examination is for internal purposes only. MSU will use the TOEFL results to place its own applicants and will not forward score reports. Students who wish to have their score reports forwarded should take TOEFL at an International or Special Center Testing program administration.

All students who take the test must bring their passport or other official photo-bearing document to gain admission to the test center.

All students who take the TOEFL must have previously applied to MSU for admission.

There will be a fee of \$15.00 assessed to each student who takes the examination. For more information about the TOEFL examination, please write to the International Student Advisor, Moorhead State University.

**Special Students.** Students may enroll at Moorhead State without seeking a degree by meeting appropriate entrance requirements as previously explained. If enrolled at another college, you may be admitted as a special student without having to submit official transcripts. Should you later decide to enter a baccalaureate program at Moorhead State, you may do so by submitting official transcripts and completing any remaining admissions requirements. No student under suspension from another institution may enroll as a special student. Credit earned may be withheld for falsely claiming eligibility.

**Special Advanced Standing for High School Students.** If you have not finished high school but show exceptional academic ability, you may enroll in courses at MSU by submitting a completed Minnesota College Admission form, an application fee, and a statement from your high school principal or counselor granting permission to attend college courses.

Any credits earned here must be in addition to those studies required by your high school for graduation. Official credit granted by the university will be deferred until after high school graduation.

(Note: The provisions of this admission policy do not apply to Minnesota high school students enrolled for both high school and college credit under the Access to Excellence program described below. Students participating under the Access to Excellence Program are advised to follow the appropriate procedures.)

**Post-Secondary Enrollment Option Program.** As enacted by the 1985 Minnesota Legislature, a Minnesota high school junior or senior may enroll for courses at Moorhead State University as part of the student's full time high school enrollment and receive both college credit and credit toward high school graduation requirements. No charge will be made to the student for the costs of tuition, fees, or required textbooks and materials.

To be eligible for this program, you will submit a completed Minnesota College Admission form including or accompanied by a transcript or statement from the high school indicating that you rank at least in the upper half of your high school class or have an equivalent score on a college admission examination.

We recommend that you carefully consider your participation in this program before applying for

admission. You should discuss your participation in the PSEO program with your parents and your high school counselor or principal.

Admission applications will be reviewed and a registration conference will be arranged for you and at least one of your parents with the program coordinator at MSU. You must bring the signed Notice of Student Registration form to this conference. You will be registered, after all regularly admitted students have registered, on a space available basis.

An orientation session for new students accepted to the PSEO program will be held at the beginning of each quarter.

Your parent or guardian should discuss possible transportation reimbursement or arrangements with the school district administration.

Class schedules and registration forms will be supplied by Moorhead State University. The Minnesota College Admission form is available at your high school.

**Special Circumstances.** Any adult who has not finished high school must first successfully complete the Test of General Education Development (GED) and secure a diploma or certificate from a qualified state or local agency before applying to MSU. Other special arrangements may be made in exceptional circumstances by the Director of Admissions.

**Application Deadlines.** Deadlines for admission are: fall quarter, August 15; winter quarter, November 15; spring quarter, February 15. Applications may be accepted past these deadlines at the option of the university.

**Readmission.** Former students of Moorhead State, including those who have enrolled in off-campus courses should complete a readmission form. If off-campus study began in 1965 or later, you must pay the application fee if you have not already done so. The application for readmission and all transcripts of post-secondary study since your last date of attendance at Moorhead State must be submitted before the readmission process is complete. If transcripts are not in the same name as the application (due to a legal name change), it is the responsibility of the applicant to have the name corrected on the transcripts so that the application and transcripts can be matched.

**Campus Visits.** Prospective students or any other interested persons are invited to visit the Moorhead State University campus. Campus tours may be scheduled with the Office of Admissions which is open Monday through Friday. Tours are offered at 10:00, 11:00, 12:00, 1:00, and 2:00 when classes are in session. If you live in Minnesota call toll free, 1-800-652-9747 and ask for the Moorhead State Admissions Office. If you live in North or South Dakota, call the Admissions Office collect, 218-236-2161.

# STUDENT INFORMATION

**Student Affairs.** The Office of Student Affairs coordinates the following programs: admissions, housing, security, counseling, financial aid, health services, career and placement services, student union, orientation/new student life, student activities, student organization, student government, food services, student development, minority student affairs, international student services and intercollegiate athletics.

**Student Senate.** Most activities and concerns of the entire student body are subject to consideration by the Student Senate, whose officers and members are elected by the students of Moorhead State.

**Student Advisor Program.** The student advisor program supplements the faculty advising program. About 35 upper-division students, nominated by their major departments, are appointed to assist students, particularly freshmen, to take advantage of all the learning opportunities at Moorhead State University. Student Advisors work through their departments and also sponsor a Student Information Center, located in Flora Frick Hall. They are employed by the Office of Academic Affairs.

12

**Student Activities and Organizations.** In addition to numerous activities related to academic studies, various campus agencies provide opportunity for extra curricular participation by students at Moorhead State University. For a list of recognized Student Organizations on campus, contact the Student Organization Development Center, CMU 222, 236-2174.

## *Men's Intercollegiate Athletics*

Basketball  
Cross Country  
Football  
Golf  
Tennis  
Track  
Wrestling

## *Women's Intercollegiate Athletics*

Basketball  
Cross Country  
Golf  
Softball  
Tennis  
Track and Field  
Volleyball

*Speech-Theatre* activities include the following:

Debate  
KMSC Radio  
Forensics  
MSU Theatre  
Straw Hat Players  
Readers Theatre

*Music Organizations* providing campus concerts and off-campus tours include:  
Concert Band

Chamber Orchestra  
Stage Band  
Vocal Ensembles  
Instrumental Ensembles  
Festival Choir  
Snowfire  
Symphonic Wind Ensemble  
Opera Workshop  
Concert Choir  
Collegiate Chorale  
Chamber Singers  
Collegium Musicum  
Women's Chorus

*Comstock Memorial Union* conducts a regular program of weekly events: movie series, bowling, art exhibits, international film series, billiards, concerts, dances, outdoor recreation, table tennis, video tapes and special events.

*Center for the Arts* is the site of photographic and art exhibits, music recitals and programs and the annual Performing Arts Series with nationally known artists.

*Intramural Athletics* include competition in the following sports:

m—Men, w—Women, c—Coed

Flag Football m & c  
Softball m, w, & c  
Hockey m  
Tennis m, w, & c  
Golf m & w  
Wrestling m  
Track m & w  
Swimming m & w  
Volleyball m, w & c  
Racquet Ball m, w & c  
Archery m, w & c  
Basketball m & w  
Badminton m, w & c  
Broomball m & c

## *Other Fee-Funded Activities*

Advocate (student newspaper)  
Campus Activities Board  
Journal of Social and Behavioral Sciences  
KMSC (radio)  
Student Senate  
Visiting Scholar Lecture Series  
Performing Arts Series  
International Films  
Forensics  
Dramatics  
Summer Theatre  
Recreational Swimming  
International Students  
Homecoming  
MSU Pep Band

## **Student Organizations**

*Residence Hall Councils*  
Inter-Residence Hall Council (IRHC)  
Ballard Hall  
Dahl Hall  
Snarr Hall

Nelson-Grantham  
Neumaier-Holmquist

*Social Fraternities*

Delta Chi Omega  
Phi Sigma Kappa  
Old Order of Owls

*Social Sororities*

Panhellenic Council  
Delta Zeta  
Gamma Phi Beta

*Departmental and Professional Clubs*

Accounting Club  
Ad II Club  
Administrative Management Society  
American Institute of Graphic Arts  
American Marketing Association  
Association for Computing Machinery  
Biology Club (Beta Beta Beta)  
Blackfriars  
Business Professionals of America  
Chemistry Club  
Construction Management Society  
Criminal Justice Association  
Energy Management Society  
Financial Management Association  
French Club  
German Club  
GraphiComm  
Health, Physical Education & Recreation (HPER)  
Hotel, Sales and Marketing Assoc. Ind.  
International Business Student Organization  
Legal Assistant Student Organization  
Mathematics Club  
Music Industry Association  
Natl. Student Speech, Hearing and Language Assoc.  
New Center Student Activities  
Norwegian Club  
Pi Sigma Epsilon  
Pre-Professional Club  
Psi-Chi, Psychology Club  
Public Relations Student Society of America  
Sigma Alpha Iota (music)  
Sigma Delta Chi (Society for Professional Journalists)  
Society of Manufacturing Engineers/Ind. Tech.  
Spanish Club  
Student Advisory Committee for Social Studies  
Student Council for Exceptional Children  
Students Involved in the Visual Arts  
Student Minnesota Education Association  
Student Social Work Association  
Student Personnel Association  
Tour to the United Nations

*Honor Societies*

Alpha Lambda Delta  
Delta Mu Delta (Business Administration)  
Kappa Delta Pi  
MSU Honors Society  
Phi Kappa Phi  
Pi Kappa Delta  
Pi Kappa Lambda  
Pi Omega Pi  
Sigma Tau Delta

*Religious Organizations/Campus Ministry*

Campus Ambassador Christian Ministry  
Campus Crusade for Christ  
Fellowship of Christian Athletes  
First Assembly Campus Ministry  
InterVarsity Christian Fellowship  
Lutheran Student Movement  
St. Thomas Newman Center (Roman Catholic)  
United Campus Ministry

*Special Interest and Service Organizations*

Campus Activities Board  
Century of Peace  
Cheerleaders  
Circle K  
College Republicans  
Delta Pi Delta/SOTA (Students Older Than Average)  
Dragon Danceline  
Gamers Club  
Hands in Motion (sign language)  
Heritage Dancers  
Hispanic Student Organization  
International Students Club  
KMSC Radio  
Lighthouse Toastmasters  
Model United Nations Club  
Photography Club  
Soccer Club  
Society for the Ethical Treatment of Animals  
SPURS  
Tae Kwon Do Club  
Ten Percent Society  
Travelers Anonymous  
Unicorn  
Volunteer Connection  
Young Democratic Farmer-Labor Party

**Parking and Traffic Regulations.** All motor vehicles driven or parked on the campus must be registered and bear a current parking permit which may be purchased in the Office of Administrative Affairs, Owens Hall 206.

All motor vehicles must be operated in conformity with the official published parking and traffic regulations of the university.

**Housing Policies.** Housing reservation forms are mailed to all students following their admission to the university and are also available from the Housing Office.

Off-campus students are requested to give notification of any change of address or telephone number to the Office of Student Services.

**Health Service and Insurance.** The Hendrix Health Center, located in the lower level of Dahl Hall, is an excellent out-patient clinic staffed with local doctors, nurse practitioners, and other professional staff members. They offer medical treatment, referrals, health education and counseling, and pharmacy services. Minimal charges are made for pharmaceuticals and some of the laboratory tests.

A group plan of accident and health insurance is available through the university. Information



concerning the student group policy is provided at the time of registration or may be secured upon request addressed at the university's business office. It is strongly recommended that all students have some form of insurance protections against the cost of accident and illness.

All students are required to fill out a medical history form. You may obtain one at Hendrix Health Center.

## FINANCIAL INFORMATION

**University Expenses.** Since Minnesota taxpayers provide a good share of the support for the education costs at Moorhead State University, students are able to complete their studies with less expense than at many other colleges and universities.

Basic costs usually fall into three categories: tuition and fees, housing and meals, and incidental or personal expenses. Barring any unusual financial obligations, students living on campus can expect estimated total annual expenses at MSU to range from \$5,400 to \$6,300.

The following is a table of estimated costs for the 1989-90 academic year, based on a normal undergraduate load of 16 credits per quarter.

Tuition (including mandatory comprehensive fee):

Resident \$1,852.80  
Non-Resident \$2,935.20

Housing and Meals

Resident (Double) \$2,256.00  
Non-Resident \$2,256.00

Total

Resident \$4,108.80  
Non-Resident \$5,191.20

Incidental and personal expenses—books and supplies, clothing, laundry, recreation, transportation, etc.—may range from \$1,000 to \$1,400 depending upon individual needs.

**Tuition Rates.** Charges for tuition are based upon the quarter credit unit, varying according to status as a student and the type of course offered.

Types of Course

Resident Status  
Undergraduate \$34.10  
Graduate \$47.25

Non-Resident Status  
Undergraduate \$56.65  
Graduate \$68.20

**These rates are subject to change without advance notice** by the Minnesota State University Board which establishes uniform tuition rates for all state universities in Minnesota.

**Comprehensive Student Fee.** All students enrolled for regular instruction (resident credit) are assessed a mandatory comprehensive fee at a rate of \$6.00 per credit hour not to exceed \$72.00 per quarter.

Fee assessments are required by the State University Board to defray costs of maintaining such essential university services as student union operation and debt retirement, health services and co-curricular programs or activities.

Comprehensive fees are required if enrolled for six or more credits, including student teaching, internships and other instructions which may not be located on the MSU campus. The comprehensive student fee is the only fee all students pay. In a few cases, laboratory and studio courses require supply fees, but these courses are few and the costs minimal.

**Resident or Non-Resident Status.** Specific criteria have been adopted by the State University Board to define those students eligible for the benefits of Minnesota resident tuition rate. Students are entitled to resident status by meeting any one of the following qualifications:

1. Graduation from a Minnesota high school within thirty (30) months prior to the first class day at MSU.
2. Graduation from a Minnesota high school followed by substantially continuous residence in this state, providing that permanent residence has not been established in another state.
3. Service in the U.S. Armed Forces for at least 190 days other than for training purposes only within two years prior to enrollment and with no other subsequent residence in another state.
4. Employment in Minnesota on a full-time basis subject to Minnesota income taxation for at least one continuous year prior to enrollment as a full-time student.
5. A U.S. citizen, his or her spouse or dependents, who is stationed outside the continental United States as a federal employee or member of the U.S. Armed Forces.
6. A spouse or dependent of an individual who has moved to Minnesota to accept permanent employment.
7. U.S. residents of migrant background who have spent at least twelve months in seasonal agricultural labor in Minnesota during the preceding five years.
8. Aliens who have been granted permanent resident status in Minnesota or who are eligible for such status according to documents provided by U.S. Immigration officials.
9. An undergraduate student transferring to a state university who, in the past twelve (12) months, has been granted residency status for tuition purposes by a Minnesota public post-secondary educational institution.
10. A graduate student appointed to a graduate assistant position. Resident tuition status is effective for the entire academic quarter if the appointment begins by the tenth (10th) class day of the quarter and is maintained thereafter only for the duration of the appointment.

11. A full-time faculty member of an accredited Minnesota college in the first year of his or her appointment who resides in Minnesota.

12. An individual serving in the armed forces of the United States who is assigned to active duty in Minnesota for reasons other than college attendance, or who is assigned to active duty outside the continental United States, provided legal residence is not claimed in any other state or the District of Columbia. Dependents and spouses of such military personnel are included under this provision.

13. Legal dependent or spouse of any person who qualifies as a Minnesota resident under one of the criteria above. (Student and spouse must share a place of residence in Minnesota.)

14. An individual enrolled for one course for 5 credits or less.

**High Ability Students.** High ability students, as defined below, are students who reside in states that do not have reciprocity agreements with the State of Minnesota.

1. Individuals who are in the top 15 percent of their high school graduating class or who have an ACT composite score of 25 or more, a PSAT selection index of 150 or more, or combined math and verbal SAT of 1100 or more.

2. Individuals who have successfully completed an Associate of Arts or Associate of Science degree at an accredited college or university and who have a cumulative grade point average of 3.5 or better.

The University President may extend resident tuition status to such high ability students up to a number not to exceed 5 percent of the campus' initial Fall Quarter FTE enrollment. A student admitted or matriculating under this provision must maintain a minimum grade point average of 3.0 in order to retain resident tuition status beyond the initial year of enrollment.

a. To improve the cultural art ethnic diversity of Moorhead State University, resident tuition will be available to individuals who reside in states that do not have a tuition reciprocity agreement with the State of Minnesota and who are members of underrepresented racial and ethnic minority groups (specifically, black, Hispanic, Native American and Asian-Pacific populations), and who are in the upper 25 percent of their graduating classes.

b. Any nonimmigrant classified under 8.U.S.C. 1101 (a)(15)(B), (C), (D), (F), (H), (J), and (M) is not eligible for resident tuition status, except that the University President shall have the discretion to grant international students resident tuition status up to a number not to exceed 3 percent of the university's initial Fall Quarter FTE enrollment.

**Dependent Student.** An individual who is considered a dependent student for financial aid purposes shall be classified by the residence of his or her parent(s) or legal guardian(s). Normally, the residence of a dependent student follows that of the:

- (1) parents of surviving parent;
- (2) parent to whom custody of the dependent student has been awarded by a divorce or judicial decree;
- (3) parent with whom the dependent student in fact makes his or her home, if there has been a separation without a judicial award of custody;
- (4) "natural" guardian, such as grandparent, with whom the dependent student makes his or her home, when the dependent student is financially dependent upon the natural guardian.

**Sufficient Evidence of Residency.** Although not in themselves conclusive, these factors in combination may be considered as evidence of eligibility for resident tuition status: acceptance of an offer of permanent employment in this State; marriage to a State resident; former residence in the State and the maintenance of significant connections therein while absent; economic, social or political compulsion causing a person to abandon a former residence and acquire residence in Minnesota, with attendance at a state university only incidental to such residence.

**Insufficient Evidence of Residency.** The following factors, singularly or in combination, do not constitute evidence of eligibility for resident tuition status: employment by the institution as a fellow, scholar, or assistant; employment in any position normally filled by students; a statement of intention to acquire a domicile in this State; voting or registration for voting; the lease of living quarters; payment of local and state taxes; the registration of an automobile; or the continued presence in Minnesota during vacation periods.

Students from states under reciprocal tuition agreements with Minnesota must qualify for reciprocity through their home states regardless of any other qualification listed above.

Requests for reclassification of resident/non-resident tuition status should be submitted to the Registrar, whose decision may be appealed to the Committee on Academic Appeals.

**Reciprocal Tuition Agreements.** Residents of North Dakota, South Dakota or Wisconsin may qualify for reduced or resident tuition rates at Moorhead State University by complying with procedures of the reciprocal agreements between those states and the State of Minnesota. Eligibility must be renewed each year for the fall quarter.

Reciprocity application forms are available from the Records Office to be completed, notarized and submitted to the higher education authority in the student's home state. Notary services are available at most banks and courthouses or at the Moorhead State University Business Office, Student Financial Aid Office, or Records Office.

North and South Dakota and Wisconsin students will be charged at reciprocity tuition rates only if Moorhead State has been notified of their approval for reciprocity status by the appropriate higher education authority prior to regular billing dates.

Qualified students who are billed for non-resident tuition may pay reciprocity rates or receive refunds by providing evidence of their official approval within two weeks after the first class day. Copies of letters from their home state approving agencies will be satisfactory for this purpose. Payment deadlines may not be deferred to await approval.

Applications should not be submitted to Moorhead State but should be mailed directly to home state approving agencies.

Previous Minnesota residents and students who qualify for resident tuition under special Minnesota regulations shall be required to apply for reciprocity if they are residents of North and South Dakota or Wisconsin.

**Payment of Tuition and Fees.** All tuition and fees are payable in full each quarter on or before deadlines designated in the academic calendar.

Students who have any financial obligations to the university with the exception of loans scheduled to mature at a future date may be prevented from registering until their obligations are met.

Room and board charges are payable in full at the beginning of each quarter or in two advance installments by special arrangement with the Business Office.

**Refund of Payments.** Students who withdraw from all courses at MSU may apply for a refund of their tuition and fees. No refund is paid if the amounts are less than \$1.00.

Refunds or reductions in tuition and fees for dropped courses will be made only in the first three calendar days of the fall, winter or spring quarter, on the first day of a summer class, and for off-campus or evening classes which are dropped after the first course meeting but before the second.

Following is a schedule of the percentage of refund that will be made according to the time of complete withdrawal:

*During Regular School Year*

- On or before the 3rd class day 100%
- 4th through 8th class day 75%
- 9th through 13th class day 50%
- 14th through 18th class day 25%
- After 18th class day None

*During Summer Session:*

- On or before 1st class day 100%
- 2nd through 4th class day 75%
- 5th through 7th class day 50%
- 8th through 10th class day 25%
- After 10th class day None

*Off-campus and evening courses:*

- 1st course meeting but before the second 100%
- 2nd course meeting but before the third 75%
- 3rd course meeting but before the fourth 50%
- 4th course meeting but before the fifth 25%
- 5th course meeting and later None

Note: Class days refer to days in the MSU calendar and not the meeting days of the class to be dropped.

**Housing and Dining Contracts.** If you are to live in a university residence hall, you must sign a contract. The complete contract will be mailed to you and should be carefully read for provisions affecting your plans. Specific questions should be addressed to the MSU Housing Office.

To help plan your costs, room and board rates including local telephone service for each quarter of the year are:

	Quarterly			
	Rm/21 meals	Rm/14 meals	Rm/10 meals	Room only
Single				
	\$836	\$820	\$806	\$581
	S4	S3	S2	S1
Double				
	\$752	\$735	\$722	\$511
	D4	D3	D2	D1
Triple				
	\$692	\$675	\$662	\$427
	T4	T3	T2	T1
Double/Single				
	\$846	\$830	\$816	\$591
	T4	T3	T2	T1

Off-campus board only: 21 meals/\$349; 14 meals/\$332; 10 meals/\$319.

**Financial Aid.** Students seeking help for financing their educational plans should seek help from all possible sources including the university. As explained below, when applying to MSU for aid, undergraduates will also be expected to apply to the Minnesota Grant and to the federal Pell Grant Program. The Moorhead State University financial aid office financial programs available through Moorhead State University. Aid is available in either of two categories: that which is dependent on financial need and that which requires no evidence of need. Most assistance through the university that will equal the difference between estimated costs and the amount the student's family can be expected to contribute.

Further information about financial aid is available from the Financial Aid or Admissions Office.

**Application for Financial Aid.** University action on aid applications can only be taken for admitted or currently enrolled students at Moorhead State. Students desiring consideration for financial aid should complete the American College Testing (ACT) Family Financial Statement (FFS) designating Moorhead State to receive a copy of the report. In addition, the applicant must complete and provide the MSU Application for Financial Aid form to the Financial Aid Office. All applicants should submit a signed copy of their Federal Income Tax Return and, in addition, all students under 24 years of age must submit a signed copy of their parents' Federal Income Tax Return as filed with the IRS. Additional documentation may be required. No other application

forms are necessary for the Perkins Loan, Supplemental Education Opportunity Grant, College Work Study assistance or Stafford Student Loans.

Aid applications should be completed and mailed as early as possible after January 1 to assure fullest consideration for the following year's funds. Applications will be processed and awards made to the extent that funds are available. Students must apply each year.

FFS forms are available from high school counselors, or from the MSU Financial Aid Office.

**Aid Awards and Renewals.** Financial aid awards are made for a one-year period only, ending at the conclusion of spring quarter. Any change in a student's financial resources (i.e. receipt of grants, educational loans or scholarships from non-university sources) should be reported to the Financial Aid Office for possible adjustments to the student's aid package. Failure to report such changes may result in the cancellation of the student's award. This is especially important if the student or the family has an extraordinary financial problem after applying for aid or receiving an award.

Most financial aid, (grants, loans, scholarships) is disbursed on a quarterly basis during a scheduled fee payment period. Money not available at that time can be picked up in the Business Office. Students attending fulltime or part-time can receive financial aid; however, most programs require enrollment for six or more credits. Students must meet all eligibility criteria before money which has been awarded may be disbursed.

Work-Study and other campus employment earnings are paid at regular two-week intervals.

Students with special or unusual circumstances should notify the financial aid office and ask to have their file reviewed. Any special circumstance may require documentation.

**Summer Financial Aid.** A separate summer application is required for financial aid. Check with the Financial Aid Office for details.

#### **Types of Financial Aid**

**Perkins Loan (formerly NDSL).** An undergraduate may borrow up to \$4500 during the first two academic years, up to a total of \$9000 during four years. This loan is to be repaid at 5% interest on the unpaid balance starting six months after the student leaves the university. It has a maximum repayment period of 10 years and a minimum monthly payment of \$30. A portion of the principal and interest may be canceled for certain kinds of public service and payment deferred for service in the Peace Corps, VISTA or the Armed Forces.

**College Work-Study Program (CWSP).** Full-time students have the opportunity to earn part of their educational expenses through part-time work on-campus throughout the year. Working part-time an average of 10-15 hours per week, one could earn

from \$350 to \$600 each quarter from Work-Study employment. The actual amount varies with work schedule, pay rate and need eligibility.

**Supplemental Educational Opportunity Grant (SEOG).** For undergraduates with financial need who would be unable to otherwise continue their education, the SEOG grant is available. SEOG grants range from \$200 to \$2000 per year. These grants are renewable, but are limited to students who have not received a baccalaureate degree and continue to demonstrate financial need. Requires annual application.

**Pell Grant.** An undergraduate may have the opportunity to receive up to \$2200 in the federal Pell Grant program. Determination of eligibility is not made by the university but through the application which is part of the ACT-FFS form. Students with extreme changes in financial circumstances should ask for information on special applications for the Pell Grant. When they are received, students should send their Pell Grant eligibility notification (SAR) forms to the Aid Office for calculation of the award. Receipt of a Pell Grant will not limit other chances for financial assistance as long as a student needs it. All undergraduates must apply Pell grants when applying for financial aid at MSU.

**Minnesota State Grants.** Minnesota residents who enroll at MSU may qualify for aid under the Minnesota State Grant. Aid eligibility is determined by the MSU Financial Aid Office.

**Scholarships.** Moorhead State awards scholarships to freshmen, community college transfer students and upperclass students with outstanding abilities, qualifications and promise. Scholarships may range from \$150 to \$2,000. Most freshman scholarships range from \$450 to \$750. Scholarships awarded to community college graduates are \$250-\$350. Scholarship awards usually are for one year. Finalists in the National Merit Scholarship competition are eligible for an \$8,000 award with \$2,000 available each year for four years.

**Stafford Student Loans (formerly GSL).** Students may borrow up to \$2625 annually at low interest from private lending institution. Interest is paid by the federal government while the student is in school. Repayment begins six months after leaving school with a minimum payment of \$50 per month. All students are required to demonstrate financial need.

Note, indebtedness to MSU under the Perkins Loan program and to a bank under a guaranteed loan requires two monthly payments. The financial aid office tries to choose the loan program which best meets the needs of the student and maintains a single lender when possible.

**Minnesota Supplemental Student Loan Program (SELF).** This loan is available to graduate and undergraduate students who either need additional aid beyond the amount offered by these programs or have no financial need. Students must be enrolled in a degree seeking program.

Eligibility is not based on financial need, nor is it limited by family income levels. It requires a co-signor and is a credit worthy loan.

Undergraduates may borrow up to \$4000 per year less any amount obtained through other student loan programs. Total amount of aid received can not exceed the cost of education.

Interest rate is variable and the borrower is responsible for payment of interest while in school. Contact the university Financial Aid Office for more information and for application forms.

**Supplemental Loans for Students (SLS) and Loans to Parents (PLUS).** These loans are available through private lenders and offer assistance to students and parents who can not demonstrate financial need or need more assistance than is available in the Stafford Loan. Both SLS and PLUS can be used to replace the contribution which is expected from the student and family. Applications and information brochures are available from the MSU financial aid office and from lenders. Before applying for a SLS or PLUS, students should apply for all other types of financial aid.

**Campus Employment.** Part-time job opportunities which are not dependent on financial need are available in the residence halls, dining service, campus security and other such campus agencies. A student-run office called The Job Shop maintains information about on-campus and off-campus employment. Students employed on-campus should note that those earnings must be considered by the university Aid Office when considering eligibility for Perkins Loans, SEOG and Work-Study.

**Short-Term Loans.** Short term loans for \$25 to \$100 are available to full-time students through the Business Office.

**International Student Assistance.** Non-U.S. residents planning to attend Moorhead State University, must plan to provide their own finances. International students in the U.S. on student visas are not eligible for Perkins, SEOG, Work-Study, Minnesota State Grants, Pell Grant, or the Stafford Student Loan Program. Immigrant visa status may qualify a student for these programs. Foreign students may qualify for student loan under the Supplemental Educational Loan Fund. Vietnam refugee students are eligible for the various federal student aid programs. Contact the Foreign Student Advisor for financial planning information.

**Loan Counseling.** Beginning Fall 1989, all students who are scheduled to receive a student loan (Stafford, PLUS, SELF, SLS), must attend a loan counseling workshop. Workshop attendance must be documented in the financial aid file before any loan proceeds are disbursed. Information regarding this requirement is available from the Financial Aid Office.

#### **Policy Standards**

**Satisfactory Academic Progress.** Federal and State regulations require that all students maintain

satisfactory academic progress toward completion of the requirements for a degree or certificate to receive student financial aid. The following standards, specified by the Higher Education Amendments of 1986 (Public Law 99-498, Section 484 (c)), are effective with enrollment beginning Fall 1988.

Satisfactory Academic Progress Standards for receipt of student financial aid apply to all students, including graduate students, whether or not you are currently receiving any student aid. If you are otherwise ineligible for financial aid the progress standards will not immediately affect you. We will continue to inform you of any unsatisfactory progress in the event that you apply or become eligible for financial aid in the future.

Failure to maintain satisfactory progress results in ineligibility for the following financial aid programs: Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Perkins Loan (formerly NDSL), College Work-Study, Stafford Loan Program (formerly GSL), PLUS, SELF and Supplemental Loans, Minnesota State Grant and Indian Scholarships. Evaluation of your academic standing will be done quarterly and satisfactory academic progress is done yearly. You will be advised of your status by letter if you fall below the standards.

**Maintaining Satisfactory Progress.** In order to maintain satisfactory academic progress for financial aid purposes, undergraduate students must complete a minimum of 75 percent of the credits attempted in an academic year with a grade of "D" or better (or a "P" or "S" if enrolled on a pass/fail or satisfactory/unsatisfactory basis). Students who complete a minimum of 36 credits at the end of the academic year, even if 36 credits is less than 75 percent of their enrolled credits, are not subject to financial aid termination. Grades of Failed (F), Unsatisfactory (U), Incomplete (I), and Withdrawn (W) count as credits attempted but not earned. Undergraduate students will become ineligible to receive funding after completing 16 quarters of full-time equivalent enrollment at Moorhead State University or after they have earned 225 total credits, including accepted transfer credits, whichever comes first. Half-time students (6-8 credits per quarter) and three-quarter time students (9-11 credits per quarter) maximum number of quarters of enrollment will be pro-rated. Three-quarter time students will be allowed up to 22 quarters of three-quarter time enrollment while half-time students will be allowed to enroll for a maximum of 32 half-time quarters. Pell funding is limited to 15 quarters of full-time equivalent enrollment for students who enroll after June 30, 1987. Graduate students must complete their program within 7 graduate full-time equivalent quarters.

Programs that require longer than these limits must be individually approved by the Financial Aid Office through an appeal process. Students must submit for review an academic plan approved and signed by their advisor indicating the quarters remaining for

degree completion and a course plan for each remaining quarter.

Students who fail to complete and earn a minimum of 75 percent of enrolled credits in any one quarter will receive a financial aid warning. Financial aid eligibility is continued while a student is in warning status. Students are allowed until the end of spring quarter to bring their completion of earned and completed credits back up to 75 percent of the total credits. At the end of each regular academic year (i.e., June 1) students will be reviewed to determine maintenance of satisfactory academic progress. If, at the end of the academic year, 75 percent of enrolled credits have not been successfully completed, financial aid will be terminated. The University reserves the right to withdraw aid after two (2) quarters if it becomes apparent that a student will not complete 75 percent of their enrolled credits. Enrollment and completion of remedial courses, Business Education 090 and Chemistry 090 will not be included in the calculation of satisfactory academic progress nor are they included in enrolled credits eligible for financial assistance.

The following example illustrates the calculation of the percentage of credits completed.

Enrolled credits at aid disbursement: Fall-18, Winter-18, Spring-12, Summer-48  
Subsequent withdrawals, failed courses, incompletes, etc.: Fall-8, Winter-3, Spring-6, Summer-17  
Credits completed: Fall-10, Winter-15, Spring-6, Summer-31  
Percent completed: Fall-56%, Winter-83%, Spring-50%, Summer-65%

In this example, financial aid would be terminated because the student successfully completed only 65 percent of the credits attempted during the full year. It is especially important that you carefully consider decisions to drop credits once you have registered.

Students who repeat a course may receive financial assistance more than once for enrollment in the same course. When a course is repeated, each enrollment is included in calculating the percentage of successfully completed credits at the end of the academic year. For example, a student enrolls for a four-credit course, fails it and the following quarter re-enrolls in the same course and earns a "C." That student would be considered as having been enrolled in 8 credits, but successfully completing only 4 credits. Repeat courses are only calculated once in determining GPA or total credits earned.

Students will be required to maintain a minimum 1.6 cumulative GPA after having been enrolled for 24 credits, a 1.9 cumulative GPA after having been enrolled in 60 credits, and a 2.0 cumulative GPA after having been enrolled in 135 credits. Failure to maintain these standards will result in the student being placed on subject to suspension. In order to be placed on subject to suspension, a student must have been enrolled in at least 18 MSU credits. To avoid subject to suspension status, a student must either obtain a cumulative GPA adequate for his/her

total number of enrolled credits (1.6, 1.9, 2.0) or obtain a quarterly GPA of 2.0.

**Establishing Eligibility for Financial Aid.** Students who have failed to meet these standards of satisfactory progress and who meet one of the following conditions may appeal to re-establish eligibility for financial aid. All appeals must be made on the appropriate appeal form available from the Financial Aid Office.

1. Students may re-establish eligibility by completing a minimum of 12 credit hours with a grade of "D" or better at Moorhead State University. During the quarter this is accomplished the student must also complete at least 75 percent of the total credits attempted.

2. Eligibility may also be re-established by completing a minimum of 12 credits with a grade of "D" or better based upon at least half-time enrollment (6-8 credits per quarter). During these quarters the student must also complete at least 75 percent of the total credits attempted. Students must file an appeal application in order to restore financial aid eligibility.

3. If Incomplete (I) credits are a factor in failure to maintain satisfactory progress, subsequent successful completion of these credits by midterm of the next quarter may be used to re-establish eligibility for aid.

4. Students who have failed to make satisfactory progress during the academic year may use summer quarter credits earned at MSU to re-establish eligibility. Credits attempted and earned during summer sessions can be added to those attempted and earned during the academic year. If, following this procedure, the student now meets the minimum satisfactory progress requirements, eligibility may be re-established. However, a formal appeal application must be submitted.

5. You may appeal your financial aid termination status to the Financial Aid Appeal Committee. Most appeals are made on the basis of mitigating circumstances (major illness, death in the family, serious accident, etc.), or on the basis of completion of additional coursework resulting in a grade of "D" or better. Reinstatement for a completed Incomplete (I) grade or completed summer quarter study is not automatic.

The Appeal Committee will inform you promptly in writing of the decision. If you are not satisfied with the decision, you may appeal further to the University Financial Aid Appeal Committee.

#### **Definition of Terms.**

**Credits attempted** is defined as the number of hours for which a student is officially enrolled at the time student aid funds are disbursed at the beginning of each term.

**Academic year** is the period from September to May (Fall, Winter and Spring Quarters). If a student is enrolled for only one (or two) quarter(s) of an academic year, satisfactory progress is evaluated on that basis only.

**Credits earned** includes grades designated as: A,B,C,D,X or S.

**Failures, incompletes** and **withdrawn** courses do not count as credits earned.

### Scholarship Funds

**Freshman Scholarship Program.** Through the MSU Foundation more than 200 MSU Foundation Scholarships are awarded annually to incoming freshmen.

These scholarships are awarded in two categories:

**Cum Laude**, based on academic promise as indicated by high school class rank (upper 7 percent) and admission test scores. Awards range up to \$750.

**Presidential** recognizes leadership ability or other special talents. Those persons awarded scholarships have usually placed among the upper 25 percent in class rank and test scores. Awards range up to \$600.

**National Merit Finalist** provides \$2,000 to entering freshmen who are National Merit Finalists. These awards are renewable to \$8,000, \$2,000 per year for four years.

**Community College Transfer Scholarships** are awarded to graduates of a two year community college program. Awards range up to \$350 and are based upon a minimum grade point average (GPA) of 3.5 and community college counselor recommendation.

**Upperclass Student Scholarships.** Moorhead State, through the cooperation of the MSU Foundation, the Charles and Ellora Alliss Foundation and various other donors, now provide a significant number of awards for upperclass students. Applications are available during January at the Scholarship Office.

**ROTC Scholarships.** Both the Army and Air Force ROTC Departments offer scholarship opportunities to students who take part in a ROTC program. Scholarships pay for full tuition and fees, a book allowance and \$100 a month. To apply, go to the Army or Air Force ROTC departments in the P.E. Building at NDSU.

**Honors Apprenticeship Scholarships** cover tuition and fees and are renewable for four years. To receive the award, students apprentice in academic departments for eight hours each week, acquiring hands-on training and skills in their area of interest. Eligible students must be in the top 7 percent of high school rank and ACT scores.

**Application.** Special application forms are distributed by the Scholarship Committee among high school and community college counselors. Should application forms not be available, write to the Scholarship Office, Moorhead State University.

## ACADEMIC INFORMATION

**Change of Requirements.** Within practicable limits, academic policies and requirements at Moorhead State University are not retroactive, and a student entering a degree program can expect to complete that program under the requirements specified at the time the student actively enrolls in the program, unless enrollment is interrupted for more than one year.

When a required course for a previous program is no longer offered, the student may substitute another course or courses with the approval of the faculty dean or director.

Individual exceptions to major and minor requirements as listed in the University catalog, including the waiver or substitution of courses, are subject to the approval of the department chairperson by written notice to the Registrar at the time such approval is granted. Records of approved changes will be retained in student files by the Registrar until graduation.

**Academic Year.** The academic year at Moorhead State University is arranged into Fall, Winter, and Spring quarters of approximately 11 weeks each and a Summer quarter comprised of two five-week sessions and special short-term workshop sessions.

Students may enter the University at the beginning of any term although the academic year begins officially with the Fall Quarter.

**Units of Credit.** The unit of credit at Moorhead State University is the quarter hour representing one period (50 minutes) of study per week for 11 weeks or a suitable equivalent.

For transfer students, one semester hour of credit is equivalent to 1.5 quarter-hour credits. One credit unit from schools using the 4-1-4 plan is considered equivalent to six quarter-hour credits except where the school issuing such credit assigns a different value.

**Graduation Requirements (Bachelor's Degree).** At least 192 credits are required for a four-year bachelor's degree.

The candidate must have a grade point average (GPA) of at least 2.0 for all credits applied to the degree program and for all courses attempted at Moorhead State University.

The candidate must complete a Liberal Arts requirement of at least 64 credits with a GPA of at least 2.0 for all courses applied to the requirement and, in the case of transfer students, a GPA of at least 2.0 for all MSU courses applied to the Liberal Arts requirement.

The degree program must include at least one major with a GPA of 2.0 or above.

No minor is required, but a GPA of at least 2.0 must be attained in any minor presented for graduation.

The candidate must be enrolled as a resident student (registered and paid at MSU) (A) for at least three quarters, (B) for at least 45 of the last 96 credits, and (C) for at least 8 of the last 12 credits applied to the degree.

No more than 15 correspondence credits may be applied.

A candidate who has attended a community college must complete at least 96 credits from MSU or other four-year college.

An application for graduation must be submitted to the Office of Admissions and Records prior to the quarter in which the candidate expects to complete graduation requirements. The student must secure the approval of each major and minor advisor before submitting the application.

A candidate for graduation with a teaching major shall fulfill all Teacher Education requirements listed in the Education Department section of this catalog.

Specific exceptions to these graduation requirements are listed under such programs as External Studies.

**Liberal Arts.** All university baccalaureate degree programs require the completion of 64 hours in Liberal Arts. That requirement is designed to guarantee that each student will have had introduction into those areas of knowledge traditionally identified as the Liberal Arts: composition and literature, natural sciences, social sciences, humanities, communication and symbolic systems.

Only courses currently approved for Liberal Arts credit may be counted toward completion of the 64 credits required. Approved courses are marked by the Liberal Arts Division letter (A, B, C, D or E) in each quarter's class schedule. A complete list of all currently approved courses is available from the Office of Academic Affairs.

**Division A: Freshman English**—one year required. English 101, 102, 103.

**Division B: Natural Sciences**—at least 10 credits required. Designated courses in astronomy, biology, chemistry, geography and physics.

**Division C: Social Sciences**—at least 10 credits required. Designated courses in anthropology, economics, geography, history, political science, psychology, multicultural studies, and sociology.

**Division D: Humanities**—at least 10 credits required. All humanities department courses, plus designated literature courses in English and foreign languages, and designated courses in American studies, art, multicultural studies, music, philosophy, Scandinavian studies and speech.

**Division E: Communication—Language—Symbolic Systems**—at least 10 credits. Designated courses in English and foreign languages, plus designated courses in mathematics, philosophy, and speech.

Courses in the student's major discipline may not be applied to the Liberal Arts requirement. This limitation applies to one major only; courses used for a second major may be counted towards Liberal Arts.

Courses in a minor or in "related requirements" specified by a major may be applied to the Liberal Arts requirement program.

Courses taken for Pass/No Credit grades may not be applied to the Liberal Arts.

MDS (New Center) courses may not be applied to Liberal Arts except by students officially admitted to in the New Center.

In addition to the graduation requirement of a GPA of 2.0 in all MSU courses, a 2.0 GPA is required in all MSU courses applied to a student's Liberal Arts program.

In addition to the approved designated Liberal Arts courses, students enrolled at MSU before 1981 may apply courses from the General Studies lists in effect before Fall 1981.

**Freshman Year Requirements.** No specific courses are required during the freshman year at MSU, except that freshmen will normally complete the English 101-102-103 sequence. (See English Department for information about the diagnostic examination in English by which students may either earn exemption or substitute advanced courses.)

Freshmen will normally enroll in courses at the 100-level or certain 200-level courses with approval of their advisors, who will assist them in making course selections.

**Multiple Majors and Degrees.** A student completing two or more majors with different degree designations will be awarded the more appropriate degree, except that the B.S. degree shall be given if one major is in a field of professional teaching.

A student who seeks more than one baccalaureate degree will be required to complete at least 45 credits beyond the minimum of 192 credits applied to the first degree.

A student who holds a previous baccalaureate degree from Moorhead State University or from another institution whose degree is recognized by MSU may earn an additional bachelor's degree (but not an associate degree) by (A) completing at least 45 resident credits at MSU; (B) meeting all MSU course requirements for the degree program, including an approved major and teacher education requirements for any teaching major; and (C) maintaining at least a "C" average in all studies at MSU.

A student with a previous Moorhead State University degree may add another major or minor by completing any additional requirements as certified to the Registrar by the department offering the major or minor and by the education department in the case of any teaching major.



Worksheets are available from Admissions and Records to document requirements for students seeking additional degrees.

**Individualized Major.** A student may develop a multidisciplinary individualized major composed of courses from several related disciplines selected in consultation with a faculty advisor.

The form used to petition for an individualized major is available from the Office of Academic Affairs, which has the responsibility to review the petition and to determine if it merits approval.

Following approval, the student shall complete at least 45 credits before qualifying for graduation with a degree which includes the individualized major.

Each individualized major shall include (A) a total of at least 70 credits and (B) at least 30 credits from a single discipline. Thirty of the 70 credits in the major must be at the 300 and 400 level; at least 15 of these upper level credits must be in the 30-credit area of concentration; and a minimum of 40 credits of the 192 required for graduation must be at the 300 and 400 level.

No more than 4 credits of internship may be included in the 70 credits required for the major.

22

Unless the individualized major is completed in combination with another established major, the student shall include at least 60 credits from courses at the 300 or 400 level among the total credits presented for graduation.

In no way shall the title of an individualized major duplicate the name of an established major or suggest completion of certifiable curricula normally offered by collegiate institutions.

**Minors Through Exchange.** The Tri-College University commissioners have agreed that students completing minors on one of the other campuses should be given recognition for this accomplishment on their graduation transcripts. Thus a Moorhead State student could complete a minor in Agronomy, Horticulture, or Religion at one of the other TCU schools, for example, and upon graduation that student's transcript would so indicate.

Procedures for implementation of this policy are as follows:

The student should request that the chairperson of the department in which the minor has been taken send a memo indicating completion to the Moorhead State Registrar immediately after the minor has been finished.

The student should indicate the minor on the Application for Graduation form.

Such TCU minors may be elected only if equivalent minors are not available at MSU.

**Teaching Majors and Minors.** Requirements for the major programs in fields of secondary education are listed under the respective departments in this

catalog and under the Teacher Education Requirements in the Education Department.

Requirements for the majors in elementary education and special education are listed under the Education Department.

**Associate Degrees.** Moorhead State University offers two-year associate degrees as follows:

- (A) Associate in Arts in Liberal Arts
- (B) Associate in Science

Each program requires:

- (1) At least 96 quarter credits, including at least 32 credits in courses from MSU.
- (2) At least 16 MSU resident credits.
- (3) A GPA of at least 2.00 in all MSU courses applied to Liberal Arts, a 2.00 GPA in all courses applied to the A.A. or A.S., and a 2.00 in all courses taken at MSU.

A student who is admitted to and completes an associate degree program and who decides to continue with a baccalaureate program may do so by meeting all additional requirements for the bachelor's degree.

Liberal Arts requirements for each degree program must be fulfilled with courses applicable to Liberal Arts in the baccalaureate curricula.

**A.A. in Liberal Arts.** The candidate for the Associate in Arts in Liberal Arts will complete an approved Liberal Arts program of 64 credits for the bachelor's degree with a GPA of at least 2.0. Note that requirements include at least 10 credits in the Liberal Arts Divisions B, C, D, E and one year of Freshman English.

Remaining electives to fulfill the 96-credit requirement are subject to the approval of the student's advisor.

**A.S. in Career and Secretarial Fields.** The candidate for the Associate in Science degree will complete at least 42 credits in Liberal Arts courses, including a year of Freshmen English, and at least 6 credits in Liberal Arts Divisions B, C, D and E. Specific requirements for the following associate curricula are listed under the respective departmental sections of this Bulletin (see index):  
A.S. in Career Education  
A.S. in Medical Records Technology  
A.S. in Secretarial Science

**Resident Credits.** Resident credits are those registered and paid for at Moorhead State University while attending courses offered on the Moorhead State University campus, in Tri-College or Minnesota State University Common Market courses or other designated exchange programs, in workshops or field trips originating from the campus and in evening courses on campus.

Non-resident credits are those earned at another college (except in authorized exchange programs), those registered and paid for at the other Tri-College institutions, in off-campus courses, or in courses offered through local or network television without class sessions on campus.

Minnesota State Universities do not offer correspondence courses. Up to 15 quarter hour credits of correspondence study from another accredited institution may be applied to an undergraduate degree program.

**Armed Service Credits.** Study completed during military service through the United States Armed Forces Institute will be evaluated at the time of admission or re-enrollment to determine if credit will be awarded at Moorhead State University. Credit will be granted for military schools placed in the upper division baccalaureate category by the ACE Guide.

The student should discuss the possibility of such credit with the Registrar.

**Transfer of Credits.** Transfer credit from institutions accredited by regional associations (North Central, Middle States, etc.) will normally be accepted by Moorhead State University subject to limitations in this catalog.

In addition, limited credit will be accepted from (A) institutions without regional accreditation if they are listed in *Transfer Credit Practices of Designated Educational Institutions*, a publication of the American Association of Collegiate Registrars and Admissions Officers, and if they are accredited by agencies affiliated with the Council on Postsecondary Education or (B) institutions which are candidates for regional accreditation.

Transfer students from approved Bible or independent colleges or from candidate institutions (A and B above) will receive a block of elective credit not to exceed 48 credits and equal to two-thirds of the value of all courses with grades of "S" or "C" or above. Such credit may not be applied to major, minor, or Liberal Arts requirements except that an academic department may waive specific required courses on the basis of previous study.

A maximum of eight hours of elective credit can be given for study in religion or to courses with religious context from private denominational colleges.

Transfer students will receive worksheets indicating the extent and distribution of credits which are accepted by the University toward the MSU liberal arts requirement.

In cases where a student with less than a "C" average is accepted through appeal to the Committee on Admission, as many credits will be accepted as will result in a "C" average.

Credits with "D" grades from other fully accredited colleges will be accepted if the student has a previous cumulative grade point average of 2.0 or better.

Courses similar to those required for Liberal Arts at Moorhead State University will usually be considered equivalent for the purpose of meeting course requirements. However, the student must complete a total of 64 credits in Liberal Arts courses and meet all distribution requirements.

Credit is not given for departmental examinations from other institutions.

Transfer students who have completed an Associate in Arts program in liberal arts at an accredited Minnesota community college will usually be deemed to have met the Liberal Arts requirement at Moorhead State.

Transfer students who have completed an Associate of Arts program at an accredited Junior or Community College outside of Minnesota will usually be deemed to have met the Liberal Arts requirement if the program includes at least 60 credits in courses comparable to Liberal Arts at Moorhead State.

The Liberal Arts requirement will not be waived if the A.A. degree was earned at a four year college or university. Community college transfer students are not eligible for a waiver of the Liberal Arts requirement if the A.A. degree is awarded after the student's enrollment at Moorhead State University.

Transfer credits may not be applied to meet an area requirement at Moorhead State University (Liberal Arts, major, or minor) unless they also meet the corresponding grade point average requirement for the area.

Transfer students from community colleges must complete at least 96 quarter credits beyond the junior college level to meet the requirements for an undergraduate degree at Moorhead State.

Transfer credits will not be entered on a student's permanent record at MSU unless they are applicable to the student's degree program.

**Community College Career Programs.** Liberal arts and preprofessional courses will transfer at full value from two-year community and junior colleges.

Courses designated for two-year terminal career programs and professional courses normally taken in the junior or senior year at Moorhead State University will transfer as a single block of credit equivalent to two-thirds of the total credit value of such courses. (For example, courses in business communications, advanced marketing, real estate, etc., totaling 26 quarter credits will be recorded as "Business—18 credits.")

MSU will define career programs as those curricula which (A) are advertised as preparing the student for a specific vocation in two years, or (B) require fewer liberal arts credits than for pre-transfer Associate in Arts programs, or (C) require more than one-fourth of all credit in a career field, or (D) are recognized by a degree or certificate other than Associate in Arts.

Internship, work experience, communications and mathematics courses with vocational emphasis, and business courses beyond the pre-transfer level will be included in the block of credit for career courses.

Full credit for pre-transfer business courses will normally be limited to the following: one year each of beginning accounting, business law, shorthand, and typing (no credit for beginning typing); and one

course in introductory business (not applicable to MSU major requirements). Courses in intermediate accounting I and II, and introductory courses in corporate finance, management and marketing must be validated by an MSU examination before they will be transferred at full credit. Unvalidated courses in the above areas will be transferred at two-thirds value.

Full credit will also be given to an introductory course providing a general survey of a professional career field.

Major departments at Moorhead State may waive required courses on the basis of a block of career credits in a related field, but departments reserve the right to designate remaining requirements. Waiving or repeating courses in the career block will not change the number of transfer credits.

No more than 48 block credits from career programs of courses will be accepted in transfer.

**Technical College Credit.** A student who has successfully completed a program of at least nine months at a Minnesota Technical College or an accredited trade or technical school will receive transfer credit as follows: (A) No credit will be given for partially completed programs. (B) A maximum of 48 undergraduate credits will be recorded at the time of admission on the basis of 3 credits per month for the completed program. (C) No specific course evaluations will be made, and credit will be recorded as a block unit for the entire program.

If the technical college courses are posted in credit hours, they will transfer at two-thirds value. No more than 48 credits will be transferred from technical colleges.

Accredited trade or technical schools must be listed in Transfer Credit Practices of Designated Educational Institutions, a publication of the American Association of Collegiate Registrars and Admissions Officers.

Specific requirements in the student's major field of study at Moorhead State University may be waived by the major department on the basis of technical training, but no additional credit will be granted except as specified below.

At the time the student is otherwise qualified for graduation with a baccalaureate degree, additional credit may be awarded for technical training if the following qualifications are met: (A) A maximum of 24 additional credits may be granted upon the recommendation of the major department if such training was in a field related to the major. (B) Such additional credit will be given only if the training program exceeded 16 months on the basis of 3 credits for each excess month or if credit hours exceed 72.

For a student enrolled in an external study degree program, these guidelines will also be used for evaluating credit from hospital nursing programs and other non-collegiate full-time study programs.

**Advanced Placement.** Moorhead State University will award credit for successful completion of an approved Advanced Placement study program under the auspices of the College Entrance Examination Board. Such programs are available to promising students in participating high schools.

To receive Advanced Placement credit, the student must (A) have the approval of the high school, (B) complete the program successfully (usually with a score of 3 or better), and (C) enroll at Moorhead State University following high school graduation.

All records must be forwarded from the College Entrance Examination Board, and the University reserves the right to evaluate such records and determine the credit to be assigned, normally four (4) credits per examination.

**Credit by Departmental Examination.** A student may challenge a course at Moorhead State University through an examination for credit by arrangement with the appropriate department of study. The form is presented at the Records Office to verify current enrollment.

Credit may not be granted by examination if the student has previously or currently registered for an equivalent course.

An examination for credit may be announced by the department chairperson, or the student may secure written permission for such an examination from the department chairperson.

Following such announcement or written permission, the student secures an "Examination for Credit" form at the Office of Academic Affairs.

The completed form is presented at the Business Office, where the form is stamped and a receipt issued upon payment of an examination fee of \$5 per credit.

The stamped form will be collected as an admission slip at the time of the examination.

A grade of Pass or Fail ("S" or "F") and the appropriate number of credits will be marked on the form, which is then signed by the department chairperson and forwarded to the Office of Academic Affairs for approval.

The approved form is submitted to the Registrar. If the student receives a Pass grade, the credit is placed on the permanent record. If the examination is failed, the form is placed in the student's file but not entered on the transcript.

No student may repeat any examination for credit.

**Credit by CLEP Examination.** The Registrar at Moorhead State University will provide information about the College Level Examination Program (CLEP) and will administer the CLEP Subject Examinations to interested students.

Procedures will be the same as for Credit by Departmental Examination except that the Registrar

will administer the examination. The cost for each examination is \$30.

Four (4) credits will be awarded for successful performance on each CLEP Subject Examination according to standard scores recommended by the Council on College-Level Examinations. However, credit will not be given to students who have previously or currently enrolled in courses in the same subject.

Following are the approved Subject Examinations:

American Government  
American History I and II (4 each)  
American Literature  
Analysis and Interpretation of Literature  
Calculus  
College Algebra  
College Algebra-Trigonometry  
College Composition  
College French  
College German  
College Spanish  
Computers and Data Processing  
Educational Psychology  
English Literature  
Fortran Programming  
Freshman English  
General Biology  
General Chemistry  
General Psychology  
Human Growth and Development  
Introduction to Management \*  
Introduction to Marketing \*  
Introductory Business Law  
Introductory Sociology  
Macroeconomics  
Microeconomics  
Psychology  
Trigonometry  
Western Civilization I and II (4 each)

\* May be used to validate lower division coursework in these fields.

Credit earned by CLEP examination may be applied to Liberal Arts requirements but may not be applied to a major curriculum except with departmental approval.

The CLEP Subject Examinations are recommended only for students with advanced knowledge in subject fields not usually acquired in typical high school curricula.

Credit will also be awarded for equivalent performance on CLEP Subject Examinations taken at other test centers, including the military services.

Credit is not given for the CLEP General Examinations.

**Pass-No Credit Grades.** Any student with sophomore, junior or senior standing may take courses for Pass-No Credit grades in areas outside the major or minor field.

No course with Pass-No Credit grades may be applied to Liberal Arts.

A student may take no more than one course per quarter for Pass-No Credit grades.

A student may apply up to 24 credits under the Pass-No Credit option to a baccalaureate degree program.

No course which the student has previously failed may be repeated under the Pass-No Credit option.

Credits earned under the Pass-No Credit option will not be included in computing grade point averages.

A grade of "S" will be recorded for any course successfully completed under the Pass-No Credit option. No entry will be made if the student fails to earn credit.

A Pass-No Credit agreement form, available from the Records Office, must be signed by the student and the advisor and returned to the Records Office on or before the tenth class day of the quarter (fifth class day of a summer session.)

**Pass-Fail Courses.** Certain courses which offer insufficient opportunity for graded evaluation may be offered with only the grading options of pass "S" or Fail "F."

Student teaching and internships are always to be graded on a pass-fail basis.

The Vice President for Academic Affairs may grant permission for other courses to be graded pass-fail.

All students in an approved course shall be graded on the pass-fail basis.

**Auditing Courses.** A student who wishes to audit or attend a course without seeking credit must be admitted to the University, register for the course, and pay full tuition and fees.

To audit a course, the student shall attend class sessions but is not required to complete assignments or projects, participate in discussions, take examinations, or meet other requirements.

A student may declare the intent to audit a course by submitting a Course Audit form signed by the instructor within the first ten class days of a quarter or by notifying the instructor at the time of registration in an evening class, workshop, or off-campus course.

A student may not receive credit for auditing a course except by re-enrollment for credit and successful completion of the course in a subsequent quarter.

An entry of "V" (Visitor) is made on the student's permanent academic record when a course is audited without credit.

**Grades and Grade Points.** All study for University credit is recorded with the following grade designations:

"A" Excellent—4 Grade points per credit

"B" Above Average—3 Grade points per credit

"C" Average—2 Grade points per credit  
"D" Passing—1 Grade point per credit  
"F" Failing—0 Grade points per credit  
"I" Incomplete  
"S" Satisfactory  
"X" In Progress  
"V" Audit (Visitor)  
"W" Withdrawal

**Grade Point Average.** The grade point average (GPA) is computed by dividing the number of grade points earned in a given course or courses by the number of credits attempted.

Credits with grades of "S", "I", "X", "V", or "W" are not included in computing the grade point average.

Credits with grades of "F" are included in computing the grade point average.

**Incomplete Credits.** The mark of "I" (Incomplete) is granted when the student is unable to complete course requirements for reasons beyond their control and when arrangements have been made with the instructor before the end of the quarter.

It is the responsibility of the student to develop a contract to meet the instructor's requirements for making up an Incomplete. Ordinarily, the Incomplete must be made up during the next quarter in which the student is enrolled. (Students receiving financial aid may have specific requirements. See Financial Aid section.)

When requirements have been met, the instructor will notify the Registrar of the replacement grade.

**Repeating Courses.** When a course is repeated, only the higher grade will be used to compute the student's grade point average. However, repeating a course more than once will result in the removal of only one previous grade from the student's GPA computation.

To assure that the GPA is corrected, the student must submit a "Notice of Repeated Course" form at the Records Office. All course attempts will remain on the student's permanent academic record.

A student may not repeat a course to improve a previous grade of "C" or better in that course. Such registration will be treated as an audit.

**Academic Standing.** The student's cumulative grade point average for all courses attempted at Moorhead State University is the basis for determining academic standing.

A student with a GPA of 2.0 or better is considered to be in satisfactory academic standing.

#### **Academic Probation and Suspension.**

1. Any student whose cumulative grade point average at Moorhead State is less than 2.0 is automatically on probation. Probation is a general academic warning and does not imply imminent suspension.

2. A student who has enrolled for 24 or more graded credits, including transfer credits, and whose

cumulative GPA is less than 1.60 is **subject to suspension** at the end of the current quarter.

3. A student whose MSU cumulative GPA is less than 2.00 after 135 credits, or 1.90 after attempting 60 or more graded credits, including transfer credits, and has earned at least 18 MSU credits is **subject to suspension** at the end of the current quarter. (Note that only MSU grades are included in the GPA.)

4. Students who are **subject to suspension** remain so until the 2.00, 1.90, or 1.60 GPA at the appropriate credit level is reached.

5. Students who are **subject to suspension** may not preregister for the next quarter.

6. Early in the quarter during which a student is subject to suspension, the student is so informed by written notice from the Office of Academic Affairs. The notice specifies conditions that must be met to avoid suspension at the end of the quarter: the student must either (1) obtain a cumulative GPA of 1.9 (1.6 for those with less than 60 credits) or (2) obtain a quarterly GPA of 2.25 and complete all courses in which he/she is enrolled on the 10th day of classes (fifth day in summer sessions).

7. A first suspension will be for a maximum of three quarters, including summer quarter.

8. A second suspension is normally permanent.

9. During any period of suspension, a student may file a written appeal for reinstatement with the Suspension Appeals Committee and may request a personal appearance before the Committee.

10. The decision of the Suspension Appeals Committee will be reviewed by the Vice President for Academic Affairs upon written request from a student.

**Academic Honors.** Three levels of honor students are recognized annually at the spring quarter Honors Convocation: (A) Honorable Mention for those with a GPA between 3.25 and 3.49, (B) Honors for those with a GPA between 3.5 and 3.74, and (C) Special Honors for those with a GPA between 3.75 and 4.00. To be eligible, a student must have completed either (A) at least 24 credits during the fall and winter quarters of the current year or (B) a cumulative total of at least 135 credits with at least 50 graded credits at MSU and enrolled Fall or Winter quarter of current year.

The Dean's list, published at the close of the fall and winter quarters, includes all students who maintained a GPA of at least 3.25 for that quarter while completing a minimum of 14 graded credits.

Students who complete at least 96 credits at Moorhead State University as candidates for baccalaureate degrees may graduate with the following honors: (A) Cum Laude, representing a cumulative GPA of 3.4 or better; (B) Magna Cum Laude, 3.6 or better, and (C) Summa Cum Laude, 3.8 or better. Such honors are computed only from the

cumulative GPA at Moorhead State University. Examination credits or Clep credits may not be counted toward the 96 credit total.

Transfer students from Concordia College or North Dakota State University who have enrolled for MSU courses under the Tri-College University course exchange program may apply such MSU courses to fulfill requirements for graduation with honors. Such students should mark their request for this option on the application for graduation in order to qualify for honors.

Some departments of study may award departmental honors to students who meet those requirements established by the departments.

**Classification of Students.** Students at Moorhead State University are divided into classes as follows: (A) Freshman 0-44 credits; (B) Sophomore 45-89 credits; (C) Junior 90-134 credits; (D) Senior 135 or more credits.

Special students are admitted on an individual basis and classified separately, since they are not participating in degree programs.

**Advisor Assignment and Changes.** Each student will be assigned to an advisor at or before the time of first registration.

Any change of advisor may be made with the approval of the Chairperson of the department in which the student plans to seek a major and must be reported on a form available from the Records Office.

Student advisor services are available in most departments to supplement faculty advising.

**Registration Procedures.** Prior to registration, the student will plan a program with an advisor, who will sign the Advisor Approval Card.

Registration must be completed and all tuition and fees must be paid to the Business Office before published deadlines in order to avoid assessment of late registration fees.

Class schedules and descriptions of the registration procedures for any quarter may be secured from the Records Office within a few weeks before the quarter begins.

Opportunities for advance registration for returning students, transfer students, or beginning freshmen may be made available according to schedules and procedures specified by the Registrar.

**Evening Course Registration.** Evening classes on campus are considered as resident courses and are open to both part-time and full-time students.

Students who register only for evening courses may do so at the first class meeting or at the regular time for registration.

Registration for evening courses is closed after the second class session.

**Off-Campus Registration.** Moorhead State University offers off-campus evening courses at

several community centers within an approximate radius of 100 miles.

Registration for off-campus courses should take place at the first class session but may be completed at the second session upon payment of an additional \$5 late registration fee.

Credits earned in off-campus courses are considered to be non-resident credits.

Inquiries about off-campus courses should be directed to the Director of Continuing Education.

**Late Registration.** Students who fail to meet payment deadlines will be liable for late fees.

1st Day—\$10.00  
Days 2-5—\$15.00  
Days 6-10—\$25.00  
After 10 days—\$35.00

For on-campus or off-campus evening courses a \$5 fee is charged for registration after the first class session.

**Course Load.** To register for more than 18 credits during any quarter (9 credits during a summer session) a student with less than 90 credits must have an excess credit form approved by the Academic Affairs Office. No student may register for more than 20 credits without an excess credit permit from the Academic Affairs Office.

The Excess Credit Permit must be approved by both the student's advisor and the faculty dean or director.

Courses taken in evening classes, either on-campus or off-campus, are included in determining the course load.

**Tri-College University Registration.** Students who are enrolled at Moorhead State University, North Dakota State University, or Concordia College may complete a portion of their course work at either of the other two institutions through the Tri-College University.

To register for regular daytime classes, the student reports to the registration clerk at the home college to clear arrangements for a class at another college.

Tuition and fees for a Tri-College course will be the same as for equivalent credit at the student's home college, and the student must arrange for payment of such charges at the home college.

If limited enrollment in a course is exceeded, priority will be given to students who are already admitted to degree programs at the college offering the course.

Credits earned in Tri-College courses at another college are considered as resident credits at Moorhead State University if the credits are registered and paid for at MSU.

Registration for evening courses under the Tri-College agreement may take place at the first class session, and no advance permission from the student's home college is required. Later registration for evening courses must be completed through the Registrar of

the student's home college by the time of the second class meeting.

Students must observe all registration and academic policies of their home colleges, including arrangements for withdrawals, pass/no credit, and incompletes.

**Change of Program--Adding or Dropping Courses.** Program changes include adding courses or withdrawing from courses after the student has made class reservations.

A class may be added within the following time limits only:

- (A) Fall-Winter-Spring—Through the tenth class day of the quarter.
- (B) Evening and off-campus classes—Through the second meeting of the class.
- (C) Summer Sessions—Through the fifth class day of the session.

A student may withdraw from a class only within the following limits:

- (A) Fall-Winter-Spring—At least ten class days before the official closing date of the quarter.
- (B) Summer Sessions—At least five class days before the official closing date of the session.

28 No entry will be made in the student's record if a class is dropped within the first ten class days of a quarter (or equivalent for evening and summer).

A class dropped after the first ten days (or equivalent) will appear on the student's record as a withdrawal ("W"). Tuition from a withdrawn course may not be applied to subsequent course additions.

Each change of program requires the following procedures:

- (A) Complete a change of program form available from the Records Office.
- (B) Secure the instructor's signature for each class dropped or added.
- (C) Secure the faculty advisor's signature.
- (D) Present the form for checking at the Records Office.
- (E) Submit the form to the Business Office for payment of a change of program fee unless the change results in a reduction of total credits.

The date of a program change will be the day when the final step of the process above is completed.

To withdraw from an evening class, either on-campus or off-campus, the student must notify both the instructor and the Registrar in writing at least ten days before the end of the quarter.

If a change of program results in an increase in the number of credits, the corresponding additional tuition must be paid before the change will be processed.

If a change results in a decrease of credits, no refund will be made unless the change is made for the convenience of the university.

Tuition and fees will not be reduced or refunded for dropped courses except during the first three days of the fall, winter, or spring quarter, before the second meeting of an on-campus evening course, or the first day of a summer course.

**Withdrawal from Enrollment.** To withdraw from all enrolled courses, a student must complete the Student Withdrawal form available from the Counseling Center.

A student who withdraws without following this procedure will receive a grade of "F" in each course.

"W" grades cannot be granted if the withdrawal takes place later than the normal withdrawal deadline of the quarter.

Any refund of tuition or fees will be according to the schedule given under "Refund of Payments."

**Confidential Records.** Confidential information about students at Moorhead State University is maintained in several offices. Such records are on file only when students have utilized the services of such offices and are solely for the purposes of maintaining essential records, providing required reports to governmental agencies, and furnishing services to students.

Students are entitled to examine their own personal records with the exception of medical records, confidential recommendations submitted by other persons prior to January 1, 1975, and parental financial information submitted prior to January 1, 1974, when disclosure has been specifically restricted by parents.

Records will not be released to other persons without permission from the student except to those officials or agencies with specific legal authorization. Students may withhold either or both of the following categories of information from public use by submitting requests to the Records Office no later than the tenth class day of each quarter: (A) name, addresses, telephone; (B) dates attended, class level, majors or minors, degrees, academic honors, high school. Because the entire category will be withheld in all circumstances, students are cautioned to consider possible inconveniences.

Requests to examine records and to correct inaccurate or inappropriate entries should be made to officers of the University who are responsible for records in the offices listed below:

- Admissions—Director of Admissions
- Business—Business Manager
- Counseling—Director of Counseling Services
- Financial Aid—Director of Financial Aid
- Graduate Studies—Dean of Graduate Studies
- Health Services—Supervisor of Health Services
- Housing—Director of Housing
- International Students—International Student Advisor
- Placement—Director of Placement
- Records—Registrar
- Veterans Affairs—Veterans Service Officer

Appeals of decisions by officers listed above may be made to the respective vice presidents to whom

those officers are responsible. A vice president may assign such appeals to designated committees.

The decision of a vice president may be appealed to the University President in compliance with state and federal regulations applicable to contested records including the opportunity for a full and impartial hearing.

Reasonable charges may be made for reproduction of records. Copies of placement records are available as follows: active file—first ten free, \$.50 thereafter; inactive file—\$3.00 each. Transcripts of academic records are free, but special justification is required for more than two transcripts at any one time.

**Appeal of Academic Policies.** A student seeking to waive a graduation requirement or similar academic policy should inquire at the Office of Academic Affairs to determine if an appeal is necessary.

The student completes an appeal form including a faculty advisor's statement and signature, and submits the form to the Office of Academic Affairs.

The Committee on Academic Appeals reviews the appeal and submits a recommendation to the Vice President for Academic Affairs, who makes the final decision to approve or deny the appeal.

A student who is not satisfied with the decision of the Vice President may submit a written appeal to the President of the University.

## DEPARTMENTS, CURRICULA & COURSES

The following pages list all courses offered by the academic departments of Moorhead State University as of June 1989, arranged in alphabetic order by subjects. Credit values are expressed in quarter hours and appear in parentheses following course titles. One quarter credit represents one fifty-minute class meeting each week for an eleven-week term along with class preparation, although this pattern may vary for laboratory, activity, and individualized courses.

The first digit of each course number suggests the year of study in which the course should normally be taken: 100-freshman; 200-sophomore; etc. If "g" follows a 300- or 400-number, the course may be taken by both undergraduate and graduate students with differentiated assignments. A course at the 500-level is normally open to graduate students only. Numbers below 100 designate a few specified remedial or technical courses which are not applicable to college degree requirements.

To assist in program planning, this catalog includes, wherever possible, the quarter a course is offered by F for fall quarter, W for winter quarter and S for spring quarter. A capital letter indicates when the course is usually offered, a small letter when limited sections of the course are offered. "On Demand" means a department will offer the course when the numbers of students wishing to enroll warrants an offering. *In all cases, it is wise to consult the department for particulars of course offerings.*

Certain numbers are available in most subjects for specialized use as follows: 469-Student Internship; 199-299-399-499g-Special Topical Workshop; 489g-Topical Continuing Education Course. These courses are not usually listed in this publication under the various subjects because their descriptions vary according to the topics studied.

29

### Accounting Department

Carol Dobitz, *Chair*; Mary Bader, Marilyn Bakke, Lee Dexter, Sheri Erickson, Wilbert Fischer, Margaret Jorgenson, Judy McLearn, Wesley Monson, Dorian Olson, Cynthia Phillips, Donald Samelson, George Sanderson, Marlane Sanderson, Leonard Sliwoski, William Violet, Oleta Walker, Donald Wirries

#### ACCOUNTING DEPARTMENT MISSION:

The Department of Accounting has the following mission: To provide in a professional manner high quality accounting education to students and service to public and private organizations.



## ACCOUNTING CURRICULA

### Major in Accounting

Each Accounting major requires completion of 1) the common business core; 2) 40 credits of upper-level accounting; 3) related field requirements; and 4) at least 80 nonbusiness credits.

Accounting majors who graduate Fall 1990 or later must have grades of "C" or better in all courses used to satisfy the business core and the 40-credit major.

#### *Common Business Core (42 credits)*

Acct 200 Introduction to the Legal System (2)  
Acct 229-230 Principles of Accounting I-II (8)  
Acct 300 Legal Environment of Business (4)  
Acct 350 Cost Accounting I (4)  
Acct 370 Accounting Systems (4)  
Finc 340 Corporate Finance (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 450 Production/Operations Management (4)  
Mktg 310 Principles of Marketing (4)  
Mgmt 490 Business Policy (4)

#### *Required Upper-level Accounting Courses (28 credits)*

Acct 305 Business Law I (4)  
Acct 330-331-332 Intermediate Accounting I-II-III (12)  
Acct 351 Cost Accounting II (4)  
Acct 441 Individual Income Taxes (4)  
Acct 460 Auditing I (4)

#### *Elective Accounting Courses (12 credits)*

Acct 306\* Business Law II (4)  
Acct 420 Introduction to International Accounting (4)  
Acct 430 Consolidations (4)  
Acct 435 Fund/Advanced Topics (4)  
Acct 446 Estate/Gift/Trust Taxation (4)  
Acct 461 Auditing II (4)  
Acct 465 Internal Audit (4)  
Acct 469\* Internship (4-8)  
Acct 480 Theory (4)  
Acct 498 Problems (1-4)

\* A total of 4 credits from Acct 306 and Acct 469 may be applied to the 12-credit accounting elective requirement.

#### *Requirements in Related Fields (35-36 credits)*

Econ 202-204-206 Principles of Economics I-II-III (12)  
Engl 286 Practical Writing (4) **or** Engl 287 Technical Report Writing (4) **or** BEd 207 Business Communications (4)  
Math 273 Linear Algebra/Applied Calculus I (4)  
Math 274-275 Introduction to Statistics I-II (8)  
CIS 145 Data Processing (4)  
Spch 100 Beginning Speech Communications (4) **or** Spch 210 Effective Business Speaking (3)

### Minors in Accounting

For Business Majors: (24 credits)

Acct 305 Business Law I (4)  
Acct 330-331-332 Intermediate Accounting I-II-III (12)  
Acct electives selected from 420, 435, 441, 443, 460, 465 (8)

For Nonbusiness Majors: (34 credits)

Acct 200 Introduction to the Legal System (2)  
Acct 229-230 Principles of Accounting I-II (8)

Acct 305 Business Law I (4)

Acct 310 Managerial Accounting (4)

Acct 330-331-332 Intermediate Accounting I-II-III (12)

Acct electives selected from 420, 435, 441, 460 (4)

## ACCOUNTING COURSES

### **Acct 200 Introduction to the Legal System (2)** *(FWs)*

An introduction to the operation of the American legal system including an overview of its sources, procedures and major subject areas, including constitutional, criminal, administrative, tort, contract and property law, as well as alternative dispute resolution mechanisms.

### **Acct 229-230 Principles of Accounting I-II: Financial (4-4)** *(FWs-fWS)*

Accounting fundamentals, the recording process, preparation of financial statements.

### **Acct 300 Legal Environment of Business (4)** *(fWS)*

Analysis of various forces that dictate legal responsibilities of business organizations, including protections for consumers, investors, and employees; governmental regulations relating to anti-trust, employers, and unions; duties owed society and the environment. Prerequisite: Acct 200.

### **Acct 305 Business Law I (4)** *(Fws)*

A traditional study of contract law concepts, and the study of legal principles relating to business organizations including agency relationships, partnerships and corporations. Prerequisite: Acct 200.

### **Acct 306 Business Law II (4)** *(wS)*

A traditional study of sales contracts, commercial paper, debtor-creditor relationships, real and personal property, insurance, trusts and estates and accountants' legal liability. Prerequisite: Acct 200. Acct 305 recommended.

### **Acct 310 Managerial Accounting (4)** *(fWS)*

Fundamentals of managerial accounting and decision-making. Prerequisite: Acct 230, Mgmt 360 recommended concurrently.

### **Acct 330-331-332 Intermediate Accounting I-II-III (4-4-4)** *(Fw-Ws-Sf)*

330: Review of the accounting process. Analysis, valuation, and financial statement presentation of the working capital accounts. Prerequisite: Acct 230; CIS 145 recommended. 331: Analysis, valuation, and financial statement presentation of the noncurrent accounts, including the use of present and future values. 332: Analysis, valuation, and statement presentation of corporate capital. Inflation accounting, correction of errors, statement analysis, statement of cash flows. Must be taken in sequence.

### **Acct 350-351 Cost Accounting I-II (4-4)** *(Fw-Ws)*

350: Introduction to cost accounting: job order and process costing, cost-volume-profit analysis, budgeting, standard costs, variance analysis, special decisions. Prerequisite: Acct 230; CIS 145 and Math 275 recommended; Mgmt 360 recommended concurrently. 351: Cost concepts and techniques for inventory management, control of decentralized

operations and cost allocations, capital budgeting, quantitative methods. Must be taken in sequence.

**Acct 370 Accounting Systems (4) (fWS)**

Developing, organizing, and using accounting data; analyzing and improving accounting systems; emphasis on controls in EDP systems. Prerequisites: Acct 330 and 350.

**Acct 400 Financial Accounting for Managers (4) (F)**

Advanced introduction to the terminology, concepts, and procedures of financial accounting with emphasis on understanding the significance of financial statement information. Prerequisite: Graduate standing.

**Acct 420(g) Introduction to International Accounting (4) (S)**

Focus on current applied managerial and financial methodologies in the international environment. Theoretical, philosophical and anthropological arguments will be presented and discussed concerning the world-wide diversity of accounting policies. Prerequisite: Acct 230.

**Acct 430(g) Consolidations (4) (F)**

Accounting for mergers, consolidations, and intercorporate investments. Emphasis on consolidated financial statements. Prerequisite: Acct 332 or consent of instructor.

**Acct 435(g) Fund and Advanced Topics (4) (wS)**

Fund accounting systems used by non-profit entities. Various advanced topics as appropriate. Prerequisite: Acct 332 or consent of instructor.

**Acct 441(g) Individual Income Taxes (4) (fWs)**

Individual income tax planning; fundamentals of federal tax return preparation. Prerequisite: Acct 230.

**Acct 443(g) Taxation of Corporations and Partnerships (4) (wS)**

Tax planning and return preparation for corporations and partnerships. Prerequisite: Acct 441.

**Acct 446(g) Estate, Gift and Trust Taxation (4) (W)**

Federal estate and gift tax; income taxation of estates and trusts; fundamentals of estate planning. Prerequisite: Acct 230.

**Acct 460(g)-461(g) Auditing I-II (4-4) (FW-wS)**

460: Orientation to auditing. Purpose, ethics, legal liability, internal control, EDP, evidence and planning. Prerequisite: Acct 332 and Acct 370 or consent of the instructor; Math 275 recommended. 461: Statistical sampling, audit objectives and procedures and report writing. Must be taken in sequence.

**Acct 465(g) Internal Auditing (4) (W)**

The role of the internal auditor; auditing procedures and practices; operational audits; effective reporting. Prerequisite: Acct 460 and Mgmt 360.

**Acct 469 Student Internship (4-8) (fWs)**

**Acct 480(g) Accounting Theory (4) (S)**

Intensive study of current authoritative pronouncements with emphasis on prescribed

procedures and suggested alternatives. Prerequisites: Acct 332 and 351 or consent of instructor.

**Acct 498(g) Problems in Accounting (1-4) (Fws)**

Special problems not in the regular curriculum. May be taken more than once since content will vary. Prerequisite: consent of instructor.

## Agriculture

*Cooperative Degree Program*

Although no courses in this field are offered at MSU, a cooperative agreement with North Dakota State University permits a student to take three years of courses as an MSU student, concurrently pursuing courses in this specialty at NDSU. The student need only transfer for the fourth year to North Dakota State University, may pay in-state tuition under a reciprocity agreement and will receive the degree from that institution.

## American Studies

D.C. Cole, *Coordinator*

The American Studies degree is designed for those who plan to engage in professions such as public relations, journalism, government service, teaching, social service, editing and publishing, library and museum work, law and the ministry. The major is also appropriate as a liberal arts major and as a second major in any number of fields (Business, Mass Communications, Social Services) where a broad knowledge of American society is desirable.

### AMERICAN STUDIES CURRICULA

**Major in American Studies B.A. Degree (69 credits)**

*Core Requirements in American Studies (12 credits)*

AmSt 217 Introduction to the American Culture (4)

AmSt 317 The Midwest (4)

AmSt 417 Seminar in American Culture (4)

**or**

AmSt 419 Seminar: Success and Failure in American Society (4)

Two courses in each of the following areas: (24-32)

Social Sciences

Fine Arts or Mass Communications

American Literature

American History

*Requirements in Related Fields (26-34)*

In addition to the major course requirements, the student will choose electives from a wide selection of courses in various departments to satisfy professional goals and individual interests. Those who choose American Studies as a second major and who plan their program with care may fulfill some of the requirements in related fields with courses which also fulfill requirements in liberal arts and the first major.

## AMERICAN STUDIES COURSES

### **AmSt 217 Introduction to the American Culture (4) (FWS)**

An introduction to the interdisciplinary study of the American culture. Course materials are drawn from disciplines such as history, social sciences, literature, philosophy and the arts.

### **AmSt 221-222-223 20th Century I-II-III (4,4,4) (FWS)**

221: A study of representative works of literature, art, architecture and music as they reflect central themes of the 20th century through World War I. 222: From 1920 through World War II. 223: From 1945 to the present.

### **AmSt 317(g) The Midwest (4) (W)**

An interdisciplinary approach to the study of the Midwest to examine regional values, beliefs and patterns of behavior. Course materials are selected from history, geography, literature, social sciences and the arts.

### **AmSt 340 Topics in American Culture (4)**

An interdisciplinary approach to a selected issue or era in American life. Topics vary. Prerequisites: American Studies 217 or consent of instructor.

### **AmSt 417(g) Seminar in American Culture (4)**

Selected problems in American culture, employing the objectives and approach of interdisciplinary studies. Emphasis upon student research and writing. Prerequisites: American Studies 217 and 317, or consent of instructor.

### **AmSt 419(g) Seminar: Success and Failure in American Society (4)**

An examination of the dominant beliefs about success and failure in American society: their origin, impact, and current influence. Materials are drawn from literature, history, journalism, interdisciplinary studies, film. Prerequisites: American Studies 217 and 317, or consent of instructor.

### **AmSt 420 Directed Reading in American Studies (2-4)**

Tutorial in American Studies. Prerequisites: Senior standing, American Studies 217 and 317, consent of instructor.

### **AmSt 469 Student Internship (4-16)**

## Anthropology

See *Sociology for Curricula*

## ANTHROPOLOGY COURSES

### **Anth 110 Introduction to Culture/Symbols (4) (FWS)**

Studies of culture and society emphasizing the integrative nature of culture; the role of language in development and transmission of culture.

### **Anth 111 Human Evolution and Prehistory (4) (FWS)**

Human evolution; biological background of culture; development of cultures through space and time.

### **Anth 200 Health and Culture (4)**

Introduction to health-related disciplines. Interrelationships among behavior, beliefs and health. See Soc 200.

### **Anth 202 Health Aspects of Aging (4)**

Models and theories of aging; environmental factors that effect physiological changes with age; life-style and aging processes. See Health 202.

### **Anth 210 Minnesota Prehistoric People (4) (every other F)**

Culture/history of ancient peoples in the northern Midwest since earliest occupation. Archaeological excavations and their implications for understanding regional prehistory. Origins of historically known ethnic groups.

### **Anth 215 Indians of South America (4)**

Ethnographic survey of pre-hispanic native South American cultures. Prerequisite: Anth 110 or consent of instructor.

### **Anth 216 Prehistoric Cultures (4) (W)**

A comparative survey of ancient cultures from earliest times until the end of the Ice Age. Focus on the relationship between prehistoric peoples and their environment, and on the social processes and technological changes that were responsible for the development of human society from its primitive beginnings.

### **Anth 217 Social Evolution (4) (S)**

The origins of agriculture and the rise of civilization in both hemispheres will be surveyed. Emphasis on comparative studies of common social processes involved in the development of complex societies.

### **Anth 220 Indians of Middle America (4)**

Meso-America as a culture area focusing attention on traditional Indian societies. Prerequisite: Anth 110 or consent of instructor.

### **Anth 225 Indians of North America (4)**

Major culture areas of native North American peoples with emphasis on environment and socio-cultural adaptation. Prerequisite: Anth 110 or consent of instructor.

### **Anth 230 Cultures of Africa (4) (W)**

Cultural variation in Africa from an anthropological perspective; emphasis on Subsaharan pre-industrial societies. Prerequisite: Anth 110 or consent of instructor.

### **Anth 235 Topics in Anthropology (4)**

Topics from specific ethnographic or archaeological areas. Prerequisite: Anth 110 or consent of instructor.

### **Anth 302 Cultural Aspects of Aging (4) (every other W)**

Attributes, concerns and function of elders in western and non-western societies. Prerequisite: Anth 110, recommend Soc/Anth 200 or consent of instructor.

**Anth 305 Primate Behavior (4) (W)**

Origin and early evolution of primates; survey of primate behavior and its relationship to human behavior. Prerequisite: Anth 111 or consent of instructor.

**Anth 306 Cross-Cultural Illness and Care (4) (S)**

Ethnomedical approach to perceptions and definitions of illness and disease; treatment; function of practitioners. Prerequisite: Anth 110 or Soc/Anth 200 or consent of instructor.

**Anth 310 Human Evolution (4) (Fs)**

Application of evolutionary theory to the human species. Fossil record; interpretation of fossil forms. Prerequisite: Anth 111 or consent of instructor.

**Anth 315 North American Archaeology (4)**

Prehistory from the first occupation of North America. Prerequisites: Anth 110, 111 or consent of instructor.

**Anth 323 Community (3-4)**

Investigation of community formations in "primitive" and "modern-industrial" contexts. Emphasizes effects of penetration of traditional communities by industrial institutions. Prerequisite: Soc 110 or Anth 110. See Soc 323.

**Anth 325 Technology and Materials Culture (4)**

Development of present community health services. Distribution of disease, emphasizing interrelationships among culture, social organization, environment and populations. Prerequisite: Anth 110, 111 or consent of instructor.

**Anth 335 Humans, Culture and Environment (4)**

Influence of ecology and demography on cultural development. Prerequisite: Anth 110, 111 or consent of instructor.

**Anth 340 Social and Cultural Change (4)**

Major theories of social and cultural change, including unilineal and multilineal evolution and acculturation. Prerequisite: Anth 110 or consent of instructor.

**Anth 350 Psychological Anthropology (4)**

The relationship between culture and mental health; specific illnesses and causes; problems in identifying a cross cultural typology. Prerequisite: Anth 110, 111 or consent of instructor.

**Anth 360 Economic Anthropology (4) (W)**

The relationship of economic organization and technology of social organization and culture. Prerequisite: Anth 110.

**Anth 370 Anthropological Linguistics (4) (every other F)**

Analysis of phonology, morphology, syntax and grammar of non-Indo-European speech families. Prerequisite: Anth 110 or consent of instructor.

**Anth 375 Language in Culture (4) (every other F)**

Language studies including: origins and acquisition, sociolinguistics, ethnolinguistics and historical relationships. Prerequisite: Anth 110, 111, or consent of instructor.

**Anth 400 Development of Anthropological Theory (4) (every other S)**

Major theoretical trends in the study of human culture; the origin, development, and transformation of anthropological ideas. Prerequisite: Upper-class status or consent of instructor.

**Anth 421-422-423 Senior Project in Anthropology I-II-III (3 each) (on demand)**

Student-initiated research project under the close supervision of members of the faculty. Prerequisite: Senior status with an Anthropology major.

**Anth 445(g) Seminar in Anthropology (4) (S)**

Selected topics in Anthropology. Prerequisite: Junior or senior standing or consent of instructor.

**Anth 450 Field Work in Anthropology (1-8)**

Under auspices of a college or university summer training session, or under the supervision and direction of the faculty. Prerequisite: Junior or senior standing or consent of instructor.

**Anth 461(g) Readings in Anthropology (1-8) (on demand)**

Selected readings in anthropology under the close supervision of a member of the department. Prerequisite: Upper-division status and permission of the instructor.

**Anth 469 Internship in Anthropology (3-16) (on demand)**

Junior or senior standing with major in Anthropology.

33

**Architecture***Cooperative Degree Program*

Although no courses in this field are offered at MSU, a cooperative agreement with North Dakota State University permits a student to take three years of courses as an MSU student, concurrently pursuing courses in this specialty at NDSU. The student need only transfer for the fourth year to North Dakota State University, may pay in-state tuition under a reciprocity agreement and will receive the degree from that institution.

**Art Department**

P. Richard Szeitz, *Chair*; Virginia Barsch, Shelley Fuller, John Holland, Lyle Laske, Donald McRaven, Jeffrey Mongrain, Phillip Mousseau, Carl Oltvedt, Timothy Ray, Deborah Broad, Allen Sheets

**AREAS OF CONCENTRATION**

**Art History.** The area of concentration in Art History is offered to present an additional option for visual art oriented individuals whose principal interest is not studio production but museum work, teaching or other related fields intimately related to the visual arts. In the core curriculum, in addition to basic studio classes, individual courses cover Ancient-Classical, Medieval, Renaissance, Baroque, 19th and 20th Century. The alternately scheduled offerings for

electives include: Oriental Art, Primitive Art, Scandinavian Art, History of Prints and Modern Architecture. Additional electives are also available through the Tri-College consortium. At least one course must be taken in one of the other institutions of the Tri-College University. A public lecture presentation of the senior research paper is required for graduation.

**Ceramics.** Options include all handbuilding techniques, wheel-thrown stoneware, porcelain, special clays and glazes such as Raku and low-fire bright glazes, glaze chemistry, and kiln history, design and operation as well as arranged projects of the student's own choosing. Internships available at senior level.

**Graphic Design.** Traditional and computer aided design processes utilized for in-depth studio investigations into the various formal, conceptual, and technical applications toward effective graphic communications. Illustration, package design, symbol, typographic and diagrammatic design, exhibition systems, design for film, television, publications and posters are among those areas covered. Internships are available within the field on a national scale.

**Painting.** Individual studio work in painting may consist of work in any of the various media and techniques, including but not limited to traditional oil glaze techniques, impasto, wet into wet, palette knife or brush techniques, acrylic, brush, impasto, glaze, stain and airbrush techniques. Encaustic, egg tempera, gouache, watercolor, thermoplastics, collage, assemblage, polyurethane foam, lacquer, enamel, as well as more unusual media may be investigated in a variety of ways.

Areas of specialization within painting, independent of media and techniques, include but are not limited to any combination of the following: traditional representational, surrealist, realist, expressionist, abstract expressionist, color field, pop, constructivist, perceptual abstraction, funk, psychedelic, symbolic, kinetic, or post-object art forms. Internships available.

**Photography.** A traditional and contemporary approach to photography which includes developing, advanced composition, lighting techniques, retouching and negative manipulation, toning, hand coloring and slide processing. Portraiture, night photography, landscape topography and use of large camera format are taught. Students are encouraged to develop individual styles based on self-awareness.

**Pictorial Illustration.** Utilizes a broad range of disciplines in the Department of Art and Industrial Studies to offer students a program integrating the concepts of narrative and visual form. The program's sequence of course requirements is based on nationally accredited standards for the B.F.A. degree. Topics covered: editorial, book, children's books, advertising and scientific illustration.

**Printmaking.** The student may choose one or a combination of the following printmaking media: relief printing, intaglio printing, lithography, serigraphy and photo silk screen. Internships available.

**Sculpture.** Studio in traditional and contemporary materials, techniques and philosophies. Modeling media include water clay, plasticene and wax which are cast in rigid or flexible negative molds. Positive casting media are hydrostone, concrete and thermosetting plastics. Both standard and ceramic shell investments are used to cast bronze. Carving media are wood and stone. Arc and oxy-acetylene welding are taught as well. Internships are available.

**Art Education.** Preparation for teaching art in the public schools\*, including required methods courses on the application of aesthetic principles and visual art elements to the progressive development of various age groups. The student may undertake additional field experiments and research in the schools.

\* Both in the B.S. and BFA programs, K-12 certification received.

## LEVELS OF STUDY

### Foundation Studies

First year students who intend to major in art are introduced to the basic theories, skills and working concepts of art through a series of drawing, design and art theory classes. These are the Foundation Drawing I, II and Life Drawing; the Basic Design, Color and Three-dimensional Design courses, plus the Art Theory I, II and III.

**150 series.** Introduction to all major areas of concentration with emphasis on media and concept. May be taken by beginning students.

**200 series.** Investigation of specialized areas of interest chosen and explored within the introductory series with emphasis on media and concept. May be taken after corresponding introductory course and completion of 20 art credits.

**300 series.** Refinement of previously acquired introductory knowledge and experimentation in the 200 level, now with increased conceptual emphasis. May be taken after corresponding introductory course and 40 art credits.

**400 series.** Further development of conceptual and formal qualities of art work in selected media. Emphasis on conclusive visual unity and presentation of individual projects. Internships and field experiences. May be taken after 60 art credits.

**450 series.** In-depth problem analysis and conceptual refinement of projects. Emphasis on professional presentation or exhibitions in preparation for further career development either in formal setting or in the field. May be taken after 80 art credits.

### Statement on Credits

Work toward credits can take place in formal classes, critiques, technical workshops or independent study

activity. The distribution of time spent between in-class and out-of-class options is determined by the nature of the particular course. In all art courses, however, the ratio of three clock hours of work per week, per credit should be met.

### **Annual Evaluation**

In order to help students evaluate their progress and their prospects for success as artists or art educators, the Art Department requires all art majors to submit representative pieces annually for evaluation by a committee. This is a prerequisite for the next level of studio art courses.

### **Requirement for Student Senior Exhibition**

During the senior year, each art major must present an exhibition containing representative pieces of work done in art courses throughout the advanced years of study. This exhibit is to be independently designed and constructed by the student and is to be accepted as a partial fulfillment of the condition for graduation by a select committee constituted of members of the faculty of the Art Department. For descriptions of criteria and requirements for specific areas of concentration, consult with major advisor.

### **ART CURRICULA**

The Department of Art offers the following degree programs:

**B.A.** The Bachelor of Arts Degree with the major in fine art offers the following areas of study: Painting, Sculpture, Printmaking, Photography, Ceramics, Drawing, Art History or Graphic Design (4 years, 80 art credits, total 192 credits, senior exhibition required or lecture-presentation required.)

**B.S.** The Bachelor of Science Degree with the major in Art Education offers areas of concentration: Painting, Sculpture, Printmaking, Photography, Ceramics, Drawing, Art History or Graphic Design (4 years, 80 art credits, total 192 credits, student teaching and senior exhibition required).

**B.F.A.** Beyond the B.A. and B.S. Degree, the Bachelor of Fine Arts (B.F.A.) Degree is offered as a "Professional Program." This degree is considered nationally as "entry-level credentials" desired for employment in the applied fields or for graduate study in the fine arts toward a terminal degree. Students, seeking admission to the B.F.A. program, must meet the following requirements: 2.75 overall G.P.A. and 3.0 in studio. Presentation of sample works from one year of previous studio work. Public showing of the final year's work is required for graduation. Please note that unlike the other studio areas, concentration in Pictorial Illustration is only available in a B.F.A.

Of the 234 total B.F.A. degree credits, 133-146 art credits are required for fine art, design and crafts; and 121 art credits for the B.F.A. in Art Education.

### **Major in Art Education B.S. Degree (80 credits)**

#### *Areas of Study*

Foundation Studies in Art (18)

Introductory Studio Courses (14-16)

Both two- and three-dimensional courses must be included

Art Survey and History (20)

Art Education Method Courses (7)

Seminars in Art (6)

Art Concentration (12)

Art Electives or Internships (3)

### **Major in Art B.A. Degree (80 credits)**

#### *Areas of Study*

Foundation Studies in Art (18)

Introductory Studio Courses (9-12)

Both two- and three-dimensional courses must be included

Art Survey and History (20)

Seminars in Art (6)

Art Concentration and Internship (18)

Art Electives (6-9)

### **B.F.A. Degree in Fine Art, Design & Crafts (Five Year-234 credits)**

Foundations in Art (21)

Introductory Courses (12)

Both two- and three-dimensional courses must be included

Studio Concentration and Internship (64-77)

Seminars in Art (6)

Art Electives (9)

Art History (24)

*Total Art Credits (133-146)*

*Liberal Arts (64)*

*General Electives (18)*

*Total B.F.A. Credit Requirements (234-237)*

### **B.F.A. Degree in Art Education, K-12 (Five Year-234 credits)**

Foundations in Art (21)

Introductory Courses (18-24)

Both two- and three-dimensional courses must be included

Studio Concentration and Internship (50)

Methods, Art Education (7)

Seminars in Art (6)

Art History (24)

*Total Art Credits (122)*

Student Teaching, K-12 & Alternative Ed. (20)

Professional Education (15)

Liberal Arts (64)

*Total B.F.A. Credit Requirements 234-240*

### **Minor in Art B.A. Degree (40 credits)**

Art 100 Art Elements (3)

Art 101 Basic Drawing I (4)

Introductory Studio Courses (12)

Choose two courses from the following (6-8):

Art 233-5 Survey of Art (6-8)

233 Survey of Art I (4)

234 Survey of Art II (4)

235 Survey of Art III (4)

or

Art 270-2 Art Appreciation (6-8)

270 Content and Form (3)  
271 Great Masters (3)  
272 Art Today (3)

Art Concentration (8)  
Art Electives (5 or 7)  
*Total Art Credits (40)*

**Minor in Art Education B.S. Degree (40 credits)**

Art 100 Art Elements (3)  
Art 101 Drawing I (4)  
Art 150 Intro. to Ceramics (3)  
Art 158 Intro. to Printmaking (4)  
Art 162 Intro. to Watercolor (4)

Art 233-5 Survey of Art (6-8)  
233 Survey of Art I (4)  
234 Survey of Art II (4)  
235 Survey of Art III (4)

or  
Art 270-2 Art Appreciation (6-8)  
270 Content and Form (3)  
271 Great Masters (3)  
272 Art Today (3)

Art 442 Studies in Elementary School Art (3)  
Art Electives (11 or 13)

**ART COURSES**

36

**Art 100 Elements of Art (3) (Fws)**

Basic principles of creative design. Experimental use of various media in drawing and painting. For non-majors.

**Art 101 Basic Drawing I (4) (Fws)**

Introduction to visual elements through various drawing media, emphasizing accurate observation of still-life, nature and the figure. For non-majors.

**Art 102 Basic Drawing II (3-4) (S)**

Advanced visual inquiry using representational and imaginative studies. Composition emphasized. Wet media and figure drawing included. Prerequisite: Art 101.

**Art 103 Art Education in Contemporary Society (1) (W)**

Understand historical and contemporary theories in art education; develop an understanding of appropriate behavior and art product expectancies for identified stages of student development. Prerequisite: Art Ed major (BFA/BS) or consent of instructor.

**Art 114 Design (3)**

Textures, shapes, lines, space and colors in their visual psychological relationships in compositions. For non-majors.

**Art 120, 121, 122 Foundations Theory (3) (FWS)**

Slide lecture and film sessions introducing formal, aesthetic, media and vocational aspects of 20th Century art and design. Art 123-125 and 124-126 must be taken concurrently.

**Art 123 Foundations Drawing I (3) (F)**

Introduction to visual elements through studies in representation and imagination. Variety of media. Art 120 and 125 must be taken concurrently.

**Art 124 Foundations Drawing II (3) (W)**

Advanced visual inquiry using representational and imaginative studies. Composition emphasized. Art 121 and either 126 or 127 must be taken concurrently. Prerequisite: Art 123.

**Art 125 Foundations Design, Basic (3)**

Elements and principles of visual language, color, form/shape, line, space and texture. Art 120 and 123 must be taken concurrently.

**Art 126 Foundations Design, Color (3)**

Introduction to constructive, perceptual, symbolic and expressive aspects of color within a variety of relationships. Art 124 and 121 or 122 must be taken concurrently. Prerequisite: Art 125.

**Art 127 Foundations Design, Three Dimensional (3)**

Introduction to visual organization, volume, plane, linear volume, organic-biomorphic, texture, light art, translucency, kinetic and reflection. Art 124 and 121 or 122 must be taken concurrently. Prerequisite: Art 125.

**Art 150 Introduction to Ceramics (3)**

Historical, technical and aesthetic aspects of the materials and methods of ceramics, functional and nonfunctional. Prerequisite: Art Foundations or consent of instructor.

**Art 152 Introduction to Pictorial Illustration (4) (F)**

Study of basic concepts of pictorial illustration. Traditional and contemporary trends in image making also adaptable for publishing in narrative. Descriptive and analogous visualization of ideas will be explored. Further development of drawing skills attained in foundations. Prerequisite: Art Foundations or consent of instructor.

**Art 153 Introduction to Photography (3)**

See Basic Photography (Art 230).

**Art 154 Introduction to Graphic Design (4) (FWS)**

Studio inquiry into the nature of graphic design. Including: Visual problem-solving, introduction to typography, symbols, lettermarks, logotypes, publication design and diagrams, as well as client/designer relations, studio operations and production procedures for print media. Prerequisites: Art Foundations or consent of instructor.

**Art 156 Introduction to Painting (2-4)**

Contemporary and historical approaches to painting; materials, techniques and theoretical bases of 20th Century art. Prerequisites: Art Foundations or consent of instructor.

**Art 157 Introduction to Printmaking (1-4)**

Historic development of relief printing, intaglio, lithography and serigraphy. Prerequisite: Art Foundations or consent of instructor.

**Art 160 Introduction to Sculpture (3)**

Survey of the materials, methods and techniques of sculpture. Prerequisite: Art Foundations or consent of instructor.

**Art 162 Introduction to Watercolor (4)**

Techniques and creative expression in water media. Emphasis on transparent watercolor. Representational and non-objective approach. Prerequisite: Art Foundations or consent of instructor.

**Art 175 Introduction to Jewelry Making (4)**

Creative jewelry-making processes: design, materials and techniques. Prerequisite: Art Foundations or consent of instructor.

**Art 200A Ceramics Studio (2-15)**

200 level courses concentrate on developing student's skills, techniques and aesthetics of forms thrown on the potter's wheel. Enlarged and extended experiences in decorating and glazing techniques.

**200B Graphic Design Studio, Visual Ideas (1-16) (FWS)**

In-depth studio investigations in selected areas of graphic image making and planning, i.e. symbols, typography, diagrams, displays, packaging, and illustrative and photographic applications. Prerequisite: Art 154 or consent of instructor.

**200C Painting Studio (1-15)**

Investigation of painting in areas of particular interest to the student based on an initial contractual agreement between the student and the instructor. Emphasis upon introductory level technical skills, media investigation and concepts. Prerequisites: Foundation Drawing I and II, Basic Design, Color Design and the completion of 20 Art credits.

**200D Printmaking Studio (2-15)**

Development of the technical facility and appropriate imagery in any one of the traditional printmaking media as relief printing, intaglio, lithography or serigraphy. The scope of work and media will be determined in a contractual agreement between the student and instructor. Prerequisites: Foundation studies plus Art 157 Introduction to Printmaking.

**200E Sculpture Studio (1-15)**

Exploration of sculpture concepts and media. Emphasis upon introductory level technical skills, media investigation and concepts.

**200F Photography Studio (3-15)**

Development of technical facility using the zone system exposure control, the relative adjustment of film sensitivity and the developer. Refinement of lighting techniques, composition and conceptual considerations. The scope of work will be determined in contractual agreement between student and instructor. Prerequisite: Basic Photography or consent of instructor.

**200H Drawing Studio (1-15) (Fws)**

Investigation of drawing in areas of particular interest to the student based on initial contractual agreement between student and instructor. Emphasis on continued refinement of introductory level technical

skills, media investigation and concept. Prerequisites: Foundation Drawing I, II, Life Drawing and Basic Design; completion of 20 art credits.

**200K Life Sculpture****200L Pictorial Illustration Studio (3-12)**

Development of drawing and painting skills in order to visualize a variety of narrative concepts in pictorial form. Prerequisites: Art 152 and consent of instructor.

**200M Portrait Sculpture****Art 210 Creative Crafts (2)**

Explore materials for instruction in school art curricula traditionally associated with crafts. Simple weaving, stitchery, wood sculpture, batik and print making will be investigated. Prerequisite: Art 103, BFA/BS art majors or consent of instructor.

**Art 220 Papermaking (3)**

Survey of materials, methods and techniques of hand papermaking. Prerequisite: Art Foundations or consent of instructor.

**Art 230 Basic Photography (3)**

Introduction to photography as a fine art discipline, including aesthetics, elementary theory, exposure and processing of black and white film. See Mass Communications 230.

**Art 233,234,235 History of Art in the Western World I, II, III (4 each) (FWS)**

Architecture, painting and sculpture in their historical and cultural context. 233: Prehistory through early Christian and Byzantine Art, 234: Early Medieval period through the High Renaissance in Venice, 235: Baroque through Modern Art. Prerequisite: Sophomore standing. Recommended to be taken in sequence.

**Art 252, 253 Life Drawing-Advanced Life Drawing (3 each) (FW)**

Studies from live models emphasizing interpretation and anatomical accuracy. Advanced study emphasizes figure in composition using a variety of media. Prerequisite: Foundations Drawing II or consent of instructor. May be repeated up to 16 credits.

**Art 262 Watercolor (3-12)**

Creative painting in transparent and opaque watercolor. Painting problems and solutions. Prerequisite: Art 162 or consent of instructor.

**Art 268 Glass Blowing (3)**

Off-hand glass working; basic forms and techniques in working tank glass; some color; accessories. May be repeated.

**Art 270 Art Appreciation: Content and Form (3)**

Visual art as reference and expression in the life of man; form and materials used by artists. For non-majors.

**Art 271 Art Appreciation: Great Masters (3)**

Artistic personalities and works of selected masters from ancient to modern times presented through slides, lecture and film. For non-majors.



**Art 272 Art Appreciation: Art Today (3)**

Consideration of current art trends and movements since the 1950s. An understanding through slides, film and lecture of the multiplicity of contemporary styles. For non-majors.

**Art 298 Gallery Management (1-4) (on demand)**

A study of the design installation and lighting of exhibitions of art, documentation, public relations, publicity and financial management. Prerequisite: Sophomore standing or consent of instructor.

**300A Ceramics Studio (2-15)**

300 level courses continue exploration of wider number of directions that are possible with clay and glazes. Advanced handbuilding is also encouraged. At this level also formal problems in glaze chemistry and kiln operation are begun.

**300B Graphic Design Studio, SYSTEMS (1-16)**

(Fws)

Advanced visual problem solving in selected areas of component or serial image systems, i.e. books, brochures, exhibitions, displays, alphabets, slide presentations, visual identity, etc. Some independent work may be contracted at this level. Prerequisite: Art 200B

**300C Painting Studio (1-15)**

Development beyond the second year based on initial contractual agreement between student and instructor. Individual research in historical or technical expertise is encouraged. Continued investigation of form, color, space and imagery, with increased conceptual emphasis. Prerequisites: 200C and 40 art credits.

**300D Printmaking Studio (1-15)**

Refinement of technical skills and conceptual quality appropriate to a particular media as relief printing, intaglio printing, lithography or serigraphy. Experimentation in color printing and combination of processes. The scope of the work and media will be determined in a contractual agreement between the student and the instructor. Prerequisites: Printmaking Studio 200 or consent of instructor.

**300E Sculpture Studio (1-15)****300F Photography Studio (3-15)**

Refinement of technical facility and concentration to the subjects of portraits, characterization of individuals and architectural forms. Experimentation with hand coloring techniques. The scope of the work and the media will be determined in a contractual arrangement between the student and the instructor. Prerequisite: Photo 200F and consent of instructor.

**300H Drawing Studio (1-15) (Fws)**

Refinement of previously acquired introductory knowledge and experimentation at the 200 level, based on initial contractual agreement between student and instructor. Continued investigation of media, including color, and increased conceptual emphasis. Prerequisites: Completion of all foundation level studies and 40 art credits.

**300L Pictorial Illustration Studio (3-12) (Fws)**

Development of systems concept for variety of illustration topics with the goal to clearly articulate a concept in visual language to a client and the intended audience. Prerequisites: Art 152, 200L, and consent of instructor.

**Art 320 Philosophy of the Arts (4)**

Philosophical questions in fine arts. Topics include the nature of art and aesthetic experience and criticism. Prerequisite: One course in philosophy or consent of instructor. See Phil 320(g) Philosophy of the Arts.

**Art 329 Photographic Silkscreen Process (2-4)**

(on demand)

Directed studio investigation of the screen printing process via photo-sensitive stencil methods. Prerequisite: Consent of instructor.

**Art 340 Art in the Elementary School (2) (Fs)**

Exploratory course in theory and techniques applicable to art in the elementary curriculum. Prerequisite: Art 100. For PFY majors only.

**Art 352 Life Drawing Anatomy (4) (W)**

Study from life models of human structure relative to surface manifestations of movement, age and posture. May be repeated for up to 12 credits. Prerequisite: Acceptance of competency portfolio at level of Art 253.

**Art 353(g) Psychology and the Arts (4)**

An understanding of the relationship of the fundamental principles of psychology to the arts is developed from the formal beginning of psychology to the present. Prerequisite: Psy 113 or consent of instructor. See Psy 353(g) Psychology and the Arts.

**Art 391 Junior Seminar: Theory and Form of Contemporary Art (3)**

Investigation of theoretical concerns and other historical factors influencing the development of contemporary visual arts. Prerequisite: Junior standing in art and consent of instructor.

**400A Ceramics Studio (2-15 each quarter)**

400 level contracts are usually issued to senior majors in Ceramics. The work done by these students is most often connected to the senior exhibition and extends students to produce work of their highest capabilities.

**400B Graphic Design Studio, Independent work (1-16) (Fws)**

Advanced studio work with real visual problems and production. These investigations may be initiated by the student, commissioned on or off campus or developed under design direction of the instructor, i.e. visual identity, publication design, art exhibition promotion and/or other university publication design. Prerequisite: Art 300B

**400C Painting Studio (1-15)**

Further development of conceptual and formal qualities of painting in media or medium of particular interest to the student based on previous investigation and initial contractual agreement between student and instructor. Emphasis on the development of a

cohesive body of work showing coordination of technical, formal and conceptual issues in the context of personal imagery. Prerequisites: 60 art credits.

#### **400D Printmaking Studio (1-15)**

Further development of conceptual and formal qualities of creative work in a selected printmaking media such as relief printing, intaglio printing, lithography or serigraphy, with emphasis on consistency of small editions. The scope of the work and media will be determined in a contractual agreement between the student and instructor. Prerequisites: Printmaking Studio 300D and consent of instructor.

#### **400E Sculpture Studio (1-15)**

Exploration of sculpture concepts and media in preparation for the Senior Exhibition.

#### **400F Photography Studio (3-15)**

Further development of conceptual and formal qualities in selected non-silver process photographic projects, plus color photography and processing. The scope of the work and the media will be determined in contractual arrangement between the student and the instructor. Prerequisite: Photo 300 and consent of instructor.

#### **400H Drawing Studio (1-15) (Fws)**

Further development of conceptual and formal qualities of drawing in media or medium of particular interest to the student based on previous investigation and initial contractual agreement between student and instructor. Emphasis on the development of a cohesive body of work showing coordination of technical, formal and conceptual issues in the context of personal imagery. Prerequisite: 60 art credits.

#### **Art 400L Pictorial Illustration Studio (3-12) (Fws)**

Further development of conceptual and formal qualities of illustration in media selected appropriate to the subjects. Emphasis on conclusive clear pictorial statement. Prerequisites: Art 152, 200L, 300L and consent of instructor.

#### **Art 409(g) Art of Primitive Peoples (4)**

The art of peoples living in village and tribal units apart from the "Historic" civilizations: Africa, Oceania, Pre-Columbian America. Prerequisite: Junior standing or consent of instructor.

#### **Art 410(g) Ancient Classic Art (4)**

A study of the principal monuments of Ancient Greece, Etruria, and Rome with emphasis on forms that have influenced Western art. Prerequisite: Art 233 or consent of instructor.

#### **Art 411-412(g) Medieval Art I-II (4 each)**

Architecture, sculpture, painting, and related arts from the decline of the Roman Empire to the Renaissance. 411: Early Christian period to the end of Ottonian rule. 412: Romanesque and Gothic architecture, sculpture and painting. Prerequisite: Art 233-234 or consent of instructor.

#### **Art 420-421(g) Renaissance Art I-II (4 each)**

European painting, architecture and sculpture in the period 1300-1600. 420: Italian Renaissance and

Mannerism. The evolution and development of Renaissance ideals and forms. 421: Northern Renaissance. Artistic developments in France, Germany, England, and the Netherlands in the 15th and 16th centuries. Prerequisite: Art 233-234 or consent of instructor.

#### **Art 422(g) Baroque Art (4)**

The artistic achievements of the 17th and 18th centuries in Europe. Prerequisite: Art 233, 234, 235 or consent of instructor.

#### **Art 425(g) Art History Abroad (4-6)**

This course, conducted abroad, exposes students to many periods of art and allows for concentrated work in special-interest fields. Prerequisite: Art 233, 234, 235 or consent of instructor.

#### **Art 430-431-432(g) Modern Art I-II-III (4 each)**

Painting, sculpture and related arts from the 19th century to the present. 430: 19th century Neoclassicism, Romanticism, Impressionism, Post Impressionism. 431: Art from 1900 to 1920. 432: Art from 1920 to the present. Prerequisite: Junior standing or consent of instructor.

#### **Art 433(g) Modern Architecture (4)**

Architecture of the late 19th and 20th centuries. The materials, techniques and forms of the architectural conception. Prerequisite: Junior standing or consent of instructor.

#### **Art 434-435(g) Art in the United States I-II (4 each)**

A survey of architecture, painting and sculpture in America from the Colonial period to the present. 434: Colonial beginnings to the end of the Civil War. 435: Last decades of the 19th century to the present. Prerequisite: Art 233- 234-235 or consent of instructor.

#### **Art 437(g) History of Fine Prints (4)**

A survey of the art of the relief, intaglio and surface print from the 15th century to the present. Prerequisite: Art 234, 235 or consent of instructor.

#### **Art 438(g) Oriental Art (4)**

A study of the principal art forms of India, China and Japan with emphasis on their cultural and philosophical context. Prerequisite: Sophomore standing.

#### **Art 439(g) Scandinavian Art (4)**

A survey of Scandinavian Art in Norway, Sweden, Finland and Denmark from the Viking period to the present.

#### **Art 440 Art in the Secondary School (4) (W)**

Exploratory course in theory and techniques applicable to the relationship of art in the secondary curriculum—junior high and high school. Prerequisite: B.S. Art Major or Minor or consent of instructor.

#### **Art 441 Practicum in Art Education Grades: 7-12 (1) (Fws)**

A practical field experience in teaching non-traditional art experience. Prerequisite: Art majors working toward 7-12 licensure.

**Art 442 Studies in Elementary School Art: Grades K-6 (3) (on demand)**

Exploratory course in theory and techniques applicable to the relationship of art in the elementary school curriculum. Prerequisites: Art 100 for non-majors or consent of instructor. (Art Education majors only).

**Art 443 Practicum in Art Education: Grades K-6 (1) (Fws)**

A practical and field experience in teaching non-traditional art experiences. Prerequisite: Art majors working toward the K-6 grade licensure or consent of instructor.

**Art 447 Topics in Art (2-9)**

Studies selected from art history, theory of ceramics, drawing, graphic design, painting, photography, printmaking, sculpture and watercolor. Prerequisite: Junior standing and consent of instructor.

**Art 449 Senior Seminar: Art and Society (3)**

Review of the economics, social and legal concerns of the contemporary visual artist and art educator. Prerequisite: Senior standing in art and consent of instructor.

**Studios in the B.F.A. Program (6-16)**

40

**451A-452A-453A Ceramic Studio (Fws)**

Assuming that the accepted student has mastered all of the preceding experiences and has presented a portfolio of high competency demonstration, the hours devoted to the major level BFA program involves one with a concentration in a single-minded project in ceramics-decorating, glazing, firing, formal elements, and/or sets and other. BFA standing.

**451B-452B-453B Graphic Design Studio (Fws)**

Senior project preparation for BFA candidacy fulfillment, portfolio preparation, and project presentation. Three month, 3-16 credit design internships may also be available and encouraged prior to graduation. Prerequisite: Art 400B and BFA standing.

**451C-452C-453C Painting Studio**

In-depth problem analysis and conceptual refinement of personal imagery in selected painting media, as well as continued development of a cohesive body of work. Emphasis on preparation for professional presentation or exhibition in preparation for further career development either in formal setting or in the field. Prerequisites: 80 art credits and BFA standing.

**451D-452D-453D Printmaking Studio**

In-depth problem analysis and high quality technical refinement of editions. Development of personal imagery in a cohesive portfolio of fine prints. The scope of the work and media will be determined in a contractual arrangement between the student and the instructor.

**451E, 452E, 453E Sculpture Studio**

In-depth problem analysis and conceptual refinement of personal imagery in selected sculpture media, as well as continuing development of a cohesive body

of work. Emphasis on preparation for professional presentation or exhibition preparation for further career development, either in formal setting or in the field. Prerequisite: 80 Art credits and BFA standing.

**451F-452F-453F Photography Studio**

In-depth problem analysis and high quality technical refinement of prints. Development of personal imagery and conceptual approach in a cohesive visual investigation documented in a portfolio of photographic works. The scope of the work and media will be determined in a contractual arrangement between student and instructor. Prerequisite: 80 credits in art and BFA standing.

**451H-452H-453H Drawing Studio (FWS)**

In-depth problem analysis and conceptual refinement of personal imagery, as well as continued development of a cohesive body of work. Emphasis on preparation for professional presentation or exhibition in preparation for further career development either in formal setting or in the field. Prerequisites: 80 art credits and BFA standing.

**451L-452L-453L Pictorial Illustration Studio**

In-depth problem analysis and conceptual refinement of personal imagery in selected illustration media, as well as continued development of a cohesive body of work. Emphasis preparation for professional presentation in preparation for further development either in a formal setting or in the field. Prerequisites: 80 art credits and BFA standing.

**Art 455(g) Practicum in Art Ed. K-12 (2) (Fws)**

A practical on field experience in teaching non-traditional art experiences. Prerequisite: Art majors working toward the K-12 grade licensure, or consent of instructor.

**Art 469(g) Student Internship in Art (3-16) (on demand)**

A (one term) self-directed exploration or professional experience with an artist, art museums or studio. Prerequisite: Senior standing in art, consent of advisor and approval by faculty internship committee.

**Art 532 Studies in Art History (3-18)**

Individual directed study in particular problems in the history of art. Prerequisite: Graduate standing. (Offered on request.)

**Art 540 Current Practices in Art Education (3)**

Development of a philosophical point of view in relation to art education in contemporary society. Prerequisite: Graduate standing in Art Education.

**Art 542 Studies in Art Education (3) (on demand)**

Individual directed study in selected phase of Art Education agreed upon by the instructor and student. Prerequisite: Graduate standing in Art Education.

**Art 550 Studies in Drawing (3-18)**

This course is designed for students at the graduate level who would like to pursue the development of their visual ideas in drawing as research for their work in other media or as an end in itself. Projects are developed individually by the student and his/her instructor. Prerequisite: Consent of Art Studio faculty on presentation of portfolio.

**Art 551 Studies in Photography (3-18)**

Individual studio concentration in photography with advanced technical and conceptual explorations. Projects are developed by the students individually with the advice of the faculty. Prerequisite: Consent of Art Studio faculty on presentation of portfolio.

**Art 552 Studies in Painting (3-18)**

Individual directed studies in particular problems in painting. Painting may involve any media. Prerequisite: Consent of studio faculty member on presentation of a portfolio.

**Art 554 Studies in Sculpture (3-18)**

Individual study in sculpture with emphasis on the elaboration of personal expression of form into cohesive body of sculpture. Prerequisite: Consent of Art studio faculty on presentation of a portfolio.

**Art 560 Studies in Ceramics (3-18)**

Individual studio concentration in Ceramics in areas of interest chosen by the student with advice of instructor. Prerequisite: Consent of Art studio faculty on presentation of a portfolio.

**Art 574 Studies in Printmaking (3-18)**

Advanced individual studies in printmaking. Specialization in various processes. Prerequisite: Consent of Art Studio faculty on presentation of a portfolio.

**Art 578 Studies in Pictorial Illustration (3-18)**

Individual studio concentration in pictorial illustration with advanced exploration into concept development and refined technique, with the advice of the instructor. Prerequisite: Consent of Art Studio faculty on presentation of a portfolio.

**Art 580 Seminar in Art Education (3) (on demand)**

The identification of problems in art education at various curriculum levels; examination of related research with possible implications for practice. Recommended for concurrent registration with thesis in Art 599.

**Art 581 Graduate Seminar in Art (3)**

Detailed investigation of contemporary and traditional artistic theories and creative practices in the visual arts. Within an art historical context the directed writing of a starred paper related to a graduate project.

**Art 584 Studies in Graphic Design (3-18) (on demand)**

Advanced studies in design related to consumer, environmental, corporate or institutional needs. Specific emphasis placed on visual communications. Prerequisite: Consent of instructor on the basis of portfolio and graduate standing.

**Art 597 Individual Study in Art (1-3)**

Independent research for advanced graduate students in art theory and creative practice. Repeated to a maximum of 6 credits. Prerequisite: Consent of instructor and advisor.

**Art 599 Thesis (1-6)**

Registration only after consultation with major advisor.

**Astronomy**

See *Physics-Astronomy for Curricula*.

**ASTRONOMY COURSES****Ast 100 Introduction to Astronomy (4) (Fws)**

A summary of current concepts of the structure of the universe from Solar System to distant galaxies.

**Ast 100L Introductory Astronomy Laboratory (1)**

Observational work in astronomy. The course involves acquisition and analysis of data acquired from observation of celestial objects as well as of data gathered in the laboratory. The course may include observation of celestial motions, study of lunar surface features, spectroscopy and radioactive decay. Prerequisite or corequisite: Astronomy 100 or permission of the instructor.

**Ast 101 Observational Astronomy (3) (on demand)**

Non-technical introduction to naked-eye astronomy and observing with small telescopes. The course is primarily project-oriented. Includes laboratory.

**Ast 110 Introduction to Space Travel (3) (on demand)**

Non-technical summary of the basic principles of rocketry and space exploration, including past and future of space exploration and applications.

**Ast 200 Cosmology (4) (on demand)**

Theoretical principles and observational evidence regarding the large-scale structure and evolution of the universe. Prerequisite: Astronomy 100 or permission of instructor.

**Ast 230 Topics in the History of Astronomy (4) (on demand)**

Development of man's ideas about the physical universe from prehistory to the early 20th Century.

**Ast 260 Planetary Science (4) (on demand)**

A synthesis of current knowledge of the members of the solar system and the origin and evolution of planetary systems. Includes laboratory. Prerequisite: Ast 100 or permission of instructor.

**Ast 300 Topics in Modern Astronomy (1-4) (on demand)**

Non-technical consideration of topics of current interest in astronomy. May be repeated as topics and course titles vary. Prerequisites: Ast 100 or permission of instructor. (Consent of the instructor required if the course is to be repeated for credit.)

**Ast 350 Astrophotography (2) (on demand)**

Use of the camera, telescope, Schmidt camera and other instruments for taking photographs of celestial objects. Prerequisites: MC 230 or permission of instructor, and Ast 101.

**Ast 380 Celestial Mechanics (3)**

Principles of celestial mechanics, central force motion, two body problem, n body problem, prediction and determination of orbits, perturbations. Prerequisite: Physics 330.

**Ast 410 Astrophysics (3) (on demand)**

Mathematical consideration of various topics in introductory astrophysics. May be repeated as course titles vary. Prerequisite: Junior status in Physics. May be taken as Phys 410.

**Ast 499 Topics in Advanced Astronomy (1-5) (on demand)**

Consideration of special problems or the study of introductory topics at a more advanced level. Prerequisite: Consent of instructor. May be repeated for credit with consent of instructor for no more than three times or 10 credits.

in the Biology Department consult a member of the Biology faculty early in their college career.

**Major in Biology (B.A. Degree)**

This curriculum is designed for students preparing for a variety of entry-level professional positions in the biological sciences and for students who wish to prepare for graduate or professional school in the biological or medical sciences. The program is flexible and careful choice of electives, selected in consultation with one's advisor, will allow students to satisfy specific interests and vocational objectives. Although the program provides a broad background in biology it is suggested that a student augment the major with a minor(s) in one of the other sciences or mathematics. In fact, most Biology majors complete a Chemistry minor. Transfer students wishing to complete the Biology major must complete at least 8 credits selected from approved 300-400 level courses in the Department of Biology at Moorhead State University regardless of the number of transfer credits accepted toward the major.

*Major Requirements in Biology (50 credits)*

Biol 111 Cell Biology (4)  
 Biol 112 General Zoology: Invertebrate (4)  
 Biol 113 General Zoology: Vertebrate (4)  
 Biol 122 General Botany I (4)  
 Biol 123 General Botany II (4)  
 Biol 341 Genetics (4)  
 Biol 345 Principles of Ecology (4)  
 Biol 348 Organic Evolution (4)  
 Biol 350 Microbiology (4)

One of the following (4):  
 Biol 306 Animal Physiology  
 Biol 424 Plant Physiology  
 Biol 450 Cell Physiology

Any two of the following (2):  
 Biol 481, 482, 483 Biology Seminar I-II-III

Additional Electives in Biology (8)  
 (Selected from approved 300 and 400 level courses)

*Requirements in Related Fields (51 credits)*

Chem 111-112-113 General Chemistry (12)  
 Chem 111L-112L-113L General Chemistry Laboratory (or 111H-112H-113L) (3)  
 Phys 111-112-113 Elementary Physics I-II-III (12)

Mathematics (at least 12 credits including Math 133, Trigonometry, or the high school equivalent and excluding Math 100, 110, 111, and 203. May include no more than one course in Computer Science.)  
 Additional approved electives in Chemistry, Physics or Mathematics (at least 12 credits).

**Major in Life Science (Teaching) (B.S. Degree)**

This curriculum is designed to prepare students for licensure to teach life science courses in secondary schools. A minor is not required, but students are encouraged to complete minor licensure requirements in an area(s) such as mathematics, another science or coaching to increase their employability. Transfer students wishing to complete

**BIOLOGY DEPARTMENT**

Richard H. Pemble, *Chair*; Monroe H. Bartel, Thomas W. Collins, Phyllis H. Harber, Oscar W. Johnson, Mary A. Shimabukuro, Kenneth R. Skjegstad, Donna R. Stockrahm, Robert S. Weibust, Kathryn M. Wise

**AREAS OF STUDY: Majors in Biology, Life Science (Teaching), Cytotechnology, Medical Technology and Minors in Biology, Botany, and Zoology.****BIOLOGY CURRICULA**

The Biology Department offers several programs leading to the baccalaureate degree in addition to providing course work and advising in many pre-professional areas.

The Biology major is excellent preparation for the health-related professional schools or entry into occupations related to life science in government or the private sector. Biology majors, with proper selection of courses, are well prepared to enter graduate school in the biological sciences. Other majors in the department prepare students for careers in cytotechnology, medical technology and secondary teaching.

The department offers a Bachelor of Arts degree in Biology and Bachelor of Science degrees in Life Science (Teaching), Cytotechnology and Medical Technology. Minors in Biology, Botany and Zoology are designed to support other fields of study such as psychology, chemistry and certain business majors. The sequential nature of the biology curriculum and the necessity to coordinate certain biology courses with courses required in other disciplines make it essential that students considering any of the majors

the Life Science (Teaching) major or those who already have a degree but are fulfilling certification requirements must complete at least 8 credits selected from approved 300-400 level courses in the Department of Biology at Moorhead State University regardless of the number of transfer credits accepted toward the major.

*Requirements include all those listed for the Biology (B.A.) major above*

*Additional certification requirements in science (16 credits)*

Biol 440 Secondary Science Teaching Methods (4)  
Geol 115 Physical Geology (4)  
Ast 100 Introduction to Astronomy (4)  
Geog 241 Elementary Meteorology (4)

(All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education under Education Department.)

### **Major in Cytotechnology (B.S. Degree)**

Kathryn Wise, *Director*

The curriculum complies with the recommendations set forth by the Committee on Allied Health Education and Accreditation of the American Medical Association in collaboration with the American Society of Cytotechnology as well as the guidelines of the *Essentials of an Accredited Education Program for the Cytotechnologist*. Upon successful completion of the three years of campus course work and the year of clinical education at an affiliated school, the student is granted the B.S. Degree, major in Cytotechnology. The graduate is eligible for certification as a Cytotechnologist through successful completion of the National Registry Examination.

*Major Requirements in Biology (32 Credits)*

Biol 111 Cell Biology (4)  
Biol 112 General Zoology: Invertebrate (4)  
Biol 113 General Zoology: Vertebrate (4)  
Biol 302 Histology (4)  
Biol 306 Animal Physiology (4)  
Biol 341 Genetics (4)  
Biol 343 Microtechnique (4)  
Biol 350 Microbiology (4)

*Requirements in Related Fields (15 Credits)*

Chem 111-112-113 General Chemistry I-II-III (12)  
Chem 111L-112L-113L General Chemistry Laboratory (or 111H-112H-113L) (3)

*Recommended Electives*

Biol 301 Embryology (4)  
Biol 410 Parasitology (4)  
Biol 449 Advanced Cell Biology (4)  
Biol 470 Immunology (3)  
Biol 471 Immunology Laboratory (1)  
ComS 130 BASIC Programming with Microcomputers (4)

*Internship in Clinical Education (48 Credits)*

Biol 465 Cytotechnology Clinical Education (6 or 12, repeated to total 48 credits) as follows:

General Principles of Cytology (3)  
Gynecologic Cytology (6)  
Advanced Gynecologic Cytology (4)  
Bronchial Cytology (5)  
Urinary Cytology (4)  
Gastrointestinal Cytology (2)  
Body Cavity and Misc. Secretion Cytology (6)  
Fine Needle Aspiration Cytology (3)  
Cytogenetics (3)  
Cytopreparation Techniques (6)  
Seminar (2)  
Independent Projects (4)

This requirement is fulfilled when the student completes the year of Clinical Education at one of the affiliated schools listed below. Admission to the Clinical Education Program is based on an interview, recommendations, academic record and the available student space.

Mayo School of Health Related Sciences, Rochester, Minnesota  
State Laboratory of Hygiene, University of Wisconsin, Madison

### **Major in Medical Technology (B.S. Degree)**

Kathryn Wise, *Director*

The curriculum complies with the recommendations set forth by the *Essentials of an Accredited Educational Program for Medical Technologists* as adopted by the Committee on Allied Health Education and Accreditation. Upon successful completion of the three years of campus course work and the year of clinical education at an affiliated hospital, the student is granted the B.S. Degree, major in Medical Technology. The graduate is eligible for certification as a Medical Technologist through successful completion of an examination given by the American Society of Clinical Pathologists and/or the National Certification Agency.

*Major Requirements in Biology (32 Credits)*

Biol 111 Cell Biology (4)  
Biol 112 General Zoology: Invertebrate (4)  
Biol 113 General Zoology: Vertebrate (4)  
Biol 306 Animal Physiology (4)  
Biol 350 Microbiology (4)  
Biol 410 Parasitology (4)  
Biol 470 Immunology (3)  
Biol 471 Immunology Laboratory (1)  
Biol 475 Pathogenic Microbiology (4)

*Requirements in Related Fields (43 Credits)*

Chem 111-112-113 General Chemistry I-II-III (12)  
Chem 111L-112L-113L General Chemistry Laboratory (or 111H-112H-113L) (3)  
Chem 237-238-239 General Organic Chemistry Laboratory I-II-III (9)

Chem 237L-238L-239L General Organic Chemistry Laboratory (3)  
 Chem 321 Quantitative Analysis (4)  
 Chem 461, 462 Biochemistry I-II (6)  
 Chem 464, 465 Biochemistry Laboratory I-II (2)  
 Mathematics 8 credits to include Math 274, Intro. to Statistics I; **or** Math 375, or equivalent, and one of the following: (A) the achievement of at least a B average in three years of high school math and ACT or SAT scores above the 75th percentile, or above the 50th percentile in a CLEP math examination; **or** (B) any other college mathematics course(s) at or above the level of Math 121, Intermediate Algebra.

*Recommended Electives*

Biol 309 Principles of Hematology (4)  
 Biol 341 Genetics (4)  
 ComS 130 BASIC Programming with Microcomputers (4)

*Internship in Clinical Education (48 credits)*

Biol 460 Medical Technology Clinical Education (6 or 12, repeated to total 48 credits) as follows:  
 Hematology/Coagulation (0-12)  
 Blood Bank/Serology (0-10)  
 (Immunohematology/Immunology)  
 Microbiology (0-12)  
 Parasitology (0-7)  
 Mycology (0-1)  
 Chemistry (0-12)  
 Management (0-1)  
 Teaching Methods/Education (0-1)  
 Microscopy (0-4)  
 Clinical Urinalysis (0-2)  
 Miscellaneous body fluids (0-2)

This requirement is fulfilled when the student completes the year of Clinical Education at one of the affiliated hospitals listed below. Admission to the Clinical Education Program is based on an interview, recommendations, academic record and the available student space.

The Penrose-St. Francis Healthcare System, Colorado Springs, Colorado  
 United Hospital, St. Paul, Minnesota  
 St. Luke's Hospital, Fargo, North Dakota  
 St. Alexius Hospital, Bismarck, North Dakota  
 Trinity Medical Center, Minot, North Dakota

**Minors in Biology, Botany, and Zoology**

The complete program in any of these minors must be approved by the chair of the Department of Biology. The students are urged to consult with an advisor in the department prior to selection of electives to be applied to a minor. Transfer students must complete at least 8 credits selected from approved 300-400 level courses in the Department of Biology at Moorhead State University regardless of the number of transfer credits accepted toward completion of the minor.

**Minor in Biology (32 credits)**

Biol 111 Cell Biology (4)  
 Biol 112 General Zoology: Invertebrate (4)  
 Biol 113 General Zoology: Vertebrate (4)  
 Biol 122 General Botany I (4)  
 Biol 123 General Botany II (4)  
 Plus 12 credits in biology to be selected from those required for the major.

**Minor in Botany (28 credits)**

Biol 111 Cell Biology (4)  
 Biol 122 General Botany I (4)  
 Biol 123 General Botany II (4)  
 Approved Electives in Botany (16)

**Minor in Zoology (28 credits)**

Biol 111 Cell Biology (4)  
 Biol 112 General Zoology: Invertebrate (4)  
 Biol 113 General Zoology: Vertebrate (4)  
 Approved electives in Zoology (16)

**BIOLOGY COURSES**

**Biol 102 Matter and Life (4) (FWS)**

Biological principles with emphasis on the chemical and physical bases for life at the cellular level. Includes topics on genetics and evolution. For non-science majors. Majors or minors in any area of biology should take Biol 111 instead.

**Biol 103 Humanity and the Ecosystem (4) (FWS)**

Survey of general ecology emphasizing human impact on the environment; population, pollution, etc. For non-science majors.

**Biol 104 Human Biology (4) (FWS)**

The basic structure, function, development and genetics of the human organism. For non-science majors.

**Biol 111 Cell Biology (4) (Fw)**

Fundamental concepts of the structure, function and reproduction of cells. With lab.

**Biol 112 General Zoology: Invertebrate (4) (S)**

Comparative structure and function of major invertebrate phyla. With lab. Prerequisite: Biol 111 or consent of instructor.

**Biol 113 General Zoology: Vertebrate (4) (W)**

Topics include: Origin of life; evolution; a survey of vertebrate classes; the anatomy and physiology of organ systems. With lab. Prerequisite: Biol 111 or consent of instructor.

**Biol 122 General Botany I (4) (W)**

Survey of the major groups of plants, algae and fungi emphasizing structural and reproductive patterns. With lab. Prerequisite: Biol 111.

**Biol 123 General Botany II (4) (S)**

Structure, function, growth and reproduction of angiosperms. With lab. Prerequisite: Biol 111.

**Biol 190 Independent Study in Biology (1-4)**

Independent study portion of the area study requirement for External Studies Program. Biology advisor's approval required; maximum 8 credits.

**Biol 215-216 Human Anatomy and Physiology I-II (4 each) (WS)**

Basic structure and function of the human organism. Meets needs of pre-nursing and other non-biology majors. With lab. No prerequisite; must be taken in sequence.

**Biol 226 Field Biology of Plants (4) (Summer Session)**

An introduction to plant identification, ethnobotany and ecology. Laboratory activities and field trips will focus on the local flora and vegetation. No prerequisites.

**Biol 236 Introduction to Microbiology (4) (S)**

Concepts and application of microbiology. For paramedical, health, physical education, agriculture majors. Not for medical technology, biology majors, minors. With lab. No prerequisite.

**Biol 241 Principles of Human Genetics (3) (W)**

An introduction to human genetics for the non-biology major. Without lab. No prerequisites. (Biol 102, 104 or 111 recommended).

**Biol 301(g) Vertebrate Embryology (4) (F)**

A study of principles in developmental biology and of the early developmental anatomy of vertebrates. With lab. Prerequisite: Biol 113.

**Biol 302(g) Histology (4) (W or S)**

Microscopic characteristics of human tissues and organs, structural-functional correlation, histogenesis. With lab. Prerequisite: Biol 113.

**Biol 304 Biology of Women (4) (F)**

A study of the gender-related aspects of the biology and behavior of women, including a critical examination of research in this field. Prerequisites: Biol 104 or consent of the instructor and junior standing. Not applicable toward a major or minor in any area of biology.

**Biol 306 Animal Physiology (4) (FW)**

An introductory study of functional aspects of the organ system of animal species. With lab. Prerequisites: Biol 113 and Chem 113, or consent of the instructor.

**Biol 309 Principles of Hematology (4) (S)**

Biochemical, physiological and immunological processes involved in normal blood formation and function and disturbances that may occur in different diseases. With lab. Prerequisites: One year each of biology and chemistry or consent of instructor.

**Biol 310 Comparative Vertebrate Anatomy (4) (F)**

A comparative morphological study of selected animal species including lamprey, shark, Necturus and cat. With lab. Prerequisite: Biol 113.

**Biol 317 Ichthyology (4) (S 90)**

The morphology, physiology, taxonomy and ecology of fishes, with emphasis on the Upper Midwest species. With lab and field work. Prerequisite: Biol 113.

**Biol 318 General Entomology (4) (W)**

The morphology, taxonomy, physiology, reproduction and the economics of the Insecta. With lab and field work. Prerequisite: Biol 112, Biol 123 desirable.

**Biol 325 Plant Taxonomy (4) (S)**

Identification, principles of classification and phylogeny of the vascular plants with emphasis on the angiosperms. With lab and field work. Prerequisite: Biol 123 or consent of instructor.

**Biol 341 Genetics (4) (FS)**

A survey of the modern molecular and classical Mendelian principles underlying biological inheritance. With lab. Prerequisite: Biol 111.

**Biol 343(g) Microtechnique (4) (W)**

Tissue preparation for histological, histochemical and fluorescent studies, including whole organism preservation. With lab. Prerequisite: Biol 113 (Chem 113 recommended) or consent of instructor.

**Biol 345 Principles of Ecology (4) (FS)**

Basic relationships of plants and animals to their environment. Field work will emphasize local species. With lab and field work. Prerequisites: Biol 113 and 123.

**Biol 348 Organic Evolution (4) (WS)**

The historic development and the genetic interpretation of the major principles of evolution and speciation. Prerequisite: Biol 341 or consent of instructor.

**Biol 350(g) Microbiology (4) (F)**

Morphology, nutrition, genetics and physiology of bacteria and other microorganisms, as well as introduction to medical applications. With lab. Prerequisites: One year each of chemistry and biology or consent of instructor; Biol 341 recommended.

**Biol 355(g) Wildlife Ecology (4) (F)**

The application of ecological principles to the management of wildlife populations. Population dynamics and field techniques are stressed. With labs. Prerequisite: Biol 345.

**Biol 410(g) Parasitology (4) (S)**

Principles and importance of parasitism and exemplified by selected parasitic protozoa, helminths and arthropods. With lab. Prerequisites: Biol 112 and 113.

**Biol 417 Ornithology (4) (S 91)**

The basic features of avian anatomy, physiology and behavior combined with field and laboratory observations of regional birds. Prerequisite: Biol 113.

**Biol 423(g) Plant Anatomy (4) (on demand)**

Structure of the seed plants with emphasis on the development of vegetative and reproductive organs of the angiosperms. With lab. Prerequisite: Biol 123.



**Biol 424(g) Plant Physiology (4) (on demand)**

A survey of plant physiology with emphasis on water relations, mineral nutrition, translocation, respiration, photosynthesis and plant growth. With lab. Prerequisite: Biol 123 and Chem 113 or consent of instructor.

**Biol 433(g) Plant Morphology: The Lower Forms (4) (on demand)**

The structure, development, life cycles and relationships of algae, fungi and bryophytes. With lab. Prerequisite: Biol 122 or consent of instructor.

**Biol 434(g) Plant Morphology: The Vascular Plants (4) (on demand)**

The structure, development, evolution, life cycles, and relationships of the vascular plants. With lab. Prerequisite: Biol 122 and 123 or consent of instructor.

**Biol 440 Secondary Science Teaching Methods (4) (Ws)**

Materials and methods appropriate for junior and senior high school classes and laboratories. Junior standing in a science education program. Must be taken prior to student teaching. Cross-listed in Biology, Chemistry and Physics.

**Biol 445(g) Limnology (4) (Summer Session)**

Aquatic ecology; analysis of the physical, chemical and biotic factors that affect life in lakes, ponds, streams. With lab and field work. Prerequisites: 30 quarter hours of college biology, including Biol 345, and one year of college chemistry.

**Biol 449(g) Advanced Cell Biology (4) (W)**

Cell structure in relation to function, reproduction and development. Prerequisites: Biol 341, Chem 113.

**Biol 450(g) Cell Physiology (4) (on demand)**

The relationship between cell structure and function with emphasis on cellular metabolism and its regulation. With lab. Prerequisites: Biol 113 or 123 and Chem 238 or consent of instructor.

**Biol 460 Medical Technology Clinical Education (6 or 12, repeated to total 48 credits)**

Clinical education in a school of medical technology in an affiliated hospital. Prerequisites: 144 credits of prescribed and elective courses in the medical technology curriculum and the consent of the medical technology advisor.

**Biol 465 Cytotechnology Clinical Education (6 or 12, repeated to total 48 credits)**

Clinical education in a school of cytotechnology in an affiliated school or clinic. Prerequisites: 144 credits of prescribed and elective courses in the cytotechnology curriculum and the consent of the cytotechnology advisor.

**Biol 469 Student Internship in Biology (8-16) (on demand)**

A supervised work experience generally involving research in a governmental agency or the private sector. Prerequisites: Senior standing in Biology and approval by Department Internship Committee.

**Biol 470(g) Immunology (3) (W)**

Introduction to antibody-mediated immunity and cell-mediated immunity. Biol 471, Immunology Laboratory may be taken concurrently. Prerequisites: Biol 350 and one year of chemistry or consent of instructor; Biol 341 recommended.

**Biol 471(g) Immunology Laboratory (1) (W)**

Selected methods in antibody-antigen assays and cellular immunology. Prerequisites: Biol 470 or concurrent registration.

**Biol 475(g) Pathogenic Microbiology (4) (S)**

A survey of the major pathogens causing infectious disease in humans. Emphasis on bacterial pathogens including their cultivation, identification, and pathogenicity. With lab. Prerequisites: Biol 350 and 470; Biol 341 recommended.

**Biol 481-482-483(g) Biology Seminar I-II-III (1 each) (FWS)**

Oral reports by students and staff based on critical evaluation of scientific literature, and/or independent research. Junior or Senior standing in major.

**Biol 490 Senior Research in Biology (1-3) (on demand)**

Individual research; project and its format must be accepted by the research advisor prior to registration. Prerequisite: Senior standing in major and consent of instructor.

## Department of Business Administration

Earl Alberts, *Chair*; M. Wayne Alexander, Grace Chu Te, Sheila Deibler, Peter Geib, Rosalinda Hoops, Rajiv Kalra, Alan MacDonald, Molly Moore, James Noehl, Tom Pearce, Sam Roy, James Swenson, A. Clyde Vollmers, James Walker, Marsha Weber, Vaughan Westaway, Carol Wilson, Sandra Williams.

### AREAS OF STUDY: Business Administration, Finance, Management, Marketing, Hotel-Motel-Restaurant Management, International Business.

The Business Administration Department has approximately 1,400 majors and is one of seven departments in the Division of Business, Industry, and Applied Programs. Students enjoy a high degree of flexibility when choosing from the Department's six degree programs and 86 courses. An increasing number of students from other disciplines at Moorhead State University choose one of the Department's five Minor programs.

In addition to providing excellent depth in degree programs and courses, the Department offers students rich and varied non-traditional experiences. Students may earn up to 16 credits in an internship program that consists of supervised business training in a local or regional business firm. Consulting experience can be gained through the Department's participation in the Small Business Development Center where teams of students visit small local businesses to solve real-world business problems over a period of 10 weeks. Students enjoy other benefits as a result of the departmental policy of offering approximately 40 percent of its classes at night. In addition to creating greater opportunities for part-time employment, the evening classes generate an interesting mix of students. The heterogeneity of ages and backgrounds often produces stimulating classroom discussion. While the basic programs in the Business Administration Department contain an excellent variety of courses, a student may pursue a subject in even greater depth through an Independent Study course which consists of a faculty-supervised research and reading project.

Effective Fall 1990, a "D" grade will no longer be accepted to satisfy courses in the Business Core and Major requirements.

#### Four Year Programs

B.S. Degrees in Business Administration, Finance, Management, Marketing, International Business and Hotel-Motel-Restaurant Management are offered. The following program descriptions are subject to change. See Departmental Worksheets for current degree requirements.

80 Credits in Liberal Arts (64 credits) and other nonbusiness courses are required

#### *Requirements in Related Fields (40 credits)*

Econ 202 Principles of Economics I (4)

Econ 204 Principles of Economics II (4)

Econ 206 Principles of Economics III (4)

CIS 145 Data Processing (4)

\*Psy 113 General Psychology (4) or Soc 110

Introduction to Sociology (4)

Psy 119 Social Behavior (4) or Soc 205 Social Psychology (4)

Math 273 Linear Algebra/Applied Calculus I (4)

Math 274 Introduction to Statistics I (4)

Math 275 Introduction to Statistics II (4)

Speech 100,202,204,210,219,221,310 or 312 (4)

\* Psy 113 and Soc 110 are required for Marketing majors

#### *Business Core Requirements for Majors in Business Administration, Finance, Management, Marketing, Hotel-Motel-Restaurant Management and International Business (42 credits)*

Acct 229 Principles I: Financial (4)

Acct 230 Principles II: Financial (4)

Acct 310 Principles III: Managerial (4)

Acct 200 Introduction to the Legal System (2)

Acct 300 Legal Environment of Business (4)

Finc 340 Corporate Finance (4)

Mktg 310 Principles of Marketing (4)

Mgmt 360 Principles of Management (4)

Mgmt 450 Production/Operations Management (4)

Mgmt 456 Management Information Systems (4)

Mgmt 490 Business Policy (4)

#### *Business Administration Requirements and Electives B.S. Degree (32 credits)*

1. Mgmt 420 or 451

2. One quantitative course from the following list:

Mgmt 421, Mgmt 424, Mktg 422, Mktg 410, Econ 370

3. Select three areas of study from the following five areas: Accounting, Economics, Finance, Management or Marketing.

4. Choose one course from each of the selected areas. Make sure that one of the three courses chosen is an international course (Acct 420, Econ 425, Finc 450, Mgmt 458, Mktg 444).

#### Accounting

Acct 305 Business Law I (4)

Acct 330 Intermediate Acct I (4)

Acct 331 Intermediate Acct II (4)

Acct 332 Intermediate Acct III (4)

Acct 420 International Acct (4)

Acct 441 Individual Tax (4)

#### Economics

Econ 290 Econ Literature/Methods (3)

Econ 302 Intermediate Microeconomics (4)

Econ 304 Intermediate Macroeconomics (4)

Econ 315 Government & Business (4)

Econ 320 Money & Banking (4)

Econ 370 Quantitative Economic Analysis (4)

Econ 425 International Trade (4)

#### Finance

Finc 440 Intermediate Finance (4)

Finc 450 International Finance (4)

Finc 456 Principles of Investment (4)

Finc 457 Portfolio Analysis (4)

#### Management

Mgmt 405 Small Business Management (4)

Mgmt 420 Organizational Theory (4)

Mgmt 421 Decision Analysis (4)

Mgmt 424 Management Science I (4)

Mgmt 440 Personnel Management (4)

Mgmt 451 Organizational Behavior (4)

Mgmt 458 International Management (4)

#### Marketing

Mktg 320 Introduction to Logistics (4)

Mktg 410 Marketing Logistics (4)

Mktg 421 Consumer Behavior (4)

Mktg 422 Marketing Research (4)

Mktg 423 Marketing Communications (4)

Mktg 444 Transnational Marketing (4)

Mktg 455 Marketing Management (4)

5. Choose one additional course in each of your three selected areas from any courses offered in the areas of Accounting, Economics, Finance, Management and Marketing.

6. A maximum of four credits of Internship (Finc 469, Mktg 469, Mgmt 469) may be counted toward the Business Administration Requirements and Electives.

### Major in Finance B.S. Degree

Choose one area of concentration from the following:

#### *Corporate Finance (32 credits)*

Econ 302 Microeconomics (4)  
Econ 320 Money and Banking (4)  
Finc 321 Banking Policy (4)  
Finc 351 Risk Management (4)  
Finc 441 Advanced Corporate Finance (4)  
Finc 450 International Finance (4)  
Finc 456 Principles of Investment (4)  
Finc 458 Case Studies in Finance (4)

#### *Investments (32 credits)*

Econ 320 Money and Banking (4)  
Econ 304 Intermediate Macroeconomics (4)  
Acct 330 Intermediate Accounting I (4)  
Finc 352 Life & Health Insurance (4)

**or**

Finc 354 Real Estate I (4)  
Finc 441 Advanced Corporate Finance (4)  
Finc 442 Investment Seminar (4)  
Finc 456 Principles of Investment (4)  
Finc 457 Portfolio Analysis (4)

#### *Personal Finance (32 credits)*

Econ 320 Money and Banking (4)  
Acct 441 Personal Income Tax (4)  
Finc 351 Risk Management (4)  
Finc 352 Life & Health Insurance (4)  
Finc 353 Insurance Topics (4)  
Finc 354 Real Estate I (4)  
Finc 456 Principles of Investment (4)  
Finc 469 Internship (4)

Investment as an area of concentration provides a more directed program to prepare students for careers in brokerage and investment analysis.

Personal Finance as an area of concentration is in recognition of growth in the service economy in the United States. In addition, some states now require college courses for licensing in real estate and that trend is expected to continue.

*Internships.* Although internships (Finc 469) may be taken for 3-16 credits, a maximum of 4 credits of internship may be counted as Finance Electives. Additional internship credits are counted as Free Electives.

### Major in Hotel-Motel-Restaurant Management B.S. Degree

#### *HMR Professional Requirements (25 credits)*

HMR 300 Food and Beverage Management (4)  
HMR 350 HMR Maintenance Management (4)  
HMR 352 Front Office Management (4)  
HMR 355 Innkeeper's Liability (4)  
HMR 442 HMR Organization & Management (4)  
HMR 446 Hospitality Marketing & Sales Promotion (4)  
HMR 466 Current Trends in HMR Management (1-4)

#### *HMR Electives (16 credits minimum)*

HMR Practicum Required (4)\*\*\*  
HMR 349 Food Service Laboratory (2)  
HMR 456 Convention and Sales (4)  
HMR 460 Innkeepers Design & Aesthetics (4)  
HMR 498 Problems in HMR (1-4)

#### *Finance*

Finc 351 Risk Management (4)  
Finc 440 Intermediate Finance (4)  
Finc 456 Principles of Investment (4)

#### *Management*

Mgmt 420 Organizational Theory (4)  
Mgmt 421 Decision Analysis (4)  
Mgmt 424 Management Science I (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 451 Organizational Behavior (4)

#### *Marketing*

Mktg 320 Introduction to Logistics (4)  
Mktg 421 Consumer Behavior (4)  
Mktg 422 Marketing Research (4)  
Mktg 423 Marketing Communications (4)  
Mktg 330 Personal Selling (4)

#### *Tri-College*

\* T&C 122 Institutional Housekeeping I (4)  
\* T&C 431 Textile for Interiors (4)  
\*\* Food Selection and Preparation  
\*\* Quantity Food Production  
\* Institutional Purchasing

\* North Dakota State University Courses

\*\* Concordia College and North Dakota State University Courses

\*\*\* Required Elective: Practicum— choose from HMR 310,312,314,316

HMR 310 Food Administration Practicum (2-4)  
HMR 312 Beverage Administration Practicum (2-4)  
HMR 314 Motel Administration Practicum (2-4)  
HMR 316 Motel Administration Practicum (2-4)

### Major in International Business B.S. Degree

#### *Foreign Language (12-24 credits)*

Language requirements: Two or more years of secondary level language study may count for one year of college level language. Those with less than two years of language study will be required to take two years of foreign language.

*International Business Requirements (24 credits)*

Mgmt 458 International Management (4)  
Finc 450 International Finance (4)  
Mktg 444 Transnational Marketing (4)  
Acct 420 International Accounting (4)  
Econ 425 International Trade (4)

*Business Electives (12 credits)*

Select three courses from the following. Four credits of internship may be applied to the twelve required business elective credits.

*Finance*

Finc 440 Intermediate Finance (4)  
Finc 456 Principles of Investment (4)  
Finc 458 Financial Decision-making (4)  
Finc 321 Banking Policy (4)  
Finc 351 Risk Management (4)  
Finc 354 Real Estate I (4)

*Marketing*

Mktg 320 Introduction to Marketing Logistics (4)  
Mktg 421 Consumer Behavior (4)  
Mktg 422 Marketing Research (4)  
Mktg 423 Marketing Communications (4)  
Mktg 455 Marketing Management (4)

*Management*

Mgmt 420 Organizational Theory (4)  
Mgmt 421 Decision Analysis (4)  
Mgmt 424 Management Science I (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 451 Organizational Behavior (4)

*Related International Electives (8 credits)*

Select two courses from the following:  
Econ 304 Intermediate Macroeconomic Theory (4)  
Econ 330 Economic Development (4)  
Econ 340 Comparative Economic Systems (4)  
Pol 160 International Relations (4)  
Pol 290 International Political Economy (4)  
Pol 360 American Foreign Policy (4)  
Pol 361 Topics in International Law (4)  
Hist 357 U.S. Foreign Relations I (4)  
Hist 358 U.S. Foreign Relations II (4)  
Soc 215 Population (3)  
Soc 323 Sociology of Community (3-4)  
Anth 110 Intro to Cultural Anthropology and Linguistics (4)  
Anth 335 Humans, Culture and Environment (4)  
Anth 360 Economic Anthropology (4)  
Anth 375 Language in Culture (4)  
Geog 110 Introductory Physical Geography (4)  
Geog 111 World Regional Geography (4)

**Major in Management B.S. Degree**

*Management Requirements (20 credits)*

Mgmt 420 Organizational Theory (4)  
Mgmt 421 Decision Analysis or Mgmt 424 Management Science I (4)  
Mgmt 451 Organizational Behavior (4)  
Mgmt 458 International Management (4)  
Mgmt 480 Senior Management (4)

*Management Electives (12 credits)*

Mgmt 315 Government & Business (4)  
Mgmt 405 Small Business Management (4)  
Mgmt 406 Small Business Mgmt Consulting (2)  
Mgmt 415 Industrial Organization & Public Policy (4)  
Mgmt 416 Labor Economics (4)  
Mgmt 421 Decision Analysis (4)  
Mgmt 424 Management Science I (4)  
Mgmt 425 Management Science II (4)  
Mgmt 430 Managerial Economics (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 452 Organizational Development (4)  
Mgmt 461 Management Seminar (4)  
Mgmt 469 Management Internship (maximum 4)  
Mgmt 498 Problems in Business Administration (1-4)  
Econ 302 Intermediate Microeconomics (4)  
Econ 304 Intermediate Macroeconomics (4)  
Econ 316 Labor History (4)

Electives may include up to 8 credits of upper-level courses from disciplines other than Accounting, Management, Marketing, Finance or Economics. The student must obtain written approval of the course from his or her academic advisor before taking the course as an elective.

*Internships.* Although Internship (Mgmt 469) may be taken for 3-16 credits, a maximum of 4 credits of internship may be counted as Management Electives. Additional internship credits are counted as Free Electives.

49

**Major in Marketing B.S. Degree**

*Marketing Requirements (20 credits)*

Mktg 320 Introduction to Marketing Logistics (4)  
Mktg 421 Consumer Behavior (4)  
Mktg 422 Marketing Research (4)  
Mktg 441 Business & Society (4)  
Mktg 455 Marketing Management (4)

*Marketing Electives (12 credits)*

Mktg 315 Industrial Marketing (4)  
Mktg 330 Personal Selling (4)  
Mktg 335 Retail Management (4)  
Mktg 406 Small Business Management Consulting (2)  
Mktg 410 Marketing Logistics (4)  
Mktg 420 Marketing Channels (4)  
Mktg 423 Marketing Communications (4)  
Mktg 442 Marketing Seminar (4)  
Mktg 444 Transnational Marketing (4)  
Mktg 469 Marketing Internship (maximum 4)  
Mktg 470 Independent Study (1-4)  
Mktg 498 Problems in Marketing (1-4)  
Mgmt 405 Small Business Management (4)  
Mgmt 424 Management Science I (4)  
Econ 301 Intermediate Microeconomics (4)

Electives may include up to 8 credits of upper-level courses from disciplines other than Accounting, Marketing, Management, Finance and Economics. The student must obtain written approval of the course from his or her academic advisor before taking the course as an elective.

*Internships.* Although Internship (Mktg 469) may be taken for 3-16 credits, a maximum of 4 credits of internship may be applied to Marketing electives. Additional internship credits are counted as free electives.

### **Minor Programs**

*Marketing Minor for Business Administration, Management, Finance, Hotel-Motel-Restaurant Management, International Business, Accounting and Business Education majors*

24 credits of marketing courses above the marketing requirements in each of the majors. Marketing courses which satisfy major requirements cannot be used to satisfy Marketing Minor requirements.

*Marketing Minor for other majors.*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Econ 202 Principles I: Micro (4)  
Econ 204 Principles II: Macro (4)  
Mktg 310 Principles of Marketing (4)  
Mktg 320 Introduction to Logistics (4)  
Mktg 421\* Consumer Behavior (4)  
Mktg 441 Business and Society (4)  
Mktg 455\* Marketing Management (4)  
Mktg Elective

\* Prerequisite is either Psy 113 or Soc 110; and either Psy 119 or Soc 205

*Management Minor for Business Administration, Marketing, Finance, Hotel-Motel-Restaurant Management, International Business, Accounting and Business Education majors.*

24 credits of management courses above the management requirement in each of the majors. Management courses which satisfy major requirements cannot be used to satisfy Management Minor requirements.

*Management Minor for other majors*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Econ 202 Principles I: Micro (4)  
Math 274 Introduction to Statistics I (4)  
Math 275 Introduction to Statistics II (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 420\* Organizational Theory (4)  
Mgmt 450 Production/Operations Management (4)  
Mgmt 451\* Organizational Behavior (4)  
Mgmt elective

\* Prerequisite is either Psy 113 or Soc 110; and either Soc 119 or Soc 205

*Finance Minor for Business Administration, Marketing, Management, Hotel-Motel-Restaurant Management, International Business, Accounting and Business Education majors*

24 credits of finance courses above the finance requirements in each of the majors. Finance courses which satisfy major requirements cannot be used to satisfy Finance Minor requirements.

*Finance Minor for other majors*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Econ 202 Principles I: Micro (4)

Econ 204 Principles II: Macro (4)  
Finc 320 Money and Banking (4)  
Finc 340 Corporate Finance (4)  
Finc 440 or 441 Int. Finance (4)  
    or Adv. Corp. Finance (4)  
Finc 456 Principles of Investment  
Finance Elective  
Finance Elective

*Business Administration Minor for Marketing, Finance, Hotel-Motel-Restaurant Management, International Business, Accounting, Management and Business Education majors.* 8 credits in each of three of the following areas: Management, Marketing, Finance. Economics, Accounting—beyond those courses required for the major. If the major is Management, for example, the three areas must be from Marketing, Finance, Accounting or Economics.

*Business Administration Minor for other majors*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Econ 202 Principles I: Micro (4)  
Econ 204 Principles II: Macro (4)  
Mktg 310 Principles of Marketing (4)  
Mgmt 360 Principles of Management (4)  
Finc 340 Corporate Finance (4)

Choose one course from each of the following areas:

Mktg 320 Intro to Logistics  
Mktg 421\* Consumer Behavior  
Mktg 441 Business & Society  
Mktg 455 Marketing Management

Mgmt 420 Organizational Theory  
Mgmt 450 Production/Operations Management  
Mgmt 451 Organizational Behavior

Finc 320 Money and Banking  
Finc 440 or 441 Int Finc or Adv Corporate Finc  
Finc 456 Principles of Investments

\* Prerequisite is either Psy 113 or Soc 110; and either Soc 119 or Soc 205

*Hotel-Motel-Restaurant Management Minor for Marketing, Finance, International Business, Business Administration, Accounting, Management and Business Education majors*

24 credits of Hotel-Motel-Restaurant Management courses.

*Hotel-Motel-Restaurant Management Minor for other majors*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Econ 202 Principles I: Micro (4)  
HMR 350 HMR Maintenance Management (4)  
HMR 352 Front Office Management (4)  
HMR 442 HMR Organization and Mgmt (4)  
HMR 443 Food and Beverage Management (4)  
HMR 446 Hospitality Mktg. and Sales Promotion (4)  
HMR 460 Hotel-Motel-Restaurant Design and Aesthetics or HMR elective  
HMR practicum (4)

HMR minor requires completion of Math 121 or equivalent

## Business Education Department

Fran Dexter, *Chair*; Evelyn Grove

### BUSINESS EDUCATION CURRICULA

The Business Education Department offers a teaching major in Business Education, a Bachelor of Science degree in Office Administration, a teaching minor in Business Education, and an Associate of Science in Secretarial Science

#### Major in Business Education

*Core Requirements in Business Education (42 credits)*

Acct 200 Intro to Legal Sys (2)  
Acct 300 Legal Envir of Bus (4)  
Acct 229 Prin I: Finc (4)  
Acct 230 Prin II: Finc (4)  
Acct 310 Managerial Acct (4)  
CIS 145 Bus Data Proc (4) or Mgmt 456 Mgmt Info Sys (4)  
Econ 206 International Econ (4)  
Finc 340 Corporate Finance (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 450 Production/Operations Mgmt (4)  
Mktg 310 Principles of Marketing (4)

*Major Requirements in Business Education (31-33 credits)*

BEd 207 Business Communications (4)  
BEd 212 Adv Keyboarding/WP (2)  
BEd 260 Micro Comp/Bus App (3)  
BEd 315 Consumer Education (4)  
BEd 320 Records Management (4)  
BEd 330 Office Management (4)  
BEd 414 Adv WP/Trans (3)  
BEd 420 Int Micro Bus App (3)  
BEd 439 Methods Kbd/WP/Proc (2)  
BEd 440 Meth/Acct/Comp App (2)  
BEd 441 Meth/Shorthand (Op) (2)

*Requirements in Related Fields (12 credits)*

Econ 202 Micro Econ\* (4)  
Econ 204 Macro Econ\* (4)  
Spch 100 Beg Spch Comm\* (4)  
\* Starred items may be used for Liberal Arts

All Teacher Education Requirements must be fulfilled to complete this major. See Education Department.

#### Major in Office Administration

*Core Requirements (46 credits)*

Acct 229 Prin I: Finc (4)  
Acct 230 Prin II: Finc (4)  
Acct 310 Managerial Acct (4)  
Acct 200 Intro to Legal Sys (2)  
Acct 300 Legal Envir of Bus (4)  
Econ 206 International Econ (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 450 Production Management (4)  
Mgmt 456 Mgmt Info Sys (4) or CIS 145 Bus Data Proc (4)  
Mktg 310 Principles of Marketing (4)  
Finc 340 Corporate Finance (4)  
Bus 490 Business Policy (4)

*Additional Major Requirements (21 credits)*

BEd 207 Business Communications (4)  
BEd 212 Adv Keyboarding/WP (2)  
BEd 260 Micro Comp/Bus App (3)  
BEd 315 Consumer Education (4)  
BEd 320 Records Management (4)  
BEd 420 Int Micro Bus App (4)

*Areas of Specialization (Either Area I or II is required.)*

I. EXECUTIVE SECRETARIAL (17-18 credits)

BEd 220 Shorthand I (4)  
BEd 221 Shorthand II (4)  
BEd 222 Shorthand III (4) or BEd 326 Dictation & Transcription (3)  
BEd 323 Secretarial Administration (3)  
BEd 414 Adv Word Proc/Trans (3)

II. OFFICE MANAGEMENT (20 credits)

BEd 330 Office Management (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 451 Organizational Behavior (4)  
Math 274 Introduction to Statistics I (4)  
MC 270 Public Rel Princ (4)

*Requirements in Related Fields (16 credits)*

Econ 202 Micro Econ Prin\* (4)  
Econ 204 Macro Econ Prin\* (4)  
Psy 113 General Psychology\* (4)  
Spch 100 Beginning Speech Communication\* (4)  
\* Starred items meet Liberal Arts requirements.

#### Minor in Business Education (38 credits)

Acct 229 Prin I: Finc (4)  
Acct 230 Prin II: Finc (4)  
Acct 310 Managerial Accounting (4)  
Acct 200 Intro to Legal Sys (2)  
Acct 300 Legal Envir of Bus (4)  
BEd 207 Business Communications (4)  
BEd 212 Adv Keyboarding/WP (2)  
BEd 260 Microcomp Bus App (3)  
BEd 315 Consumer Education (4)  
BEd 414 Adv WP/Trans (3)  
BEd 439 Meth Kbd/WP/Proc (2)  
BEd 440 Meth Acct/Comp App (2)

This minor can be awarded only in combination with at least one teaching major. This minor is not licenseable in Minnesota.

#### Associate in Science, Medical Records Technology

The Associate in Science in medical records is a program offered cooperatively by the Moorhead Technical Institute and Moorhead State University. Students enroll simultaneously at both institutions, doing half of their work at each. Upon graduation from the two year program, the students receive an A.S. degree from MSU, a diploma from MTI, and are authorized to take the national accreditation examination to become accredited medical records technologists.

At MSU, medical records students complete 48 college credits, including 45 credits in liberal arts with at least 4 credits in each division. At least two courses in anatomy and physiology are required; these may be applied to Liberal Arts Division B.

At MTI, the student will complete the technical curriculum in medical records. New students seeking admission to this degree program should first contact the Office of Admission, Moorhead Technical Institute, Moorhead, Minnesota, 56560; if already enrolled at MSU, students should get further information from Dr. Molly Moore.

### **A.S. in Secretarial (Two-Year Program—96 credits)**

*Liberal Arts (45 credits)*

Freshman English-one year

Other Liberal Arts Courses, including 6 credits in distributional areas. (B, C, D & E)

*Requirements in Accounting and Business Education (23 credits)*

Acct 229 Prin I: Finc (4)

Acct 230 Prin II: Finc (4)

BEd 207 Business Communications (4)

BEd 212 Adv Keyboarding/WP (2)

BEd 260 Micro Comp/Bus App (3)

BEd 323 Secretarial Administration (3)

BEd 414 Adv WP/Trans (3)

*Additional Courses in Business Education*

Must take 17 credits from courses listed below.

BEd 220 Shorthand I (4)

BEd 221 Shorthand II (4)

BEd 222 Shorthand III (4)

BEd 241 Intro to Lotus (2)

BEd 242 Work Experience I (1)

BEd 243 Work Experience II (1)

BEd 244 Work Experience III (1)

BEd 315 Consumer Education (4)

BEd 320 Records Management (4)

BEd 330 Office Management (4)

BEd 420 Int Micro Bus App (3)

BEd 469 Internship (1-4)

BEd 470 Independent Study (1-4)

### **BUSINESS EDUCATION COURSES**

#### **BEd 090 Beginning Keyboarding (2) (Fws)**

Audit course for students without typewriting experience and for students who wish to renew these skills. Credit not applicable to degree.

#### **BEd 115 Introduction to Word Processing (2)**

*(Fws)*

Principles and applications of word processing on the microcomputer. Emphasis will be on personal and professional applications. Hands-on experience with word processing programs. Prerequisite: One semester of high school keyboarding or knowledge of alphabetic and numeric keyboard.

#### **BEd 207 Business Communications and Report Writing (4) (Fws)**

Business letters, memos and reports. Business communications systems.

#### **BEd 211 Intermediate Keyboarding/Formatting (2) (Fws)**

Typing business papers; tabulation problems; manuscripts.

#### **BEd 212 Advanced Keyboarding/Word Processing (2) (Fws)**

Speed and production skills; statistical typewriting, special reports, and business papers. Prerequisite: BEd 211.

#### **BEd 220-221-222 Shorthand I-II-III (4 each) (Fws)**

Gregg shorthand, dictation and transcription.

Keyboarding must either precede or accompany all shorthand courses. Prerequisite: BEd 211 or equivalent. Must be taken in sequence. Offered every other year.

#### **BEd 241 Introduction to Lotus (2) (Fws)**

Introduction to the basics of Lotus 1-2-3, including the creation of graphics, the integration of macros, and the use of database with emphasis given to business applications. Prerequisite: BEd 090 or consent of instructor.

#### **BEd 242-243-244 Work Experience I-II-III (1 credit each, maximum 3) (Fws)**

Supervised office experience in a cooperating firm. Minimum of 60 hours of satisfactory work in each course. For majors only.

#### **BEd 260 Microcomputer Business Applications (3) (Fws)**

Experience in using the microcomputer in a variety of business data processing applications. Prerequisite: One semester of high school keyboarding or equivalent, Acct 230.

#### **BEd 315(g) Consumer Education (4) (W)**

Selection of goods and services; aid available from government and private agencies; family financial planning.

#### **BEd 320(g) Records Management (4) (F)**

The application of systematic analysis and scientific control of business records from their creation through processing, maintenance, protection, and final disposition.

#### **BEd 323(g) Secretarial Administration (3) (W)**

Secretarial and office administration procedures.

#### **BEd 324 Dictation and Transcription (3)**

Emphasis on speed dictation and transcription of Gregg Shorthand.

Prerequisite: BEd 221 or consent of instructor.

#### **BEd 330(g) Office Management (4) (S)**

Organization of offices, layout, furniture and equipment, machines, selection and training of personnel.

**BEd 413(g) Word Processing Methods (3)**

Preparation to teach or administer word-processing programs in secondary and post-secondary schools and businesses. Prerequisites: BEd 212 or consent of instructor.

**BEd 414(g) Advanced Word Processing/Transcription (3) (Fws)**

Practical experience in word processing using several word processing programs on a microcomputer.

**BEd 415(g) Business Simulation Methods and Materials (4)**

Course designed to meet requirements for business simulation occupations teacher.

**BEd 420 Integrated Microcomputer Business Applications (3) (W)**

Integrated business applications on microcomputers. Intermediate and advanced database and spreadsheet techniques will be incorporated. Prerequisite: BEd 260.

**BEd 439 Methods of Teaching Keyboarding/Word Processing/Procedures (2) (S)**

Prerequisite: BEd 212. Teaching methods course for education majors only.

**BEd 440 Methods of Teaching Accounting/Computer Applications (2) (S)**

Prerequisite: Acct 310. Teaching methods course for education majors only.

**BEd 441 Methods of Teaching Shorthand (2) (S)**

Prerequisite: BEd 222, or consent of instructor. Teaching methods course for education majors only.

**BEd 442 Methods of Teaching Basic Business and Economics (2)**

Teaching methods course for education majors only.

**BEd 443(g) Related Curricular Development and Cooperative Management (4)**

A course to gain an understanding of organizing and planning a cooperative office education curriculum and to provide experience in developing units of instruction.

**BEd 445(g) Coordination Techniques for Cooperative Education (3)**

Development of coordination techniques through the study of objectives, programs, practices, laws, standards and certification requirements of vocational education.

**BEd 469 Internship (4-16)**

Enables students with necessary academic credentials to receive experience in business environment. Prerequisite: Consent of instructor.

**BEd 470 Independent Study (1-4) (Fws)**

An opportunity for extensive study in a subject area beyond the formal class offering. Prerequisite: Consent of instructor.

**BEd 495(g) Principles and Practices of Vocational Education (3)**

Examination of philosophical, social, and economic forces that create the need for and the purposes of vocational education.

**BEd 498(g) Problems in Business and Office Education (1-4) (Fws)**

An aspect of business and office education not dealt with in the regular curriculum. May be repeated as content varies.

**BEd 530 Current Trends and Issues in Business Education (4) (W)**

Purposes of Business Education, changing occupational requirements, results of current thinking and research in Business Education, curriculum innovations and changes.

**BEd 570 Independent Study (1-4) (Fws)**

An opportunity for graduate study in a subject area not dealt with in the regular curriculum. May be repeated up to a total of four hours. Prerequisite: Consent of instructor.

**BEd 595 Special Problems (1-3) (Fws)**

Registration only after consultation with major advisor.

**BEd 597 Individual Study (1-3) (Fws)**

Project in Business Education. Registration only after consultation with major advisor.

**BEd 599 Thesis in Business Education (1-6) (Fws)**

Registration only after consultation with major advisor.

53

## Chemistry Department

Dennis R. Mathiason, *Chair*; Dewey O. Brummond, Gary Edverson, Nicholas Kowanko, Dennis L. Krzyzaniak, B. Spencer Meeks, Abbas Pezeshk, William B. Treumann (Emeritus)

### CHEMISTRY CURRICULA

The Department of Chemistry at Moorhead State University is on the Approved List of the American Chemical Society.

Four undergraduate majors are offered by the department. For the student who desires a career as a professional chemist there are both the conventional major and the industrial chemistry major. Each leads to a B.S. degree designed to meet the standards set by the Committee on Professional Training for the American Chemical Society. The conventional major is for the student who intends to enter graduate school in chemistry, or seek a professional career based on an undergraduate degree. The industrial chemistry major is designed for the student wishing industrial employment as a chemist at the B.S. level.



A more flexible liberal arts major in chemistry leads to a B.A. degree and is designed for a wide variety of students in preprofessional programs in medicine, dentistry, etc., as well as those seeking employment in chemistry-related fields.

Finally, a secondary teaching major in physical science leading to a B.S. degree is available. This major may be completed by choice of either a chemistry major with a physics minor or a physics major with a chemistry minor. See physics department listing for the physics major option. Undergraduate research, with or without registration in Chem 490, is strongly encouraged for all students studying chemistry.

### **Professional Major in Chemistry B.S. Degree**

The B.S. in Chemistry program provides a strong background for students intending to enter graduate school or seek employment as professional chemists. The degree meets the requirements of the Committee on Professional Training of the American Chemical Society.

#### *Major Requirements in Chemistry (68 credits)*

Chem 111-112-113 General Chemistry I-II-III (12)  
Chem 111L-112L-113L General Chemistry Laboratory I-II-III or 111H-112H-113L (3)  
Chem 231-232-233 Organic Chemistry I-II-III (9)  
Chem 234-235-236 Organic Chemistry Laboratory I-II-III (6)  
Chem 305 Chemical Literature (1)  
Chem 321 Quantitative Analysis (4)  
Chem 341-342-343 Physical Chemistry I-II-III (9)  
Chem 345-346 Physical Chemistry Laboratory I-II (4)  
Chem 421-422 Instrumental Analysis I-II (7)  
Chem 452-453 Inorganic Chemistry (6)  
Chem 455 Inorganic Chemistry Laboratory (1)  
Approved Electives in Chemistry (6)

#### *Requirements in Related Fields (47 credits)*

Phys 200-201-202 General Physics I-II-III (15)  
Math 231-234 Calculus I-IV (16)

#### **Either**

Math 331 Differential Equations (4)

#### **Or**

Math 375 Intern Probab and Statistics I (4)

#### **Either**

Ger 101-102-103 Beginning German I-II-III (12)

#### **Or**

one year of approved Computer Science courses.

### **Major in Industrial Chemistry B.S. Degree**

This major has three special components: (1) courses in chemistry and related fields needed to support chemistry; (2) an optional, but normally expected, cooperative education experience consisting of a total of nine months carefully structured employment experience in industry; and (3) a minor or approved coherent group of elective courses (not less than 16 credits) in an area complementary to industrial chemistry, such as business, economics, computer science, electronics, mathematics.

#### *Major Requirements in Chemistry (61 credits)*

Chem 111-112-113 General Chemistry I-II-III (12)  
Chem 111L-112L-113L General Chemistry Laboratory I-II-III or 111H-112H-113L (3)  
Chem 231-232-233 Organic Chemistry I-II-III (9)  
Chem 234-235-236 Organic Chemistry Laboratory I-II-III (6)  
Chem 305 Chemical Literature (1)  
Chem 321 Quantitative Analysis (4)  
Chem 341-342 Physical Chemistry I-II (6)  
Chem 345 Physical Chemistry Laboratory I (2)  
Chem 401-402-403 Applied Chemistry Laboratory I-II-III (4)  
Chem 410 Industrial Chemistry (4)  
Chem 421-422 Instrumental Analysis I-II (7)  
Chem 452 Inorganic Chemistry I (3)

#### *Requirements in Related Fields (39 credits)*

Math 231-232-233 Calculus I-II-III (12)  
Phys 200-201-202 General Physics I-II-III (15)  
Econ 202 Principles of Economics I Micro (4)  
ComS 140 Fortran Fundamentals (or suitable substitute) (4)  
Engl 287 Technical Report Writing (4)

#### *Approved Individual Course Electives (16 credits)*

(Normally met by Chem 491 Cooperative Education)

#### *Optional Block of Courses (20 or more credits)*

### **Liberal Arts Major in Chemistry B.A. Degree**

The B.A. curriculum in chemistry is a flexible liberal arts program suitable to a wide variety of students including those in premedicine, pre dentistry and other preparatory programs in the science professions.

#### *Major Requirements in Chemistry (54-56 credits)*

Chem 111-112-113 General Chemistry I-II-III (12)  
Chem 111L-112L-113L General Chemistry Laboratory I-II-III or 111H-112H-113L (3)

#### **Either**

Chem 231-232-233 Organic Chemistry I-II-III (9)  
and Chem 234-235-236 Org Chem Lab I-II-III (6)

#### **Or**

Chem 237-238-239 Gen Org Chem I-II-III (9),  
Chem 237L-238L-239L Gen Org Lab I-II-III (3),  
Chem 422 Instrumental Analysis II (4)

Chem 321 Quantitative Analysis (4)

Chem 341-342 Physical Chemistry I-II (6)

Chem 345-346 Physical Chemistry Laboratory I-II (4)

Chem 452 Inorganic Chemistry I (3)

#### **Either**

Chem 361 Introduction to Biochemistry (4) and  
Chem 421 Instrumental Analysis I (3)

#### **Or**

Chem 461-462 Gen Biochemistry I-II (6) and Chem  
464-465 Gen Biochemistry Laboratory I-II (2),

*Requirements in Related Fields (28-31 credits)*

Math 231-232 Calculus I-II (8)

**Either**

Phys 111-112-113 Elem. Physics I-II-III (9) and

Phys 111L-112L-113L Elem. Phy Lab I-II-III (3)

**Or**

Phys 200-201-202 General Physics I-II-III (15)

Approved Electives in Science (8)

**Physical Science Teaching Major B.S. Degree**

This program requires a chemistry major with a physics minor or a physics major with a chemistry minor. It meets the Minnesota requirements for licensure in physical science, grades 7-12, and should be chosen by students who expect to teach chemistry, physics or physical science.

*Chemistry Major Requirements (51-53)*

Chem 111-112-113 General Chemistry I-II-III (12)

Chem 111L-112L-113L General Chemistry Laboratory I-II-III or 111H-112H-113L (3)

**Either**

Chem 231-232-233 Org Chem I-II-III (9) and

Chem 234-235 Org Chem Lab I-II (4)

**Or**

Chem 237-238-239 Gen Org Chem I-II-III (9)

Chem 237L-238L Gen Org Chem Lab I-II (2)

Chem 321 Quantitative Analysis (4)

Chem 341-342-343 Physical Chemistry I-II-III (9)

Chem 345 Physical Chemistry Laboratory I (2)

Chem 440 Secondary Science Teaching Methods (4)

Chem 452-453 Inorganic Chemistry I-II (6)

*Requirements in Related Fields (19-20)*

Math 231-232-233 Calculus I-II-III (12)

Biol 111 Cell Biology (4)

An Approved Course in Computer Science (3-4)

A teaching minor in physics is also required. All teacher education requirements shall be fulfilled to complete this major.

**Chemistry Minor Teaching (30 credits)**

Chem 111-112-113 General Chemistry I-II-III (12)

Chem 111L-112L-113L or General Chemistry Laboratory 111H-112H-113L (3)

Chem 321 Quantitative Analysis (4)

Electives in Chemistry (11)

(Must include two quarters of organic chemistry lecture and laboratory or two quarters of physical chemistry lecture.)

This minor satisfies the requirements for the Physical Science Teaching degree if the physics major option is selected. All teacher education requirements shall be fulfilled to complete this minor.

**Minor in Chemistry (34 credits)**

Chem 111-112-113 General Chemistry I-II-III (12)

Chem 111L-112L-113L General Chemistry Laboratory I-II-III or 111H-112H-113L (3)

Electives in Chemistry (19)

(Must include two quarters of organic chemistry lecture and laboratory or two quarters of physical chemistry lecture).

**CHEMISTRY COURSES**

**Chem 090 Science Learning Clinic (1)**

The course will consider techniques for helping students overcome science anxiety and help in the development of better science study skills. Credit not applicable to degree.

**Chem 102 Survey of Basic Principles of Chemistry (4) (FWS)**

Fundamentals of chemistry and applications in modern society. Suitable for those who have had no high school chemistry. Credit not applicable to a chemistry major or minor.

**Chem 103 Topics in Introductory Chemistry (2-4)**

Study of some elementary aspects of chemistry and chemical concepts as applied to topical interest.

Designed for the non-science major. Prerequisite:

Chem 102 or high school chemistry or instructor's approval. Credit not applicable to a chemistry major or minor.

**Chem 104 Environmental Chemistry (4) (S)**

Chemical processes in the environment. Prerequisite: High school chemistry or Chem 102 or instructor's approval.

**Chem 106-107-108 Chemistry for Health Professions I-II-III (5 each—4 lecture, 1 laboratory) (FWS)**

Preparation for nursing, physical therapy, home economics and vocational-technical programs in medicine and dentistry; also appropriate for liberal arts credit. Not applicable to a chemistry major or minor. Chem 106: Introduction to basic chemical principles. Chem 107: Introduction to aliphatic and aromatic compounds and behavior of functional groups. Prerequisite: Chem 106 or Chem 112. Chem 108: Introduction to structure and metabolism of carbohydrates, lipids and proteins. Prerequisite: Chem 107.

**Chem 110 Basic Introductory Chemistry (5) (F)**

Fundamental principles of chemistry and stoichiometric relationships emphasizing problem solving using the unit-cancellation method. Intended for students under-prepared for enrollment in Chem 111. Prerequisite: Consent of instructor. May not be taken for credit by those who have earned a C or better in Chem 111. Credit not applicable to a chemistry major or minor.

**Chem 111-112-113 General Chemistry I-II-III (4 each) (FWS)**

Fundamental principles of chemistry. Concurrent registration in Chem 111L-112L-113L or 111H-112H-113L

required. High school algebra or Math 121 recommended. Each quarter is the prerequisite for following quarters.

**Chem 111L-112L-113L General Chemistry Laboratory I-II-III (1 each) (FWS)**

Laboratory techniques of general chemistry including qualitative and quantitative analysis. Must be taken concurrently with Chem 111-112-113. Honors laboratory program offered as 111H-112H for which instructor's approval is required.

**Chem 202 Scientific Glass Fabrication (2) (W)**

Techniques of construction of specialized glass apparatus. Prerequisite: Instructor's approval.

**Chem 231-232-233 Organic Chemistry I-II-III (3 each) (FWS)**

Fundamentals of organic chemistry: sequence intended for chemistry majors and recommended for pre-pharmacy majors. Prerequisite: Chem 113 or instructor's approval.

**Chem 234-235-236 Organic Chemistry Laboratory I-II-III (2 each) (FWS)**

Techniques of organic chemistry. Intended for chemistry majors. Prerequisite: Chem 231-232-233 or concurrent registration.

56 **Chem 237-238-239 General Organic Chemistry I-II-III (3 each) (FWS)**

Fundamentals of organic chemistry: sequence intended primarily for students in the bio-medical area. Prerequisite: Chem 113 or instructor's approval.

**Chem 237L-238L-239L General Organic Chemistry Laboratory I-II-III (1 each) (FWS)**

Techniques of organic chemistry: sequence intended primarily for students in the bio-medical area. Prerequisite: Chem 237-238-239 or concurrent registration.

**Chem 305(g) Chemical Literature (1) (S)**

Introduction to the chemical literature in journals, handbooks, abstracts, monographs, patents and other sources. Computer searches.

**Chem 314 Aquatic Chemistry (3) (S)**

The fundamentals of solution equilibria as applicable to natural water systems. Prerequisite: Chem 113 and instructor's approval.

**Chem 321 Quantitative Analysis (4—2 lecture, 2 laboratory) (Fs)**

The theoretical principles and laboratory techniques involved in modern quantitative analysis. Prerequisite: Chem 113.

**Chem 341-342-343 Physical Chemistry I-II-III (3 each) (FWS)**

A survey of applications of physics to chemical phenomena including thermodynamics, kinetics, electrochemistry and introductory quantum theory. Prerequisites: Chem 113, Math 232, Phys 202 or instructor's approval. Math 234 needed for Chem 343.

**Chem 345-346 Physical Chemistry Laboratory I (1 lecture, 1 laboratory), II (2 laboratory) (WS)**

Experimental physical chemistry. Prerequisite: Chem 321 and Chem 342 or concurrent registration.

**Chem 361(g) Introduction to Biochemistry (4) (S)**

Natural product chemistry and metabolism. A brief survey. Not open for graduate credit to chemistry majors. Prerequisites: Biol 111 and Chem 238 or 232.

**Chem 401-402-403 Applied Chemistry Laboratory I-II-III (2, 1, 1) (FWS)**

An integrated laboratory with emphasis on team projects, polymer chemistry and the practical applications of instrumentation. Most experiments will be of the type that might be encountered in an industrial setting. Prerequisites: Chem 236, 345. Corequisites: Chem 421, 422.

**Chem 410 Industrial Chemistry (3-4) (W)**

Consideration of the structure of chemical industry and the factors which determine modern chemical practice. Representative industrial chemical processes are examined in detail. Prerequisite or corequisite: Chem 233 or 239.

**Chem 421 Instrumental Analysis (3-2 lecture, 1 laboratory) (S)**

The theory, principles and laboratory techniques of electro-analytical chemistry. Prerequisite: Chem 342, 346 and Chem 236 or instructor's approval.

**Chem 422 Instrumental Analysis II (4—3 lecture, 1 laboratory) (W)**

The theory, principles and laboratory techniques of ultra-violet and infra-red spectrophotometry, nuclear magnetic resonance, atomic absorption and mass spectrometry, instrumental design and operation emphasized. Prerequisite: Chem 342.

**Chem 427(g) Topics in Analytical Chemistry (1-3) (S)**

Selected topics such as spectroscopy, electrochemical methods, chemical separations and interfacing instruments with computers. Prerequisites: Chem 236 and instructor's approval. May be repeated when topic is changed.

**Chem 432(g) Advanced Organic Chemistry (3) (S)**

Consideration of organic reactions on the basis of reaction mechanisms. Prerequisite: Chem 233 or 239.

**Chem 434 Advanced Organic Chemistry Laboratory (1-3) (Ws)**

Specialized laboratory techniques: more difficult organic synthesis. Prerequisite: Chem 236 or instructor's approval. May be repeated to a maximum of 3 credits.

**Chem 437(g) Topics in Organic Chemistry (1-3) (S)**

Selected topics such as biosynthesis of natural products, photochemistry, heterocyclic chemistry. Prerequisite: Chem 233 or 239 or instructor's approval. May be repeated when topic is changed.

**Chem 440 Secondary Science Teaching Methods (4) (Ws)**

Materials and methods appropriate for junior and senior high school classes and laboratories. Must be taken prior to student teaching. Prerequisite: Junior or senior standing in a science education program. Cross-listed in Biology, Chemistry and Physics.

**Chem 444 Advanced Physical Chemistry Laboratory (1-3) (Ws)**

Prerequisite: Chem 346 or instructor's approval. May be repeated to a maximum of 3 credits.

**Chem 447(g) Topics in Physical Chemistry (1-3) (S)**

Selected topics such as kinetics, statistical thermodynamics or quantum chemistry. Prerequisite: Chem 343 or instructor's approval. May be repeated when topic is changed.

**Chem 452 Inorganic Chemistry I (3) (F)**

Aspects of bond theory, periodicity, acid-base chemistry, reaction kinetics and energetics and chemistry of non-transition elements. Prerequisite: Chem 342.

**Chem 453 Inorganic Chemistry II (3) (W)**

Transition metal chemistry, valence bond, molecular orbital, crystal field, and ligand field theory, molecular symmetry. Bio-inorganic models. Prerequisite: Chem 452.

**Chem 455 Inorganic Chemistry Laboratory (1-3) (Fw)**

A synthesis and spectroscopic study of inorganic compounds. Techniques include: vacuum line synthesis, high temperature methods, inert gas techniques and organometallic synthesis. Prerequisites: Chem 452 or concurrent registration. May be repeated to a maximum of 3 credits.

**Chem 457(g) Topics in Inorganic Chemistry (1-3) (S)**

Selected topics: Coordination chemistry, bonding, acid-base and non-aqueous solvent theory, organometallic chemistry and inorganic biochemistry. Prerequisite: Instructor's approval. May be repeated when topic is changed.

**Chem 461-462-463(g) Biochemistry I-II-III (3 each) (FWS)**

A survey of the chemistry and metabolism of biological systems. Prerequisite: Chem 233 or Chem 239.

**Chem 464-465-466(g) Biochemistry Laboratory I-II-III (1 each) (FWS)**

Representative experiments in the isolation, quantitation and metabolism of naturally occurring substances. Prerequisite: Chem 461-462-463 or concurrent registration.

**Chem 467(g) Topics in Biochemistry (1-3) (S)**

Selected biochemical topics. Prerequisites: Chem 463 or instructor's approval. May be repeated when topic is changed.

**Chem 469 Student Internship (3-16) (FWS)**

Supervised work experience. For majors only. Prerequisites: Junior or senior standing and departmental approval.

**Chem 480(g) Seminar (1) (S)**

Prerequisite: Junior or senior standing or consent of instructor. May be repeated to a maximum of three credits.

**Chem 490 Undergraduate Research (1-5) (FWS)**

Research studies in all areas of chemistry. A research paper is required. Prerequisite: Instructor's approval. May be repeated to a maximum of 9 credits.

**Chem 491 Cooperative Education in Chemistry (8, 6 and 4 for 3 periods of 10-12 weeks each) (Fws)**

A planned and supervised full-time work experience in an industrial setting or government laboratory and which involves some alternation between work experience and academic training. May be repeated twice to a total of 18 credits. Prerequisites: Chem 233, 236 and consent of the department.

57

## Classics

Allan Hanna

*See also Latin below*

Two years of college Latin are offered when feasible. The second year will be scheduled as a regular class only if the prospective enrollment justifies it; otherwise it may be elected solely on a tutorial basis, by arrangement with the instructor.

Besides work in the Latin language, courses in related subjects—especially art, archeology, Greek and Latin literature in translation, ancient history, and classical philosophy—are available to interested students. Upper-class courses in Latin, and courses in Greek as well, may be taken by Moorhead State University students at Concordia College and at North Dakota State University (Cardinal Muench Seminary) through the Tri-College University.

## LATIN COURSES

*See also Classics above*

**Lat 101-102-103 Beginning Latin I-II-III (4 each) (FWS)**

Latin grammar and syntax, with readings adapted from original texts and with some practice in elementary Latin composition.

**Lat 201-202-203 Intermediate Latin I-II-III (4 each) (On demand)**

Intensive review of Latin grammar and syntax; representative readings in the literature of the late Republic and the Empire, especially in those authors

whose work exemplifies the characteristic forms and usage of the classical period: Cicero, Caesar, Vergil, Horace, Livy, and Ovid; occasional exercises in composition; some collateral reading in English on various aspects of Roman civilization. Prerequisite: Lat 101-102-103 or the equivalent.

## Computer Science and Information Systems Department

Curtis R. Bring, *Chair*; Abdei Fatah Bashir, Daniel L. Brekke, Omran A. Bukhres, Rhonda Ficek, John Gaffrey, Kemal Koymen, Benjamin M. Lin, Duncan Meier, Gerard Morris, Richard Walker

### COMPUTER SCIENCE CURRICULA

The Department of Computer Science and Information Systems (CSIS) offers programs of study in two areas: Computer Science (ComS), and Computer Information Systems (CIS). Programs of study in Computer Science are intended for students planning to work in the high technology computer industry, pursue graduate work in computer science, or teach computer science at the elementary, secondary or post-secondary level. Programs of study in Computer Information Systems are intended for students planning to work in applied areas that heavily utilize computers as application tools. A 2.5 GPA in CSIS courses is required for continuing status as a CSIS major.

### Computer Science and Information Systems Curricula

#### Major in Computer Science B.S. Degree (73 credits)

*Required courses (51 credits)*

ComS 201 Introduction to Computers and Programming I (4)  
 ComS 202 Introduction to Computers and Programming II (4)  
 ComS 204 Assembly-Language Programming (4)  
 ComS 305 Logical Design of Computers (4)  
 ComS 305L Logical Design Laboratory (1)  
 ComS 315 Data Structures (4)  
 ComS 380 Introduction to System Software (4)  
 ComS 410 Theory of Language Translations (4)  
 ComS 415 Operating Systems I (4)  
 ComS 416 Operating Systems I Lab (1)  
 ComS 420 Design/Implementation of High Level Languages (4)  
 ComS 425 Computer Architecture (4)  
 CIS 429 Introduction to Software Engineering (4)  
 CIS 461 Database Design and Implementation (4)  
 ComS 485 Senior Seminar (1)

*Elective courses selected from the following (22 credits):*

ComS 250 Numerical Methods (4)  
 ComS/CIS 260 Topics in Programming Languages (1-4)(repeatable up to 4 credits)  
 ComS/CIS 280 Statistical Analysis of Data (2)  
 ComS/CIS 285 Computer Simulation (4)  
 ComS/CIS 300 Ethical and Societal Concerns (3)  
 ComS 325 Microprocessors (4)  
 CIS 346 Structured System Analysis and Design (4)  
 ComS 370 Advanced Data Structures (4)  
 ComS 406 Computer Networks I (4)  
 ComS 411 Compiler Design Theory I (4)  
 ComS 450 Numerical Analysis I (4)  
 ComS 451 Numerical Analysis II (4)  
 ComS 469 Internship (4 credits maximum)  
 ComS 470 Computer Graphics (4)  
 ComS 475 Introduction to Artificial Intelligence (4)  
 ComS 480 Seminar (4 credits maximum)  
 ComS 490 Independent Study (4 credits maximum)

*Requirements in Related Fields (53-56 credits)*

Math 231-232-233 Calculus I-II-III (12)  
 Math 265 Discrete Structures (4)  
 Math 327 Introduction to Linear Algebra (4)  
 Math 375 Intermediate Probability and Statistics I (4)  
 One year of 200 level Physics (with labs) (15)  
 An additional three courses in science and/or courses with a strong emphasis on quantitative methods (9-12)  
 Engl 287 Technical Report Writing (4)  
 Spch 100 Beginning Speech Communication (4) or  
 Spch 210 Effective Business Speaking (3)

*Recommended Liberal Arts Courses and Electives*

Acct 229 Principles of Accounting I (4)  
 Acct 230 Principles of Accounting II (4)  
 Econ 202 Principles of Economics I (4)  
 Econ 204 Principles of Economics II (4)  
 Psy 113 General Psychology (4)  
 Psy 119 Social Behavior (4) or Soc 110 Introduction to Sociology (4)  
 or Edu 213 Interpersonal Communication (3)  
 Phil 240 Symbolic Logic (4)  
 IndS 270 Electrical Circuits I (4)  
 IndS 271 Electrical Circuits II (4)  
 IndS 333 Introduction to Robotics (4)  
 Math 331 Differential Equations (4)

#### Major in Computer Science B.S. Degree (Teaching) (73 credits)\*

*Required courses (51 credits)*

ComS 201 intro to Computers & Programming I (4)  
 ComS 202 Intro to Computers & Programming II (4)  
 ComS 204 Assembly-Language Programming (4)  
 ComS 305 Logical Design of Computers (4)  
 ComS 305L Logical Design Laboratory (1)  
 ComS 315 Data Structures (4)  
 ComS 380 Introduction to System Software (4)

ComS 410 Theory of Language Translations (4)  
 ComS 415 Operating Systems I (4)  
 ComS 416 Operating Systems I Lab (1)  
 ComS 420 Design/Implementation of High Level Languages (4)  
 CIS 429 Introduction to Software Engineering (4)  
 ComS 430 Teaching Computer Science (4)  
 CIS 461 Database Design and Implementation (4)  
 ComS 485 Senior Seminar (1)

*Elective courses selected from the following (22 credits):*

ComS 130 BASIC Program with Microcomputers (4)  
 ComS 250 Numerical Methods (4)  
 CIS 255 COBOL Programming (4)  
 CIS 256 Advanced COBOL and File Organization (4)  
 ComS/CIS 260 Topics in Programming Languages (1-4) (6 credits max.)  
 ComS/CIS 280 Statistical Analysis of Data (2)  
 ComS/CIS 285 Computer Simulation (4)  
 ComS 300 Ethical and Societal Concerns (3)  
 ComS 325 Microprocessors (4)  
 CIS 346 Structured System Analysis and Design (4)  
 ComS 370 Advanced Data Structures (4)  
 ComS 406 Computer Networks I (4)  
 ComS 411 Compiler Design Theory I (4)  
 ComS 425 Computer Architecture (4)  
 ComS 450 Numerical Analysis I (4)  
 ComS 451 Numerical Analysis II (4)  
 ComS 469 Internship (4 credits maximum)  
 ComS 470 Computer Graphics (4)  
 ComS 475 Introduction to Artificial Intelligence (4)  
 ComS 480 Seminar (4 credits maximum)  
 ComS 490 Independent Study (4 credits maximum)

*Requirements in Related Fields (53-56 credits)*

Math 231-232-233 Calculus I-II-III (12)  
 Math 265 Discrete Structures (4)  
 Math 327 Introduction to Linear Algebra (4)  
 Math 375 Intermediate Probability and Statistics I (4)  
 One year of 200 level Physics w/labs (15)  
 An additional three courses in science and/or courses with a strong emphasis on quantitative methods (9-12)  
 Engl 287 Technical Report Writing (4)  
 Spch 100 Beginning Speech Communication (4) or  
 Spch 210 Effective Business Speaking (3)

*Recommended Liberal Arts Courses and Electives*

Acct 229 Principles of Accounting I (4)  
 Acct 230 Principles of Accounting II (4)  
 Econ 202 Principles of Economics I (4)  
 Econ 204 Principles of Economics II (4)  
 Psy 113 General Psychology (4)  
 Psy 119 Social Behavior (4) or Soc 110 Introduction to Sociology (4) or Ed 213 Interpersonal Communication (3)  
 Phil 240 Symbolic Logic (4)  
 IndS 270 Electrical Circuits I (4)  
 IndS 271 Electrical Circuits II (4)  
 IndS 333 Introduction to Robotics (4)  
 Math 331 Differential Equations (4)

\* **Note:** Because certification requirements for teachers vary from state to state, students who plan to complete this program should check local requirements where they plan to teach. Minnesota does not currently certify teachers in the area of Computer Science.

**Major in Computer Information Systems B.S. Degree (65 credits)**

*Required courses (53 credits)*

CIS 145 Business Data Processing (4)  
 ComS 201 Introduction to Computers and Programming I (4)  
 ComS 202 Introduction to Computers and Programming II (4)  
 ComS 204 Assembly-Language Programming (4)  
 CIS 255 COBOL Programming (4)  
 CIS 256 Advanced COBOL and File Organization (4)  
 CIS 346 Structured System Analysis and Design (4)  
 CIS 375 Data Communications (4)  
 CIS 427 Design and Implementation of Information Systems (4)  
 CIS 429 Introduction to Software Engineering (4)  
 CIS 461 Database Design and Implementation (4)  
 CIS 465 Information Center Functions (4)  
 CIS 482 System Analysis and Design Field Project (4)  
 CIS 485 Senior Seminar (1)

*Elective courses selected from the following (12 credits):*

CIS 170 RPG Programming (2)  
 CIS 245 Advanced Microcomputer Applications and Concepts (4)  
 ComS/CIS 260 Topics in Programming Languages (1-4)  
 ComS/CIS 280 Statistical Analysis of Data (2)  
 ComS/CIS 285 Computer Simulation Models (4)  
 ComS 300 Ethical and Societal Concerns (3)  
 ComS 305 Logical Design of Computers (4)  
 ComS 305L Logical Design Laboratory (1)  
 ComS 315 Data Structures (4)  
 ComS 380 Introduction to System Software (4)  
 CIS 469 Internship (4 credits maximum)  
 CIS 480 Seminar (4 credits maximum)  
 CIS 490 Independent Study (4 credits maximum)

*Requirements in Related Fields (47 credits):*

Acct 229 Principles of Accounting I (4)  
 Acct 230 Principles of Accounting II (4)  
 Engl 287 Technical Report Writing (4)  
 Acct 310 Principles of Accounting III (4)  
 Finc 340 Corporate Finance I (4)  
 Mgmt 360 Principles of Management (4)  
 Mgmt 424 Management Science I (4)  
 Mgmt 451 Organizational Behavior (4)  
 Spch 210 Effective Business Speaking (3)  
 Math 273 Mathematics for Business and Social Sciences (4)  
 Math 274 Introduction to Statistics I (4)  
 Math 275 Introduction to Statistics II (4)

*Recommended Liberal Arts Courses and Electives:*  
Econ 202 Principles of Economics I (4)  
Econ 204 Principles of Economics II (4)  
Psy 113 General Psychology (4)  
Psy 119 Social Behavior (4) or Soc 110 Intro to  
Sociology (4) or Ed 413 Interpersonal Communication  
(3)

**Minor in Computer Science (36 credits)**

ComS 201 Introduction to Computers and  
Programming I (4)  
ComS 202 Introduction to Computers and  
Programming II (4)  
ComS 204 Assembly-Language Programming (4)  
Elective courses from the list of required or elective  
courses for the Computer Science Major (24)

**Minor in Computer Science (Teaching) (36  
credits)**

ComS 201 Introduction to Computers and  
Programming I (4)  
ComS 202 Introduction to Computers and  
Programming II (4)  
ComS 204 Assembly-Language Programming (4)  
ComS 430 Teaching Computer Science (4)  
Elective courses from the list of required or elective  
courses for the Computer Science Major (Teaching)  
(20)

**Minor in Computer Information Systems (36  
credits)**

CIS 145 Business Data Processing (4)  
CIS 170 RPG Programming (2)  
ComS 201 Introduction to Computers and  
Programming I (4)  
ComS 202 Introduction to Computers and  
Programming II (4)  
CIS 255 COBOL Programming (4)  
CIS 256 Advanced COBOL and File Organization (4)  
CIS 346 Structured System Analysis and Design (4)  
Elective courses from the list of required or elective  
courses from the Computer Information Systems  
major (10)

*Requirements in Related Fields (20 credits)*

Acct 229 Principles of Accounting I (4)  
Acct 230 Principles of Accounting II (4)  
Engl 287 Technical Report Writing (4)  
Finc 340 Corporate Finance I (4)  
Mgmt 360 Principles of Management (4)

**COMPUTER SCIENCE/COMPUTER INFORMATION  
SYSTEMS COURSES**

**ComS 110 Introduction to Microcomputers (2)  
(Fws)**

Introduction and tutoring in basic computer skills.  
Designed for students with little or no background in  
computer science. Overview of what computers can  
do and how to use them. Hands-on experience with  
microcomputers. Discussion of computer terminology.  
No prerequisite. Not open to those who have  
completed CIS 145.

**ComS 120 Computers and Society (2) (Ws)**

Introduction to computers and their impact on  
society. Discussion of computer applications, trends,  
promises and concerns. Prerequisite: ComS 110 or  
equivalent. Not open to those who have completed  
ComS 300.

**ComS 130 BASIC Programming With  
Microcomputers (4) (Fws)**

Introduction to the BASIC programming language  
including problem solving and programming.  
Laboratory work required. No prerequisite.

**ComS 140 FORTRAN Programming (4) (Fs)**

Introduction to the FORTRAN programming language  
including problem solving and programming. No  
prerequisite.

**CIS 145 Business Data Processing (4) (Fws)**

Introduction to basic concepts of digital computers  
and programming as related to business and  
industry. No prerequisite.

**CIS 170 RPG Programming (2) (F)**

Introduction to the RPG II or III programming  
language including problem solving and  
programming. Prerequisite: CIS 255 or consent of  
instructor.

**ComS 201 Introduction to Computers and  
Programming I (4) (Fw)**

Introduction to problem solving and programming in  
a high-level language. A one-hour per week  
recitation/discussion session is required. Corequisite  
Math 273 or Math 231.

**ComS 202 Introduction to Computers and  
Programming II (4) (Ws)**

Continuation of ComS 201 with emphasis on data  
representations and organizations, system concepts  
and structured programming. A one-hour per week  
recitation/discussion session is required. Prerequisite:  
ComS 201.

**ComS 204 Assembly-Language Programming (4)  
(Fs)**

Introduction to an assembly language, machine  
architecture and assembly-language programming. A  
one-hour per week recitation/discussion session is  
required. Prerequisite: ComS 202.

**CIS 245 Advanced Microcomputer Applications  
and Concepts (4) (Fs)**

An in-depth study of microcomputer hardware and  
software uses and concepts focusing on popular  
operating systems and application software.  
Prerequisite: CIS 145 or consent of instructor.

**ComS 250 Numerical Methods (4) (F)**

A computer programming approach to numerical problems including error analysis, linear systems, curve fitting, polynomial approximations and numerical integrations. Only 8 credits of ComS 250, ComS 450 and ComS 451 will count in the ComS major. Prerequisites: ComS 202 and Math 232.

**CIS 255 COBOL Programming (4) (Fw)**

Introduction to the COBOL programming language including problem solving and programming. Prerequisite: ComS 201.

**CIS 256 Advanced COBOL and File Organization (4) (Ws)**

Advanced COBOL features and file organizations and processing. File organizations include sequential, indexed, relative and multi-key file organizations. Prerequisite: CIS 255

**ComS/CIS 260 Topics in Programming Languages (1-4) (Fws)**

A study of programming languages topics not offered regularly in other programming courses. A maximum of 4 credits (6 for teaching major) applicable toward the major or minor. Prerequisite: Consent of instructor and knowledge of a programming language.

**ComS/CIS 280 Statistical Analysis of Data (2) (W)**

A study of computer-based statistical packages, such as SPSS, SAS, MINITAB and BMD with emphasis on one such package. Prerequisite: Math 275 or Math 376.

**ComS/CIS 285 Computer Simulation Models (4) (S)**

An introduction to computer simulation languages and their application to the development of real-world simulation models. Prerequisite: At least one ComS programming course and one statistics course.

**ComS 300 Ethical and Societal Concerns of Computer Scientists (3) (S)**

Ethical questions and Societal concerns related to the widespread use of computers and the resulting responsibilities of computer scientists. Prerequisite: ComS 202, Engl 287, Spch 100 or Spch 210.

**ComS 305 Logical Design of Computers (4) (Fw)**

An introduction to the logical design of computers including Boolean Algebra, logical devices, combinational and sequential circuit analysis and synthesis. Prerequisite: ComS 204 and Math 265.

**ComS 305L Logical Design Laboratory (1) (Fw)**

A three-hour per week laboratory devoted to the implementation and testing in computer logic circuits. Corequisite: ComS 305.

**ComS 315 Data Structures (4) (Fs)**

Discussion of information representations and processing techniques for lists, strings, trees, graphs, records and files. Prerequisite: ComS 202.

**ComS 325 Microprocessors (4) (W)**

Introduction to microprocessing systems including concepts of data bus, clock cycle, direct access, I/O interface, interrupts and instruction set. A three-hour per week laboratory session is required. Prerequisite: ComS 305.

**CIS 346 Structured System Analysis and Design (4) (Fs)**

The analysis and design of computer information systems to include a systems development life cycle and the accompanying analysis/design tools. Prerequisite: CIS 256 or ComS 202, Engl 287, Spch 210.

**ComS 370 Advanced Data Structures (4) (S)**

A study of file organization, file indexing, internal/external search, sort and merge algorithms. Prerequisite: ComS 315.

**CIS 375 Data Communications (4) (W)**

Data communication for centralized, decentralized and distributed information systems. Prerequisite: ComS 204 and CIS 346. Not open to students who have completed ComS 406.

**ComS 380 Introduction to System Software (4) (Fs)**

Introductory concepts in systems programming including assembly, relocation, linking and loading, translation and sequential operating systems. Project required. Prerequisite: ComS 315, Engl 287, Spch 100 or Spch 210.

**ComS 406(g) Computer Networks I (4) (S)**

A study of basic communications theory, components of data communications, network protocols, communication carrier facilities, error detection techniques and system planning considerations. Prerequisite: ComS 305. Not open to students who have completed CIS 375.

**ComS 410 Theory of Language Translation (4) (Ws)**

A study of finite state machines, formal languages, grammars, lexical analysis and techniques relevant to the theory of language translation. Prerequisite: ComS 315.

**ComS 411(g) Compiler Design Theory I (4) (F)**

A study of several top-down and bottom-up parsers, semantics, intermediate code generation and error detection. Project required. Prerequisite: ComS 410 or ComS 502.

**ComS 415(g) Operating Systems I (4) (Fw)**

A study of operating systems as a resource manager with emphasis on memory, process, processor and file management. Prerequisite: ComS 380 and CIS 429.

**ComS 416(g) Operating Systems I Lab (1) (Fws)**

Design and implementation of a simulated batch multiprogrammed operating system. Project required. Prerequisite: ComS 415.



**ComS 420(g) Design and Implementation of High Level Languages (4) (Fs)**

An examination of underlying concepts in high level programming languages and techniques for their implementation in a selected group of such languages along with a discussion of the interrelationship between programming and programming languages. Prerequisite: ComS 315.

**ComS 425(g) Computer Architecture (4) (Fs)**

Basic principles of processor organization, machine instructions, addressing modes, memory management and input/output operations. Prerequisite: ComS 305.

**CIS 427(g) Design and Implementation of Information Systems (4) (Fw)**

Study of the physical design of a computer information system. The course builds on the prerequisite, which uses a case study to develop a general design for a system. This course will continue into the physical design of the new system using the same case study. Prerequisite: CIS 346 and CIS 375.

**CIS 429(g) Introduction to Software Engineering (4) (Ws)**

Basic concepts, techniques and tools in structured software design and development. A discussion of software security, generality, mobility, reliability and feasibility. Prerequisite: CIS 346 or ComS 315. Not open to students who have taken or plan to take ComS 540.

**ComS 430(g) Teaching Computer Science (4) (W)**

For students planning to teach computer science. Issues, methods and materials typically encountered in the instruction of elementary and secondary school computer science. Prerequisite: Consent of instructor.

**ComS 450(g) Numerical Analysis I (4) (F)**

Numerical solutions to equations, finite differences, interpolation formulas, numerical calculus. Only 8 credits of ComS 250, ComS 450 and ComS 451 will count in the ComS major. Prerequisite: ComS 250 and Math 331 or consent of instructor.

**ComS 451(g) Numerical Analysis II (4) (W)**

Numerical methods related to linear algebra and differential equations. Only 8 credits of ComS 250, ComS 450 and ComS 451 will count in the ComS major. Prerequisite: ComS 450 and Math 327.

**CIS 461(g) Database Design and Implementation (4) (Fw)**

In-depth study of data modeling and systems development in a database environment. Investigation and application of database concepts including database administration, technology and management. Prerequisite: CIS 256 or ComS 315. Not open for credit to those who have taken or plan to take ComS 521.

**CIS 465(g) Information Center Functions (4) (S)**

Information center methods for building systems through collaboration with users and analysts. Fourth-generation systems and the changing role of the programmer/analyst. Prototyping versus traditional life-cycle development. Prerequisite: CIS 461.

**ComS/CIS 469 Internship (4-16) (Fws)**

Opportunity for students to supplement classroom learning with field work with a computer-using agency. A maximum of 4 credits applicable toward the major. Prerequisite: ComS 315 or CIS 427, junior standing and prior consent of department.

**ComS 470(g) Computer Graphics (4) (W)**

Introduction to graphic display devices, related mathematical theory, software for display files, interactive graphics and three-dimensional graphics. Prerequisite: ComS 315 and Math 327.

**ComS 475(g) Introduction to Artificial Intelligence (4) (F)**

Introduction to artificial intelligence including theorem proving, heuristic searches, problem solving, computer analysis of scenes, robotics, natural language understanding and knowledge base systems. Prerequisite: ComS 315.

**ComS/CIS 480 Seminar in Computer Science/CIS (1-3) (Fws)**

Offers advanced students an opportunity to study various topics of particular timeliness. Repeatable. A maximum of 4 credits applicable toward the major. Prerequisite: Junior standing and consent of instructor.

**CIS 482(g) System Analysis and Design Field Project (4) (Fs)**

Students are assigned to a system development project. The project involves part, but preferably all, of the development cycle. Students work in teams to acquire practical experience in such projects, including the behavioral aspects. Prerequisite: All core CIS courses.

**ComS/CIS 485 Senior Seminar (1) (Fws)**

Library and independent study of advanced computing topics followed by oral and written presentations. Prerequisite: Completion or concurrent registrations in all courses needed for the major.

**ComS/CIS 490(g) Special Problems in Computer Science/CIS (1-4) (Fws)**

Independent study of advanced topics under guidance of department faculty. May be repeated to a maximum of 4 credits. Prerequisite: Junior standing and consent of instructor.

**ComS 500 Fundamental Structures (3) (F)**

A study of fundamental data structures, file organization and handling, internal/external sorting, searching and merging techniques, and an in-depth study of recursive programming. Prerequisite: Graduate standing.

**ComS 502 Automata and Formal Languages (3)***(F)*

A study of finite state machines, syntax and semantics of formal languages and the application of formal languages in compiler design theory.

Prerequisite: Graduate standing.

**ComS 504 Algorithm Analysis (3) (S)**

A continuation of ComS 500 including an analysis of several advanced search and sort algorithms, efficiency comparisons of algorithms, backtracking, lower-bound theory, NP-problems and approximation algorithms for some NP-problems. Prerequisite: ComS 500.

**ComS 506 Computer Networks II (4) (W)**

A study of network topology, routing algorithms, local network structure, virtual terminal and file transfer.

Prerequisite: ComS 406, ComS 415, and ComS 425.

**ComS 511 Compiler Design Theory II (3) (S)**

A continuation of ComS 411 including run-time memory management, code generation and code optimization. Prerequisite: ComS 411 and ComS 502.

**ComS 515 Operating Systems II (3) (S)**

Continuation of ComS 415 with emphasis on concurrent programming, critical section and deadlock problems and performance evaluation. Project required. Prerequisite: ComS 415 and ComS 500.

**ComS 521 Data Base Systems I (3) (F)**

Fundamental concepts of the three types of data bases: hierarchical, network and relational.

Discussion of data base programming languages with major emphasis given to one such language. Prerequisite: ComS 500.

**ComS 522 Data Base Systems II (3) (W)**

A study of techniques for designing efficient data bases. Prerequisite: ComS 521.

**ComS 525 Analysis of Computer Systems (3) (F)**

Comparison of various computer architectures based on instruction-set processors, addressing techniques, I/O structures, memory organization and protection schemes. Prerequisite: ComS 425.

**ComS 530 Topics in Computer Education (3) (S)**

Issues and trends in computer science education including course-author languages, hardware and software developments. Prerequisite: ComS 430 or equivalent.

**ComS 540 Software Engineering I (3) (W)**

A study of the design and development of software systems including real-time system design, management and implementation along with system security and privacy. Prerequisite: ComS 500.

**ComS 541 Software Engineering II (3) (S)**

A continuation of ComS 540 including systems maintenance, reliability, efficiency, verification/validation and legal aspects of software development. Prerequisite: ComS 540.

**ComS 580 Seminar in Computer Science (1-3)***(Fws)*

Discussion of current topics not included in other computer science courses. May be repeated for a maximum of 3 credits. Prerequisite: Graduate standing and consent of instructor.

**ComS 590 Advanced Topics in Computer Science (1-3) (Fws)**

Opportunity for independent study of advanced topics not covered in depth in other computer science courses. May be repeated for a maximum of 4 credits. Prerequisite: Graduate standing and consent of instructor.

**ComS 597 Individual Study (3) (Fws)**

Plan B project in Computer Science. Prerequisite: Consent of graduate advisor.

**ComS 599 Thesis in Computer Science (6) (Fws)**

Plan A thesis in Computer Science. Prerequisite: Consent of graduate advisor.

63

**Criminal Justice**

*See Sociology-Anthropology for Curricula.*

**CRIMINAL JUSTICE COURSES****CJ 200 Introduction to Criminal Justice (4) (Fws)**

Overview of the criminal justice field emphasizing history and description of the contemporary United States system.

**CJ 201 Criminal Law (4) (Fws)**

Substantive criminal law, development and meaning of principles of criminal law, current issues.

**CJ 309 Law and Society (3-4) (Fs)**

Relationships of law and society; social forces in law making, dynamics of law administration, social, cultural and behavioral effects of law. Prerequisite: Soc 110 or CJ 200 or consent of instructor.

**CJ 400 Seminar in Criminal Justice (3-4) (Fws)**

In-depth analysis of one area of the criminal justice system. Prerequisite: Consent of instructor.

**CJ 430 Minnesota Criminal Law and Procedure (4) (W)**

The Minnesota criminal statutes, and the Minnesota rules of criminal procedure are examined.

Prerequisite: CJ 201 or Pol 231 or consent of instructor.

**CJ 461 Readings in Criminal Justice (1-4) (Fws)**

Selected readings in Criminal Justice under the close supervision of members of the department.

Prerequisite: Upper-division status and permission of the instructor.

**CJ 469 Internship in Criminal Justice (3-16) (Fws)**

## Economics Department

Douglas Greenley, *Chair*; John Cooper, Vernon Dobis, Oscar Flores, Daniel Knighton, William McGhee, Eugene Philipps, Li-teh Sun

### ECONOMICS CURRICULA

#### Major in Economics B.A. Degree

*Major Requirements in Economics (50 credits)*

Econ 202-204-206 Principles of Economics I-II-III (12)

Econ 290 Introduction to Economic Literature and Methodology (3)

Econ 302 Intermediate Microeconomic Theory (4)

Econ 304 Intermediate Macroeconomic Theory (4)

Econ 317 History of Economic Thought (4)

Econ 370 Quantitative Economic Analysis (4)

Additional electives in Economics (19)

*Requirements in Related Fields (18-20 credits)*

Math 273 Linear Algebra/Applied Calculus I (4)

Math 274 Introduction to Statistics I (4)

Acct 229 Principles of Accounting I, Financial (4)

At least two courses from the following:

Acct 230 Principles of Accounting II, Financial (4)

Acct 310 Managerial Accounting (4)

ComS 201 Introduction to Computers and Programming I (4)

ComS 202 Introduction to Computers and Programming II (4)

ComS 280 Statistical Analysis of Data (2)

Students planning to do graduate work in Economics are encouraged to take additional mathematics courses, preferably Math 231-234, Calculus I-IV, and to complete at least one full year of a modern foreign language.

#### Major in Economics, Social Studies (Teaching)

Only the approved Social Studies major can be accepted for secondary teaching certification. See Social Studies.

#### Minor in Economics (31 credits)

Econ 202-204-206 Principles of Economics I-II-III (12)

Econ 290 Introduction to Economic Literature and Methodology (3)

Any two of the following three:

Econ 302 Intermediate Microeconomic Theory (4)

Econ 304 Intermediate Macroeconomic Theory (4)

Econ 317 History of Economic Thought (4)

An additional eight (8) credits of approved electives in economics.

### ECONOMICS COURSES

#### Econ 100 The American Economy (4) (fws)

A one-quarter course in principles of economics for non-business and non-economics majors with special emphasis on the American economy.

#### Econ 202 Principles of Economics I: Micro (4) (Fws)

An introductory study of microeconomics. Emphasis on the price system, resource allocation and income distribution.

#### Econ 204 Principles of Economics I: Macro (4) (fws)

An introductory study of macroeconomics. Emphasis on national income, fiscal and monetary theory and policy, unemployment and inflation. Prerequisite: Econ 202.

#### Econ 206 Principles of Economics III: International (4) (fws)

An introductory study of regional and international economics, economic growth, developing countries and comparative economic systems. Prerequisite: Econ 204.

#### Econ 290 Introduction to Economic Literature and Methodology (3) (FS)

The organization, presentation and interpretation of economic findings; library resources, methodological problems and paper writing are examined. Prerequisite: Econ 206.

#### Econ 302 Intermediate Microeconomic Theory (4) (W)

Theories of consumer and producer behavior under various institutional regimes; theory of production and distribution; general equilibrium and welfare criteria. Prerequisite: Econ 206.

#### Econ 304 Intermediate Macroeconomic Theory (4) (FS)

An examination of national income accounting, income determination, employment, growth theory and economic policy. Prerequisite: Econ 206.

#### Econ 310 Topics in Economics (1-4)

Topics of current interest not covered elsewhere in curriculum. Prerequisite: Econ 202 or instructor's consent. May be repeated for credit.

#### Econ 315 Government and Business (4) (FS)

A survey course which includes governmental enforcement of competition, regulation of public utilities, and public enterprise. (Same as Management 315) Prerequisite: Econ 206.

#### Econ 317 History of Economic Thought (4) (FS)

The origins and development of economic ideas from ancient times to the present are examined. Prerequisite: Econ 206 or equivalent.

#### Econ 320 Money and Banking (4) (fws)

Roles of money, banking and the financial market place; monetary policy; relationship of monetary variables to general economic policy. (Same as Finance 320) Prerequisite: Econ 206.

#### Econ 330 Economic Development (4) (S)

Development theories and their relevance to problems of international income inequalities and growth. Prerequisite: Econ 206.

#### Econ 340 Comparative Economic Systems (4) (W)

Alternative solutions to the economic problem as reflected in capitalism, socialism and communism are examined in contemporary contexts. Prerequisite: Econ 206.

**Econ 350 Public Finance (4) (F)**

Study of taxes and expenditures of federal, state, and local governments and their effects upon economic activity; fiscal policy and the national debt. (Same as Finance 350) Prerequisite: Econ 206.

**Econ 370 Quantitative Economic Analysis (4) (S)**

Study of statistical and mathematical procedures employed in economic analysis. Prerequisites: Math 274 and Econ 206.

**Econ 380 Economic and Social Security (4)**

Investigation of institutional arrangements and theoretical framework involved in economic transfer mechanisms and poverty programs. (Same as Social Work 380). Prerequisite: Econ 100 or 202.

**Econ 411(g) Economic History of the United States (4)**

Survey of the economic history of the United States from the colonial period to the present. Prerequisite: Econ 206

**Econ 415(g) Industrial Organization and Public Policy (4)**

Market structure, market conduct, and economic performance. Public policy regarding the attainment of workable competition in industry. (Same as Management 415). Prerequisite: Econ 315.

**Econ 416(g) Labor Economics (4) (W)**

Wage and employment theory, labor unions and other institutions associated with collective bargaining, and social legislation. (Same as Management 416). Prerequisite: Econ 206.

**Econ 425(g) International Trade and Finance (4)(FS)**

Theories and institutions of trade and finance are examined in traditional and contemporary contexts. (Same as Finance 425). Prerequisite: 304 or 320.

**Econ 430(g) Managerial Economics (4) (W)**

Integration of quantitative methods and economic theory for managerial decision-making. (Same as Management 430). Prerequisite: Econ 206 and Management 360.

**Econ 450(g) Individual Study in Economics (1-4) (FWS)**

An individual inquiry into economic problems not dealt with in the regular curriculum. Prerequisite: Econ 206 and consent of instructor. May be repeated for credit.

**Econ 469 Internship (1-16) (FWS)**

Supervised economic field work through placement in governmental, volunteer or commercial agencies. Prerequisite: Junior or Senior standing and consent of instructor and chairperson.

**Econ 499(g) Economics Seminar (3-4)**

An intensive investigation of some aspect of economics. Subject matter and prerequisites depend upon the interests of the instructor.

**Econ 598 Research in Economics (3)**

Individual graduate-level research of an economic topic of mutual interest to student and instructor. Prerequisite: Consent of instructor and MBA Program Director.

**Teacher Education Departments****Elementary and Early Childhood Education Department**

Sandra Gordon, *Chair*, Leonard Bergquist, *Director of Clinical and Field Experiences*; Beth Anderson, Leslie Crawford, Joseph DiCola, Virginia Gassner, Charlotte Iiams, Roberta Shreve, Cheryl Sunflower, Doris Walker-Dalhouse, Mary Worner

**Secondary Education and Foundations Department**

Richard Bowman, *Chair*; Howard Freeberg, *Director of Student Teaching Abroad*; Joseph Thorman, *Director of Student Teaching in Texas*; Beth Anderson, Lawrence Anderson, Barbara Boseker, Arnold Cooper, Jack Neufeld, Paul Shore

**AREAS OF STUDY: Early Childhood Education, Elementary Education, Special Education, Secondary Education, Graduate Education which includes Elementary Education, Special Education, Reading, Counselor Education, and Educational Administration in conjunction with Tri-College University, and Counseling and Human Development.**

65

The Education Departments offer a variety of programs qualifying students for teaching licenses or supplementing curricula from other departments and programs without meeting license requirements.

Students seeking to become licensed teachers must earn at least a bachelor's degree with one teaching major and complete all teacher education requirements listed below. Majors in early childhood education, elementary education and special education are offered by the Education Departments. Undergraduate majors in other teaching fields, including secondary school subjects, are listed under other departments.

Descriptions of graduate programs and courses may be requested from the Office of Graduate Studies.

**Teacher Education Requirements**

To be eligible for graduation and/or licensure with any teaching major, the candidate shall fulfill all of the following requirements: (A) teacher education admission and retention in good standing; (B) completion of a professional education sequence of courses appropriate to the level of teacher preparation; (C) fulfillment of an approved human

relations component; (D) complete PPST prior to enrolling in 300 & 400 level courses; (E) one or more courses in health education, including instruction in the effects of narcotics and alcohol (satisfied by the MSU course Hlth 110); and (F) student teaching.

### **Selective Admission and Retention in Teacher Education (SARTE)**

Formal application for admission to teacher education is made when you take your first education course, usually Education 200, Career Explorations in Education.

To be admitted you must complete the following: Ed 200 or SpEd 200, Ed 213, Ed 214, and SpEd 220 with a grade of C or better in each and a minimum of a 2.5 Grade Point Average (GPA) for the four courses; minimum of 2.25 GPA in 30 credits of the liberal arts; an overall GPA of 2.5 or better; completion of the Pre-Professional Skills Test (PPST); completion of a writing sample; turn in a completed application to the SARTE office.

Retention in teacher education requires a cumulative GPA of 2.5 or better for all MSU courses. If your GPA is between 2.25 and 2.5, you may be admitted or retained on probation through an appeal process to the Teacher Education Admission and Retention Committee (TEARC).

Admission or dismissal must be approved by TEARC. This may require a screening interview, proficiency exams, endorsement by an advisor or major department or recommendation from personnel who supervise student teaching and the practicum experience.

Retention in elementary teacher education requires a cumulative GPA of 2.5 for the Professional Fourth Year (PFY) program. Therefore, TEARC may refuse admission to a student whose GPA is below 2.5 or who does not demonstrate consistent academic improvement.

### **Dismissal from Teacher Education**

A faculty member, supervising teacher, or administrator of a school to which a student is assigned may request TEARC to review the fitness of any student enrolled in a teacher education curriculum.

### **Professional Education Sequence**

Any curriculum leading to graduation and/or licensure with a teaching major shall include courses in the professional preparation of teachers designated by the MSU Teacher Education Departments to comply with requirements of the Minnesota State Board of Teaching.

Such requirements for teaching in the public elementary schools are included in the curriculum for the elementary education major.

Professional education courses for all secondary teaching curricula are:

Ed 200 Career Explorations in Education (3)  
Ed 213 Interpersonal Communications (3)  
Ed 214 Human Growth and Development (3)  
Ed 305 Educational Psychology (3)  
Ed 307 Measurement and Evaluation (3)  
Ed 390 Foundations of Education (3)  
SpEd 220 Education of the Exceptional Child (3)

Substitutions for these courses must be approved by the Chair of Secondary Education and Foundations in a written memorandum filed with the Registrar.

### **Human Relations Component**

All applicants for teaching licenses in Minnesota are required by Minnesota regulation EDU 521 to have completed a training program to develop competency in human relations.

A previously certified teacher must attain 6 quarter credits in human relations, including three credits at the cognitive level and three credits at the affective level. Courses must be approved by the Human Relations Committee at Moorhead State University subject to approval by the Minnesota State Department of Education.

The non-licensed teaching candidate has several options to satisfy the human relations requirement. A brochure detailing the various MSU programs is available from faculty advisors or from the Human Relations Office in Lommen Hall.

Forms to be used for certifying completion of the human relations component are also available at the Human Relations Office.

### **Student Teaching**

Student teaching should be completed during the 9th, 10th or 11th quarter in order to provide time for placement interviews during the final quarter.

Students are requested to apply for admission to student teaching at least two full quarters in advance of their assignment. Application forms for admission to student teaching are available from the Field Experience Office, Lommen Hall.

Requirements for admission to student teaching include: (A) a GPA of 2.5 or higher in all credits earned at Moorhead State University; (B) a GPA of 2.5 or higher in professional education courses; (C) the recommendation of the student's faculty advisor; (D) a GPA of 2.5 or higher in the major; (E) demonstration of competency in the basic skills of language and mathematics; (F) a GPA of 2.25 or higher in liberal arts courses; (G) completion of a selective biography; and (H) completion of application form.

Students should not plan to enroll for additional courses or hold employment during full-time student teaching (16 credits). Other courses may not be substituted for student teaching.

Student teachers will follow the calendar of the school in which they are assigned. The number of days of student teaching will equal at least the number of class days in the university quarter.

Elementary education majors in the Professional Fourth Year (PFY) curriculum will complete student teaching as an integral part of the entire program.

Transportation, food and lodging are arranged and paid for by the student.

Student teaching placements will be based on available classroom teachers and university supervisors. Travel may be necessary.

### **License Programs and Applications**

Completion of a degree including a teaching major and teacher education requirements will normally qualify for licensure. However, several majors (e.g., music, business education, early childhood education, special education) include different concentrations or options leading to one or more specialized licenses in the major field. Special licenses in such areas as coaching, learning disabilities, or kindergarten may be added through appropriate minors or course selections.

Completion of secondary education curricula will fulfill license requirements for grades 7-12, except that students with teaching majors in art, foreign languages, health, music or physical education may qualify for grades K-6 also by completing (A) part of their student teaching at the elementary level; and (B) any stipulated elementary teaching method courses.

Students who plan teaching careers are advised to examine all license options and contact the head of such programs as early as possible.

A curriculum Worksheet for Teaching License must be completed and signed by all license program coordinators and submitted to the Registrar before any license application may be processed. The applicant should secure such a worksheet from the Records Office (Owens 104) or one of the Education Departments (Lommen Hall) early in the senior year and return it to the Records Office as soon as possible after securing all signatures to prevent any delay in processing the license application.

Application forms for Minnesota licenses are available at the Records Office. Forms for other states should be requested from the appropriate state agencies.

Completed applications and checks or money orders for state license fees are submitted to the Records Office where they will be processed and forwarded after verification.

Moorhead State University is authorized to endorse license applications to other states only for students who have fulfilled all requirements for approved license programs in Minnesota.

## **ELEMENTARY EDUCATION CURRICULA**

Major in Elementary Education  
(Professional Fourth Year—PFY)

The Elementary and Early Childhood Education Department offers one teacher education preparation program which culminates in the Professional Fourth Year or PFY.

Students interested in an elementary major spend their first years completing Liberal Arts, two concentrations and prerequisites. Students are expected to attend a handbook advising session as soon as they have identified elementary education as their major. Students are urged to begin their professional work in the sophomore year by enrolling in Ed 200, Career Explorations in Education. Completion of the PPST is required before students can enroll in 300 and 400 level courses. Passing the PPST is mandatory before students will receive Minnesota licensure. A 2.5 GPA is required to enter the PFY program. Only grades of C or higher are accepted in the elementary education major course work. Repeating any PFY course must be done in consultation with the department chairperson.

Students must apply for admission into the PFY program. Applications are available in the Elementary and Early Childhood Education Department. Students unable to participate in, or not needing a full-year, full-time program should contact the department. Very few alternatives are available.

### **Major in Elementary Education**

Ed 305 Educational Psychology (3)  
Ed 306 Measurement and Evaluation (2)  
Ed 345 Foundations for Teaching Language and Reading (3)  
Ed 341 Children's Literature (4)  
PE 240 Physical Education in Elementary Schools (2)  
Art 340 Art in Elementary Schools (2)  
Mus 340 Music in Elementary Schools (2)  
Ed 420C Child Growth (2)  
Ed 421B Language Arts in Elementary Schools (3)  
Ed 421C Reading in Elementary Schools (4)  
Ed 421F Audiovisual: Elementary School (1)  
Ed 467 Practicum I (2)  
Math 340 Mathematics in Elementary Schools (4)  
Ed 420B Professional Teacher (4)  
Ed 421E Science Health in Elementary Schools (3)  
Ed 421S Social Studies in Elementary Schools (3)  
Ed 467 Practicum II (2)  
Ed 451E Student Teaching (16)

*The following must be completed before enrolling in the PFY Program:*

Ed 200 Career Explorations in Education (3)  
Ed 213 Interpersonal Communications (3)

Ed 214 Human Growth and Development (3)  
 SpEd 220 Education of the Exceptional Child (3)  
 Art 100 Elements of Art (or equivalent) (3)  
 Mus 110 Fundamentals of Music (or equivalent) (3)  
 Math 100 Introduction to Mathematics (4)  
 Math 203 Foundations of Number Systems (4)  
 Hlth 110 Personal and Community Health (4)  
 Hlth 124 First Aid-Elementary Education (1)  
 Completion of Human Relations Program  
 PE 240 Physical Education in the Elementary School (2)  
 Ed 305 Educational Psychology (3)  
 Ed 306 Measurement and Evaluation: Elementary Schools (2)  
 Ed 341 Children's Literature: Content and Methods (4)  
 Ed 345 Foundations for Teaching Language and Reading (3)

*These courses are taken during the PFY Program:*

Art 340 Art in Elementary Schools (2)  
 Mus 340 Music in Elementary Schools (2)  
 Ed 420C Child Growth and Development of Elementary School Children (2)  
 Ed 421B Language Arts in Elementary Schools (3)  
 Math 340 Mathematics in Elementary Schools (4)  
 Ed 421F Audiovisual: Elementary School (1)  
 Ed 467 Practicums I (2) and II (2)  
 Ed 421C Reading in Elementary Schools (4)  
 Ed 420B Professional Teacher (4)  
 Ed 421E Science/Health in Elementary Schools (3)  
 Ed 421S Social Studies in Elementary Schools (3)  
 Ed 451E Student Teaching (16)

### Minor in Elementary Education

The purpose of the Elementary Education minor is to supplement other teaching majors whose graduates need some knowledge of the 6-12 year old's education. Students who may be interested are those with majors such as School Psychology, Mathematics, Physical Education, Music, Art and others. The minor does not qualify for a teaching licensure. Work in addition to this minor is required for licensure to teach in grades 1-6. Prerequisite: Ed 214 Human Growth and Development (3)

*Required:*

Ed 345 Foundations for Teaching Language and Reading (3)  
 Ed 420C Child Growth and Development (2)  
 Ed 421B Language Arts (3)  
 Ed 421C Reading: Elementary School (4)  
 Ed 421E Science/Health (3)  
 Ed 421S Social Studies (3)  
 Ed 341 Children's Literature (4)  
 SpEd 220 or SpEd 411 (3-4)  
 Math 203 Foundations of Number Systems (4)

Select 6-8 electives from the following courses to complete the 36 required in the minor. Substitutes for electives may be made by your advisor.

Ed 346 Linguistic Foundations for Reading (3)  
 Ed 448 Reading Study Skills in the Content Area (Lab required) (4)  
 Ed Field Experience (can be taken only after completion of -1, required, as listed above) (1-3)  
 Math 100 Introduction to Mathematics (4)  
 Math 340\* Mathematics in the Elementary School (4)  
 Ed 349 Reading Strategies (4)  
 Psy 401 Child Psychology (4)  
 SpEd 421 Gifted Child (3)  
 SpEd 445 Remedial and Corrective Reading (3)  
 SpEd 465 Special Education Reading (3)  
 SpEd 471 Behavior and Environmental Management (3)  
 CDFR classes from NDSU—Advisor approval

\* Prerequisites: Math 100 and Math 203

### English as a Second Language Licensure Program (ESL)

All candidates recommended for licensure to teach English as a Second Language in grades kindergarten to 12 shall:

1. hold a baccalaureate degree;
2. satisfactorily complete a minimum of two years college-level or four years of high school-level foreign language, or equivalent experience in learning another language and interacting with another culture;
3. satisfactorily complete a professional education preparation program for teachers of English as a Second Language approved by the Board of Teaching, consisting of 35-36 quarter hours, or the equivalent. (A valid Minnesota teaching license, K-12, 7-12, or 1-6 would exempt teachers from these requirements); and
4. satisfactorily complete the student teaching component of full day experiences for one academic quarter, or its equivalent, which includes both elementary and secondary education levels with students of limited English proficiency.

Requirements in lieu of valid Minnesota teaching license, K-12, 7-12, or 1-6:

Complete the MSU professional core of education courses for elementary or secondary licensure plus additional Minnesota licensure requirements.

*Specific ESL Licensure Requirements (36 credits)*

These courses are offered over a two year cycle.  
 Engl 361(g) Introduction to Descriptive Linguistics (4)  
 Engl 364(g) American English (4)  
 Anth 370 Anthropology/Linguistics (4)  
 SLHS 401(g) Psycholinguistics (4)  
 Anth 110 Introduction to Culture/Symbols (4)  
 Anth 375 Language in Culture (4)  
 Ed 480(g) Reading in ESL (3)  
 Ed 481(g) Teaching English to ESL (3)  
 Electives approved by program advisor, Dr. Les Crawford (6)

*Additional Requirements (16 credits)*

Ed 450E Student Teaching Elementary:LEP (8)

Ed 451S Student Teaching Secondary:LEP (8)

**Minor in Language and Literacy**

This minor offers appropriate background courses for students wishing to develop a reading licensure foundation. The Literacy Block and the Literacy Concentration are alternate ways of developing the content. Contact the Elementary and Early Childhood Education Department for listings of these programs and advising help in planning. Courses within the sequence are offered every quarter.

Students seeking to qualify as elementary or secondary remedial reading teachers may elect the reading minor and plan a curriculum with an advisor leading to the appropriate license program. However, a reading license cannot be issued until after two years of teaching experience.

Any elementary or secondary teaching major is required for the developmental reading license. Remedial reading will be licensed at the level of the student's teaching major preparation.

*Prerequisites are:*

Ed 200 Career Explorations in Education (3)

Ed 214 Human Growth and Development (3)

*Core Requirements:*

Ed 345 Foundations for Teaching Language and Reading (3)

Ed 346(g) Language Foundations for Reading Instruction (3)

Ed 341(g) Children's Literature (4)

Ed 425(g) Improvement of Instruction in Reading and Language Arts (3)

SpEd 445(g) Remedial and Corrective Reading (4)

Ed 448(g) Reading Study Skills in the Content Areas (3)

Ed 474(g) Language Arts in Early Childhood (3)

Ed 499(g) Reading Conference (1-3)

*Two Courses From the Following:*

Ed 342 Comprehension Strategies (3)

Ed 480(g) Teaching Reading: Second Language (3)

Spch 341 Creative Dramatics (4)

Engl 365 Language and Learning (4)

*Additional Electives:*

Ed 417 Counseling Skills I (3)

SpEd 422 Curriculum Methods/Gifted (3)

Anth 110 Introduction to Cultural Symbols (4)

Anth 370 Anthropological Linguistics (4)

Anth 375 Language in Culture (4)

SLHS 101 Introduction to Speech, Language, Hearing Science (3)

SLHS 401 Psycholinguistics (3)

**Major in Early and Exceptional Education**

The major in Early and Exceptional Education contains two concentrations. Majors take one of these. One concentration includes licensure in prekindergarten teaching; the other concentration leads to licensure in early childhood special education.

All majors complete teacher education requirements listed below:

Hlth 110 Personal and Community Health (4)

Human Relations (7)

*Professional Prerequisites:*

Ed 213 Interpersonal Communications (3)

Ed 214 Human Growth and Development (3)

Ed 305 Educational Psychology (3)

*Core Courses:*

Ed 370 Growth and Development of the Young Child (3)

Ed 371 Observing and Recording Young Children's Behavior (1)

Ed 372 Art, Music & Literature for Young Children (3)

Ed 475(g) Curriculum Development for Young Children (4)

Ed 478(g) Play and Development (3)

SpEd 364 Consultation in Special Education (3)

SpEd 477g/Ed 477g Senior Seminar (3)

SpEd 424(g) Assessment of Infants/Young Children (4)

SpEd 471 Behavior & Environmental Management (3)

*Traditional Pre-Kindergarten Licensure Option:*

Hlth 125 First Aid (2)

Ed 200 Career Explorations in Education (2)

Ed 200L Laboratory (1)

Ed 373 Foundations of Early and Exceptional Education (4)

Ed 375 Theories of Instruction with Young Children (3)

CDFS 482 Organization & Administration in EC (3)

CDFS 483 Parent-Professor Relationships (4)

Ed 341(g) Children's Literature: Content and Methods (4)

SpEd 425(g) Young Children with Special Needs (4)

Ed 424 Infant/Toddler Programs and Practices (4)

Ed 474(g) Language Arts in Early Childhood (3)

Ed 469 Student Internship Program (Early Childhood) (4)

Ed 455C Student Teaching (Infant/Toddler) (8)

Ed 455C Student Teaching (Preschool) (8)

*Early Childhood Special Education Licensure Option:*

Special Education core and Professional Education Requirements that are not listed in Early and Exceptional Education Core:

SpEd 200 Introduction to Special Education (2)

SLHS 204 Language Development (4)

SpEd 320 Educational Services for Except. Indiv. (4)

SpEd 363 Assessment in SpEd (3)

SpEd 494g Legal/Social Foundations (3)



*Licensure Courses:*

Ed 455C Student Teaching (Early Childhood) (3)  
SpEd 412g Mental Retardation (4)  
SpEd 423g Theory and Practice in ECSE (3)  
SpEd 424g Assessment Strategies (4)  
SpEd 426g Instructional Strategies: Infant (4)  
SpEd 427g Instructional Strategies: Preschool (4)  
SpEd 428g Family Ecology of the Handicapped (3)  
SpEd 459g Communication Programming for Persons with Severe Handicaps (3)  
SpEd 467E Preschool Practicum (3)  
SpEd 468E Infant/Interagency Practicum (3-6)  
SpEd 450E Student Teaching in ECSE (13)

*Electives:*

Pre-Kindergarten Option (32)  
ECSE Option (21)

Students may select either licensure option. Students who choose both licensure options should make this known to the advisor for planning.

**Minor in Early and Exceptional Education**

A minor in Early and Exceptional Education is available for students with teaching majors who seek additional licensure as prekindergarten (nursery school) teachers.

70

In addition to the following courses, at least six credits of student teaching must be at the prekindergarten level.

Ed 370 Growth and Development of the Young Child (3)  
Ed 371 Observing and Recording Young Children's Behavior (1)  
Ed 372 Art, Music and Literature for Young Children (3)  
Ed 373 Foundations of Early and Exceptional Education (4)  
Ed 375 Theories of Instruction with Young Children (3)  
Ed 475 Curriculum Development for Young Children (4)  
Ed 478 Play and Development (3)  
SpEd 425g Young Children with Special Needs (4)

**Kindergarten Licensure**

Licensed elementary education teachers may also qualify as a kindergarten teacher by completing the following courses and at least 8 credits of student teaching at the kindergarten level. Kindergarten student teaching must be done after PFY.

Option A: **Preferred**

Ed 372 Art, Music, Literature for Young Children (3)  
Ed 471 Curriculum and Instruction in Kindergarten Education (4)  
Ed 474 Language Arts in Early Childhood (3)  
Ed 478 Play and Development (3)  
SpEd 425 Teaching Young Children with Special Needs (4)  
Ed 455K Student Teaching: Kindergarten (8)  
Option A may be used as a related field concentration with an elementary education major.

Option B:

Ed 471 Curriculum and instruction in Kindergarten Education (4)  
Ed 474 Language Arts in Early Childhood (3)  
Ed 455K Student Teaching: Kindergarten (8)

**SECONDARY EDUCATION AND FOUNDATIONS**

Professional education courses for all secondary teaching curricula are:

Ed 200 Career Explorations in Education (2)  
ED 200L Lab (1)  
Ed 214 Human Growth and Development (3)  
Ed 305 Educational Psychology (3)  
Ed 307 Measurement and Evaluation (3)  
Ed 213 Interpersonal Communications (3)  
Ed 390 Foundations of Education (3)  
SpEd 220(g) Learners with Special Needs (3)

Substitutions for these courses must be approved by the Chair of Secondary Education and Foundations in a written memorandum filed with the Registrar.

**EDUCATION COURSES**

**Ed 100 Personal Career Planning (1)**

Designed to assist students in seeking and defining career goals. Career positions are explored by class. Pass/Fail.

**Ed 101 Assertiveness Training (2)**

Designed to enable students to learn their interpersonal rights and responsibilities, to discriminate between assertive, aggressive and submissive behavior and acquire a set of assertive skills that, by definition, maintain the dignity of the parties involved.

**Ed 102 Advanced Assertiveness Training (2)**

This class examines advanced techniques and theories related to assertive behavior. Prerequisite: Ed 101.

**Ed 103 Career Development and Career/Life Planning (2)**

Designed to assist students with the career decision-making process.

**Ed 104 Decision-making (2)**

The purpose of this course is to enable the students to understand their own decision-making process and the elements of successful decision-making.

**Ed 105 Marital/Premarital Enrichment (2)**

This class is designed to enhance the communication process in a marital/premarital relationship.

**Ed 106 Personal Growth Issues of Women and Men (2)**

This class examines issues related to women's and men's self-concept identify, value and communication skills.

**Ed 107 Topics in Personal Growth and Development (2)**

This course is designed to be a special topics experience. Subjects selected on current topical trend, i.e., death and dying, divorce adjustment, human potential, etc.

**Ed 108 Stress Management (2)**

Study of the causes and effects of stress plus a survey of specific skills for reducing or preventing its negative effects. Application for university students will be emphasized.

**Ed 142 College Reading Development (2)**

Instruction in study skills. Practice use of study resources to improve vocabulary and reading.

**Ed 189 Personal Development (2)**

Exploration and work on personal development goals in small group, i.e., self-understanding, communication skills, values, goals, etc.

**Ed 200 Career Explorations in Education (3) (FWS)**

Introduction to current concepts/issues in professional education including introduction to educational professional periodicals. Practicum experience included for underclassmen. Lab: 20 hours teacher aiding required.

**Ed 213 Interpersonal Communications (3) (FWS)**

The "affective" course in Human Relations. Simulation, participation focus on nonverbal communication, conflict resolution, trust development, paraphrasing. Lab: 20 hours tutoring required for majors in secondary and special fields only.

**Ed 214 Human Growth and Development (3) (FWS)**

Study of stages and principles of human development and their educational implications. Theories from behavioristic, developmental, Gestalt, cognitive theorists. Prerequisite: Ed 200, Ed 214 is part of Block I. Block I also includes Ed 413 and SpEd 418.

**Ed 270 Orientation and Child Development (3)**

Introduction to early childhood education. Physical, mental, emotional and social development from conception to age six. Observation of children required. Concurrent with Ed 273.

**Ed 272 Early Childhood Curriculum (3)**

Methods, materials in mathematics, social sciences, physical science, health and nutrition for the young child. Prerequisite: Block I and concurrent with Ed 273.

**Ed 273 Practicum in Early Childhood Education (4-16)**

Supervised work with young children in nursery schools/day care centers. Seminar included. Concurrent enrollment in Ed 270, 372, or 272.

**Ed 274 Language Development of the Young Child (3)**

Materials and techniques used to encourage language development in young children.

**Ed 300(g) Audiovisual Materials and Methods (3)**

Introduction to media education with emphasis upon the use of audiovisual media and technology in the classroom. With lab.

**Ed 305 Educational Psychology (3) (FWS)**

A systems approach to learning, learning environments, readiness, individual differences, student-teacher relationships. Prerequisites: Ed 200 and Ed 214 or concurrent with Ed 213, Ed 214, SpEd 220

**Ed 306 Measurement and Evaluation: Elementary (2)**

Construction and use of questioning techniques, teacher-made tests, and interpretations of standardized evaluation instruments. Prerequisites: Ed 200 and Ed 213, 214, SpEd 220, Ed 305 or concurrent with Ed 305.

**Ed 307 Measurement and Evaluation: Secondary (3) (FWS)**

Emphasizes assessment and evaluation of instruction with objective development as basis for current techniques. Normative/criterion reference testing principles and concepts. Prerequisites: Ed 213, Ed 214, Ed 305 or concurrent with 305, SpEd 220.

**Ed 310 Basic Photography for Educators (3)**

Introduction to still photography including panchromatic, ortho and color positive films with an emphasis on educational application.

**Ed 320 Production of Audiovisual Materials (3)**

Basic methods and techniques for the production of graphic, audio and photographic instructional media. With lab.

**Ed 341(g) Children's Literature: Content and Methods (4) (FWS)**

Systematic study of trade books available for use with students preschool through adolescence. Includes overview of current trends, selection criteria and strategies for making literature an integral part of the curriculum. Prerequisites: Ed 200, Ed 213, Ed 214, SpEd 220.

**Ed 342(g) Comprehension Strategies (1-3)**

Analysis of juvenile books emphasizing the development of comprehension strategies for cognitive and affective understanding.

**Ed 345 Foundations for Teaching Language and Reading (3) (FWS)**

General introduction to literacy learning processes and components emphasizing connections between reading and language arts. Prerequisites: Ed 200, Ed 213, Ed 214, SpEd 220, Ed 341 and proficiency in word recognition skills (phonics).

**Ed 346(g) Language Foundations for Reading Instruction (3) (FS)**

Develops understanding of socio-psycholinguistics principles of processing English and implications for teaching reading as a communication process. Prerequisites: Ed 200, Ed 213, Ed 214, SpEd 220, Ed 341 and Ed 345.

**Ed 370 Growth and Development of the Young Child (3) (F)**

Growth and development of children from conception to age six with emphasis on children in group settings. Prerequisite: Ed 214.

**Ed 371 Observing and Recording Young Children's Behavior (1) (F)**

Observation, data collection and discussion of selected facets of young children's growth and development. Prerequisite: Ed 370 taken concurrently.

**Ed 372 Art, Music and Literature for Young Children (3) (F)**

Exploration of children's developmental stages in the areas of art and music. Curricular applications of art, music and literature are explored.

**Ed 373 Foundations of Early and Exceptional Education (4) (F)**

Examination of programs for young children from sociological, psychological, and historical contents. Models, types of programs and legislation are also examined. Prerequisites: Ed 370, 371 or concurrent registration.

**Ed 375(g) Theories of Instruction with Young Children (3) (W)**

Examination of major theoretical positions on the interrelated positions of how children learn and how these assumptions are translated into instructional practices. Prerequisites: Ed 370, 371 or concurrent registration.

**Ed 388(g) Cultural Pluralism (3) (FWS)**

Social/economic backgrounds and lifestyles of culturally different students. Analysis of appropriate teaching strategies. Prerequisites: Ed 200 or SpEd 200 and Ed 305.

**Ed 390 Foundations of Education (3) (FWS)**

Historical, philosophical, social, and professional foundations of American education. Prerequisites: Ed 200 or SpEd 200, 213, 214, and 305. Should be taken prior to Ed 450-451S.

**Ed 400 Independent Study in Education (1-4)**

Extends study beyond regular course work. May substitute for courses in major with consent of advisor, instructor, and department chairperson. (Repeated up to 8 credits).

**Ed 408(g) Foundations of Oppression (3) (F)**

Nature, experiences and disadvantages of oppression; diagnosis and classification of structure of oppression. Prerequisite: Teaching experience.

**Ed 409(g) Self and Oppression (3) (F)**

Conflict-confrontation, interpersonal communications, understanding differences in value systems of others.

**Ed 411(g) Introduction to Counseling (3) (F)**

Basic concepts and principles of counseling.

**Ed 417 Basic Counseling Skills (3) (S)**

Basic skills in the one-to-one counseling interview. Improve interpersonal communication skills in listening and responding.

**Ed 418(g) Sociology of Education (3) See Soc 418(g)****Ed 420B Professional Teacher (4) (FWS)**

Focuses on the study of education and the rights and responsibilities of the individual teacher within the school setting. Prerequisites: All PFY prerequisites.

**Ed 420C Child Growth and Development of Elementary School Children (2) (FWS)**

Focuses on the developmental aspects of the elementary school age child as those aspects influence or affect the teaching of elementary school subject matter. Prerequisites: All PFY prerequisites.

**Ed 421B Methods in Language Arts in Elementary Schools (3) (FWS)**

Provides instructional methods that will help the preservice teacher become an effective teacher of language arts. Prerequisites: All PFY prerequisites.

**Ed 421C Methods in Reading in Elementary Schools (4) (FWS)**

Teaching reading in literacy learning contexts from emergence through content learning including mainstreamed learners. Prerequisites: All PFY prerequisites.

**Ed 421E Methods in Teaching Elementary Science and Health (3) (FWS)**

Content, philosophy, and organization of science/health program; methods of instruction and curricular issues. Prerequisites: All PFY prerequisites.

**Ed 421F Audiovisual: Elementary School (1) (FWS)**

Introduction to audiovisual education with emphasis on the use of audiovisual media and technology in the classroom with an opportunity for limited experiences in the production of instructional materials and equipment operation. Prerequisites: All PFY prerequisites.

**Ed 421S Methods in Teaching Elementary Social Studies (3) (FWS)**

Content, philosophy, and organization of social studies program; methods of instruction and curricular issues. Prerequisites: All PFY prerequisites.

**Ed 425(g) Improvement of Instruction in Reading and Language Arts (3)**

Examines research about thinking and language that supports a literature-based integrated reading/language arts program with appropriate evaluation strategies. Prerequisites: Ed 200, Ed 213, Ed 214, SpEd 220, Ed 341 and Ed 345.

**Ed 431(g)-422(g)** See SpEd 421(g)-422(g)

**Ed 440 Social Studies in the Secondary School (3) (F)**

Objectives, teaching strategies, curriculum materials, and evaluation at the secondary level (7-12).

Prerequisites: near completion of social science major/minor and Ed 200, 213, 214 and 305.

**Ed 442(g) Curriculum Foundations (4)**

Foundations for curriculum development: learning theories, curriculum designs, recent trends, and learning assessments. Prerequisites: Student teaching or teaching experience.

**Ed 443(g) Industrial Arts for Elementary/Special Education (3)**

Projects and experiences in industrial arts and crafts designed for teachers of the mentally handicapped. (Same as SpEd 443(g) and IndS 443(g).

**Ed 445(g) Remedial and Corrective Reading (3) (FS)**

Presentation of special methods and materials in teaching reading to disabled readers at the primary, intermediate and secondary level. Prerequisites: Ed 345 or teaching experience. (Same as SpEd 446(g).

**Ed 447(g) Reading Workshop (2)**

Designed for reading teachers to update theories and practices in teaching reading. Topics will vary as offered.

**Ed 448(g) Reading Study Skills in the Content Areas (3) (S)**

Teaching techniques to improve reading ability in content materials; vocabulary, comprehension, study skills and provisions for individual learning differences.

**Ed 450E Student Teaching: Elementary (8) (FWS)**

Supervised student teaching experience in an elementary school. Prerequisites: Admission to TEC, Ed 200, 213, 214, 305, 306, SpEd 220, all elementary methods (grade of C or better) and curriculum classes. Applications required two quarters prior to the field experience. Departmental approval needed.

**Ed 450S Student Teaching: Secondary (8) (FWS)**

Supervised student teaching experience in a secondary school (7-12). Prerequisites: Admission to TEC, Ed 200, 213, 214, 305, 307, and SpEd 220, special methods course(s), and departmental approval. Applications required two quarters prior to the field experience.

**Ed 451E Student Teaching: Elementary (16) (FWS)**

Supervised student teaching experience in an elementary school. Prerequisites: Admission to TEC, Ed 200, 213, 214, 305, 306, SpEd 220, all elementary methods (grade of C or better) and curriculum classes. Applications required two quarters prior to the field experience. Departmental approval needed.

**Ed 451S Student Teaching: Secondary (16) (FWS)**

Supervised student teaching experience in a secondary school (7-12). Prerequisites: Admission to TEC, Ed 200, 213, 214, 305, 307, and SpEd 220, special methods course(s), and departmental approval. Applications required two quarters prior to the field experience.

**Ed 455C Student Teaching: Early Childhood (1-16)**

Student teaching experience in an early childhood education center. Prerequisite: Completed early childhood major course work.

**Ed 455E, 455S Student Teaching (8-16) (FWS)**

Student teaching experience to qualify for additional licensure or supplemental student teaching experience. Advisor and consent required.

**Ed 455K Student Teaching: Kindergarten (8)**

Student teaching experience with 5 year olds. Prerequisites: Ed 471, 474 and a completed elementary major.

**Ed 467 Practicum/Elementary Teaching (1-6) (WS)**

Observation of children in a classroom setting assisting classroom teacher; teaching selected lessons under supervision. May include seminar. Can be repeated.

**Ed 469 Student Internship Program (3-16)**

Opportunities for on-the-job experience. Appropriate for students with individualized majors. Prerequisites: Permission of chairperson, Junior/Senior status.

**Ed 471(g) Curriculum and Instruction in Kindergarten Education (4) (FS)**

Overview of early childhood education. Required for kindergarten licensure. Prerequisites: Ed 200, 213, and junior status.

**Ed 473(g) Practicum in Early Childhood Education (3-16) (W)**

Supervised practicum experience with prekindergarten children. Analysis and evaluation of classroom procedures and development of young children. Prerequisites: Ed 470, 472, or concurrent registration with Ed 472.

**Ed 474(g) Language Arts in Early Childhood (3) (FWS)**

In-depth study of early language and literacy development and beginning reading instruction. Required for kindergarten licensure. Prerequisites: Ed 200 and Ed 214.

**Ed 475(g) Curriculum Development for Young Children (3) (WS)**

Provides knowledge of curriculum approaches and instructional methods in the content areas of mathematics, science, social studies, language, reading readiness and health. Includes a 24 hour practicum. Prerequisites: Ed 375 or consent of instructor.

**Ed 476(g) Early Childhood Education Workshop (1-3)**

Workshop for experienced nursery school and kindergarten teachers in improvement of teaching skills. Topics vary.

**Ed 477(g) Seminar in Early Childhood Education (1)**

Day Care/Nursery School issues. Concurrent with Ed 473(g).

**Ed 478(g) Play and Development (3) (S)**

Examination of the central role of play to learning and development of young children. Content, functions, outcomes, environments and teacher responsibility are explored. Prerequisites: Ed 370, 371 or consent of instructor.

**Ed 480(g) Educational Alternatives for Learning**

Construction of both established and innovative educational programs. Prerequisites: Consent of instructor.

**Ed 481(g) Issues in Education (1-3)**

Seminar to examine current issues and trends in specific areas of education. Prerequisites: Consent of instructor.

**Ed 491(g) Topics in the Socio-Cultural Foundations of Education (1-5)**

In-depth examinations of historical, philosophical, and cultural aspects of educational theory and practice. Prerequisites: Junior/Senior or consent of instructor.

**Ed 492(g) Impact of Education on Women (3)**

Exploring the literature on sex-role stereotyping in public education.

**Ed 493(g) Education for International Understanding (3)**

Objectives, techniques, and materials suitable to develop and extend intercultural empathy. Study of educational ideas and practices from other countries.

**Ed 495(g) Comparative Education (3)**

Foreign education systems, International understanding through education. Introduction to UN education agencies.

**Ed 496(g) Study Tour in Comparative and International Education (6)**

Field study in selected countries through conferences with educators, schools, universities, ministry visitation and conferences. Open to non-majors.

**Ed 497(g) Readings in Education (3)**

Readings and supervised study of topics in depth. On demand only. May be repeated up to six credits.

**Ed 501 Psychological Foundations of Education (3)**

A systems approach to schools and systems of psychology. Principles affecting learning and instruction.

**Ed 502 Statistics in Educational Research (3) (W)**

Basic theory, techniques for using descriptive and inferential statistics and application in educational research designs.

**Ed 503 Methods of Research (3) (F)**

Methodology of design of research studies; preparation of effective technical reports. Ed 502 recommended.

**Ed 504 The School and Society (3)**

History and development of social structures in America; relationship between social structures and the school.

**Ed 505 Single Subject and Small Group Research Designs (3) (S)**

Introduction to research on simple subjects and small groups, with application to problems in education and related areas. Prerequisite: Ed 502 or equivalent. (Same as SpEd 505).

**Ed 506-509 Adult Education Sequence (3)**

For administrators, teachers, graduate students in adult education. Incorporates nature of learner, special curricular aspects, educational theory and sociological implication.

**Ed 510 Philosophy of Education (3)**

Major philosophical concepts and principles as they apply to education from Plato to the present.

**Ed 512 Study of the Individual (3)**

Case study methods, laboratory experience and practicum where applicable.

**Ed 522 Perception, Language & Reading (3)**

Research and scholarly opinion regarding language acquisition and perception in relation to reading, learning and teaching. Examine beginning reading and current practices. Prerequisites: Teaching experience and/or consent of instructor.

**Ed 524 Seminar in Reading (3)**

Study of research and descriptive literature in reading. Prerequisites: Ed 502, 503, or 505 recommended.

**Ed 530 Intro to Education Administration (3) (F)**

Theory, principles, issues and problems involved in the execution of the school management function.

**Ed 531 Teacher/Student Rights (3) (S)**

Examination of the legislative and judicial actions affecting teachers and students, including due process relating to exceptional children.

**Ed 532 Strategies for Solving School Organizational Problems (3) (W)**

Examination of procedures and theories which increase skills in problem solving in school organizations. Prerequisite or concurrent: Ed 530

**Ed 533 Computer Utilization in Classrooms (3) (F)**

Exploration of computer equipment, operation, means of communication with computers, instructional use and impact of computers in society. Prerequisite: Ed 530.

**Ed 534 School Finance (3) (F)**

Study of local, state and federal revenue systems to support public education. Tax theory, budgetry and accounting procedures. Prerequisites: Ed 530 or concurrent with Ed 530.

**Ed 535 The Process of Supervision (6) (S)**

Specific techniques and systems to supervise instruction. Interpersonal communication and group process skills are applied to administrative supervision. Prerequisite: Ed 530.

**Ed 536 Supervisory Theories (3)**

A study of management models and techniques for supervisors to systematically improve instruction in a variety of organizational climates. Prerequisites: Ed 530 and Ed 535.

**Ed 537 Curriculum Theory and Principles (3) (W)**

Examination of principles, contemporary theories and change process alternatives as they impact on the school education program.

**Ed 538 Secondary School Curriculum (30) (W)**

History, development, and evaluation of curricular patterns in the secondary schools. Analysis of current curricular practice and trends.

**Ed 539 Administration of the Secondary School (3) (W)**

Intended for those preparing to become school administrators. Investigates all phases of the administrator's duties and responsibilities for educational leadership. Prerequisites or concurrent: Ed 530 and 538.

**Ed 540 Elementary Children and Learning (3)**

Recent trends and research in educational foundations and effect upon elementary curriculum and/or practice. Topics vary each quarter.

**Ed 541 Developments in Elementary Education (3)**

Deals with a particular problem or recent program developments in elementary education. Topics vary each quarter.

**Ed 542 Elementary School Curriculum (3)**

History, development and evaluation of curriculum. Analysis of recent trends and development of curriculum sequence at elementary level. Ed 537 recommended.

**Ed 543 Administration of the Elementary School (3) (S)**

An investigation into an administration's responsibilities, practices and problems in all aspects of leadership in elementary school. Prerequisites: Ed 530 and 542.

**Ed 544 Middle School/Junior High School Administration (3)**

Organization and administration of educational programs for young adolescents. Prerequisites: Ed 530 and 538 or 542.

**Ed 545 Diagnosis and Correction of Reading Difficulties (3)**

Advanced study of reading difficulties. Prerequisites: Ed/SpEd 445.

**Ed 546 Reading Clinic: Diagnosis (2)**

Individual case studies or supervision of individual case studies. Prerequisite: Ed 545.

**Ed 548 Foundations of Counseling (3) (F)**

Introduction to the profession of counseling. Emphasis on introductory concepts in the profession including developmental theories; aspects of counseling role, relationship and theories; professional organizations and code of ethics. Basic professional skills, such as word processing, library research, development of APA writing style are included.

**Ed 549 Counseling Skills I (3) (F)**

Development of attending skills in interviewing. Emphasis is placed on students becoming able to get into client's world and label client's feelings accurately. Introduction to several approaches to helping others including behavioral insight, micro counseling, and decision-making.

**Ed 550 Counseling Theories (3) (W)**

Students will study and examine current counseling principles and theories in order to utilize counselor techniques associated with those theories. Prerequisites: 411(g) or consent of instructor.

**Ed 551 Counseling Skills II (3) (W)**

Course is designed to assist students in examining and applying counseling techniques appropriate for crisis, facilitative, preventive and developmental counseling. Prerequisites: Ed 549, 550, or consent of instructor.

**Ed 552 Group Counseling (3) (S)**

Group dynamics in theory and practice. Prerequisites: Ed 550, Psych 476, or consent of instructor.

**Ed 552L Group Counseling Laboratory (1-3) (S)**

Participation in groups provides opportunities to practice and experience theory and concepts learned in Ed 552. Must be taken concurrently with Ed 552.

**Ed 553 Individual Appraisal (3) (F)**

Study of various types of tests, testing programs, and appraisal techniques and tools for individuals.

**Ed 554 Career Development (3) (W)**

Theories of career development, vocational guidance programs. Guidance strategies to promote career development sources of occupational/educational information.

**Ed 555 Organization and Administration of Guidance Services (3) (F)**

Examination of principles of organization and administration of guidance and counseling programs. Development of skills to administer program.

**Ed 556 Special Problems for Counselors (3)**

Seminar designed to focus on topics of special concern in the field. Topics and content will vary.

**Ed 558 Counseling the Gifted (3)**

A variety of theoretical and practical issues related to counseling and teaching the gifted student. Prerequisites: SpEd 421(g)/Ed 431(g) or equivalent, and SpEd 422(g)/Ed 432(g) or equivalent, or permission of instructor.

**Ed 563 Human Resources Development (4) (W)**

Exploration of the training and development needs of employees and volunteers. Covers ways adults learn, motivation of volunteers, interviewing skills and the needs analysis, design, implementation, evaluation, administration and cost effectiveness of training programs.

**Ed 564 Theory and Process of Consultation (3)**

Exploration of theory and process of various consultation models, consultant roles, research and evaluation across community, mental health and school settings. (Same as SpEd 564).

**Ed 565 Counseling Skills III (3) (S)**

Designed to provide students with skills for conducting growth producing interviews or one-to-one counseling sessions with client. Emphasis is on skillfully entering the client's world and facilitating positive change. Prerequisite: Ed 551.

**Ed 570 Seminar, Current Trends in Counseling (1-3) (S)**

Emphasizes current issues and developments in the broad field of counseling and human development-study of current periodic literature, federal and state legislation, professional practices and leading research. Prerequisite: After completion of core courses or after 36 credits and with instructor approval. May be repeated.

**Ed 571 Counseling Research Seminar (1) (S)**

Discussion of research topics, methodologies and procedures in counseling and human development. May be repeated.

**Ed 581 Legal Aspects of Education (3) (F)**

Study of legal authority of the public school; legal problems facing school personnel. Prerequisites: Ed 531 and Master's degree or equivalent.

**Ed 582 School Management and Decision-making (3) (W)**

Examination of needs assessment, goal setting, planning and evaluation systems, management systems, management by objective plans and decision-making procedures. Prerequisites: Ed 532 and Master's degree.

**Ed 583 Computer Data Management and Decision-making (3)**

Effective computer applications, the computer as a decision-making planning tool, opportunities and problems presented by a computer. Prerequisites: Ed 533 and Master's degree.

**Ed 584 School Personnel Administration (3) (W)**

Study of personnel administration. Examination of the purposes, policies, plans, procedures and processes of personnel administration. Prerequisites: Ed 536 and Master's degree.

**Ed 586 School Plant Planning and Maintenance (3) (S)**

Principles in planning, construction and maintenance of school buildings, visitation and appraisal of buildings. Prerequisites: Ed 539 or Ed 543 and Master's degree.

**Ed 588 School Business Management (3) (W)**

School business administration of insurance, transportation, food services, purchasing, inventory control, budgeting procedures, state and federal accounting and personnel. Prerequisites: Ed 534 and Master's degree.

**Ed 589 School Community Relations (3) (F)**

Purposes, organization, agencies and criteria of good school-community relationships; knowledge and techniques of public relations. Prerequisites: Ed 539 or 543 and Master's degree.

**Ed 591 Practicum in School Counseling (1-6) (FWS)**

A practical field experience in counseling and guidance for majors. Individualized for each student. Prerequisite: Consent of instructor.

**Ed 594 Practicum in Administration (1-9) (FWS)**

Supervised field experiences in various areas in education administration. Seminar and projects required; Master's Degree and courses in related areas required.

**Ed 595 Special Problems (1-3)**

Individual exploration of topical area through field placement, reading or research.

**Ed 597 Individual Study in Education (1-3) (FWS)**

Independent research for advanced graduate students. Repeated to a maximum of 6 credits. Prerequisites: Consent of instructor and advisor.

### **Ed 598 Seminar in School Administration and Supervision (1-6)**

Special topics seminars for practicing or potential administrators and supervisors. Consent of instructor. May be repeated.

### **Ed 599 Thesis or Field Research (1-6) (FWS)**

Thesis or Field Research (1-6) (FWS)  
Major study in chosen area. Available for candidates for the master's or specialist degree. Project approval required from advisor committee.

## **Energy Management**

Hameed G. Nezhad, *Director*

The Energy Management Program is a multidisciplinary program offering a Bachelor of Science degree in Energy Management with a concentration in an existing field such as marketing, accounting, finance, management, economics, political science, computer science, geology, international business, public relations or industrial technology. A student may also create a concentration area of his/her choice. Such a concentration must be approved by the Energy Management Curriculum Committee.

Graduates of this program, who will be among the pioneers in this field, are in demand by: electric utility companies; manufacturing and distributing companies involved in the production and marketing of energy products; energy companies involved in the exploration, production, distribution and marketing of oil, natural gas, coal and alternative energy resources; governmental agencies dealing with energy and environmental programs; and energy consulting firms.

### **ENERGY MANAGEMENT CURRICULA Major in Energy Management B.S. Degree**

*Energy Core Requirements (32 credits)*

- EMgt 200 Introduction to Energy Management (4)
- EMgt 310 Principles of Heat Transfer (2)
- EMgt 320 Heating, Ventilation and Air Conditioning Systems (2)
- EMgt 340 Energy Management and Control Systems (4)
- EMgt 400 Energy Auditing and Accounting (4)
- EMgt 420 Alternative Energy Technologies (4)
- EMgt 440 International Aspects of Energy Management (4)
- EMgt 470 Special Topics in Energy Management (4)
- EMgt 480 Energy Resource Planning (4)

*Business Core Requirements (26 credits)*

- Acct 229-230 Principles of Accounting I-II (8)
- Acct 200 Introduction to Legal Systems (2)
- Finc 340 Corporate Finance (4)
- Mgmt 360 Principles of Management (4)

- Mgmt 450 Production/Operations Management (4)
- Mktg 310 Principles of Marketing (4)

*Requirements in Related Fields (65-66 credits)*

- Biol 103 Humanity and the Ecosystem (4)
- Chem 111-112 General Chem I-II (8)
- Chem 111L-112L General Chem Lab I-II (2)
- ComS 145 Business Data Processing (4)
- Econ 202, 204, 206 Principles I (micro), II (macro), III (international) (12)
- Engl 287 Technical Report Writing (4)
- Math 273 Linear Algebra/Applied Calculus (4)
- Math 274 Intro to Statistics I (4)
- Math 275 Intro to Statistics II (4)
- Phys 111-112-113 Elementary Physics I-II-III (9)
- Phys 111L-112L-113L Elementary Physics Lab I-II-III (3)
- Pol 120 National Govt (4)
- Spch 100 Beginning Speech Communication (4) or Spch 210 Effective Business Speaking (3)

Area of Concentration (20 credits)

A concentration is determined by one or more departments. A student may also create a concentration of his/her choice. Such a concentration must be approved by the director of the Energy Management Program.

Free Electives (21-22 credits)

### **ENERGY MANAGEMENT COURSES**

#### **EMgt 200 Introduction to Energy Management (4) (S)**

An overview of energy resource management including the availability and utilization of present and future energy resources, and basic concepts of energy efficiency with emphasis upon current practice, future potential and ultimate limitations.

#### **EMgt 300 Geology of Energy Resources (4)**

Introduction to the geology of fossil fuels, nuclear fuels, and geothermal energy. Also includes an introduction to methods of exploration for energy resources. Prerequisite: Chem 112.

#### **EMgt 310 Principles of Heat Transfer (2) (F)**

Principles of heat transfer by conduction, free and forced convection, and radiation. Prerequisite: Phys 113.

#### **EMgt 320 Heating, Ventilation and Air Conditioning Systems (2) (W)**

Application of heat transfer principles to heat transfer equipment such as boilers, heating, ventilation and air conditioning systems. Prerequisite: EMgt 320.

#### **EMgt 340 Energy Management and Control Systems (4) (S)**

An introduction to energy management control systems. Topics include principles of electricity and electronics, sensors, controllers, and microprocessor-based Energy Management and Control Systems devices. Prerequisite: Phys 113.



**EMgt 400 Energy Auditing and Accounting (4)**  
(W)

An analysis of the energy flow of a system such as a building or a plant facility to determine where, how much, and how well energy is being used and to find alternative ways for improving energy efficiency of the system. Prerequisites: Acct 230 and EMgt 320.

**EMgt 420 Alternative Energy Technologies (4)** (S)

An in-depth examination of energy technologies including direct and indirect solar energy, coal, nuclear energy, energy conversion, energy storage and energy conservation technologies. Prerequisites: EMgt 320 and EMgt 340.

**EMgt 440 International Aspects of Energy Management (4)** (F)

A comprehensive study of the present and future world energy resources, production, consumption, trade and policies. Prerequisites: EMgt 420 and Econ 206 or consent of the instructor.

**EMgt 470 Special Topics in Energy Management (4)** (Fws)

This course is designed to permit students and a professor to pursue a specialized interest in an area of energy management, e.g., energy marketing, energy economics, energy and society, energy policy, energy finance, energy modeling, etc. Prerequisite: Consent of the instructor.

**EMgt 480 Energy Resource Planning (4)** (S)

Processes and methods for planning and problem solving in the management of energy resources in both the public and private sectors. Prerequisites: EMgt 440 and Mgmt 450 or permission of the instructor.

**Engineering**

Charles Martin, *Chair*

Moorhead State University offers a pre-engineering program constituting the first two years of study for an engineering degree. The curriculum is so designed that, upon satisfactory completion, a student may transfer to a college of engineering as a third year student.

The program may be modified or augmented by enrollment in engineering courses at North Dakota State University through the MSU-NDSU "Covered Programs." In this case students may transfer to NDSU (at resident tuition under reciprocity) for only the last 45 credits. (See Academic Information.)

Adjustments in the curriculum also can be made to conform to requirements of those schools where the students will eventually complete their degrees. Pre-engineering students should work closely with their advisor in planning courses of study.

**PRE-ENGINEERING CURRICULA (96-108 credits)**

Engl 101-102 Freshman Composition (8)

Engl 287 Technical Report Writing (4)

Math 231-232-233-234 Calculus I-II-III-IV (16)

Math 331 Differential Equations (4)

Chem 111-112 General Chemistry I-II (8)

Chem 111L-112L or 111H-112H Gen Chem Lab

Phys 200-201-202 General Physics I-II-III (15)

Eng 130 Engineering Orientation and Computation (3)

Eng 210 Engineering Design (3) or Eng 113

Engineering Graphics (4)

Eng 243 Engineering Mechanics I—Statics (4)

Eng 244 Engineering Mechanics II—Dynamics (4)

Eng 245 Engineering Mechanics III—Materials (4)

Approved Electives (17-29)

**ENGINEERING COURSES**

**Eng 113 Engineering Graphics I (4)** (Fws)

Principles and applications of graphical communication and analysis. Content includes geometric construction, multiview drawings, dimensioning, auxiliary views and computer-aided drafting.

**Eng 130 Engineering Orientation and Computation (3)** (F)

Introduction to engineering fields, tools and methods for numerical computation graphic solutions in engineering. Prerequisite: Consent of instructor.

**Eng 200 Surveying I (3-6)** (S)

Use and adjustment of surveying instruments; measurements by tape, electronic, and stadia methods; topographic surveying; coordinate systems. Three lectures and three 3-hour laboratories weekly.

**Eng 210 Engineering Design (3)** (W)

Introduction to the design process emphasizing creativity, cooperation and understanding of an orderly approach to all design problems. Evaluation of technical sketches and working drawing supported by written, oral and computer presentation.

**Eng 211 Engineering Communications (1-3)**

Study of and participation in graphic, oral and written communication.

**Eng 214 Descriptive Geometry (4)** (S)

Fundamental principles of orthogonal projection, true length lines, angles between planes, development of surfaces, and intersection of solids.

**Eng 230 Manufacturing Processes (3)** (F)

This course is designed to provide the student with a broad background in the industrial processes, materials and machines that are common to all manufacturing related industries. Both traditional and non-traditional processes are covered.

**Eng 231 Welding Processes (3)** (S)

An introduction to welding processes, safety, energy sources for welding, metallurgy, materials, equipment study, weld inspection and testing, weld symbols and blueprint reading.

**Eng 232 Machining Processes (3) (Ws)**

Course content includes a study of production techniques using saws, drilling machines, lathes, mills, grinders, the punch press and the press brake. Laboratory exercises involve the development and use of production fixtures, stops, drill jigs and positioners.

**Eng 243 Engineering Mechanics I—Statics (4)***(Fw)*

Vector algebra. Application of equations of equilibrium to the analysis of simple engineering structures and machines. Nature and influence of friction. Elementary theory of statically determinate framed structures. Prerequisite: Math 231.

**Eng 244 Engineering Mechanics II—Dynamics (4)***(Sf)*

Principles of kinematics, particle systems and plane rigid bodies, and vector calculus in solving problems. Prerequisite: Eng 243.

**Eng 245 Engineering Mechanics III—Materials (4)***(W)*

Application to problems of stress and strain at a point, stress-strain relations in two dimensions, linear theory of torsion, bending stresses, deflection of determinate and indeterminate beams and instability. Prerequisite: Eng 243.

**Eng 291 Materials Inspection and Testing (1-2)***(Ws)*

A study of methods, materials and techniques of inspection and testing of industrial materials and products; quality control.

**English Department**

Daniel Deneau, *Chair*; Rufus Bellamy, John Bremer, Sheila Coghill, Marjorie Corner, Alan Davis, John Early, Scott Emmert, V. Dennis Flood (Emeritus), Laura French, Susan Gebhardt-Burns, Clarence Glasrud (Emeritus), Sheila Gullickson, Allan Hanna, Patricia Hansen, Gordon Jackson, Gary Litt, David Mason, Thomas McGrath (Emeritus), Fair Meeks, Joseph Miller (Emeritus), Elizabeth Moraghan, Sandra Pearce, Robert Pender, Mary Pryor, Hazel Retzlaff, SuEllen Shaw, John Sherman, Donald Short, Rosemary Smith, Keith Tandy, Marie Tarsitano, Mark Vinz, William Woolwine, Richard Zinober

**ENGLISH CURRICULA**

Requirements for majors, dual majors, and minors in English are set forth in detail below. Anyone who wishes to major or minor in English must see the chairperson and be assigned an advisor. Because of the significant number of electives permitted by the department, English majors and minors must consult their advisors each quarter in order to plan programs which will be both academically respectable and personally satisfying. Students who wish to set up individualized majors including English courses (for instance, Comparative Literature or language studies) should consult the chairperson.

The B.A. and B.S. (teaching) programs presently have similar core requirements; but among other differences, the B.S. program includes course work prescribed by the State Board of Education for a teaching major in English on the secondary level.

Students who intend to pursue graduate study are advised to take more than the minimum number of 300 and 400-level courses. They are also advised to make themselves proficient in at least one foreign language.

**Major in English B.A. Degree***Major Requirements in English (64 credits)**Core Requirement (28 credits)*

Engl 211-212-213 Major British Writers I-II-III (12)

Engl 371-372-373 American Literature Survey I-II-III (12)

(12)

Engl 314 Shakespeare (4)

*Electives in English (36 credits)*

Group A: Engl 301, 302, 303, 304: minimum of 4 credits

Group B: Engl 305, 306, 307, 340 (British novel): minimum of 4 credits

The Department of English may designate other courses, before they are offered, as acceptable in each group.

American Literature, 300-level course: minimum of 4 credits

400-level courses: minimum of 8 credits, each of the two required courses from a different national literature (American, British, Continental)

Additional electives: 16 credits, a minimum of 8 in literature, 300-400 level.

**Major in English B.S. Degree (Teaching)***Major Requirements (68 credits)**Core Requirement (24 credits)*

Engl 211-212-213 Major British Writers I-II-III (12)

Engl 371-372-373 American Literature Survey I-II-III (12)

(12)

Engl 314 Shakespeare (4)

*Electives in English (16 credits)*

300 or 400-level (minimum 8 credits)

400-level (minimum 4 credits)

Additional elective: 4 credits

*Courses Required for Teaching Certification (24 credits)*

Engl 280 Literature: East and West (4)

Engl 365 Language and Learning (4)

Engl 391(g) Teaching English in Secondary Schools (4)

Engl 392(g) Teaching Adolescent Literature and Reading (4)

Engl 393(g) Grammars of English (4)

Engl 394 Advanced Composition (4)

*Related Requirement (8)*

Spch 100 Beginning Speech Communication (4)  
 Spch 105 Beginning Oral Interpretation (4)  
 All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education Requirements under Secondary Education.

**Dual Major in English and Speech Communication/Theatre Arts B.S. Degree (Teaching)**

*Major Requirements in English (64 credits)*  
*Core Requirement (28 credits)*  
 Engl 211-212-213 Major British Writers I-II-III (12)  
 Engl 371-372-373 Survey of American Literature I-II-III (12)  
 Engl 314 Shakespeare (4)

*Electives in English (12 credits)*

Elective, any level (4)  
 Electives, 300 or 400-level (8). One course in literature recommended.

*Courses Required for Teaching Certification (24 credits)*

Engl 280 Literature: East and West (4)  
 Engl 365 Language and Learning (4)  
 Engl 391(g) Teaching English in Secondary Schools (4)  
 Engl 392(g) Teaching Adolescent Literature and Reading (4)  
 Engl 393(g) Grammars of English (4)  
 Engl 394 Advanced Composition (4)

*Major Requirements in Speech*

*Communication/Theatre Arts (54 credits)*  
 Spch 100 Beginning Speech Communication (4)  
 Spch 101 Voice and Diction (4)  
 Spch 105 Beginning Oral Interpretation (4)  
 Spch 202 Introduction to Rhetoric (4)  
 Spch 204 Principles of Debate (4)  
 Spch 220 Theatre Form and Appreciation (4)  
 Spch 222 Principles of Acting (4)  
 Spch 224 Technical Theatre Methods (4)  
 Spch 280 History of the Film (4)  
 Spch 312 Principles of Persuasion (3)  
 Spch 340(g) The Teaching of Speech (4)  
 Spch 344(g) Principles of Play Direction (4)  
 SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)  
 Electives in Speech Communication or Theatre Arts at 300 level or above (4)

To satisfy the requirements of the State Board of Education for secondary certification with a major in Speech Communication-Theatre Arts, students must participate in at least two speech activities: forensics, theatre, oral interpretation or broadcasting.

All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education Requirements under Secondary Education.

**Dual Major in English and Mass Communications B.A. Degree (100 credits)**

*Major Requirements in English (56 credits)*

Core Requirement (28 credits)  
 Engl 211-212-213 Major British Writers I-II-III (12)  
 Engl 371-372-373 Survey of American Literature I-II-III (12)  
 Engl 314 Shakespeare (4)

Writing Requirement (8 credits); two courses chosen from the following:

Engl 285 Writing for Film and Television (4)  
 Engl 286 Practical Writing (4)  
 Engl 287 Technical Report Writing (4)  
 Engl 288 Introduction to Creative Writing (4)  
 Engl 354 Non-Fiction Writing (3)  
 Engl 355 Advanced Technical Writing (4)  
 Engl 388 Creative Writing (3)

*Electives in English (20 credits)*

At least 12 credits at 300 or 400 level, including one course in American literature and one course in British literature. Electives in English should be chosen in close consultation with an advisor in the Department of English.

*Major Requirements in Mass Communications (44 credits)*

Core Requirements (24 credits)  
 MC 100 Introduction to Mass Communications (3)  
 MC 175 Desktop Publishing (3)  
 MC 205 Media Writing (3)  
 MC 230 Communications Photography I (3)  
 MC 305 Reporting (4)  
 MC 420 Mass Media: Ethics and Issues (4)  
 MC 440 Communications Law (4)

*Electives in Mass Communications (20 credits)*

Electives in Mass Communications should be chosen in close consultation with an advisor in the Department of Mass Communications.

Note: The dual major does not require completion of the distributional requirements of the Mass Communications major; however, it does require completion of the university's liberal arts requirement (64 credits), plus 36 credits of English literature.

**B.A. Minor in English (35 credits)**

*Core Requirements (20 credits)*

Engl 211-212-213 Major British I-II-III (8 credits, two of the three courses)  
 Engl 371-372-373 Survey of American Literature I-II-III (8 credits, two of the three courses)  
 Engl 314 Shakespeare (4)

*Electives in English (15 credits)*

One course British Literature 300 or 400-level (4 credits)  
 One course American Literature 300 or 400-level (4 credits)  
 Additional electives (7 credits)

### **B.S. Minor in English (Teaching) (52 credits)**

*Core Requirements (28 credits)*

Engl 211-212-213 Major British Writers I-II-III (12)  
Engl 317-372-373 Survey of American Literature I-II-III (12)  
Engl 314 Shakespeare (4)

Courses Required for Teaching Certification (24 credits)

Engl 280 Literature: East and West (4)  
Engl 365 Language and Learning (4)  
Engl 391(g) Teaching English in Secondary Schools (4)  
Engl 392(g) Teaching Adolescent Literature and Reading (4)  
Engl 393(g) Grammars of English (4)  
Engl 394 Advanced Composition (4)

### **Minor in English, Writing (to accompany B.A. or B.S. Degree) (28 credits)**

*Writing Requirement, at least 15 credits chosen from the following:*

Engl 285 Writing for Film and Television (4)  
Engl 286 Practical Writing (4)  
Engl 287 Technical Report Writing (4)  
Engl 288 Introduction to Creative Writing (4)  
Engl 354 Non-Fiction Writing (repeatable) (3)  
Engl 355 Advanced Technical Writing (4)  
Engl 388 Creative Writing (repeatable) (3)  
Engl 488(g) Advanced Creative Writing (3)  
Engl 469 Internship (2-16) (Maximum of 4 hours applicable to the Writing Minor)

*Electives (at least 8 credits)*

Electives should be chosen in close consultation with a Minor Advisor assigned by the Department of English. Each student completing the minor is encouraged to assemble a portfolio of writing samples to present to prospective employers.

### **ENGLISH COURSES**

#### **Engl 090 Basic Grammar (1) (FW)**

Instruction and tutoring in basic writing skills. Open to any student; required of students judged likely to need special assistance in English 101. Combines a weekly lecture on syntax and grammar, weekly grammar workbook assignments, and weekly tutoring in the writing laboratory. Offered only Pass/Fail; repeatable only by students who fail. Credit not applicable toward graduation, liberal arts, major or minor. Students required to enroll in 090 must pass it, as well as 101, before entering 102.

#### **Engl 101-102-103 Composition and Literature I-II-III (4 each) (FWS)**

101: Numerous written assignments and readings in essays and/or short fiction; general introduction to the use of the library. 102: Composition and literature (drama and novels); emphasis on expository and argumentative writing. 103: Composition and literature (poetry). 101 is prerequisite to 102 and 103.

#### **Engl 111-112-113 Composition and Literature for Non-Native Speakers I-II-III (4 each) (FWS)**

Reading and writing of expository prose; introduction to American culture through literature; review of English grammar, vocabulary study, English for academic uses. Restricted to non-native speakers, who must take the course unless exempted by the department upon recommendation of the instructor; if exempted, students may enter 101-103. 111-112-113 fulfill Freshman English requirement.

#### **Engl 192-193 Literature and Critical Writing II-III (4 each) (WS)**

Close reading of literary masterpieces. Enrollment in 192 restricted to those who have excelled in 101; enrollment in 193 restricted to those who have completed 192 or who have excelled in 102. 192 and 193 satisfy Freshman English requirement.

#### **Engl 195 Effective Reading (4)**

Various techniques to improve the student's reading efficiency and speed. Instruction in writing essay examinations, taking notes, and improving study skills.

The following 200, 300, and 400-level courses are intended primarily for sophomores, juniors, and seniors respectively. English 211-212-213, Major British Writers, is intended primarily for English majors and minors; other 200-level courses are appropriate for non-majors who have completed Freshman English. Before registering for any of the following courses, students should consult their advisors and read the course descriptions posted and circulated each quarter by the Department of English. These descriptions will give specific information about requirements and emphases. *Courses marked with an asterisk may be repeated, with consent of instructor, when authors and topics vary.*

#### **Engl 211 Major British Writers I (4) (F)**

Selected major writers through Donne. Some attention to literary criticism and research techniques.

#### **Engl 212 Major British Writers II (4) (W)**

Selected major writers, Milton through Romantics. Some attention to literary criticism and research techniques.

#### **Engl 213 Major British Writers III (4) (S)**

Selected major writers, Victorians and Moderns. Some attention to literary criticism and research techniques.

#### **Engl 214 Introduction to Shakespeare (4)**

A study of representative plays and poems.

#### **Engl 230\* Individual Authors (4)**

Study of one or two major or influential writers.

**Engl 232 Film and Novel (4)**

Comparative analysis of major novels and their screen adaptations. Focus on aesthetic and interpretative similarities and differences. Cross-listed as Speech 282.

**Engl 234 Mythology (4)**

Introduction to the great myths of Greece and Rome and their influence upon later literature.

**Engl 240\* Masterworks (4)**

Extensive reading in a particular literary genre—novel, drama or poetry.

**Engl 241\* Modern American Literature (4)**

Selected major figures of 20th-century American Literature.

**Engl 246 Women in Literature (4)**

A study of the various ways women are depicted in imaginative literature and expository prose. Readings vary.

**Engl 248 Introduction to American Ethnic Literature (4)**

Significant writers and selected works representing several minority ethnic backgrounds, including African, Asian, Hispanic, and Native American.

**Engl 280 World Literature: East and West (4) (W)**

Selected writers or literary traditions in world literature with at least one-third of the course focusing on non-Western literature.

**Engl 281 World Literature (4)**

Selected writers or literary traditions in Western world literature.

**Engl 285 Writing for Film and TV (4)**

Techniques and approaches to writing scripts for film and television: dramatic stories, factual and thematic documentaries, adaptations from other sources, animation and advertising. Students will analyze scripts and write short scripts to be analyzed and evaluated. Prerequisite: Engl 101-102-103 or equivalent.

**Engl 286 Practical Writing (4) (FWS)**

Study and practice in writing non-literary material linked to the experiences of daily life and to practical career situations.

**Engl 287 Technical Report Writing (4) (FWS)**

Expository writing dealing with scientific subjects and planned for a specialized audience: documenting, writing abstracts, preparing reports of original investigations. Prerequisite: English 101-102-103 or equivalent.

**Engl 288 Introduction to Creative Writing (4) (FWS)**

Practice in the writing of poetry, short fiction, or drama.

**Engl 290\* Special Topics (4)**

Study of a particular literary topic: special approaches or procedures related to the study of language or literature.

**Engl 301\* Medieval British Literature (4)**

Study of selected major authors and works, sometimes in comparison with European counterparts, exclusive of Chaucer.

**Engl 302\* 16th-Century British Literature (4)**

Study of selected major authors from More through the lyricists of the 1590s.

**Engl 303\* 17th-Century British Literature (4)**

Study of selected major authors from Donne and Jonson to Browne.

**Engl 304\* Restoration and 18th-Century British Literature (4)**

Study of selected major authors from Dryden to Dr. Johnson.

**Engl 305\* The Romantic Movement (4)**

Study of selected authors from Burns to Keats.

**Engl 306\* The Victorian Period (4)**

Study of selected major authors from Carlyle to Hardy.

**Engl 307\* 20th-Century British Literature (4)**

Study of selected major British authors from the 1890s to the present.

**Engl 308\* 19th-Century American Literature (4)**

Study of selected major American authors of the 19th century.

**Engl 309\* 20th-Century American Literature (4)**

Study of selected major American authors of the 20th century.

**Engl 314\* Shakespeare (4) (FS)**

Study of selected plays and poems. When the works vary, students may repeat course.

**Engl 330\* Individual Authors (2-4)**

Intensive study of one or two significant writers.

**Engl 340\* Genre Studies (4)**

Extensive reading in a particular literary genre—short story, novel, poetry, drama, or epic.

**Engl 343-344-345 Development of Drama I-II-III (4 each)**

Representative readings in dramatic literature from Greek theatre to the present day. 343: Greek and Roman tragic and comic playwrights, Aristotelian criticism, and classical theatre history. 344: Early native farce, religious drama, and the drama and theatrical innovations of the Renaissance through the 18th century. 345: The drama of the modern era, beginning with the 19th century Romantics, viewed as a revolutionary, cultural, political and artistic force. Cross-listed as Speech 322-324-326.

**Engl 350 Practical Criticism (4)**

Practice in critical evaluation of literary works.

**Engl 354 Advanced Scientific/Technical Report Writing (4)**

Process-oriented writing class focuses toward a formal feasibility study and/or formal grant proposal, requiring a consultant in the student's major discipline; emphasizes work in communication theory, documentation style, abstracts, business ethics, case studies and annotated bibliographies.

**Engl 355\* Non-Fiction Writing (3)**

Writing of non-fiction prose; partly a dialogue on the form and theory of non-fiction, but mainly a workshop centered on the practice of non-fiction writing.

**Engl 361(g) Introduction to Descriptive Linguistics (4)**

A broad survey of the field of descriptive linguistics.

**Engl 363(g)\* History of the English Language (4)**

A survey of the early history of the English language, its sounds and its grammar, emphasizing Old English and its literature or Middle English and its literature.

**Engl 364(g) American English (4)**

A survey of American dialects—both regional and social—their characteristics, origins, causes and development, including Chicano and Black English.

**Engl 365 Language and Learning (4) (S)**

An interdisciplinary approach to theories of language development, and language as a mode of learning. Prerequisites: English 101-102-103, English 394 or consent of instructor.

**Engl 371 Survey of American Literature I (4) (F)**

Historical and critical study of American Puritanism, Nationalism, and Romanticism; may include such authors as Anne Bradstreet, Jonathan Edwards, Benjamin Franklin, Ralph Waldo Emerson, Nathaniel Hawthorne, Edgar Allan Poe and Herman Melville.

**Engl 372 Survey of American Literature II (4) (W)**

Historical and critical study of American Realism and early Modernism; may include such authors as Walt Whitman, Emily Dickinson, Mark Twain, Henry James, Stephen Crane, Theodore Dreiser, and Sinclair Lewis.

**Engl 373 Survey of American Literature III (4) (S)**

Historical and critical study of the modern American renaissance in poetry and fiction; may include such authors as Robert Frost, T.S. Eliot, Ezra Pound, William Carlos Williams, Wallace Stevens, F. Scott Fitzgerald, Ernest Hemingway and William Faulkner.

**Engl 380\* World Literature (4)**

Study of selected world masterpieces grouped by theme or genre.

**Engl 381-382-383 Scandinavian Literature I-II-III (4 each)**

381: The older literature of Scandinavia. 382: Ibsen and Strindberg. 383: The Modern Scandinavian novel. Cross-listed as Scandinavian 381-382-383.

**Engl 388\* Creative Writing (3)**

The writing of poetry, short fiction, plays, or film. Partly a dialogue on contemporary writing, but mainly workshop. Students may repeat this course once.

**Engl 390\* Special Topics (2-4)**

Study of a particular literary genre, topic, or theme.

**Engl 391(g) Teaching English in Secondary Schools (4) (W)**

Current practices in teaching secondary English; possible observation of secondary classes; discussion of curriculum, approaches, and techniques.

**Engl 392(g) Teaching Adolescent Literature and Reading (4) (S)**

Review of current trends in adolescent and young adult literature. Approaches and techniques for teaching reading and for studying literature in junior and senior high school. May be repeated after five years with consent of instructor.

**Engl 393(g) Grammars of English (4) (W)**

A survey of the history of language study, of the history of the English language, and of the various kinds of grammars: traditional, structural, and transformational.

**Engl 394 Advanced Composition (4) (F)**

Principles of clear and effective writing, elements of the writing process, research and methods in teaching, responding to, and evaluating writing. Practicum in tutoring remedial writing students. Prerequisite: Engl 101-102-103 or equivalent; some experience with word processing.

**Engl 410(g)\* Studies in British Literature (4)**

Study of selected topics, movements, or genres.

**Engl 411 Chaucer (4)**

Study of selected major works and their background.

**Engl 412 Spenser (4)**

Study of selected major works and their background.

**Engl 416 Milton (4)**

Study of selected major works and their background.

**Engl 430(g)\* Individual Author (4)**

Intensive study of selected works of one author.

**Engl 450(g)\* Critical Traditions (4)**

Principal works of literary aesthetics and criticism from selected periods in history.

**Engl 469 Internship—Writing (2-16) (FWS)**

Supervised employment requiring substantial writing practice in government or private agency. Repeatable up to a total of 16 credits. All credits apply toward graduation, but only four may count toward a major or minor in English.

**Engl 480(g)\* Advanced World Literature (4)**

Intensive study of selected world masterpieces from one language, in translation.

**Engl 488(g)\* Advanced Creative Writing (3)**

Advanced work in writing of poetry, short fiction, plays, or film. Prerequisite: Engl 388 and/or consent of the instructor. Students may repeat this course once.

**Engl 492(g) Transformational Grammar (4)**

An introduction to a theory of grammar that describes and explains how sentences are created.

**Engl 495(g) Advanced Study in Language or Literature (3-4)**

Study of selected topics, individual authors, genres or movements in linguistics or in American, British, or world literature. The course may be offered as a seminar, as an independent study, or as an adjunct to another class taught by the same instructor. Repeatable when subject matter varies. Consent of instructor required for graduate credit.

**Engl 498(g) Tutorial (1-3)**

The consideration of various problems in literature or language agreed upon by the instructor and the student.

**Finc 340 Corporate Finance (4) (Fws)**

Analysis of methods used to manage assets, liabilities and investments. Prerequisite: Acct 310 or consent of instructor.

**Finc 350 Public Finance (4)**

Same as Econ 350.

**Finc 351 Risk Management (4) (F)**

Survey of risk management principles and the management of property and liability insurance coverage. Prerequisites: Acct 300 or consent of instructor.

**Finc 352 Life and Health Insurance (4) (W)**

A study of insurance policies, pension plans and financial planning tools for individuals and business concerning life and health risk.

**Finc 353 Advanced Insurance Studies (4) (S)**

A review of current literature and government programs concerning the treatment of risk facing individuals and firms. Prerequisites: Finc 351 and Finc 352.

**Finc 354 Principles of Real Estate I (4) (Fs)**

Fundamentals of purchasing, managing and financing real estate.

**Finc 355 Advanced Real Estate Studies (4) (W)**

Emphasizes applications of real estate principles and techniques to an analysis of real problem situations to appraisal process. Prerequisite: Finc 354.

**Finc 406(g) Small Business Management Consulting (2) (Fws)**

Practicum in providing management assistance to small business. Can be taken two quarters consecutively for a total of 4 credits. Senior or graduate standing and permission of the instructor required. Offered only on a pass/fail basis.

**Finc 425(g) International Trade and Finance (4)**

Same as Econ 425.

**Finc 440 Intermediate Finance (4) (Ws)**

Designed for non-finance majors to permit study of topics appropriate to business decisions. Prerequisites: Finc 340.

**Finc 441 Advanced Corporate Finance (4) (Fw)**

Analysis and formulation of financial opportunities with respect to maximizing shareholder wealth of the corporation. Prerequisites: Finc 340, Math 275.

**Finc 442(g) Finance Seminar (4) (Ws)**

Selected finance topics of contemporary interest. May be repeated with different topics. Prerequisite: Consent of instructor.

**Finc 450(g) International Financial Management (4) (W)**

Traditional areas of corporate finance will be explored including working capital; capital budgeting, cost of capital and financial structure evaluation and control of operations in a multinational setting. Prerequisites: Econ 206, Finc 340.

**External Studies**

Lois Fisher, *Director*; Janet Flagel, *Assistant Director*; Judy Lacher, *Learning Consultant*

See page six for a description of the External Studies program, or contact the External Studies Office, 236-2182, for more information.

**EXTERNAL STUDIES COURSE****ExSt 300 Educational Planning (2) (Fws)**

A required orientation course for adult learners who are considering the External Studies program as a method of attaining a B.A. or B.S. degree from Moorhead State University. (Prospective External Studies students only.)

**Finance**

See *Business Administration for Curricula*

**FINANCE COURSES****Finc 320 Money and Banking (4)**

Same as Econ 320.

**Finc 321 Banking Policy (4) (Fw)**

Examination of interbank relationships and contemporary developments in banking administration. Prerequisite: Finc 320.

**Finc 330 Credit and Collection (4) (Fs)**

Credit management dealing with different types of credit, credit extension and collections.

**Finc 456(g) Principles of Investment (4) (Fs)**  
Studies financial assets, brokerage firms and the security industry and the mechanics and strategies of buying and selling various assets for investment purposes. Prerequisite: Finc 340.

**Finc 457(g) Portfolio Analysis (4) (W)**  
Analysis of techniques used in combining a portfolio of securities. Examines various classes of securities and investments meeting a proper balance of investor's requirements. Prerequisite: Finc 456.

**Finc 458 Financial decision-making (4) (Fs)**  
Long and short term aspects of finance with emphasis placed upon analysis and decision-making. Case approach. Prerequisite: Finc 441 or consent of instructor.

**Finc 469 Student Internship (3-16)**  
Prerequisite: Junior standing.

**Finc 498(g) Problems in Finance (1-4)**  
Individual inquiry into an aspect of finance not covered in the regular curriculum. Prerequisite: Consent of instructor.

## French

*See Languages for curricula and courses.*

## Geography-Geology Department

Roger L. Richman, *Chair*

### GEOGRAPHY-GEOLOGY CURRICULA AREAS OF STUDY: Geography, Geology

**Minor in Geography (30-32 credits)**  
Geog 110 Introductory Physical Geography (4)  
Geog 111 World Regional Geography (4)  
Geog 220 Economic Geography (4)  
Geog 225 Conservation (4)  
Geog 310 United States and Canada (4)

*Electives in Geography (10-12 credits)*  
One course in Regional Geography  
One course in Systematic Geography

Minor in Earth Science (Teaching)  
This program is under revision. Please see department chair.

*(This minor can be awarded only in combination with at least one teaching major.)*

### GEOGRAPHY COURSES

**Geog 100 Introduction to Geography (4)**  
Basic framework for understanding geography through examining various parts of this academic discipline and applied science.

**Geog 110 Introductory Physical Geography (4)**  
Basic elements of geography including weather and climate, vegetation, soils and landforms.

**Geog 111 World Regional Geography (4)**  
Problems of man's relation to the land and the interrelation of regions. Prerequisite: Geog 110.

**Geog 112 Cultural Geography (4)**  
Diffusion of innovation, environmental perceptions, and cultural diversity of people in different parts of the world.

**Geog 130 Introduction to the Field of Planning (2)**  
Foundation for understanding the planning process, and the different approaches to planning, and tools of the planner.

**Geog 220 Economic Geography (4)**  
The geography of man's economic activities, including agriculture, mining, manufacturing and trade.

**Geog 225 Conservation (4)**  
Environmental problems such as food supplies, energy resources, air and water pollution and wildlife habitat.

**Geog 235 Geography of Minnesota and North Dakota (3)**  
Survey and analysis of the physical and cultural environments of Minnesota and North Dakota.

**Geog 241 Elementary Meteorology (4)**  
The basic elements of weather: temperature, pressure, condensation and precipitation, air masses and fronts, vorticity and jet streams and storms. Prerequisite: Geog 110.

**Geog 300 Geomorphology (4)**  
Regional survey of landforms of United States, with attention given to classic problems in geomorphic interpretation. Prerequisites: Geog 110 or consent of instructor.

**Geog 310 United States and Canada (4)**  
Regional survey of United States and Canada with emphasis on regional contrasts and interrelationships. Prerequisites: Geog 110, 111, or consent of instructor.

**Geog 485 Earth Science Teaching Methods (1)**  
Curriculum review, objectives, methods, materials, and evaluation used in the earth science program. Prerequisite: Sci 440 or concurrent with Sci 440.

**Geog 490(g) Special Problems in Geography (1-4)**  
Individualized work for advanced students involving reading in geography and special writing projects utilizing the geographic approach. Prerequisite: Consent of instructor.



## **GEOLOGY COURSE**

### **Geol 115 Physical Geology (4)**

A survey of the physical nature and properties composing the earth, distribution of materials, and the processes of earth formation.

## **German**

*See Languages for curricula and courses.*

## **Gerontology**

The Gerontology Minor is a multi-departmental program design to complement majors in fields where professional responsibilities involve, directly or indirectly, older people. Individual flexibility and a liberal arts foundation are the basis for the selection of courses in the program. Some courses from the Tri-College University are included to provide a greater number of options in addition to MSU offerings. Consult Department of Sociology for Advising.

### **Minor in Gerontology (32 credits)**

*Required Courses (20 credits)*

Soc/SW 308\* Introduction to Gerontology  
Psy 403 Adulthood and Aging (4)  
Hlth 301 Health Aspects of Aging (4)  
Anth 302 Cultural Aspects of Aging (4)  
SW 409 Social Policies and Services for the Elderly (4)

*Electives (12 credits)*

Choose 3 courses:

Phil 211 Morals and Medicine (4)  
CDFS 461 The Elderly Consumer (4) NDSU  
CDFS 494 Aging and the Family (4) NDSU  
Soc 441 Sociology of Death (4) NDSU  
SW 387 Mental Health Care of the Aging (2) CC  
SW 388 Social Service Programming (2) CC  
SW 411 Chemical Dependency (4)  
SW 404 Rural Social Work (4)  
SW 369 Field Experience related to aging (4)  
SW 479 Field Experience II  
(To take SW 369 or 479 the student must be a SW major and go through a formal planning process in the Social Work Department the quarter prior to registration) (4-15)  
Biol 104 Human Biology, Biol 236 Introduction to Microbiology, or Biol 241 Human Genetics (3)  
Soc 235 Sociology of Health and Medicine, Hlth 326 Epidemiology, or Soc 442 Sociology of Chronic Illness and Disability (4) NDSU

\* Similar courses at other Tri-College institutions may be substituted with permission.

## **Health-Physical Education-Recreation Department**

Lyndon Brown, *Chair*; Kenneth Bladow, Cynthia Booth, Richard Bynum, D. Ellen Cromwell-Cecrle, Mary Curtis, Ross Fortier, James Gemar, Steven Grineski, Margaret Moore, Orlow Nokken, Donella Palmer, Janet Paulsen, J. Brad Pole, David Schellhase, Randall Smith, William Thomas, Lori Ulferts, Kirk Westre, Kathryn Wilson

### **Major in Health Education (Teaching)**

*Major Requirements (72 credits)*

Core Requirements (41 credits)

Hlth 110 Personal and Community Health (4)

Hlth 125 First Aid (2)

Hlth 200 Health and Culture (4)

Hlth 205 Introduction to Nutrition (4)

Hlth 215 Health Agencies and Services (4)

Hlth 327 Principles of Safety Education (4)

Hlth 330 Introduction to Diseases (4)

Hlth 340 Health Methodology (4)

Hlth 410 Consumer Health Education (4)

Hlth 412 Marriage and Family Life Education (4)

Hlth 465 Organization and Administration of School Health Programs (3)

*Requirements in Related Areas (31 credits)*

Selections from the following areas based on prior education and goals of the student: (Suggested courses are listed.)

Biology or Zoology

(Biol 103 Hum & Ecosystem)

Bacteriology or Microbiology

(Biol 236 Intro to Micro)

Applied Human Anatomy

(PE 220 App Human Anatomy)

Physiology

(PE 321 Human Physiology)

Human Growth and Development

(Ed 214 Hum Grwth/Dev)

Psychology

(Psy 113 General Psych)

Sociology

(Soc 110 Intro to Soc)

All Teacher Education requirements must be fulfilled to complete this major. (See Teacher Education Requirements in Education Department.)

### **Major in Health Education (Community Health)**

*Major Requirements (89-99 credits)*

Core Requirements (55-65 credits)

Hlth 110 Personal and Community Health (4)

Hlth 125 First Aid (2)

Hlth 200 Health and Culture (4)

Hlth 205 Introduction to Nutrition (4)

Hlth 215 Health Agencies and Services (4)

Hlth 326 Epidemiology (4)

Hlth 327 Principles of Safety Education (4)

Hlth 330 Introduction to Diseases (4)

Hlth 340 Health Methodology (4)  
Hlth 410 Consumer Health Education (4)  
Hlth 412 Marriage and Family Life Education (4)  
Hlth 415 Design and Evaluation of Community Health Education Programs (4)  
Hlth 465 Organization and Administration of School Health Programs (3)  
Hlth 469 Internship (6-16)

*Requirements in Related Areas (26 credits)*

Selections from the following requirements based upon licensure rules, prior education and experience, and educational goals of the student:

Biol 103 Humanity and the Ecosystem (4)  
Biol 236 Introduction to Microbiology (4)  
Chem 104 Environmental Chemistry (4)  
Chem 106-107-108 Chemistry for Health Professions (15)  
Mgmt 360 Principles of Management (4)  
PE 111 Concepts of Physical Fitness (2)  
PE 220 Applied Human Anatomy (4)  
PE 321 Human Physiology (4)  
(Biol 215-216 may be substituted for PE 220 & 321)  
Psy 113 General Psychology (4)  
Soc 110 Introduction to Sociology (4)  
SpEd 100 Beginning Speech Communication (4)

*Electives in Health Education (8 credits minimum in the areas of human growth and development or communication skills—subject to advisor approval.)*

**Major in Physical Education (Teaching) B.S. Degree**

*Major Course Requirements (79 credits)*

Hlth 125 First Aid (2)  
Hlth 220 Prevention and Care of Athletic Injuries (2)  
One Aquatics Course (1)  
PE 191 Activity Block I (4)  
PE 192 Activity Block II (4)  
PE 193 Activity Block III (4)  
PE 194 Activity Block IV (4)  
PE 200 Foundations of Physical Education (4)  
PE 220 Applied Human Anatomy (4)  
PE 243 General Methods in PE (4)  
PE 250-252 Sports Officiating (2)  
PE 310 Sport and Play in the U.S. (3)  
PE 311 Motor Learning (3)  
PE 320 Kinesiology (4)  
PE 321 Human Physiology (4)  
PE 360 Elementary Methods in PE (4)  
PE 361 Secondary Methods in PE (4)  
PE 371-379 Sports Coaching (3)  
PE 421 Physiology of Exercise (4)  
PE 452 Adapted Physical Education (4)  
PE 460 Principles of Coaching (4)  
PE 474 Tests & Measurements in Physical Education (4)  
PE 495 Administration of Physical Education (3)  
Coaching Practicum (0)

All Teacher Education requirements must be fulfilled to complete this major. (See Teacher Education Requirements in Education Departments.)

**Major in Physical Education B.A. Degree**

For persons who do not plan to qualify for public school teaching. Requirements are the same as for the teaching major excluding Teacher Education Requirements.

**Coaching Licensure (18 credits)**

Coaching Certification can be awarded only in combination with at least one teaching major.

All applicants for coaching licensure must complete a practicum. MSU Physical Education majors complete necessary course work as part of their major. Non-majors must complete the courses listed below:

Hlth 125 First Aid (2)  
Hlth 220 Prevention & Care of Athletic Injuries (2)  
PE 350 Mechanical Principles of Sport (4)  
PE 351 Physiology of Sport (3)  
PE 371-79 One Coaching Class (3)  
PE 460 Principles of Coaching (4)  
Practicum (0)

**Athletic Training**

The program is not an academic major or minor, but a means for students to work toward National Athletic Trainers Association certification in athletic training. The program is supervised by the Head Athletic Trainer and requires 28 credit hours of course work and 1500 internship hours of internship experience.

*Required Courses (28 credits)*

Hlth 110 Personal and Community Health (4)  
Hlth 125 First Aid (2)  
Hlth 220 Prevention and Care of Athletic Injuries (2)  
Hlth 420 Advanced Athletic Training (4)  
PE 220 Applied Human Anatomy (4)  
PE 320 Kinesiology (4)  
PE 321 Human Physiology (4)  
PE 421 Physiology of Exercise (4)

*Internship (1500 hours)*

Practical experience under the supervision of the Head Athletic Trainer.

**Developmental/Adapted Physical Education Licensure (38 credits)**

This licensure can be awarded only in combination with a Physical Education K-12 major.1L  
SpEd 412(g) Mental Retardation (4)  
SpEd 461(g) Educating Children and Youth with Specific Learning Disabilities (4)  
SpEd 471(g) Behavioral and Environmental Management (3)  
PE 311 Motor Learning (3)  
PE 452(g) Adapted Physical Education (4)  
PE 453(g) Assessment and Programming in D/APE (4)  
PE 456(g) Assessment and Curriculum Planning for Persons with Severe Handicaps I (4)  
PE 476 Internship—D/APE (5)  
PE 409 Adapted Physical Education (NDSU) (3)  
PE 419 Adapted Physical Education Curriculum (NDSU) (4)

**Minor in Health Education (Teaching) (33 credits)**

This minor can be awarded only in combination with at least one teaching major.

Hlth 110 Personal and Community Health (4)  
 Hlth 125 Standard First Aid/Personal Safety (2)  
 Hlth 205 Nutrition (4)  
 Hlth 327 Principles of Safety Education (4)  
 Hlth 340 Health Education Methodology (4)  
 Hlth 465 Org/Ad of School Health Prog (3)  
 PE 220 Applied Human Anatomy (4)  
 PE 321 Physiology (4)

At least one of the following courses:

Hlth 215 Health Agencies and Services (4)  
 Hlth 330 Introduction to Diseases (4)  
 Hlth 410 Consumer Health (4)  
 Hlth 412 Marriage and Family Life Education (4)  
 Hlth 415 Des/Eval of Community Health Education Programs (4)

**Minor in Health (Community) (33-34 credits)**

Hlth 110 Personal and Community Health (4)  
 Hlth 125 Standard First Aid and Personal Safety (2)  
 Hlth 205 Introduction to Nutrition (4)  
 Hlth 215 Health Agencies and Services (4)  
 Hlth 410 Consumer Health (4)  
 Hlth 415 Des/Eval of Community Health Education Programs (4)

At least three of the following courses:

Biol 104 Human Biology (4)  
 Hlth 200 Health and Culture (4)  
 Hlth 301 Health Aspects of Aging (4)  
 Hlth 306 Cross-Cultural Illness and Care (4)  
 Hlth 326 Epidemiology (4)  
 Hlth 327 Principles of Safety Education (4)  
 Hlth 330 Introduction to Diseases (4)  
 Hlth 340 Health Methodology (4)  
 Hlth 412 Marriage and Family Life Education (4)  
 Hlth 465 Organization and Administration of School Health Programs (3)

**Minor in Physical Education K-12 (Teaching) (38 credits)**

This minor can be awarded only in combination with at least one teaching major and is not recognized for teacher certification in the State of Minnesota.

Hlth 125 First Aid (2)  
 PE 191 or 193 Activities Course (4)  
 PE 192 or 194 Activities Course (4)  
 PE 220 Applied Human Anatomy (4)  
 PE 243 General Methods in PE (4)  
 PE 321 Human Physiology (4)  
 PE 360 Elementary Methods in PE (4)  
 PE 361 Secondary Methods in PE (4)  
 PE 452 Adapted Physical Education (4)

**Recreation and Leisure Studies**

A major in Recreation and Leisure Studies is not available at this time.

**HEALTH EDUCATION COURSES****Hlth 110 Personal and Community Health (4)**

(Fws)

An overview of health-related topics emphasizing education for the prevention of illness. Required for teacher certification in Minnesota.

**Hlth 124 First Aid-Elementary Education (1) (Fs)**

Preparation relative to injury/illness as encountered by the elementary teacher.

**Hlth 125 First Aid (2) (Fws)**

This course is designed to prepare the student to deal effectively with situations in which emergency care is required and medical assistance is not readily available.

**Hlth 200 Health and Culture (4) (S)**

Introduction to health-related disciplines. Interrelationships among behavior, beliefs and health as they relate to medical problems.

**Hlth 205 Introduction to Nutrition (4) (Fw)**

Topics that deal with nutrition requirements and energy needs of people will be covered, such as utilization of food components, weight control and food additives.

**Hlth 215 Health Agencies and Services (4) (F)**

A survey of community agencies and programs at the national, state and local levels from historical and contemporary perspectives.

**Hlth 220 Prevention and Care of Athletic Injuries (2) (Fws)**

This course introduces students to the basic principles of athletic training essential to prevention, recognition and treatment of athletic injuries and organization and administration of athletic training programs.

**Hlth 301 Health Aspects of Aging (4) (F)**

Models and theories of aging; environmental factors that affect physiological changes with age; life-style and aging processes.

**Hlth 302 Cultural Aspects of Aging (4)**

Attributes, concerns and function of elders in Western and non-Western societies. Prerequisite: Hlth/Soc/Anth 200 or consent of instructor.

**Hlth 306 Cross-Cultural Illness and Care (4)**

An ethnomedical approach to perceptions and definitions of illness and disease; treatment employed; function of practitioners. Prerequisite: Anth 100 or Hlth 200 or consent of instructor.

**Hlth 326 Epidemiology (4) (W)**

A study of the distribution of disease with an emphasis upon interrelationships among culture, social organizations, environment and population changes.

**Hlth 327 Principles of Safety Education (4) (Ws)**

Study and evaluation of factors in safety awareness and accident prevention.

**Hlth 330 Introduction to Disease (4) (W)**

Introduction to common degenerative and developmental disorders. Emphasis on the relationship of these disorders to health education programs.

**Hlth 340 Health Methodology (4) (F)**

A student-involvement approach to procedures and materials used to facilitate learning experiences in a school or community setting.

**Hlth 350 Cross-Cultural Mental Health (4)**

The relationship between culture and mental health; specific illness and causes; problems in identifying a cross cultural typology. Prerequisite: Anth 110, 111, or consent of instructor.

**Hlth 410(g) Consumer Health (4) (S)**

Investigation of the impact on the consumer of various health-related products and services: provides an opportunity to analyze and evaluate in order to select more intelligently.

**Hlth 412(g) Marriage and Family Life Education (4) (Fws)**

An in-depth study of pre-marital and family relations. Group and valuing processes are involved.

**Hlth 415(g) Design and Evaluation of Community Health Education Programs (4) (S)**

Study of a process and the technique to organize, implement and evaluate community health education programs. Prerequisite: Hlth 215, Hlth 340, or consent of instructor.

**Hlth 420 Advanced Athletic Training (4)**

Study of advanced athletic training techniques (orthopedic assessment; therapeutic modalities, emergency management and rehabilitation principles). Prerequisite: Hlth 220, PE 220.

**Hlth 465(g) Organization and Administration of School Health Programs (3) (S)**

A study of the philosophy of the three phases of the school health program, and the policies and procedures used in coordinating such programs.

**Hlth 469(g) Internship (6-16) (Fws)**

Designed for Community Health Education majors. Involvement in field work by placement in health related governmental, volunteer or commercial agencies. Prerequisite: Consent of instructor.

**Hlth 474(g) Workshop in Health Education (2)**

Designed to meet special needs for up-to-date information in specific health areas. Prerequisite: Consent of instructor.

**Hlth 475(g) Seminar in Health Education (2-6)**

Issues of major concern in the field of health. Topics of special interest are developed. This course may be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

**Hlth 476(g) Seminar in Health Problems (2-6)**

Issues of major concern in the field of health. Topics of special interest. This course may be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

**Hlth 489 Driver Education I (4)**

Devoted to methods of teaching and administrating high school driver and traffic safety education. Prerequisite: Hlth 327.

**Hlth 490 Driver Education II (4)**

Analysis of traffic accidents, attitudes, factors and essential knowledge involving motor vehicles. Laboratory experience for developing driving skills included in this course. Prerequisite: Hlth 489.

**Hlth 540 Problems in Health Education (3)**

In-depth study and research of the philosophical socioeconomic, and scientific implications of health education in a changing society and resulting needs. Prerequisite: Hlth 465 or equivalent.

**Hlth 565 Coordination of School Health Education**

Emphasis on background necessary for school health coordinators. Minnesota State Department of Education regulations require that all public schools employ a coordinator. Prerequisite: Hlth 465 or equivalent.

89

**History Department**

Lysle Meyer, *Chair*; Dieter Berninger, Henry Chan, Robert Davies, William Eagan, Dianne Farrell, Paul Harris, I. Kenneth Smemo.

**HISTORY CURRICULA****Major in History B.A. Degree (62 credits)***Major Course Requirements*

Hist 101-102-103 History of Western Civilization I-II-III

(12) **or** Hist 104-105-106 World History I-II-III (12)

Hist 121-122-123 History of the United States I-II-III (12)

Electives in the following areas (At least 6 credits):

Africa

Asia

Latin America

Modern Middle East

At least one Seminar in History (3-4):

Hist 402-403-404-405

Electives in History (At least 29 credits):

Note: For History 100, Topics in History (3-4), only 4 credits may be applied toward the major.

### *Foreign Language Requirements*

The Bachelor of Arts degree in history requires completion of one year of a foreign language in a program acceptable to the department or equivalent reading skill demonstrated to the satisfaction of the department.

### **Major in History B.S. Degree Social Studies (65 credits)**

Only the approved Social Studies major can be accepted for secondary teaching certification. See Social Studies.

### **Minor in History B.A. Degree (39 credits)**

Hist 101-102-103 History of Western Civilization I-II-III (12) **or** Hist 104-105-106 World History I-II-III (12)  
Hist 121-122-123 History of the United States I-II-III (12)

*Electives in North American and European History at the 200 level or above (At least 9 credits):*

United States  
Canada  
Europe

*Electives in Non-Western History at the 200 level or above (At least 6 credits):*

Africa  
Asia  
Latin America  
Modern Middle East

### **HISTORY COURSES**

#### **Hist 100 Studies in History (3-4)**

Selected topics and regions in historical perspective. Designed especially for the liberal arts student, the course may be repeated for credit under a different subtitle as the subject matter changes. Only 4 credits may be applied toward a History Major.

#### **Hist 101-102-103 Western Civilization I-II-III (4 each) (FWS)**

101: Ancient and medieval periods. Human beginnings, the ancient civilizations of the Mediterranean basin, and medieval Europe. 102: Renaissance to 1815. Europe transformed: the Renaissance, the Reformation, the rise of the nation state, and competition for empires. 103: 1815 to present. The age of modern industrialism, liberalism, nationalism, the new imperialism and 20th century problems into the atomic age.

#### **Hist 104-105-106 World History I-II-III (4 each) (FWS)**

104: Cultures of the world in the ancient period: the agricultural revolution, the rise of the first civilizations. 105: From the end of Classical civilizations to the beginning of global dominance by the West in the late 18th century in world perspective. 106: World civilizations in the modern period, from the late 18th century to the present.

#### **Hist 107 World War II (4) (W)**

A survey of the causes of the war and the major Axis and Allied military operations during the war. The political, diplomatic, economic and social aspects of the war will be considered also. Not applicable toward fulfillment of the history major.

#### **Hist 109 Civil War and Reconstruction (4) (F)**

An introductory survey examining the background and causes leading to the War between the States, the course of the war, Reconstruction and the meaning of the period for the future. Not applicable toward fulfillment of the history major.

#### **Hist 110 World War I (4) (S)**

The origins, features and significance of the war in modern history. Political, social and cultural aspects of the period considered. Not applicable toward fulfillment of the history major.

#### **Hist 111 Modern Scandinavia in Historical Perspective (4)**

An introductory examination of the five Scandinavian countries today in the light of their histories; impact on contemporary values, institutions, economics and culture. Not applicable toward fulfillment of the history major.

#### **Hist 112 African Highlights (4) (S)**

A one-quarter survey of significant features of the continent's historical development, from ancient times to the present. Not applicable toward fulfillment of the History Major.

#### **Hist 121-122-123 History of the United States I-II-III (4 each) (FWS)**

121: Colonial America: growth of a new society in the 17th and 18th centuries. 122: The 19th century: America as a new nation. 123: The 20th century: America as a world power.

#### **Hist 141 Evolution of Social Services (4) (Fws)**

A study of major social problems of Western Civilization with special emphasis upon the American experience since the 1700s. Attention will be given to concepts and practices of social welfare, attitudes on poverty, crime, family and individual instability.

#### **Hist 215 Minnesota and the Upper Midwest (4)**

Historical development of the Upper Midwest region with particular focus on the State of Minnesota in the modern period.

#### **Hist 221-222-223 History of England I-II-III (3 each) (FWS)**

221: Roman Britain to Norman England. Emphasis on Medieval life and institutions. 222: Tudor, Stuart and early Hanoverian periods. Topics include English Reformation, Puritan revolt, Glorious Revolution. 223: Industrialization, the Victorian period, Britain and Ireland in the 20th century.

**Hist 240 History of Mass Communications (3) (Fs)**

Development of journalism in the U.S. from the time of the American colonies to the present.

**Hist 251-252-253 East Asian History I-II-III (3 each) (FWS)**

The cultural, economic and political growth of East Asia. 251: China. 252: Japan. 253: Southeast Asia.

**Hist 261-262-263 History of Africa I-II-III (3 each) (FWS)**

261: Northern African and sub-Saharan civilizations up to the 15th century. 262: European intrusion, the slave trade; black state-building. 263: Colonial partition and black resistance; colonial rule and the growth of African nationalism; problems of independence.

**Hist 271-272 History of Latin America I-II (4 each) (FWS)**

271: Iberian heritage, pre-Columbian Indian cultures, the era of conquest, the colonial period and Wars of Independence. 272: Major trends in Latin America in the 19th and 20th centuries.

**Hist 305(g) Modern Middle East (4) (W)**

The Middle East since 1914. European imperialism and the background to the Arab-Israel struggle, nationalism, revolution, Islamic resurgence and contemporary problems.

**Hist 307(g) Studies in Asian History (3-4)**

Selected topics in Asian history.

**Hist 308(g) Studies in African History (3-4)**

Selected topics in African History.

**Hist 309(g) Studies in Latin American History (3-4)**

Selected topics in Latin American history.

**Hist 310(g) Studies in European History (3-4) (W)**

Selected topics in European history.

**Hist 311 (g) Studies in North American History (3-4) (W)**

Selected topics in North American history.

**Hist 312-313-314(g) Ancient History I-II-III (4 each) (FWS)**

312: Ancient Near East: political, social and cultural history from the dawn of civilization through the formation of the great empires. 313: Ancient Greece: social, political, economic and cultural development. 314: Ancient Rome: political, social, economic and cultural development.

**Hist 315(g) Medieval Europe (3)**

European history from the decline of the Roman Empire to the Renaissance.

**Hist 316(g) The Renaissance (3) (W)**

The political, religious, cultural, economic and social evolution of Europe from the 14th to the 16th century.

**Hist 317(g) The Reformation (3) (S)**

16th century Europe during the Protestant and Catholic Reformation period; the development of the modern state system.

**Hist 318-319(g) History of Germany I-II (4 each)**

318: Germany from earliest times to the late 19th century. 319: Political, social and economic developments to the present.

**Hist 325(g) French Revolution and Napoleon (4)**

A survey of the French Revolutionary and Napoleonic periods in European history examining the causes and consequences of the Revolution in social, political and military terms.

**Hist 331-332-333(g) Russian History I-II-III (4 each) (FWS)**

331: Russia from earliest times to the end of the 18th century; 332: Imperial Russia in the 19th century to the end of the Romanovs (1917); 333: Russian Revolution and history, government, society and foreign policies of Soviet Union to the present.

**Hist 338-339(g) Intellectual History of Western Civilization I-II (4 each)**

338: Reflections on fundamental social, political, and religious concerns from the Renaissance to the 18th century Enlightenment. 339: Intellectual response to the special problems of modern society in the 19th and 20th centuries. Prerequisite: Hist 102-103 or consent of instructor.

**Hist 340-341(g) History of Scandinavia I-II (4 each) (FWS)**

340: Survey of the social, cultural, political and economic development of the peoples of the five Scandinavian countries from pre-historic times to the mid-18th century. 341: Mid-18th century to the present.

**Hist 355(g) The Scandinavian Heritage in America (4) (S)**

An examination of the conditions in the Scandinavian countries in the 19th century which prompted mass migration to the U.S., the regions and nature of early Scandinavian settlements, adjustment and assimilation, and the nature and degree of ethnic retention among the descendants of these immigrants.

**Hist 357-358(g) United States Foreign Relations I-II (4 each) (FWS)**

357: Diplomacy in the era of the American revolution, continental expansion, the Civil War, and the Gilded Age. 358: American expansion into the Caribbean and to the Far East, World Wars I and II; the various forces that affected American foreign relations in the 20th century.

**Hist 366-367(g) Constitutional History of the United States I-II (4 each)**

366: The origins and development of the American Constitution from Colonial times to the beginning of the industrial age. 367: The American constitutional system in its historic setting from early industrial times to the present.

**Hist 368-369(g) American Life and Thought I-II (4 each)**

368: From the beginnings to mid-19th century. 369: From Darwin to the present.

**Hist 370(g) The American West (4)**

The frontier movement as a factor responsible for North American character and institutions.

**Hist 375(g) Women in United States History (3-4) (W)**

This course will focus on the experience of women in America from colonial times through the present. Oral history and other contemporary sources such as diaries, newspaper writings and sociological tracts will be examined. Special attention will be paid to: a. European Background; b. The Colonial Period; c. The Victorian Woman; d. Women in 20th Century.

**Hist 377(g) Afro-American History (3-4) (S)**

This course will focus on the black experience in America from the African Background through the present. Major topics: African Background, Slave Experience in North and South America, The Reconstruction Period, The Black Urban Experience in the 20th Century.

**Hist 381-382(g) History of Canada I-II (3 each) (Ws)**

381: Pre-Confederation Canada: exploration and French settlement through the conquest, British rule, achievement of responsible government and the development of Canadian nationality. 382: Post-Confederation Canada: the consolidation and expansion of Canada from Confederation to the present, emphasis on Canada's internal growth and multinational character.

**Hist 402(g) Seminar in African History (3-4)**

Problems in African history for advanced students.

**Hist 403(g) Seminar in Latin American History (3-4) (S)**

Problems in Latin American history for advanced students.

**Hist 404(g) Seminar in European History (3-4)**

Problems in European history for advanced students.

**Hist 405(g) Seminar in North American History (3-4) (F)**

Problems in North American History for advanced students.

**Hist 410 Tutorial in History: Undergraduate (1-3)**

Directed readings and discussion on particular topics agreed upon by instructor and student. Consent of instructor must be obtained before registration. May be repeated for credit.

## Home Economics

### *Cooperative Degree Program*

Although no courses in this field are offered at MSU, a cooperative agreement with North Dakota State University permits a student to take three years of courses as an MSU student, concurrently pursuing courses in this specialty at NDSU. The student need only transfer for the fourth year to NDSU, pay in-state tuition under a reciprocity agreement, and will receive the degree from that institution.

## Honors Program

Michael W. Hughey, *Director*

The Honors Program exists to reward and encourage superior academic achievement. It is designed to create a community of learning in which students can pursue ideas collectively and learn with and from each other as well as from instructors. Students with a 3.5 GPA or better are invited into the program at the end of their freshman year. Course work usually begins in the sophomore year. Those who complete the Honors Program will have their achievement noted on their transcript.

### *Program requirements*

Honors 200 and any three of the following: Honors 300, 301, 303, 304.

## HONORS COURSES

### **Hon 100 Honors Colloquium (1)**

Small group discussions of selected topics. Offered on a Pass/Fail basis. May be repeated for credit.

### **Hon 200 Honors Colloquium (4)**

The Honors Colloquium will constitute a 4-credit course required of all Honors students upon admission to the Honors program. Colloquia will emphasize readings and small group discussions of significant issues or problems. Meetings will encourage informal exchange of ideas and viewpoints between instructors and students. Reading materials will be chosen at the discretion of the instructors.

**Hon 300 Multidisciplinary Seminar (4)**

Examines some of the major political, economic and cultural developments in American life during roughly the past century. Possible topics include concentration of political and economic power, bureaucratization and its effects, revolutions in class structures, race and ethnicity in politics, and the consequences of the decline of American empire. Social Science credit.

**Hon 301 Masterpieces of Literature (4)**

Consists of careful reading of selected masterpieces of world literature combined with intense discussion and exchange of ideas. Possible works to be covered include selections from Homer, Dante, Shakespeare, Dostoevsky, Yeats, Camus and others. Humanities credit.

**Hon 303 Nature of Physical Reality (4)**

A study and comparison of models of physical reality constructed by two major figures of 20th century physics, Albert Einstein and Niels Bohr. Natural Sciences credit.

**Hon 304 Great Works in Social Thought (4)**

A critical examination of classics in social thought, including such works as Plato's Republic, Augustine's City of God, Machiavelli's The Prince, Locke's Second Treatise and Marx's The Communist Manifesto. Humanities credit.

## Hotel-Motel-Restaurant Management

See *Business Administration for Curricula*.

### HOTEL-MOTEL-RESTAURANT MANAGEMENT COURSES

**HMR 242, 243, 244 Work Experience I-II-III (1 each) (FWS)**

Supervised work experience of at least 30 hours. Written report. Open only to students majoring in HMR. One credit per quarter, up to a maximum of 3 credits.

**HMR 310 Food Administration Practicum (2-4)**

(Fws)

Supervised on-the-job experience in food administration.

**HMR 312 Beverage Administration Practicum (2-4) (Fws)**

Supervised on-the-job experience in beverage administration.

**HMR 314 Motel Administration Practicum (2-4)**

(Fws)

Supervised on-the-job experience in motel administration.

**HMR 300 Food and Beverage Management (4) (S)**

Current methods and principles of food and beverage control and labor cost controls for restaurants and institutions. Emphasis will be placed on food and beverage control systems, forecasting, budgeting and sales analysis. Prerequisite: Quantity Food Production.

**HMR 349 Food Service Laboratory (2)(Fws)**

Supervising and operational management, food production and catering experience at the Centennial House. Prerequisite: HMR 443.

**HMR 350 HMR Maintenance Management (4) (F)**

Examines the organization and management of the Hotel-Motel-Restaurant maintenance department and provides technical information needed to establish effective preventative maintenance procedures. Emphasis will be given to energy conservation in the operation of lodging and food services.

**HMR 352 Front Office Management (4) (F)**

Front office systems, organization, functions and dynamics. Preparation of the night audit.

**HMR 355 Innkeeper's Liability (4) (S)**

Legal environment of hotels, motels and restaurants. Includes HMR investment and finance.

**HMR 442 Hotel-Motel-Restaurant Organization & Management (4) (W)**

93

The scope, organization and operation of lodging and food service departments. Topics to be covered will include Hotel-Motel-Restaurant organization and management, work authority and delegation, work policies, staffing, safety, job responsibilities and the operational characteristics of lodging and food service systems. Prerequisite: Management 360.

**HMR 446 Hospitality Marketing and Sales Promotion (4) (W)**

An analysis of aspects of the hospitality services market with emphasis on marketing and sales promotion. Internal and external stimulation of sales in competitive markets; experimental techniques in industry-sponsored, sales blitz activities. Examination of the touristic areas and current developments worldwide, attracting individuals, pleasure groups or business conventions. Prerequisite: Mktg 310, HMR 442.

**HMR 456 Convention Sales and Services (4) (F)**

Explanation of the convention market and its services. Planning, organizing, executing and evaluating conventions from the client and hotel convention service staff perspective.



**HMR 460 Hotel-Motel-Restaurant Design and Aesthetics (4)**

The condensed survey of the aesthetic and current trends in the development of public accommodations and food services. Includes the interrelationships of planning, construction, equipment, maintenance, personnel and service. Emphasis will be on design and layout, equipment selection and budget estimation. Prerequisite: HMR 443 and consent of the instructor.

**HMR 466 Current Trends in HMR Management (1-4) (S)**

Current trends in lodging and food services. Emphasis will be on review of current literature and information in the area of lodging and food service. In depth examination of special topics and/or problems by the students will be included. Prerequisite: Senior or consent of instructor.

**HMR 498 Problems in Hotel-Motel-Restaurant (1-4) (Fws)**

Individual inquiry into an aspect of hotels, motels or restaurants not covered in the regular curriculum. Prerequisite: Consent of instructor.

94 **Department of Humanities and Multicultural Studies**

Joyce Torgerson, Chair; Dieter Berninger, D.C. Cole, LeRoy Johnson, Phyllis May-Machunda, Robert McGahey, Sylvia Morgan, Glenn Ringstad, Donna Rosh

**HUMANITIES CURRICULA**

The Humanities Department is the core of a variety of interdisciplinary programs: an individualized major in Humanities (see section on Individualized Major); a major in American Studies (see American Studies); a Fine Arts Minor, especially designed for students who wish to prepare themselves for lifelong understanding and appreciation of the arts; a Humanities Minor which provides a cultural and historical context for students whose major lies elsewhere; and a Women's Studies Minor, especially designed to bring women into the mainstream of historical and cultural emphasis within the university and within society (see Women's Studies).

The department's interdisciplinary courses emphasize major ideas and art forms, particularly those of the West.

**Minor in Fine Arts (36-40)**

*Core Requirements (4 credits)*

Hum 201 Humanities Through the Arts

*Electives (32-36 credits)*

Three courses from three of the following areas. Two to four credits must be in a studio, applied or performing course.

Hum 214-215-216 Classical, Renaissance, Modern (4 credits each)

The visual arts and their history and appreciation

Theatre, film and literature

Music

**Minor in Humanities: Western Culture (35)**

*Core Requirement (12 credits)*

Hum 211-212-213 Perspectives on Society, Ultimate Reality, Self (4 each)

*Electives (23 credits)*

Two courses from the sequence of Hum 214-215-216 Classical, Medieval, Modern (4 each)

In consultation with an advisor from the department, the student will choose electives from humanistic disciplines that best serve individual interests, such as history, philosophy, political science, literature, history or appreciation of the arts.

**HUMANITIES COURSES**

**Hum 104 Scandinavian Origins (4)**

Early Scandinavian culture with emphasis on mythology and Icelandic saga.

**Hum 105 Modern Scandinavian Culture (4)**

Modern Scandinavian culture and its 19th century antecedents.

**Hum 106 The Scandinavian Self (4)**

The Scandinavian self as seen in the arts and ideas of the Scandinavian societies.

**Hum 131 Special Topics in the Humanities (4)**

Topics developed around the special interests of students and instructors. May be repeated for credit as topics vary. In the past, such topics have included Russian Humanities and Latin American Humanities.

**Hum 201 Humanities Through The Arts (4) (F)**

An exploratory approach to the arts which acquaints students with the basic elements of representative art forms.

**Hum 211-212-213 Perspectives on Society, Perspectives on Ultimate Reality, Perspectives on the Self (4 each) (FWS)**

Basic ideas and art forms of western civilization studied within a thematic context.

**Hum 214-215-216 Classical and Medieval Worlds, Renaissance through 18th Century, Romanticism and the Modern World (4 each) (FWS)**

A chronological approach to the basic ideas and art forms of western civilization. May be repeated for credit as course material and emphasis change.

**Hum 217 Latin American Humanities (4) (F)**

An introduction to the culture of Latin America through works selected for the insights they provide into the social and historical reality of the area as well as for their artistic merit.

**Hum 218** See MCS 218

**Hum 227 Russian Humanities (4) (S)**

An introduction to the culture of Russia through works selected for the insights they provide into the social and historical reality of the Soviet Union as well as for their artistic merit with concentration in the society of the last decades before the Revolution.

**Hum 237 Canadian Humanities (4) (S)**

An introduction to Canadian social and cultural life through works selected for the insights they provide into the distinctively Canadian features of North American experience as well as for their artistic merit.

**Hum 300(g) Women's Studies (4) (Fs)**

Interdisciplinary perspectives on women from biology, humanities, the arts and the social sciences. Core class for Women's Studies Minor Program.

**Hum 311(g) Topics in Women's Studies (3-4)**

May be repeated for credit as topics vary.  
Prerequisite: Hum 310 or consent of instructor.

**Hum 312 Women and the Humanities (4) (W)**

An examination of painting, sculpture, novels, songs and instrumental music by women, as well as creative work from the traditional world of women.

**Hum 314 European Humanities (16) (S)**

A study of European social and cultural life, including a general lecture series and related classes in special subjects at the Centre for Medieval and Renaissance Studies at Oxford, England, followed by a study tour of continental locations, chosen for their artistic, cultural and historical importance.

**Hum 321 Independent Study (1-8)**

Prerequisite: Humanities Liberal Arts requirement completed, and consent of instructor. May be repeated twice to a maximum of eight credits.

**Hum 331(g) Topics in Humanities (4)**

Topics appropriate to upper-division students, developed around the interests of students and instructors.

**Hum 351(g) American Religion (4)**

An interdisciplinary examination of religious life and thought in America.

**Hum 410(g) Directed Readings in Women's Studies (1-8)**

Projects designed by students and instructor.  
Prerequisites: Hum 310 or consent of instructor. May be repeated for credit.

**Hum 411(g) Christian Origins (4)**

An interdisciplinary approach to the study of the origins of Christianity.

## Individualized Major

*For requirements see Academic Information.*

The following is an example of an individualized major:

### Individualized Major in International Relations (70 credits)

A student interested in such a major should select an area of concentration of at least 30 credits in an appropriate department such as political science or history. With the help of a faculty advisor from that department, the student selects at least 70 credits—30-40 credits in appropriate courses from other disciplines such as languages, sociology, education, economics or geography.

All courses selected for an individualized major in International Relations must be clearly and directly related to the title.

The completed petition, signed by the student and the advisor, must be submitted to the Office of Academic Affairs for consideration by the Individualized Major Committee and the appropriate faculty dean, at least three quarters before graduation.

## Industrial Studies Department

Wade T. Swenson, *Chair*; Clyde O. Kale, Reza A. Maleki, Michael L. Ruth, Howard R. Schmidt, Scott C. Seltveit.

The Department of Industrial Studies offers a variety of programs to prepare not only talented educators for the teaching fields, but also skilled technologists for the growing demands of business and industry. Students can choose from the following Bachelor's degrees: Industrial Education, Graphic Communications, Vocational Rehabilitation Therapy, Industrial Technology with options including Construction Management, Industrial Distribution, or Industrial Technology/Management. Two minors in Industrial Technology—Industrial Management and Construction Management—are offered.

### INDUSTRIAL STUDIES CURRICULA Major in Industrial Education B.S. Degree

The Industrial Education major provides the necessary background to teach secondary level industrial education in any of these areas: construction, communications, electronics/energy, manufacturing and transportation. Technology courses and curriculum courses provide students an orientation and preparation for Technology Education. Students must complete the professional secondary education course sequence to meet graduation and licensure requirements. (See Secondary Education)

*Core Requirements (40 credits)**Communications Area*

- Eng 113 Engineering Graphics I (4)  
 IndS 116 Computer Aided Drafting/Design (4)  
 IndS 250 Explorations in Graphic Communications (4)

*Construction Area*

- IndS 120 Wood Technology I (4)  
 IndS 201 Construction Materials and Processes (4)

*Electronics/Energy Area*

- IndS 270 Passive Circuits I (4)  
 IndS 272 Linear Circuits I (4)

*Manufacturing Area*

- IndS 231 Welding Processes (4)  
 IndS 232 Machine Technology I (4)

*Transportation Area*

- IndS 295 Automechanics (4)

*General Requirements (20 credits)*

- IndS 334 Materials Science (4)  
 IndS 439 Industrial Education Teaching Methods (4)  
 IndS 493 Industrial Safety & Accident Prevention (4)  
 IndS 495 Foundations of Industrial Education (4)  
 IndS 497 Industrial Education Curriculum Design (4)

**Industrial Education Concentrations**—(one required)*Communications (16)*

- IndS 215 Architectural Drafting & Building Codes (4)  
 IndS 350 Layout and Design for Printing (4)  
 IndS 351 Offset Printing I (4)

## Choice of One:

- IndS 317 Technical Illustration I (4)  
 IndS 352 Offset Printing II (4)

*Construction (16)*

- IndS 215 Architectural Planning & Building Codes (4)  
 IndS 220 Wood Technology II (4)  
 IndS 325 Construction Estimating & Specifications (4)  
 IndS 326 Mechanical/Electrical Systems (4)

*Electro-Mechanical (16)*

- IndS 233 Introduction to Robotics (4)  
 IndS 290 Fluid Power Mechanics (4)  
 IndS 371 Industrial Circuits (4)  
 IndS 372 Digital Circuits I (4)

*Electronics (16)*

- IndS 271 Passive Circuits II (4)  
 IndS 370 Linear Circuits II (4)  
 IndS 371 Industrial Circuits (4)  
 IndS 372 Digital Circuits I (4)

*Manufacturing (16)*

- IndS 232 Machine Technology I (4)  
 IndS 233 Introduction to Robotics (4)  
 IndS 332 NC/CNC Part Programming (4)  
 IndS Elective (4)

*Required Related Electives (15)*

- Phy 111 Elementary Physics I (4)  
 Engl 287 Technical Report Writing (4)  
 Math 121 Intermediate Algebra (4)  
 Math 133 Trigonometry (3)

**Major in Graphic Communications B.S. Degree**

A wide variety of job opportunities exist for the graphic communication graduate. Graphic communicators have various responsibilities evolving around the production of graphic images. A graphic communicator may work in areas such as photography, layout and design, computer graphics, CADD or others. A graphic communicator may organize multi-media presentations involving slides, photographs, displays, etc. He or she may sometimes produce technical drawings and illustrations for service or parts manuals. They may find jobs as a production manager in an advertising agency, commercial printing company or a design firm. This type of position coordinates all phases of graphics, publicity and/or product support materials. The Printing Industry of America and the Graphic Arts Technical Foundation estimate 60,000 job openings a year in this field.

*Core Requirements (72 credits)*

- Eng 113 Engineering Graphics I (4)  
 IndS 252 Computer Graphics Production (4)  
 IndS 317 Technical Illustration I (4)  
 IndS 318 Technical Illustration II (4)  
 IndS 350 Layout & Design for Printing (4)  
 IndS 351 Offset Printing/Photo I (4)  
 IndS 412 Senior Project (2)  
 Art 123 Foundations Drawing I (3)  
 Art 125 Foundations Design Basic (3)  
 Art 152 Intro to Pictorial Illustration (4)  
 Art 154 Intro to Graphic Design (4)  
 MC 345 Multi-Media Communications (4)  
 Engl 287 Technical Report Writing (4)  
 Mgmt 360 Principles of Management (4)  
 Mktg 310 Principles of Marketing (4)

Photo Core: 6 credits from Art or Mass Communications

- Art 230 Basic Photo (3)  
 Art 200F Photo Studio (3)

**or**

- MC 230 Communications Photo I (3)  
 MC 430 Communications Photo III (3)

Related Area Electives:

10 credit hours of related electives to be worked out with the consent of advisor.

**Major in Industrial Technology B.S. Degree***Construction Management Concentration*

Construction Management, a component of Industrial Technology, prepares students for middle management employment at a professional level. Graduates are equipped with abilities and skills to execute architectural and engineering designs. The professional construction manager possesses skills comprising the entire construction process. Graduates are qualified for a wide range of positions including estimator, job superintendent, project inspector, insurance inspector, building inspector, purchasing agent, safety engineer, expeditor and office manager. The program consists of courses in

Industrial Studies, Engineering, Business, Management and Liberal Arts. The requirements appear below.

*Program Requirements (109 credits)*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Acct 305 Business Law I (4)  
Acct 310 Managerial Accounting (4)  
Eng 113 Engineering Graphics I (4)  
Eng 200 Surveying I (3)  
Eng 243 Engineering Mechanics I—Statics (4)  
Eng 245 Engineering Mechanics III—Materials (4)  
Eng 291 Materials Inspection and Testing (2)  
Engl 287 Technical Report Writing (4)  
Finc 354 Principles of Real Estate I (4)  
IndS 116 Computer-Aided Drafting/Dsgn (4)  
IndS 201 Construction Materials & Processes (4)  
IndS 215 Architectural Planning & Codes (4)  
IndS 325 Construction Estimating & Specifications (4)  
IndS 326 Mechanical/Electrical Systems (4)  
IndS 328 Construction Planning & Scheduling (4)  
IndS 329 Construction Equipment & Methods (4)  
IndS 424 Soil Mechanics (4)  
IndS 428 Construction Management & Contracts (4)  
IndS 429 Design of Steel, Concrete, & Wood Structures (4)  
IndS 493 Industrial Safety & Accident Prevention (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 416 Labor Economics (4)  
Mgmt 420 Organizational Theory (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 451 Organizational Behavior (4)  
Mgmt 456 Management of Information Systems (4)

*Required Related Courses (35 credits)*

ComS 145 Data Processing (4)  
Econ 202 Principles I: Micro (4)  
Econ 204 Principles II: Macro (4)  
Econ 206 Principles III: International (4)  
Math 121 Intermediate Algebra (4)  
Math 133 Trigonometry (3)  
Math 273 Linear Algebra/Applied Calculus I (4)  
Psy 113 General Psychology (4) or  
Soc 110 Intro to Sociology (4) or  
Soc 205 Social Psychology (4)

*Industrial Distribution Concentration*

Industrial Distribution, a component of Industrial Technology that concentrates on wholesale distribution of manufactured products, is one of few such programs offered in the United States. Majors are taught practical applications of technology and the skills of business. Graduates are qualified for a wide range of positions including inside sales, inventory management, purchasing, outside sales, credit and financial management, corporate management and warehouse management.

*Program Requirements (88 credits)*

Acct 229 Principles I: Financial (4)  
Acct 230 Principles II: Financial (4)  
Acct 305 Business Law I (4)

Engl 287 Tech. Report Writing (4)  
Finc 340 Corporate Finance (4)  
IndS 113 Engineering Graphics I (4)  
IndS 116 Computer Aided Drafting/Design (4)  
IndS 120 Wood Technology I (4)  
IndS 201 Construction Matls./ Processes (4)  
IndS 230 Manufacturing Processes (4)  
IndS 234 Metal Casting (4)  
IndS 270 Passive Circuits I (4)  
IndS 272 Linear Circuits I (4)  
IndS 290 Fluid Power Mechanics (4)  
IndS 334 Materials Science (4)  
IndS 371 Industrial Circuits (4)  
IndS 483 Facility Design (4)  
IndS 493 Ind. Safety & Acc. Prev. (4)  
Mgmt 360 Principles of Management (4)  
Mktg 310 Principles of Marketing (4)  
Mktg 315 Industrial Marketing (4)  
Mktg 320 Introduction to Logistics (4)

*Required Related Courses (16 credits)*

Econ 202 Principles I: Micro (4)  
Econ 204 Principles II: Macro (4)  
Math 121 Intermediate Algebra (4)  
Math 274 Introduction to Statistics I (4)

*Industrial Technology Management Concentration*

Industrial Technology Management is a component of the Industrial Technology B.S. Degree. Two areas of concentration are available—Electronics and Electro-Mechanical. This program prepares graduates for mid-management and technical supervisor positions. Typical entry-level positions include production supervision, production engineering, system engineering, industrial engineering, manufacturing engineering, methods engineering and quality assurance engineering. The major requirements include the core area and one technical concentration area.

*Core Requirements (56 credits)*

ComS 130 Basic Programming (4)  
Engl 287 Tech Report Writing (4)  
IndS 113 Engineering Graphics (4)  
IndS 116 Computer Aided Drafting/Design (4)  
IndS 230 Manufacturing Processes (4)  
IndS 380 Time & Motion Studies (4)  
IndS 382 Manufacturing Automation (4)  
IndS 383 Manufacturing Cost Analysis (4)  
IndS 482 Statistical Quality Control (4)  
IndS 483 Facility Design (4)  
IndS 493 Industrial Safety & Accident Prevention (4)  
Mgmt 360 Principles of Management (4)  
Mgmt 440 Personnel Management (4)  
Mgmt 450 Production/Oper Management (4)  
Areas of Technical Concentration (32 credits)  
One area required.

*Electronics (32)*

IndS 270 Passive Circuits I (4)  
IndS 271 Passive Circuits II (4)  
IndS 272 Linear Circuits I (4)  
IndS 370 Linear Circuits II (4)  
IndS 371 Industrial Circuits (4)

IndS 372 Digital Circuits I (4)  
IndS 470 Digital Circuits II (4)  
IndS 471 Communication Systems (4)

*Electro-Mechanical (32)*

IndS 233 Introduction to Robotics (4)  
IndS 270 Passive Circuits I (4)  
IndS 272 Linear Circuits I (4)  
IndS 290 Fluid Power Mechanics (4)  
IndS 332 NC/CNC Part Programming (4)  
IndS 334 Materials Science (4)  
IndS 372 Digital Circuits I(4)  
IndS 390 Machine System Analysis (4)

*Required Related Courses (36 credits)*

Chem 111 General Chemistry I (4)  
Chem 111L General Chemistry Laboratory I (1)  
Math 121 Intermediate Algebra (4)  
Math 133 Trigonometry (3)  
Math 273 Linear Algebra/Applied Calculus I (4)  
Math 274 Introduction to Statistics I (4)  
Phy 111 Elementary Physics I (4)  
Phy 112 Elementary Physics II (4)  
Psy 113 General Psychology (4) or Soc 110 Intro to Sociology (4)  
Psy 119 Social Behavior (4) or Soc 205 Social Psychology (4)

98 **Major in Vocational Rehabilitation Therapy B.S. Degree**

The Vocational Rehabilitation Therapy major prepares graduates to teach physically and/or emotionally handicapped persons rehabilitating vocational and technical skills on a one-to-one basis. The Vocational Rehabilitation therapist typically is employed in federal, state or privately owned institutions such as veteran's hospitals, sheltered workshops, rehabilitation centers or special education facilities. A required clinical affiliation for one quarter during the senior year is the capstone experience of this curriculum.

*Core Requirements (32 credits)*

Eng 113 Engineering Graphics I (4)  
IndS 120 Wood Technology I (4)  
IndS 220 Wood Technology II (4)  
IndS 232 Machine Production I (4)  
IndS 250 Exploration of Graphic Communications (4)  
IndS 270 Passive Circuits I (4)  
IndS 351 Layout and Design for Printing (4)  
IndS 493 Industrial Safety & Accident Prevention (4)

*Clinical Experience (16 credits)*

IndS 451 Clinical Experience (16)

*Special Education (11 credits)*

SpEd 320 Educational Services for Exceptional Individuals (4)  
SpEd 414 Instructional Strategies II: Secondary (4)  
SpEd 470 Transitional Planning for Persons with Severe Handicaps (3)

*Psychology (12 credits)*

Psy 113 General Psychology (4)  
Psy 117 Personality (4)  
Psy 463 Abnormal Psychology (4)

*Social Work (8 credits)*

SW 250 Introduction to Social Welfare (4)  
SW 411 Chemical Dependency (4)

*Biology (8 credits)*

Biol 215 Human Anatomy and Physiology I (4)  
Biol 216 Human Anatomy and Physiology II (4)

**Minors in Industrial Technology**

**Industrial Technology/Management (36 credits)**

*Core Requirements (12 credits) Choose 3 from the following courses:*

Eng 113 Engineering Graphics I (4)  
IndS 116 Computer Aided Drafting/Design (4)  
IndS 230 Manufacturing Processes (4)  
IndS 380 Time & Motion Studies (4)  
IndS 382 Manufacturing Automation (4)  
IndS 482 Statistical Quality Control (4)  
IndS 483 Facility Design (4)  
IndS 493 Industrial Safety & Accident Prevention (4)

*Technical Concentration (24 credits) Choose 1 from the following 2 areas:*

*Electronics*

IndS 270 Passive Circuits I (4)  
IndS 271 Passive Circuits II (4)  
IndS 272 Linear Circuits I (4)  
IndS 370 Linear Circuits II (4)  
IndS 372 Digital Circuits I (4)  
IndS 470 Digital Circuits II (4)

*Electro-Mechanical*

IndS 233 Introduction to Robotics (4)  
IndS 270 Passive Circuits I (4)  
IndS 272 Linear Circuits I (4)  
IndS 290 Fluid Power Mechanics (4)  
IndS 372 Digital Circuits I (4)  
Technical Elective (4)

**Construction Management**

*Program Requirements (35 credits)*

Eng 113 Engineering Graphics I (4)  
Eng 200 Surveying I (3)  
IndS 201 Construction Processes (4)  
IndS 215 Architectural Planning & Codes (4)  
IndS 325 Construction Estimating & Specifications (4)  
IndS 326 Mechanical/Electrical Systems (4)  
IndS 328 Construction Planning & Scheduling (4)  
IndS 428 Construction Management & Contracts (4)  
IndS 493 Industrial Safety & Accident Prevention (4)

**INDUSTRIAL STUDIES COURSES**

**IndS 113 Engineering Graphics I (4) (Fws)**

Principles and applications of graphical communication and analysis. Content includes geometric construction, multiview drawings, dimensioning, auxiliary views and computer-aided drafting.

**IndS 116 Computer-Aided Drafting/Design (4)**  
(Fws)

An introductory course in computer-aided design emphasizing applications in manufacturing and architecture. Course content includes drawing creation utilizing cartesian and polar coordinates, grids, dimensioning, and editing use of trim, move, mirror and layering. Prerequisites: Drawing course or consent of instructor.

**IndS 120 Wood Technology I (4)** (F)

Basic processes, safety, proper tool and machine usage. Laboratory design and fabrication of wood products of choice.

**IndS 201 Construction Materials and Processes (4)** (F)

A study of basic theories and principles of construction materials and methods. The course will follow the construction specification index format, emphasizing divisions pertaining to concrete, site work, wood and steel.

**IndS 214 Descriptive Geometry (4)** (W)

Fundamental principles of orthogonal projection, true length lines, angles between planes, development of surfaces and intersection of solids.

**IndS 215 Architectural Planning & Codes (4)** (S)

A study of architectural drawing which stresses lettering, conventional symbols, graphic techniques of construction drawing and building codes. An analytical study of contemporary architecture, building materials and construction techniques are important phases of the course.

**IndS 220 Wood Technology II (4)** (W)

Production techniques, operation, maintenance, jigs and fixtures for fabrication of wood products. Use of machines for maximum labor saving and quality production. Prerequisite: IndS 120.

**IndS 230 Manufacturing Processes (4)** (F)

A study of traditional and non-traditional industrial processes and equipment. Hands-on experience in laboratories will provide the students with understanding of basic skills in machining, welding and wood technology.

**IndS 231 Welding Processes (4)** (S)

An introduction to welding processes, safety, energy sources for welding, metallurgy, materials, equipment study, weld inspection and testing, weld symbols and blueprint reading.

**IndS 232 Machine Technology I (4)** (W)

This is the first of two courses dealing with metal machining operations. Content includes basic lathe, milling machine, surface grinder, punch press and press break operations. Prerequisite: IndS 113.

**IndS 233 Introduction to Robotics (4)** (F)

Course content includes robot components, types of robots, applications of robots and the social and economic problems involved when introducing robotics into the work place.

**IndS 234 Metal Casting (4)** (W)

Course content includes safety instruction in melting metal, lighting furnaces and pouring. Sand mold making, sand analysis and maintenance, core making and introduction to patternmaking. Prerequisite: IndS 334.

**IndS 237 Machine Technology II (4)** (S)

Course content includes advanced metal machine tool operation especially as they are used in mass production operations. Prerequisite: IndS 232.

**IndS 250 Explorations in Graphic Communications (4)** (F)

Information and experiences in various graphic communication processes including offset, lithography, screen, process printing and photography. Examination of the graphic communications industry and career potential in the field.

**IndS 252 Computer Graphics Production (4)** (Fws)

Desktop publishing to include production of graphics, illustrations, typesetting, camera-ready art by using various personal computers and software. Main emphasis is on how and why this equipment is used in the graphic communications industry. Not open to students having completed MC 215.

**IndS 270 Passive Circuits I (4)** (F)

A study of voltage, current, power, magnetism, capacitance and inductive parameters in D.C. and A.C. circuits. Prerequisite: Math 121 or equivalent.

**IndS 271 Passive Circuits II (4)** (W)

Topics include Thevenin's theorem, superposition theorem, branch current analysis and phasor analysis of complex circuits. Prerequisites: IndS 270 and Math 133.

**IndS 272 Linear Circuits I (4)** (S)

D.C. and elementary small-signal analysis of linear solid-state circuits. Topics include the study of semiconductor diodes, BJTs, FETs and circuits employing these devices. Prerequisite: IndS 270.

**IndS 290 Fluid Power Mechanics (4)** (F)

This course includes the theory and application of hydraulic and pneumatic components and systems, from basic fluid power symbols and components to calculation and design of simple industrial machines.

**IndS 295 Automechanics (4)** (S)

Engine tuneup, tires, brakes and auto repair tools and equipment. Lectures, demonstrations and actual practice work on students' automobiles.

**IndS 317 Technical Illustration I (4) (W)**

Technical art techniques including pictorial line drawing utilizing various media and techniques including color materials, shading sheets, ink line and others, applied in the production of camera-ready illustrations for publication. Prerequisite: Art 123, 125.

**IndS 318 Technical Illustration II (4) (S)**

Camera ready illustration: pictorials, orthographics, schematics and graphs for operations, maintenance, parts identification, marketing publications. Prerequisite: IndS 113.

**IndS 319 Airbrush Techniques (4) (S)**

Airbrush rendering techniques in color and black-and-white, for advertising and photo retouching, and painting for technical and commercial art. Prerequisite: IndS 317.

**IndS 325 Construction Estimating & Specifications (4) (W)**

A study of basic principles and theories of estimating including quantity take-off, work classifications, specifications and blueprint reading.

**IndS 326 Mechanical/Electrical Systems (4) (F)**

A study of mechanical construction including heating, cooling, ventilation, water supply, waste disposal and electrical distribution. Temporary services and code requirements are analyzed.

**IndS 328 Construction Planning & Scheduling (4) (W)**

A study of the Critical Path Method (CPM) and Program Evaluation and Review Techniques (PERT) as techniques of monitoring residential, commercial and heavy-highway construction projects. Job cost data and reporting are analyzed.

**IndS 329 Construction Equipment & Methods (4) (S)**

A study of planning, estimating and managing construction equipment in a manner which will attain the most efficient result.

**IndS 332 NC/CNC Part Programming (4) (W)**

This course is designed to familiarize students with NC/CNC equipment and the languages used to program them, as well as provide experiences in practical parts programs. Prerequisite: IndS 230.

**IndS 334 Materials Science (4) (F)**

A study of bonding structures; mechanical and thermal properties; and the electrical/chemical characteristics of materials used in the production of manufactured products.

**IndS 350 Layout and Design for Printing (4) (Fs)**

Principles of design and basic skills in layout. Instruction in paste-up, color, communication with camera, press and bindery personnel.

**IndS 351 Offset Printing I (4) (Fw)**

Basic offset reproduction fundamentals. High contrast line and half tone photography specifically utilized in the graphic reproduction processes. Graphic arts darkroom procedures and offset press operations, basic bindery operations.

**IndS 352 Offset Printing II (4) (S)**

Halftone, duo-tone, color separation and special effects techniques as related specifically to graphic reproduction processes. Advanced darkroom procedures and offset press is emphasized. Prerequisite: IndS 351.

**IndS 370 Linear Circuits II (4) (F)**

An analysis of small and large-signal discrete and integrated linear circuits. Prerequisite: IndS 272.

**IndS 371 Industrial Circuits (4) (W)**

Course content includes a study of the devices, circuits and systems used in automated manufacturing. Topics include static control devices, generators/motors, sensors, control systems and the technology utilized to implement automated manufacturing. Prerequisite: IndS 372.

**IndS 372 Digital Circuits I (4) (W)**

Course content includes digital gating circuits, digital IC logic families, combinational logic circuits, flip-flops, registers, counters, memory circuits and an introduction to the microprocessor. Prerequisite: IndS 272.

**IndS 380 Time and Motion Studies (4) (F)**

A study and analysis of productive and non-productive work elements for the purpose of productivity improvements and establishing time standards. Prerequisites: Junior standing.

**IndS 382 Manufacturing Automation (4) (W)**

A study and analysis of automated manufacturing systems, their components and application. Prerequisites: Junior standing, IndS 230.

**IndS 383 Manufacturing Cost Analysis (4) (W)**

Cost analysis to predict the expenses that incur to manufacture a product. Prerequisites: IndS 380 and IndS 382 or concurrent enrollment in IndS 382.

**IndS 390 Machine System Analysis (4) (F)**

Course content includes an introduction to stress/strain relationships, fatigue strength, permanent or threaded fasteners, shafting and springs. Course content also includes elements of machine design and how to apply them to everyday situations to ensure that component failures do not occur. Prerequisites: IndS 113, IndS 334.

**IndS 395 Advanced Diagnosis and Tuneup (4) (S)**

Topics include emission control systems, oscilloscope analyzers, cylinder leak tests and dynamic timing. Students will organize and operate an automotive diagnostic clinic as a final activity. Prerequisites: IndS 295.

**IndS 412 Senior Project (2) (W)**

Planning a portfolio, resumes, investigating the illustrator's image and the types of companies that employ graphic communicators. Prerequisite: Senior standing.

**IndS 423 Construction Estimating II (4) (F)**

A study of computer estimating applied to pricing of materials, labor, equipment and overhead in commercial construction projects. Job cost accounting procedures are emphasized. Prerequisite: IndS 325 or consent of instructor.

**IndS 424 Soil Mechanics (4) (F)**

A study of soils, soil behavior, compaction applications, foundation techniques and concepts of soil mechanics.

**IndS 428 Construction Management & Contracts (4) (S)**

A study of commercial construction managerial principles, supervision and contract administration as applied to middle management. An investigation of construction business practices, involving government regulations, change order administration and bond company procedures.

**IndS 429 Design of Steel, Concrete & Wood Structure (4) (S)**

Building principles of design and fabrication using steel, concrete and wood materials.

**IndS 439 Industrial Education Teaching Methods (4) (S)**

Presentation and application of concepts and principles that apply to teaching industrial education courses. Includes organization and management of facilities, teaching techniques and media for laboratory oriented curriculum.

**IndS 450 Graphic Communications Technology (4) (S)**

Advanced study of graphic arts, historical backgrounds, organization of the industry, production methods, new research, experimentation, future trends. Prerequisite: IndS 352.

**IndS 451 Clinical Experience (16) (Fws)**

A full quarter experience as a therapist at the Veterans Administration Hospital in St. Cloud, Minnesota, or at an approved sheltered workshop. Prerequisite: Upper-division standing.

**IndS 469 Student Internship (3-16) (Fws)**

Available to all majors enrolled in the Department of Industrial Studies. Approved practical work experience. Supervised by departmental faculty.

**IndS 470 Digital Circuits II (4) (S)**

A study of microprocessor architecture, interfacing requirements, peripherals and general programming techniques. Prerequisite: IndS 372.

**IndS 471 Communication Systems (4) (F)**

A survey course in communication systems. Content includes a study of AM and FM broadcast systems, SSB, television, pulse communications, transmission lines, antennas and microwaves. Prerequisite: IndS 370.

**IndS 480(g) Special Problems (Topical) (1-6) (Fws)**

Individual study not offered in depth in the regular curriculum. Prerequisite: Upper-class standing, consent of the instructor and department chairperson.

**IndS 482 Statistical Quality Control (4) (Sw)**

A study of manufacturing process control, acceptance sampling and reliability using statistical methods. Prerequisites: Junior standing, Math 274.

**IndS 483 Facility Design (4) (S)**

A study of facilities, locations, structure and planning for efficient layout and material handling systems. Prerequisites: Senior standing, IndS 380 and 382, or consent of instructor.

**IndS 490 Microcomputer-Fluid Power Interfacing (4) (W)**

Topics include fluid power control systems, microprocessors, programmable controllers, sensors and microprocessor-fluid power interfacing applications. Prerequisites: IndS 290, IndS 372 and ComS 130 or 140.

**IndS 491 Industrial Education Equipment Maintenance (4)**

Includes repair and maintenance of industrial and vocational education lab equipment. Student will repair, lubricate and make machine adjustments in the lab activity.

**IndS 493(g) Industrial Safety & Accident Prevention (4) (S)**

A study of occupational hazards, OSHA regulations and fundamentals of accident prevention will be emphasized. Students will study safety procedures for schools, plants, factories and construction sites.

**IndS 495 Foundations of Industrial Education (4) (W)**

A study of the philosophy of industrial education, from a historical perspective, present events and an analysis of future trends.

**IndS 497 Industrial Education Curriculum Design (4) (S)**

Design and development of a futuristic comprehensive industrial arts curriculum. Students also design and develop a secondary vocational education program.



## International Business

See *Business Administration for curricula.*

## Languages Department

Cheri Brown, *Chair*; Roman Alvarez, Doris Amanda Baron, Paula Brekke, Dolores Buttry (on leave), Hi-Sook Hwang, James Kaplan, Edith Krause, Jenny Lin, Teresinha Pereira, G. Theodore Schaum

### AREAS OF STUDY: Chinese, French, German, Japanese, Norwegian, Spanish, Swedish

See also *Classics and Scandinavian Studies.*

The department offers B.A. and B.S. major and minor degree programs in French, German and Spanish, and a two-year program in Norwegian. The department also participates in the Scandinavian Studies programs described elsewhere in this section of the catalog.

Students will find it advisable to begin the study of a foreign language or to continue with a language they have studied previously by beginning in the fall quarter of their freshman year.

Several departments—including Biology, Chemistry, English, History, Philosophy, Political Science, Psychology and Sociology—either require or strongly recommend that their B.A. majors study at least one foreign language, especially if they intend to pursue graduate degrees. International Business requires two years of a foreign language.

### Teaching Foreign Languages

Students who plan to teach foreign languages in elementary or secondary public schools will ordinarily elect the B.S. major. Those seeking a degree in elementary education who wish to be certified to teach a foreign language should consult the chairperson of the department at their earliest convenience to plan their programs for an elementary education minor in foreign language.

### Graduate Study in Foreign Languages

A reading knowledge of a second foreign language is essential to graduate study in languages. The student who expects to seek a graduate degree is advised to plan an undergraduate curriculum with a minor in a second language or with a double major.

### Previous Instruction

Students who have had little or no previous instruction in a foreign language should enroll in the beginning course sequence (101-102-103). Some sections may be open only to students with **no** previous instruction in the language.

Students with less than two years of high school language instruction should enroll in the first year review course in that language (105) if offered, otherwise in 101.

Students with two years of high school language should enroll in an intermediate course. Without written permission of the department chairperson, they cannot enroll in first-year courses for credit.

Those students who successfully completed four or more years in a high school language should register for 300-level courses.

## LANGUAGE CURRICULA

### Major in Languages B.A. Degree

The program is designed as a "secondary" complementary major for students whose primary major may lie in one of the academic fields listed below and for those whose career plans require proficiency in foreign languages and familiarity with their ethnic, cultural and social background: Anthropology-Sociology, Art, Business, English, Health Services, History, Mass Communications, Music, Philosophy, Political Science, Social Services, Speech-Theatre.

#### *Prerequisite*

Students who wish to pursue the Major in Languages must simultaneously declare a "primary" major in another academic program.

#### *Major Course Requirements (60 credits)*

Intermediate and advanced language and culture/civilization courses in Language I (36 credits), e.g., (French: 36/German: 36/Spanish: 36).

Beginning and intermediate language courses in Language II (24 credits), e.g., (French: 24/German: 24/Norwegian: 24/Spanish: 24).

#### *Prerequisites to Language Majors*

In each language major, the beginning level (101-102-103) is considered to be a prerequisite and is not applicable to the major. However, the sequence or any quarter thereof may be applied to the Liberal Arts Requirement.

### Major in French B.A. Degree

#### *Major Course Requirements (54 credits)*

#### *Core Requirements (36 credits)*

French 201-202-203 Intermediate French I-II-III (12)

French 301-302-303 French Conversation and Composition I-II-III (12)

French 311-312-313 French Literature I-II-III (12)

#### *Electives in French (18 credits)*

At least 8 credits in advanced language courses

At least 10 credits in literature courses

#### *Electives in Related Fields*

Selections from the following courses are strongly recommended:

Art 233-234-235 History of Art in the Western World I-II-III

Art 430-431-432 Modern Art I-II-III

Engl 380 World Literature

Hist 315-316-317 Medieval Europe, Renaissance, Reformation

Hist 325 French Revolution and Napoleon  
Hist 338-339 Intellectual History of Western Civilization I-II  
Pol 250 Comparative Governments of Western Europe  
Pol 410 Topics in Western Political Thought  
Spch 322-324-326 Development of Drama I-II-III

Electives in related fields should be chosen in consultation with one's advisor.

**Major in French B.S. Degree (Teaching)**

*Major Requirements in French (57 credits)*

*Core Requirements (36 credits)*

See B.A. Major for requirements.

Plus Language 340, Methods and Materials in Teaching Foreign Languages (3 credits).

*Electives in French (18 credits)*

See B.A. Major for electives.

*Electives in Related Fields*

See B.A. Major for electives.

Electives should be chosen in close consultation with one's advisor.

Note: All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education Requirements in Education Department. In addition, a language proficiency test in French by the Department of Languages is required.

**Minor in French B.A. degree (36 credits)**

Same as Core Requirements for B.A. Major

*Electives in Related Fields*

See B.A. Major.

**Minor in French B.S. Degree (Teaching)**

Same as Core Requirements for B.S. major (36 credits), plus

Language 340 Methods and Materials in Teaching Foreign Language (3 credits)

*Electives in Related Fields*

See B.A. major for Electives

Note: This minor can be awarded only in combination with at least one teaching major.

**Major in German B.A. Degree**

*Major Course Requirement (54 credits)*

*Core Requirements (24 credits)*

German 201-202-203 Intermediate German I-II-III (12)

German 301-302-303 Conversation and Composition I-II-III (12)

*Electives in German (30 credits)*

At least 8 credits in advanced language courses.

At least 6 credits in culture and civilization courses.

At least 16 credits in literature courses.

*Electives in Related Fields*

Selections from the following courses are strongly recommended:

Art 233-234-235 History of Art I-II-III

Engl 380 World Literature

Hist 318-319 History of Germany I-II

Phil 250 Modern Philosophy

Phil 265 19th Century Philosophy

Pol 250 Comparative Government of Western Europe

Electives should be chosen in consultation with one's advisor.

**Major in German B.S. Degree (Teaching)**

*Major Requirements in German (57 credits)*

*Core Requirements (24 credits)*

See B.A. Major for requirements.

Plus Language 340 Methods and Materials in

Teaching Foreign Languages (3 credits).

*Electives in German (30 credits)*

At least 8 credits in language courses.

At least 6 credits in culture and civilization courses.

At least 16 credits in literature.

Electives should be chosen in consultation with one's advisor.

*Electives in Related Fields*

See B.A. Major for electives.

Note: All Teacher Education Requirements must be fulfilled to complete this major. See Teacher

Education Requirements in Education Department. In addition, a language proficiency test in German by the Department of Languages is required.

**Minor in German (36 credits)**

See Core Requirements for B.A. Major (24 credits)

*Electives in German (12 credits)*

At least 3 credits in culture and civilization.

At least 9 credits in literature courses.

*Electives in Related Fields*

See B.A. Major for electives.

**Minor in German (Teaching) (39 credits)**

Same as Core Requirements for B.A. Major.

Plus Language 340 Methods and Materials in Teaching Foreign Languages (3 credits)

*Electives in German (12 credits)*

At least 3 credits in culture and civilization.

At least 9 credits in literature.

*Electives in Related Fields*

See B.A. Major.

Note: This minor can be awarded only in combination with at least one teaching major.

**SCANDINAVIAN STUDIES CURRICULA**

*See Scandinavian Studies*

**Major in Spanish B.A. Degree**

*Major Course Requirements (54 credits)*

*Core Requirements (36 credits)*

Span 201-202-203 Intermediate Spanish I-II-III (12)

Span 301-302-303 Conversation and Composition I-II-III (12)

Span 311-312-313 Hispanic Literature I-II-III (12)

*Electives in Spanish (18 credits)*

At least 8 credits in advanced language courses.

At least 10 credits in literature.

### *Electives in Related Fields*

Selections from the following courses are strongly recommended:

Art 233-234-235 History of Art in the Western World I-II-III

Anth 215 Indians of South America

Anth 220 Indians of Middle America

Engl 380 World Literature

Hist 101-102-103 Western Civilization I-II-III

Hist 104-105-106 World History I-II-III

Hist 309 Studies in Latin American History

Hum 201 Humanities through the Arts

Hum 214-215-216 Classical and Medieval Worlds

Renaissance through 18th Century, Romanticism and the Modern World

Electives should be chosen in consultation with one's advisor.

### **Major in Spanish B.S. Degree (Teaching)**

*Major Course Requirements (57 credits)*

*Same as Core Requirements for B.A. Major (36 credits).*

Plus Language 340 Methods and Materials in Teaching Foreign Languages (3 credits).

*Electives in Spanish (18 credits)*

See B.A. Major for requirements.

*Electives in Related Fields*

See B.A. Major for electives.

Note: All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education Requirements in Education Department. In addition, a language proficiency test in Spanish by the Department of Language is required.

### **Minor in Spanish (36 credits)**

Same as Core Requirements for B.A. Major.

*Electives in Related Fields*

See B.A. Major for electives.

### **Minor in Spanish (Teaching) (39 credits)**

Same as Core Requirements for B.A. Major. Plus Language 340 Methods and Materials in Teaching Foreign Languages (3 credits).

*Electives in Related Fields.*

See B.A. Major for electives.

## **CHINESE LANGUAGE COURSES**

### **Chin 101 Beginning Chinese I (4) (F)**

An introduction to the basic sounds and sentence patterns of Mandarin Chinese. Listening and speaking skills are developed through intensive aural-oral practice of daily conversation. About 120 most commonly used characters will be introduced.

### **Chin 102 Beginning Chinese II (4) (W)**

Intensive aural-oral practice of daily conversation. More sentence patterns are introduced through dialogues and stories. About 130 more characters will be taught. Prerequisite: Chin 101 or equivalent.

### **Chin 103 Beginning Chinese III (4) (S)**

More complex sentence patterns are introduced through dialogues, stories and passages. Continued emphasis on listening and speaking. Development of reading and writing skills. About 150 more characters will be taught. Prerequisites: Chin 101, 102 or equivalent.

### **Chin 201 Intermediate Chinese I (4) (F)**

Complex sentence patterns introduced through dialogues and reading passages and with abundant aural-oral practice. The skills of understanding, speaking, reading and writing are equally emphasized. About 150 characters taught. Prerequisite: Chin 101-102-103 or equivalent.

### **Chin 202 Intermediate Chinese II (4) (W)**

Further improvement of understanding, speaking, reading and writing. About 150 characters taught. Prerequisite: Chin 201 or equivalent.

### **Chin 203 Intermediate Chinese III (4) (S)**

More vocabulary, phrases and sentence patterns are introduced through aural-oral drills as well as reading and writing practice. About 150 more characters taught. Prerequisite: Chin 202 or equivalent.

## **FRENCH LANGUAGE AND LITERATURE COURSES**

### **Fren 100 Selected Emphasis in French—Beginning Level (2-4) (on demand)**

Focus on specific language skills (speaking, translation, writing, reading). May be repeated for credit with different objectives of the course. Not applicable toward the major or minor program in French.

### **Fren 101-102-103 Beginning French I-II-III (4 each) (F-W-S)**

Basic skills in understanding, speaking, reading and writing French. Language laboratory required for oral practice. Not applicable toward the major or minor program in French.

### **Fren 105 Rapid Review of French Fundamentals (4) (on demand)**

Intensive grammar review through oral and written exercises for students with previous exposure to French. Prerequisite: Fren 102 or equivalent. Not applicable toward the major or minor program in French.

### **Fren 107-108 Intensive Beginning French (6-6) (on demand)**

Accelerated acquisition of basic communicative skills in French. Minimum two hours per week language laboratory required. Preparatory for, though not applicable toward, the major or minor program in French.

**Fren 200 Selected Emphasis in French—  
Intermediate Level (1-4) (on demand)**

Focus on developing specific language skills. May be repeated for credit with different course objectives. Applicable toward the major or minor in French. Prerequisite: One year college French or equivalent.

**Fren 201-202-203 Intermediate French I-II-III (4 each) (FWS)**

Rapid and intensive review of grammar and further improvement of language skills in understanding, speaking, reading and writing. Prerequisite: One year college French or two years of high school study.

**Fren 297 Independent Reading in French—  
Intermediate Level (1-4)**

Selected project as agreed upon by student and instructor. Prerequisites: Completion of Fren 201-202-203 or consent of instructor; approval by department chair upon presentation of proposal. May be repeated for a total of 8 credits.

**Fren 301-302-303 French Conversation and  
Composition I-II-III (4 each) (FWS)**

Development of oral fluency and proficiency in French composition. Individual practice in language laboratory for pronunciation, vocabulary building and conversational skills. Prerequisite: Fren 203 or equivalent.

**Fren 311-312-313 French Literature I-II-III (4 each) (FWS)**

Readings in major works of the earlier periods of French literature. 311: Introduction to French Literature; 312: Survey of 19th Century Literature; 313: Survey of 20th Century Literature. Prerequisite: Fren 203 or equivalent.

**Fren 397 Independent Study in French—  
Advanced Level I (1-4)**

Selected project as agreed upon by student and instructor. Prerequisites: Completion of Fren 301-302-303. Consent of instructor; approval by department chair upon presentation of proposal. May be repeated for a total of 8 credits.

**Fren 401-402 Advanced French Composition and  
Conversation I-II (4 each) (FW)**

Achievement of a high level of oral and written fluency. Emphasis on phonetics, syntax and stylistics. Prerequisite: Completion of Fren 303 or consent of instructor.

**Fren 403 Applied French (4) (S)**

Advanced French for vocational uses. Vocabulary building in designated technical areas. Independent project in consecutive interpreting, translating, film dubbing, tour guiding, etc. Prerequisite: Fren 402.

**Fren 413 Survey of 18th Century Literature (4)**

Readings in the major works of the Rococo and the Enlightenment. Prerequisite: Completion of French 203. May not be repeated for credit.

**Fren 480(g) Special topics in French Literature  
and/or Culture (2-4)**

In-depth study of a selected topic in French. May be repeated for credit. Counts toward the French major or minor. Prerequisite: Fren 203 or consent of instructor.

**Fren 487(g) Studies in the French Language (3)**

In-depth study of a selected topic in French linguistics (history of the language, structure of modern French). Prerequisite: Fren 403 or consent of instructor. May be repeated for credit.

**Fren 497 Independent Study in French—  
Advanced Level II (1-4)**

Selected project as agreed upon by student and instructor. Prerequisite: Completion of Fren 301-302-303. Consent of instructor; approval by department chair upon presentation of proposal.

**GERMAN LANGUAGE AND LITERATURE  
COURSES**

**Ger 100 Selected Emphasis in German—  
Beginning Level (1-4) (on demand)**

Language skills (speaking, reading, listening, writing). No prerequisite. May be repeated for credit with different course objectives. Not applicable toward the major or minor program in German.

**Ger 101-102-103 Beginning German I-II-III (4 each) (FWS)**

Emphasis on the spoken language. Language laboratory: regular periods as required by the instructor. Not applicable toward the major or minor program in German.

**Ger 107-108 Intensive Beginning German (6-6) (on demand)**

Accelerated acquisition of basic communicative skills in German. Minimum of two hours weekly in language laboratory practice. Preparatory for, though not applicable toward, the major or minor program in German.

**Ger 200 Selected Emphasis in German—  
Intermediate Level (1-4) (on demand)**

The four language skills. May be repeated when course objectives are different. Prerequisite: At least two quarters of college-level German or the equivalent. Applicable toward the major or minor program in German.

**Ger 201-202-203 Intermediate German I-II-III (4 each) (FWS)**

Review and expansion of language skills. Readings selected from short literary works. Language laboratory as required by instructor. Prerequisite: One year of college German or two years of high school study.

**Ger 297 Independent Reading in German—Intermediate Level (1-4)**

Selected project as agreed upon by student and instructor. Prerequisite: Completion of or concurrent enrollment in Ger 201-202-203; or consent of instructor, approval by department chair upon presentation of proposal. May be repeated up to a total of 8 credits. Applicable toward the major or minor programs in German.

**Ger 301-302-303 German Composition and Conversation I-II-III (4 each) (FWS)**

Achievement of oral fluency and practical experience in writing. Prerequisite: Completion of second year German or consent of instructor.

**Ger 311-312-313 Masterpieces of German Literature I-II-III (4 each) (FWS)**

Critical reading, discussion and literary analysis of representative works. Conducted in German. 311: 20th Century. 312: Realism and Naturalism. 313: The Age of Enlightenment and the Age of Idealism. Prerequisite: Ger 201-202-203 or consent of instructor.

**Ger 331-332 German Culture and Civilization I-II (3 each)**

Lectures, readings and discussions on German art, architecture, education, history, music, philosophy, religion, science. Prerequisite: Completion of Ger 201-202-203.

**Ger 397 Independent Reading in German—Advanced Level I (1-4)**

Selected project as agreed upon by student and instructor; approval by department chair upon presentation of proposal. Prerequisite: Ger 301-302-303. May be repeated up to a total of 8 credits. Applicable toward the major or minor in German.

**Ger 401-402-403 Advanced German Composition and Conversation (4 each) (FWS)**

Advanced composition and achievement of a high level of fluency. Prerequisite: Completion of German 301-302-303 or consent of instructor.

**Ger 480(g) Special Topics in German Literature and Culture (2-4)**

In-depth study of a selected topic in German. May be repeated for credit. Prerequisite: Ger 311-312-313 or consent of instructor.

**Ger 497 Independent Reading in German—Advanced Level II (1-4)**

Selected project as agreed upon by student and instructor; approval by department chair upon presentation of proposal. Prerequisite: 301-302-303. May be repeated up to a total of 8 credits. Applicable toward the major or minor in German.

**LANGUAGE****Lang 110 Pronunciation Skills in Foreign Languages (1-2) (on demand)**

Course intended to develop pronunciation skills in one or more foreign languages. Useful to students of vocal music, theatre, mass communications and other disciplines.

**Lang 340 Methods and Materials in Teaching Foreign Languages (3)**

Analysis of objective and current techniques. Prerequisite: Completion of an intermediate course in any foreign language.

**JAPANESE****Japanese 101-102-103 Beginning Japanese I-II-III (12) (FWS)**

Introduction to Japanese language and culture. Emphasis placed on the spoken language and reading the Japanese alphabet.

**Japanese 201-202-203 Intermediate Japanese I-II-III**

The development of academic learning skills of writing and reading, in addition to the sophistication of personal communication skills is expected. In principle, instruction is done in Japanese. English written articles as well as video programs are in use for the enrichment of cultural understanding. One year of Japanese (Japanese 101-102-103) or the equivalent is required.

**Japanese 297 Independent Study in Japanese—Intermediate Level (1-4)**

Selected project agreed upon by student and instructor. Prerequisite: Japanese 101-102-103 and/or consent of instructor. May be repeated up to a total of 8 credits.

**NORWEGIAN**

*See Scandinavian Studies*

**SPANISH LANGUAGE AND LITERATURE COURSES****Span 100 Selected Emphasis in Spanish—Beginning Level (2-4) (on demand)**

Introductory course that focuses on specific objectives, applications, interests or the acquisition of certain language skills, e.g., listening comprehension, reading, speaking, writing. Credits vary according to specific course offered. May be repeated. No prerequisites. Not applicable toward the major or minor program in Spanish.

**Span 101-102-103 Beginning Spanish I-II-III (4 each) (FWS)**

Introductory course. Emphasis on spoken language. Reading and inductive study of grammar. Language laboratory: As required by instructor. Not applicable toward the major or minor program in Spanish.

**Span 107-108 Intensive Beginning Spanish (6-6)**  
(on demand)

Accelerated acquisition of basic communicative skills in Spanish. Minimum two hours weekly of language laboratory practice. Preparatory for, though not applicable, toward the major or minor in Spanish.

**Span 105 Rapid Review of Spanish Fundamentals (4)** (on demand)

Grammar review through abundant oral and written exercises. Not applicable toward the major or minor program in Spanish.

**Span 200 Selected Emphasis in Spanish—Intermediate Level (2-4)** (on demand)

Focus on specific objectives, applications, interests or developing certain language skills, e.g., listening comprehension, reading, speaking, writing, translation. Credits will vary according to the specific course offered. May be repeated for credit whenever course objectives are different. Prerequisite: At least two quarters of college-level Spanish or the equivalent. Applicable toward the major or minor program in Spanish.

**Span 201-202-203 Intermediate Spanish I-II-III (4 each)** (FWS)

Emphasis on spoken language. Rapid, intensive review of grammar; selected prose readings. Language laboratory as required by the instructor. Prerequisite: Span 101-102-103 or two years of high school Spanish.

**Span 297 Independent Reading in Spanish—Intermediate Level (1-4)**

Selected project as agreed upon by student and instructor. Prerequisites: Completion of Spanish 201-202-203 or consent of instructor; approval by department chairperson upon presentation of proposal. May be repeated up to a total of 8 credits.

**Span 301-302-303 Conversation and Composition I-II-III (4 each)** (FWS)

Practical experience in writing and speaking Spanish. Recommended as a prerequisite for advanced literature courses, and for freshmen with four years of high school Spanish.

**Span 311-312-313 Introduction to Hispanic Literature I-II-III (4 each)** (FWS)

311: Analysis and discussion of major works of Hispanic literature from 1800 to 1936. 312: Analysis and discussion of major works of Hispanic literature from 1936 to the present. 313: Analysis and discussion of major works of Hispanic literature from their origins to 1800.

**Span 397 Independent Reading in Spanish—Advanced Level I (1-4)**

Selected project as agreed by student and instructor. Prerequisites: Completion of Span 301-302-303 or consent of instructor; approval by department chair upon presentation of proposal. May be repeated up to a total of 8 credits.

**Span 401-402-403 Advanced Spanish Composition and Conversation I-II-III (4 each)** (FWS)

Advanced composition with emphasis on syntax and stylistics. Achievement of a high level of oral and written fluency. Prerequisite: Span 303 or consent of instructor.

**Span 480(g) Special Topics in Spanish Literature and Culture (2-4)**

In-depth study of a selected topic in Spanish. Focus may be historical or a theme, motif, genre, movement, period or a single major author. May be repeated for credit. Prerequisite: Span 311-312-313 or consent of instructor.

**Span 497 Independent Reading in Spanish—Advanced Level II (1-4)**

Selected project as agreed by student and instructor. Prerequisites: Completion of Span 301-302-303 or consent of the instructor; approval by department chair upon presentation of proposal. May be repeated up to a total of 8 credits.

**SWEDISH**

**Swedish 101-102-103 Beginning Swedish (4 each)** (on demand)

An introductory study of the Swedish Language stressing oral proficiency supplemented by an overview of Modern Swedish civilization.

107

**Legal Assistant**

David Hauff, *Acting Coordinator*

The Legal Assistant Program is a professional four-year major resulting in a Bachelor of Science degree. The program is guided by a Legal Assistant Committee composed of university and community members and is administratively located with the Accounting Department.

The following curriculum will be in effect for the 1989-1990 academic year. Students enrolling in the program for the 1990-91 academic year should check with the coordinator regarding curriculum revisions.

**Major Requirements**

*Core Requirements (66 credits)*

**Part A (all required)**

- LegA 125 Intro to Legal Assistant (2)
- Acct 200 Intro to the Legal System (2)
- Acct 305 Business Law I (4)
- LegA 250 Legal Research & Communication I (4)
- LegA 251 Legal Research & Communication II (4)
- LegA 252 Legal Research & Communication III (4)
- LegA 324 Interviewing (4)
- LegA 350 Law Office Management (4)
- LegA 375 Legal Ethics (4)
- LegA 469 Internship (6)

## Part B

Seven of Nine following courses required:

LegA 310 Civil Procedure (4)  
LegA 315 Medical Terms and Rec. (4)  
LegA 320 Domestic Relations (4)  
LegA 330 Bankruptcy (4)  
LegA 420 Debtor-Creditor (4)  
LegA 450 Abstracts & Titles (4)  
Acct 229 Prin I: Financial (4)  
Acct 230 Prin II: Financial (4)  
Acct 306 Business Law II (4)

*Major Tracks*—each Legal Assistant Major must complete at least 12 credits in one of the four alternate major tracks.

Estate and Tax  
Litigation  
Public Interest  
Real Estate

*Major Tracks (At least 12 credits)*

*Estate and Tax*  
LegA 301 Methods & Materials in Estates & Tax (4)-Required  
Acct 441 Individual Tax (4)  
LegA 446 Estate Gift and Trust Tax (4)

*Litigation*

108

LegA 302 Methods & Materials of Litigation (4)-Required  
LegA 441 Public Benefits I (4)  
LegA 441 Public Benefits II (4)  
LegA 443 Public Benefits III (4)  
Biol 215 Anatomy and Physiology I (4)  
Biol 216 Anatomy and Physiology II (4)  
Or up to two additional courses in core listing

*Public Interest*

LegA 303 Methods & Materials in Public Law (4)-Required  
LegA 430 Administrative Advocacy (4)  
LegA 441 Public Benefits I (4)  
LegA 442 Public Benefits II (4)  
LegA 443 Public Benefits III (4)

*Real Estate*

LegA 304 Methods & Materials of Real Estate Law (4)-required  
LegA 455 Law of Mineral Interest (4)  
Finc 354 Principles of Real Estate I (4)

## LEGAL ASSISTANT COURSES

### LegA 125 Introduction to Legal Assistant (2) (Fs)

Provides an overview of the legal assistant profession to assist students in their career decision-making process.

### LegA 250 Legal Research & Communication I (4) (F)

A general introduction to recorded sources of the law and where and how they may be found. Specific sources will be discussed and facilitated through practical exercises. Fundamentals of grammar, styles and letter writing will be discussed and practiced. Prerequisite: Completion of or concurrent enrollment in Acct 200 Intro to Legal Systems.

### LegA 251 Legal Research & Communication II (4) (W)

Continuation of Legal Research and Communication sequence. Students will begin to identify and analyze legal issues through exercises and case studies. Students will draft legal instruments, pleadings and be introduced to the writing requirements for legal memoranda. Prerequisite: LegA 250.

### LegA 252 Legal Research & Communication III (4) (S)

Continuation of Legal Research and Communication sequence, students will further develop skills in legal issue identification, analysis and research through progressively more complex exercises including the preparation of legal memoranda and briefs. Students will also receive an introduction to automated legal research sources and word processing techniques for production of legal documents. Prerequisite: LegA 250 and 251.

### LegA 301 Methods & Materials in Estate and Tax (4) (S)

A study of the procedures, documents and other techniques used in the planning for transfer of property after death, administration of estates and the preparation of federal and state gift, estate and income tax returns. Prerequisite: LegA 252 or consent of program director.

### LegA 302 Methods & Materials in Litigation (4) (S)

A study of the procedures, documents and other techniques used in a legal setting emphasizing trial practice. Topics included will be case intake, discovery, negotiations, trial preparation, trial practice and post judgment relief. Prerequisite: LegA 252, LegA 310 or consent of program director.

### LegA 303 Methods and Materials in Public Law (4) (W)

A study of the procedures, documents and other techniques used in a legal aid or poverty law setting, including client intake and eligibility determinations, routine case handling in such areas as public benefits, domestic relations, bankruptcy and debtor-creditor situations as well as handling of non-routine constitutional rights litigation. Prerequisite: LegA 252, LegA 441 or consent of program director.

**LegA 304 Methods & Materials in Real Estate Law (4) (W)**

A study of the procedures, documents and other techniques used in a legal setting emphasizing real estate practice, including title, sale or transfer, lease zoning, and mineral interests in real property. Prerequisite: LegA 252, LegA 450 or consent of program director.

**LegA 310 Civil Procedure (4) (W)**

The substantive and procedural law of civil litigation in both state and federal court systems. Prerequisite: LegA 252 or consent of program director.

**LegA 315 Medical Terms & Records (4) (F)**

An introduction to medical vocabulary, types and systems of human medical records, their use and importance in legal proceedings, and methods of acquiring such records for litigation. Prerequisite: LegA 252 or consent of program director.

**LegA 320 Domestic Relations (4) (S)**

Law of Domestic Relations including marriage, separation, divorce, annulment, adoption and custody. Prerequisite: LegA 252 or consent of program director.

**LegA 325 Interviewing (4) (F)**

Development of the skills necessary to elicit comprehensive factual information about legal issues and to assist the client in understanding the process and procedures of the legal system. Prerequisite: LegA 252 or consent of program director.

**LegA 330 Bankruptcy (4) (S)**

A study of the substantive and procedural law of bankruptcy, including liquidation, business reorganizations and adjustment of debts of individuals. Prerequisite: LegA 252 or consent of program director.

**LegA 350 Law Office Management (4) (W)**

An introduction to the unique characteristics of law office organization and management including time records and billing systems, pleading organization, docket control and file maintenance in complex legal proceedings, and an overview of computerized record, billing and research systems. Prerequisite: LegA 252 or consent of program director.

**LegA 375 Legal Ethics (4) (F)**

A study of the laws governing the professional ethics of attorneys with emphasis on the Code of Professional Responsibility and its implications for legal assistants. Prerequisite: Completion of LegA 252 or consent of program director.

**LegA 420 Debtor-Creditor Law (4) (W)**

A study of the substantive and procedural law relating to the extension of credit, pre-judgment and post-judgment collection of debts. Prerequisite: LegA 252 or consent of program director.

**LegA 430 Administrative Advocacy (4) (S)**

Techniques and procedural rules involved in the non-lawyer representation of clients before administrative hearing bodies. Prerequisite: LegA 252 or consent of program director.

**LegA 441 Public Benefits I (4) (F)**

A three-quarter sequence covering substantive and procedural law of major governmental programs providing benefits to individuals as entitlements or otherwise and dealing primarily with economic maintenance and financing of health or medical care. Will include general and medical assistance, food programs, local emergency assistance and Aid to Families with Dependent Children. Prerequisite: LegA 252 or consent of program director.

**LegA 442 Public Benefits II (4) (W)**

Includes Social Security Retirement and Disability, Supplemental Security Income and Medicare. Prerequisite: LegA 252, LegA 441, or consent of program director.

**LegA 443 Public Benefits III (4) (S)**

Includes Worker's Compensation, Unemployment Compensation, public jobs programs and Hill-Burton rights to medical care. Prerequisite: LegA 252, 441, 442 or consent of program director.

**LegA 446 Estate, Gift, and Trust Taxation (4) (W)**

Federal estate and gift tax; income taxation of estates and trusts; fundamentals of estate planning. Prerequisite: Completion of LegA 252 or consent of the program director. (cross-listed as Acct 446 Estate, Gift and Trust Taxation)

**LegA 450 Abstracts and Titles (4) (F)**

The law dealing with official descriptions and ownership (title) of real property with emphasis on the methods of description and systems for recording and abstracting the title.

**LegA 455 Law of Mineral Interests (4) (W)**

An overview of the major concepts in severability of mineral interests in real property including oil, gas, coal and water rights. Prerequisite: Completion of LegA 252 or consent of the program director.

**LegA 460 Housing Law (4)**

A study of the major concepts in housing law focusing primarily on the landlord-tenant relationship, but also including government financing programs, anti-discrimination regulations and homestead protections. Prerequisite: Completion of LegA 252 or consent of the program director.

**LegA 469 Internship (1-16) (Fws)**

Internship experience under supervision of an attorney as approved by program internship coordinator. Student must return to school for at least one quarter after the completion of the internship. Prerequisite: Completion of LegA 252, LegA 325 and one methods and materials course.



**LegA 498 Problems in Law (1-4)** *(on demand)*  
Individual research or study under supervision of program director or other approved faculty.

## **Liberal Arts**

These courses are designed around topics of special significance, team taught by faculty from different divisions and draw important connections between the disciplines.

### **LIBERAL ARTS COURSES**

#### **LART 301 War and Peace (4)**

Examined critically will be the religious and philosophical foundations of war and peace, nuclear preparedness, explanation of nuclear predicament, nuclear war as a probability, and social, economic, political and environmental costs of war. Proposals made for disarmament will also be examined.

#### **LART 302 World Hunger (4)**

Global perspective on world hunger. Study of population theory and trends in relation to food resources. Consideration of moral questions: What moral responsibility do the affluent have to the hungry? Do hungry persons have a right to be saved from starvation?

#### **LART 305 Human Rights (4)**

Examined will be the history of the development of the concept of human rights. The relevant International Covenants and Codes, the philosophical grounds for and types of human rights, the state of human rights in various societies, the efforts toward the restoration of human rights by the United Nations, the non-Government Organizations and the United States and the critique of the principle of human rights.

#### **LART 306 The Scientific Revolution (4)**

The scientific, social and cultural aspects of the birth of modern science in the 17th Century are studied. Some laboratory work involving the replication of relevant classical experiments is included in the course.

#### **LART 308 The Third World Experience in its Literature (4)**

An introductory survey of the backgrounds, problems and concerns of representative third world nations during the 20th century as these are reflected in selected literary works of merit. The approach combines the study of literature with that of social, cultural and political history. Open to juniors and seniors only.

#### **LART 310 Environment and Ethics (4)**

Ecology and earth's resources considered in relation to the ethical issues inherent to human attitudes regarding the environment. Major emphasis on ecological principles and their application in shaping an appropriate environmental ethic for the future.

#### **LART 311 Marxism and Revolution (F)**

An interdisciplinary study of the theories and practices of three 20th century revolutions: the Russian, the Chinese and the Nicaraguan. The course examines Marx's concept of revolution and traces its subsequent application, re-interpretation and adaptation to Russian, Chinese and Nicaraguan conditions.

#### **LART 312 Romantic Love (4) (Ws)**

Designed to compare, contrast, interpret and integrate themes and theories of love found in literature and social psychology. Issues relating to love's onset, stability, fairness, variety, etc. will be studied through reading in both areas, discussion, lecture and writing.

#### **LART 314 American Literature and the Great Depression (4) (F)**

This course will investigate the impact of the depression on the life and thought of the American people in the 1930s and will present a cross section of the writing of the period. It will examine the roots of the "depression psychology" that forms the basis of much of contemporary interventionist government policy as well as the basis of much reformist and socially-oriented literature.

#### **LART 315 Creative Imagination (4)**

An interdisciplinary study of creative imagination. Examines how philosophers and educational theorists have understood the concepts of imagination and creativity, and how these ideas relate to common sense views.

#### **LART 316 Democratic Theory & Practice: A Global View (4)**

#### **LART 317 Women Speak, Men Speak (4) (S)**

Information from psycholinguistics and psychology will be used to investigate and determine the extent of differences between male and female language patterns. Reasons for these differences will be explored as well as their effect on career development and social interaction.

#### **LART 318 Energy Issues (4) (S)**

Study of fundamental energy concepts. Energy issues are seen as based on the interaction of technology, society and resources. Intended to help students recognize the world-wide and long-range character of energy problems and solutions.

#### **LART 319 Images of Women in Literature and Film (4)**

An historical analysis of the changing role of women in literature and film from 1900 to the present. Influential feature films, novels, short stories and poems will illustrate the contrasts and contradictions in the evolution of women's societal roles.

**LART 321 The Exceptional Individual in Society (4)**

This course examines the changed social and legal treatment of exceptional individuals (the handicapped and the gifted). The primary empirical material is the treatment, historically, of the handicapped and gifted, particularly in the educational setting.

**LART 322 The Rhetoric of Vindication (4)**

An examination of how rhetoric is used and the role played by the mass media when a public figure who is either suspected of or charged with a wrong-doing attempts to defend herself/himself to the public. Selected case studies will be analyzed through lectures and discussions.

**LART 323 Biology and Behavior: Beyond the Nature/Nurture Debate (4)**

An examination of the biological and environmental influences on behavior from a modern integrative perspective. The history of the nature/nurture controversy and future prospects for change in behavior are also considered.

**LART 324 The Information Revolution (4)**

Exploration of the effects of technological developments on contemporary society. Special emphasis will be placed on the social impact of computer-related technologies on the work place, home and classroom.

**LART 325 Gender, Culture and Society (4) (W)**

This course will examine from sociological and anthropological perspectives, how gender roles and gender hierarchies are identified, maintained and changed.

**LART 326 Freedom and Society (4)**

This course will examine the meaning of and possibilities for freedom in society. Works of literature will be examined from both a literary and sociological perspective.

**LART 327 The Childhood Experience Through Literature & Autobiography (4)**

An examination of the concepts of literature, biography and autobiography as vehicles through which we tell our own "story," beginning with the primary experience of childhood. Using both fiction and autobiographies, the course will explore prominent theories of psychological development in conjunction with standard literary methods of analysis.

**LART 328 The Viking Age: Its History and Literature (4) (F)**

An introduction to the societal nature of pagan Scandinavia and its class with the Christian civilization of Western Europe in the Age of the Vikings (800-1100AD), and the impact of Norden's fusion with the Christian West.

**LART 329 Structures in Art/Music (4) (S)**

The course will investigate the concept of structures as it applies to music and visual arts.

**LART 330 Science and the Arts (4)**

Science and the humanities are viewed as a cooperative effort to understand the universe. Relationships between the two are studied, concentrating on major developments in physics and their impact on literature and art.

**LART 331 The Military in American Civilization (4)**

An inquiry into the nature of the American military experience, and the interaction of this experience with American society, culture and economy.

**LART 332 Russian Culture, 1812-1913 (4)**

The interrelationship of political, social and cultural development in 19th-century Russia. The course exposes students to some of the finest products of Russian culture in its greatest age and seeks an understanding of the relationship of artistic expression to the most vital social and political concerns of the age.

**Life Science (Teaching)**

*Information on the major in Life Science (Teaching) may be found under Biology.*

111

**Management**

*See Business Administration for Curricula*

**MANAGEMENT COURSES**

**Mgmt 315 Government and Business (4)**

Same as Econ 315.

**Mgmt 360 Principles of Management (4) (Fws)**

Analyzes functions of management and the forces that shape and define the manager's role.

**Mgmt 405(g) Small Business Management (4) (Fws)**

Analysis of problems confronting the manager of a small retail, wholesale or manufacturing enterprise. Prerequisite: Mgmt 360.

**Mgmt 406(g) Small Business Management Consulting (2) (Fws)**

Practicum in providing management assistance to small business. Can be taken two quarters consecutively for a total of 4 credits. Senior or graduate standing and permission of the instructor required. Offered only on a pass/fail basis.

**Mgmt 416(g) Labor Economics (4)**

Same as Econ 416.

**Mgmt 420 Organizational Theory (Fs)**

Behavioral science theory applied to an understanding of the design, structure, performance and environment of business organizations. Prerequisite: Mgmt 360, Psy 119 or Soc 205.

**Mgmt 421(g) Decision Analysis (4) (Fs)**

Structuring and analyzing of decisions under conditions of risk and uncertainty. Prerequisites: Mgmt 360, Math 275.

**Mgmt 424 Management Science I (4) (Fws)**

A study of inventory models, linear programming techniques and network models as they relate to business decisions. Other topics may be covered if time permits. Prerequisites: Mgmt 360, Math 275.

**Mgmt 425 Management Science II (4) (S)**

A study of probability based quantitative decision techniques including queuing theory, replacement decisions, simulation, game theory and Markov chains. Prerequisites: Mgmt 424.

**Mgmt 430(g) Managerial Economics (4)**

Same as Econ 430.

**Mgmt 440(g) Personnel Management (4) (Fw)**

Management of people at work with emphasis on recruiting, selecting, training and evaluating personnel. Prerequisites: Mgmt 360, Psy 119 or Soc 205.

**Mgmt 450(g) Production/Operations Management (4) (Fws)**

Description and analysis of the production/operations function in an organization. Prerequisites: Mgmt 360 and Math 275.

**Mgmt 451 Organizational Behavior (Ws)**

Studies the interaction of individuals and groups in business organizations. Prerequisites: Mgmt 360, Psy 119 or Soc 205.

**Mgmt 452(g) Organizational Development (4) (W)**

Techniques used to assist in solving problems and dealing more rapidly with change. Prerequisites: Mgmt 360, Mgmt 440 or 451.

**Mgmt 456(g) Management Information Systems (4) (Fws)**

Design and use of communication processes in which data are recorded, transmitted and revised as an aid in managerial decision-making. Prerequisites: Mgmt 360, CIS 145 or ComS 201.

**Mgmt 458(g) International Management (4) (Fws)**

Examination of organizational management in the international environment will focus on private and public management in the exchange of goods and services. Prerequisite: Mgmt 360.

**Mgmt 461(g) Management Seminar (4) (S)**

Selected management topics of contemporary interest. May be repeated with different topics. Prerequisite: Mgmt 360.

**Mgmt 469 Student Internship (3-16) (Fws)**

Prerequisite: Junior standing.

**Mgmt 480 Senior Seminar in Management (4) (Ws)**

Examination of ethical and social responsibility issues related to the field of management. Students will prepare and present three moderate length papers. Prerequisite: Mgmt 360, senior standing and consent of instructor.

**Mgmt 490 Business Policy (4) (Fws)**

Integrates material learned in the functional business areas through the solving of business policy cases and the utilization of a sophisticated computer business game. Prerequisite: Senior standing.

**Mgmt 498 Problems in Management (1-4) (Fws)**

Individual inquiry into an aspect of Business Administration not covered in the regular curriculum. Prerequisite: Consent of instructor.

**Mgmt 598 Research in Management (3)**

Research in a specific problem area in management. Designed to provide training in the use of research techniques. Topic selected through conference with faculty advisor. Prerequisite: Graduate standing.

## Marketing

*See Business Administration for Curricula.*

### MARKETING COURSES

**Mktg 310 Principles of Marketing (4) (Fws)**

Principles of planning the product, price, promotion and distributive strategies of an organization within a competitive environment to meet the needs of the consumer. Prerequisite: Econ 204.

**Mktg 315(g) Industrial Marketing (4) (W)**

Methods of marketing goods and services to manufacturers, wholesalers, retailers, institutions and governments. Prerequisite: Mktg 310.

**Mktg 320 Introduction to Logistics (4) (Fs)**

Distribution processes with emphasis placed on competencies in understanding wholesale distribution processes. Prerequisite: Mktg 310.

**Mktg 330 Personal Selling (4) (Ws)**

Investigation of the theory and practice of selling through an examination of the sociological and psychological influences upon the selling and buying process. Prerequisite: Mktg 310, Psy 119 or Soc 205.

**Mktg 335 Retail Management (4) (Fw)**

Principles and concepts underlying the managerial functions of the retailer. Prerequisite: Mktg 310.

**Mktg 406(g) Small Business Management Consulting (2) (Fws)**

Practicum in providing marketing assistance to small business. Can be taken two quarters consecutively for a total of 4 credits. Senior or graduate standing and permission of the instructor required. Offered only on a pass/fail basis.

**Mktg 410(g) Marketing Logistics (4) (S)**  
Movement and storage activities associated with the distribution of raw materials and finished goods.  
Prerequisite: Mktg 310, Mktg 320, Math 275.

**Mktg 421 Consumer Behavior (4) (Fws)**  
Behavioral science concepts applied to the study of consumer decision-making. Prerequisite: Mktg 310, Psy 119 or Soc 205.

**Mktg 422 Marketing Research (4) (Fws)**  
Methods of obtaining and analyzing internal and external marketing information in the context of the role of market information in management decision-making. Prerequisite: Mktg 310, Math 275.

**Mktg 423 Marketing Communications (4) (Ws)**  
Applications of interpersonal and mass communications theories to the management of marketing promotions. Prerequisite: Mktg 310, Psy 119 or Soc 205.

**Mktg 441 Business and Society (4) (Fws)**  
Studies role of business operating within the American society, political and economic system.  
Prerequisites: Mktg 310, senior standing.

**Mktg 442(g) Marketing Seminar (4) (Fws)**  
Selected marketing topics of contemporary interest.  
Prerequisite: Mktg 310. May be repeated with different topics.

**Mktg 444(g) Transnational Marketing (4) (Fs)**  
Comprehensive study of those factors affecting international marketing. Prerequisites: Mktg 310, senior standing.

**Mktg 455 Marketing Management (4) (Fws)**  
Marketing decisions made under conditions of uncertainty. Utilize accepted marketing and interdisciplinary methods. Prerequisite: Senior standing and 8 quarter hours of marketing.

**Mktg 469 Student Internship (3-16) (Fws)**  
Prerequisite: Junior standing.

**Mktg 470(g) Independent Study (1-4) (Fws)**  
Individual inquiry into theoretical aspects of marketing not covered in the regular curriculum. Prerequisite: Consent of instructor.

**Mktg 498(g) Problems in Marketing (1-4) (Fws)**  
Individual inquiry into a practical marketing problem.  
Prerequisite: Consent of instructor.

**Mktg 598 Research in Marketing (3)**  
Research into a specific problem area in marketing to provide training in the use of research techniques. Topic to be selected with faculty advisor. Prerequisite: Graduate standing.

## Master of Business Administration

See Graduate Bulletin for Curriculum

### MBA COURSES

**MBA 500 Professional Communication (4) (F)**  
Examines business communication in both in-house and public situations. Includes formal full-length report of individual topic development by student.

**MBA 501 Statistics for Business Management II (4) (F)**  
Regression analysis, model building, computer software packages, analysis of variances, experimental design, analysis of count data, student project. Prerequisites: Math 274-275 or Math 574.

**MBA 502 Managerial Microeconomic Analysis (4) (W)**  
Application of microeconomic theory to managerial decision-making, particularly in regard to the various kinds of market structures within which a manager may operate. Prerequisites: Econ 202, MBA 501.

**MBA 504 Macroeconomic Policy (4) (S)**  
A rigorous examination of fiscal and monetary policy, macroeconomic models and forecasting. Prerequisite: Econ 204.

**MBA 510 Marketing Administration (4) (S)**  
Analysis of problems met by management in meeting consumer needs. Emphasizes marketing decision-making under conditions of uncertainty. Prerequisites: MBA 501, MBA 502, Mktg 310.

**MBA 512 Strategic Marketing: A Nonprofit Environment (4) (F alternate years)**  
Strategic market planning in a not-for-profit environment. Prerequisite: Mktg 310.

**MBA 514 Consumer Information Processing (4) (S alternate years)**  
The application of behavioral science concepts to the study of consumer information processing and decision-making. Prerequisite: Mktg 310.

**MBA 525 Business Tax Planning (4) (F alternate years)**  
An examination of selected federal tax rules and their impact on recurring management decisions including: selection of legal form of organization, property transactions, compensation, international operations and tax planning. Prerequisites: Acct 229-230 or equivalent.

**MBA 530 Managerial Accounting (4) (W)**  
Use and analysis of accounting data for management planning, control and decision-making. Prerequisites: MBA 529, MBA 501.

**MBA 542 Advanced Financial Management (4) (S)**  
Application of financial theory to the evaluation of a firm's investments, financing and dividend decisions in keeping with the objectives of maximizing shareholder wealth. Prerequisites: Finc 340, MBA 529, MBA 530.

**MBA 550 Business and Society (4) (W)**

The free enterprise system in an economic, philosophic and historic perspective, including socialists' criticisms; antitrust, regulation and public enterprise; corporations and social responsibility. Prerequisites: Econ 202-204.

**MBA 551 Organizational Theory and Behavior (4) (F)**

In-depth consideration of the concepts and research findings in organizational theories, processes and behavior. Prerequisite: Mgmt 360.

**MBA 555 Quantitative Analysis for Management (4) (W)**

Introduction to management science models and techniques which stress logic, application and interpretation rather than the mathematical foundations. Prerequisite: MBA 501.

**MBA 560 Organizational Policy (4) (S)**

Capstone course drawing upon knowledge of management, marketing, finance, accounting and economics. Prerequisite: Permission of instructor.

**Mass Communications Department**

Martin Grindeland, *Chair*; Marvin Bossart, Wayne Gudmundson, Shelton Gunaratne, William B. Hall Jr., Dean Hustuft, Aivera Kromer, Melva Moline, Robert Larson, Mark Strand

**SUMMARY OF REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN MASS COMMUNICATIONS**

The major in mass communications is designed to balance the breadth of liberal education with the depth of a professional program. To accomplish these twin goals the department requires majors to complete 96 credits of distributional requirements as well as a minimum of 49 credits and a maximum of 60 credits in mass communications course work as part of the 192 credits required for graduation. Credits earned beyond 192 may be taken in any discipline.

Distributional requirement (Liberal Arts) . . . . .	96
Mass Communications Courses:	
Common Core . . . . .	26
Professional Concentrations . . . . .	23-27
Electives in any Discipline . . . . .	7-11
Electives in Non-Communications Courses . . . . .	36

Note: Course work in communications shall *not* be used to fulfill this requirement with the exception of those courses in speech communication which are included in the university's published list of liberal arts courses. In addition, practicums and internships of a communications nature shall *not* be used to fulfill this requirement, regardless of where such courses originate. Students may double major with another communications program or complete two

concentrations within the department provided that all of the above requirements are met.

Total Credits Required for Graduation . . . . . 192

**THE DISTRIBUTIONAL REQUIREMENT**

The distributional requirement, which will also satisfy the university's minimum requirement of 64 credits of liberal arts, is as follows:

DR1—English 101, 102 & 103 . . . . .	12
DR2—Natural Sciences . . . . .	10
DR3—Economics 202, 204, 206 . . . . .	12
DR4—History . . . . .	10
DR5—Political Science (10 crs. including Pol 120) . . . . .	10
DR6—Humanities (10 credits from the division) . . . . .	10
DR7—Mathematics 121, 274 & 275 . . . . .	12
or twelve credits in a foreign language . . . . .	12
DR8—Additional Study in the Liberal Arts . . . . .	20
Minimum Total Credits in the Liberal Arts . . . . .	96

NOTE: All of the courses in the above distributional requirement must be selected from the university's published list of approved liberal arts courses. In addition, at least one course in the above distribution must be taken from multicultural studies and another must be designated as concentrating on a non-western culture. Students who have already earned a bachelor's degree and are working on a second degree are not required to complete the above distributional requirement provided they have completed 96 credits of liberal arts.

**THE COMMON CORE**

All students who major in mass communications are required to complete a common core of study including course work emphasizing mass communications theory, history, effects, ethics, issues and law as well as the development of skills in written and visual communications. The following courses comprise the required core:

- MC 100 Introduction to Mass Communications (3)
- MC 175 Desktop Publishing (3)
- MC 184 Radio-TV Operations (3)
- MC 205 Media Writing (3)
- MC 230 Communications Photography I (3)
- MC 240 History of Mass Communications (3)
- MC 435 Mass Media: Ethics and Issues (4)
- MC 440(g) Communications Law (4)

**THE PROFESSIONAL CONCENTRATION**

In addition to the common core, students who major in mass communications concentrate typically in one of five areas: advertising, broadcast journalism, photojournalism, print journalism and public relations. Those who wish to conduct research or attend graduate school may complete a general program in mass communications. Those who wish to concentrate in writing may complete a dual major with English and Mass Communications.

### **Advertising Concentration**

The advertising concentration prepares students who wish to work designing campaigns, buying and selling media, writing copy and producing advertisements for print and broadcast.

The Common Core (26)

(and)

MC 260 Advertising Principles (4)

MC 270 Public Relations Principles (4)

MC 315 Layout and Typography (3)

MC 318 Advertising Copywriting (3)

MC 384 Television Production (4)

MC 416 Advertising Media Strategy (3)

MC 419 Advertising Campaigns (4)

Recommended:

Mktg 310 Principles of Marketing (4)

### **Broadcast Journalism Concentration**

The broadcast journalism concentration prepares students for work in the news departments at radio and television stations. The study of writing, reporting, photography, editing, production and producing is emphasized.

The Common Core (26)

(and)

MC 210 Broadcast Journalism (4)

MC 217 Radio/Television Performance (4)

(or) MC 384 Television Production (4)

MC 305 Reporting (4)

MC 385 TV News Writing (2)

MC 386 TV News Reporting

(and/or) MC 387 TV News Photography (4)

MC 388 TV News Videotape Editing

(and/or) MC 389 TV News Producing (2)

MC 400 Reporting of Public Affairs

(or) MC 465 Investigative Processes (4)

### **Photojournalism Concentration**

The photojournalism concentration prepares students for work as photographers in the news and public affairs departments at newspapers and television stations. The study of reporting, photography and visual communications is emphasized.

The Common Core (26)

(and)

MC 210 Broadcast Journalism (4)

MC 305 Reporting (4)

MC 315 Layout and Typography (3)

MC 330 Communications Photography II (3)

MC 352 TV News Photography (3)

MC 356 TV News Videotape Editing (1)

MC 430 Communications Photography III (6)

Recommended:

MC 384 Television Production (4)

### **Print Journalism Concentration**

The print journalism concentration prepares students for work at newspapers or other publications. The study of writing, reporting, copy editing, reporting of public affairs and investigative processes is emphasized.

The Common Core (26) and

(and)

MC 305 Reporting (4)

MC 310 Copy Editing (4)

MC 330 Communications Photography II (3)

MC 400 Reporting of Public Affairs (4)

MC 425 Journalism Seminar

(or) MC 460 International Communication (4)

MC 465(g) Investigative Processes (4)

### **Public Relations Concentration**

The public relations concentration prepares students to work in both internal and external communications for organizations and individuals. Theories, skills and strategies of the diverse public relations profession are emphasized.

The Common Core (26)

(and)

MC 260 Advertising Principles (4)

MC 270 Public Relations Principles (4)

MC 305 Reporting (4)

MC 310 Copy Editing (4)

MC 315 Layout & Typography

(or) MC 330 Communications Photography II (3)

MC 345 Multi-Media Communication

(or) MC 384 Television Production (4)

MC 410 Public Relations Processes (4)

Recommended:

MC 380 Case Studies in Public Relations (4)

### **The General Program**

The general program in mass communications is designed for students preparing to attend graduate school or to conduct research for media-related agencies and institutions.

The Common Core (26)

(and)

MC 210 Broadcast Journalism

(or) MC 305 Reporting (4)

MC 260 Advertising Principles (4)

MC 270 Public Relations Principles (4)

MC 328 Media and Politics

(or) MC 460 International Communication (4)

Additional credits in mass communications agreed upon by the student and her/his advisor (8)

Requirements in Other Areas:

Engl 287 Technical Report Writing (4)

Math 274 Introduction to Statistics I (4)

Math 275 Introduction to Statistics II (4)

Soc 350 Methods of Social Research I (4)

Soc 351 Methods of Social Research II (4)

**Dual Major in English and Mass Communications  
B.A. Degree (100 credits)**

*Requirements in English (56 credits)*

1. Core requirements (28)  
Engl 211-212-213 Major British Writers I-II-III (12)  
Engl 371-372-373 Amer Lit Survey I-II-III (12)  
Engl 314 Shakespeare (4)
2. Writing requirements (8)  
Engl 285 Writing for Film and Television (4)  
Engl 286 Practical Writing (4)  
Engl 287 Technical Report Writing (4)  
Engl 288 Introduction to Creative Writing (4)  
Engl 354 Non-Fiction Writing (3)  
Engl 355 Advanced Technical Writing (4)  
Engl 388 Creative Writing (3)
3. Electives in English (20)

NOTE: At least 12 credits must be taken at the 300 or 400 levels, including one course in American literature and one course in British literature. Electives should be chosen in close consultation with one's English Department advisor.

*Requirements in Mass Communications (44 credits)*

1. Core requirements (24)  
MC 100 Introduction to Mass Communications (3)  
MC 175 Desktop Publishing (3)  
MC 205 Media Writing (3)  
MC 230 Communications Photography I (3)  
MC 305 Reporting (4)  
MC 435 Mass Media: Ethics and Issues (4)  
MC 440 Communications Law (4)

2. Electives in mass communications (20)

NOTE: Electives in mass communications should be agreed upon by the student and advisor. The dual major does not require completion of the distributional requirements of the mass communications major, however, it does require completion of the university's liberal arts requirement (64 credits), plus 36 credits of English literature.

**Minor in Mass Communications**

The minor in mass communications is designed to introduce students to the study of mass communications without a concentrated sequence of course work in any of the professional areas.

Required:

- MC 100 Introduction to Mass Communications (3)
- MC 175 Desktop Publishing (3)
- MC 205 Media Writing (3)
- MC 230 Communications Photography I (3)

And two of the following:

- MC 240 History of Mass Communications (3)
- MC 435 Mass Media: Ethics and Issues (4)
- MC 440 Communications Law (4)

Additional credits in mass communications (8)

**MASS COMMUNICATIONS COURSES**

**MC 100 Introduction to Mass Communications (3) (FWS)**

The study of the power and importance of mass media in national and international affairs with emphasis on the nature and functions of newspapers, television, radio, advertising and public relations.

**MC 150 Visual Communications (3) (Fws)**

A survey of the visual components that make up mass communications, including structural elements, psychological implications and effects and general visual literacy.

**MC 175 Desktop Publishing (3) (FWS)**

An introduction to and application of computers and computer programs for information access, word processing, typesetting, graphics and layout appropriate to mass communications.

**MC 184 Radio/Television Operations (3) (FWS)**

Theory of and practical experience with basic radio and television equipment in studio and remote production. Projects include knowledge, application and aesthetics concerning equipment functions, selection and operation. (Same as Spch 184)

**MC 205 Media Writing (3) (FWS)**

Evaluation of informative and persuasive media writing, with emphasis on the organization, structure and style demanded by various media. Writing exercises designed to help the student create clear, precise and effective mass media messages. Prerequisite: Grammar test and MC 175.

**MC 210 Broadcast Journalism (4) (FWS)**

The study of radio and television news operations with emphasis upon writing, editing and producing news broadcasts. Prerequisite: MC 205.

**MC 212 University Newspaper Publication (2) (FWS)**

Practicum for students working on the MSU Advocate staff. Repeatable to 6 credits. Prerequisite: Consent of the Advocate publisher.

**MC 217 Radio/Television Performance (4) (Fw)**

Theory and practice in the professional areas of radio and television. Projects include news anchoring/announcing, interviewing, hosting and delivering public service announcements. (Same as Spch 217)

**MC 230 Communications Photography I (3) (FWS)**

Black and white processing, visual perception and communication. Students without acceptable cameras may rent cameras at \$10 per quarter.

**MC 240 History of Mass Communications (3) (FS)**

The development of American print and electronic mass media from the colonial era to its present global impact.

**MC 260 Advertising Principles (4) (FWS)**

Introduction to the principles of advertising in the print, broadcast and other media.

**MC 270 Public Relations Principles (4) (FWS)**

Introduction to the principles and theories of public relations, its problems, impact and potential.

**MC 305 Reporting (4) (FWS)**

Discussion and assignments in gathering information and writing all types of local news stories to meet deadlines. Preparing students to conduct journalistic interviews. Prerequisite: MC 175 and MC 205.

**MC 310 Copy Editing (4) (WS)**

Evaluating and preparing news copy for publication. Extensive practice in editing, rewriting, headline and caption writing. Working with desktop publishing and applications to lay out copy and graphics. Prerequisite: MC 175, MC 205 and MC 305.

**MC 315 Layout and Typography (3) (FWS)**

An introduction to terms, concepts, skills and processes involved in design and production of visual material for the print media. Prerequisite: MC 175.

**MC 318 Advertising Copywriting (3) (FS)**

Theory and practice of advertising copywriting for both print and broadcast media. Prerequisite: MC 175, MC 205 and MC 260.

**MC 328 The Media and Politics (4) (Fs)**

Concepts of political communication, socialization and public opinion. The media's role in politics, including relations between the media and government, with special focus on the media's impact on presidential elections. (Same as Pol 328) Prerequisite: Pol 120.

**MC 330 Communications Photography II (3) (FWS)**

Photojournalism. Spot news and feature photographs, with cutlines, for the printed page. Photographing and writing picture stories for the print media. Prerequisites: MC 205 and MC 230.

**MC 345 Multi-Media Communications (4) (FS)**

Introduction to the visual communications process, production methods and effective presentation techniques in business. Culminates in the production of an audio/graphic presentation. Prerequisites: MC 230.

**MC 380 Case Studies in Public Relations (1-4) (W)**

An advanced course in public relations designed to build on the basic theories studied in Public Relations Principles. It will provide opportunities to apply theory to practical experience through discussion of actual case studies. Students will work as teams to develop public relations plans to solve public relations problems. Repeatable to 8 credits. Prerequisites: MC 270 and consent of instructor.

**MC 384 Television Production (4) (Ws)**

Theory and practice in the production aspects of television. Content includes: message/audience analysis, script preparation, studio and crew management in producing a variety of television formats. (Same as Spch 384) Prerequisite: MC 184.

**MC 385-389 Television News Workshop (1-4 each) (FWS)**

A practicum whereby students participate in the development of a weekly television program or project as part of a series of newscasts, public affairs programs or informative programs. Areas as follows: 385 TV News Writing, 386 TV News Reporting, 387 TV News Photography, 388 TV News Videotape Editing, 389 TV News Producing. May be repeated for credit. No credit will be awarded for studio production and performance experiences in this course. Prerequisite: Consent of the instructor.

**MC 400 Reporting of Public Affairs (4) (Fs)**

Instruction and practice in reporting the affairs of municipal, school, county, state and federal administrative and legislative agencies. Learning the use of scientific methods for gathering information. Prerequisite: MC 175, MC 205 and MC 305.

**MC 405 Broadcast Documentary (4)**

History and analysis of non-fiction documentation via radio, film and video. Each student will write a treatment and shooting script for a documentary and participate in the development of a television documentary program. Prerequisite: Consent of the instructor.

**MC 410 Public Relation Processes (4) (FS)**

Execution of theories and principles of public relations as related to the creation of public and general information materials. Prerequisites: MC 175, MC 205 and MC 270.

**MC 416 Advertising Media Strategy (3) (FW)**

Principles and practice of evaluating and selecting media for advertising. Emphasis upon developing strategies for using media in advertising as well as media buying and selling at both the local and national level. Prerequisite: MC 260.

**MC 419 Advertising Campaigns (4) (FWS)**

A seminar for advanced students in advertising with emphasis on campaign execution. Repeatable to 8 credits. No more than 4 credits can be earned in one academic year. Prerequisites: MC 260, MC 315, MC 318 and MC 416 or consent of instructor.

**MC 425 Journalism Seminar (4) (S)**

Advanced assignments in researching and writing news, features or editorial material. Topics chosen quarterly. Repeatable to 12 credits. Prerequisite: Consent of instructor.



**MC 430 Communications Photography III (3) (FWS)**

Individual studies agreed upon by the instructor and student. Repeatable to 9 credits. Prerequisite: MC 330 and consent of instructor.

**MC 435 Mass Media: Ethics and Issues (4) (FW)**

Study of ethical considerations in advertising, journalism and public relations as well as major contemporary issues in the mass media. Emphasis will be placed upon research findings regarding mass media effects and the resultant alternatives for policymakers, practitioners and consumers.

**MC 440(g) Communications Law (4) (FWS)**

Consideration of the legal philosophy bearing on the mass media.

**MC 460(g) International Communication (4) (W)**

An examination of comparative media systems in the Western, Marxist and Third worlds and of the current issues in international communication including the debate on the new world information and communication order.

**MC 465(g) Investigative Processes (4) (W)**

Examination of human and library reference sources and their applications to investigative and in-depth news reporting. Prerequisite: MC 175, MC 205 and MC 305.

**MC 469 Internship (3-5) (FWS)**

Practical work for an approved media agency.

**MC 480 Problems in Mass Communications (1-6) (FWS)**

Individual problems in areas of specific interest to the student.

**MC 496(g) Journalism Workshop (1-3) (FWS)**

A course designed for workshops in broadcast or print journalism.

**MC 497(g) Advertising, Public Relations Workshop (1-3)**

A course designed for workshops in advertising or public relations.

**MC 499(g) Topical Workshop (1-4)**

A course designed for workshops on current media topics.

**MC 580 Problems in Mass Communications (1-4) (FWS)**

Individual problems in areas of specific interest to the student.

**Mathematics Department**

Milton W. Legg, *Chair*; Sayel A. Ali, Carl T. Carlson, Wayne Chen, Sidney J. Drouilhet II, Marvel L. Froemming, James P. Hatzenbuehler, Ronald M. Jeppson, Julie M. Legier, Don A. Mattson, Christine E. McLaren, Bette G. Midgarden, Barbara G. Rath, Harley D. Reed, Dennis L. Rhoads, Derald D. Rothmann, Bonita R. Schmidt, C. Jane Schobel, Walter S. Sizer, Jeanne D. Travis, James T. Wallen, Shelda A. Warren, Ariyaratna M. Wijetunga, Vernon E. Wolff, Fike A. Zahroon

**MATHEMATICS CURRICULA****Major in Mathematics B.A. Degree (56 credits)**

Math 231-232-233-234 Calculus I-II-III-IV (16)  
Math 327 Introduction to Linear Algebra (4)  
Math 391 Foundations of Mathematics (4)  
Math 392 Intermediate Analysis I (4)  
Math 424 Abstract Algebra I (4)

Math electives\*—at least 24 credits at the 300 level and above to include at least two of the following combinations:

Math 392-393  
Math 424 and either 425 or 427  
Math 450-451  
Math 474-475  
Math 420-470

*Related Field Requirement:*

ComS 140 (4) or ComS 201 (4).

**Major in Mathematics B.S. Degree (Teaching) (60 credits)**

Math 231-232-233-234 Calculus I-II-III-IV (16)  
Math 327 Introduction to Linear Algebra (4)  
Math 375 Intermediate Probability and Statistics (4)  
Math 391 Foundations of Mathematics (4)  
Math 392 Intermediate Analysis I (4)  
Math 415 Foundations of Geometry (4)  
Math 424 Abstract Algebra I (4)  
Math 440 Mathematics in the Secondary School (4)  
Math electives\*—300 level and above (at least 16 credits)

*Related Field Requirement:* ComS 130 (3) or ComS 140 (4) or ComS 201 (4)

(The professional education sequence must also be completed. See Teacher Education Requirements in Education Department.)

**Minor in Mathematics B.A. Degree (32 credits)**

Math 231-232-233-234 Calculus I-II-III-IV (16)  
Math electives\*—300 level and above (at least 16 credits)

**Minor in Mathematics B.S. Degree (Teaching) (36 credits)**

Math 231-232-233-234 Calculus I-II-III-IV (16)  
Math 440 Mathematics in the Secondary School (4 credits)

Three of the following four courses:

Math 327 Introduction to Linear Algebra (4)  
Math 375 Intermediate Probability and Statistics I (4)  
Math 391 Foundations of Mathematics (4)  
Math 415 Foundations of Geometry (4)  
Math electives\*—300 level and above (at least 4)

**Minor in Mathematics (For Elementary Education Majors) (35 credits)**

Math 100 Intro to Mathematics (4)  
Math 203 Foundations of Number systems (4)  
Math 231-232-233 Calculus I-II-III (12)

Three of the following four courses:

Math 327 Introduction to Linear Algebra (4)  
Math 375 Intermediate Probability and Statistics I (4)

Math 391 Foundations of Mathematics (4)  
Math 415 Foundations of Geometry (4)  
Electives in Mathematics (121 level or above) or  
Computer Science (3) credits.\*

#### **Area of Concentration**

#### **(For Elementary Education Majors) (20 credits)**

Math 100 Intro to Mathematics (4)  
Math 203 Foundations of Number Systems (4)  
Math 231 Calculus I (4)  
Electives in Mathematics—121 level and above (8)  
credits.\*

\* The electives may not include: Math 340, 341, 344,  
440, or 444.

### **MATHEMATICS COURSES**

#### **Math 090 Elementary Algebra (4) (FWS)**

For students with weak backgrounds in algebra. Not  
for students having more than one year of algebra in  
secondary school. Signed numbers, radicals,  
exponents, products and factoring, solution of linear  
and quadratic equations. Credit not applicable to  
degree.

#### **Math 100 Introduction to Mathematics (4) (FWS)**

Axiomatic systems, logic, sets and probability. Not  
intended to prepare students for any subsequent  
course, except Math 203.\*\*

#### **Math 121 Intermediate Algebra (4) (FWS)**

Exponents, algebraic fractions, polynomials, linear  
and quadratic equations, systems of equations.  
Prerequisite: At least one year of algebra in  
secondary school.\*\*

#### **Math 131 College Algebra (4) (FWS)**

Functions, exponents, radicals, inequalities, induction,  
progressions, binomial series. Prerequisite: Math 121  
or equivalent.\*\*

#### **Math 133 Trigonometry (3) (FWS)**

Trigonometric functions, identities, applications.  
Prerequisites: Two years of secondary school algebra  
or Math 121.\*\*

(\*\*) Students who have completed a mathematics  
course numbered 200 or above must obtain the  
consent of the department chairperson before  
registering for a mathematics course at the 100-level.

#### **Math 203 Foundations of Number Systems (4) (FWS)**

Systems of numeration, rational number systems,  
basic geometric concepts. Open to elementary  
education and special education majors only.  
Prerequisite: Math 100.

#### **Math 231-232-233-234 Calculus I-II-III-IV (4 each) (FWS)**

Calculus I and II: Calculus of one variable. Calculus  
III: Techniques of integration and infinite series.  
Calculus IV: Calculus of several variables, multiple  
integration and partial differentiation. Sequential.  
Prerequisites: Math 131 and 133 or equivalent high  
school preparation.

#### **Math 265 Discrete Structures (4) (S)**

Sets, relations, graphs, functions, boolean algebras,  
lattices, trees, finite-state machines and their  
applications to computer science. Prerequisites:  
ComS 201 and Math 231 or Math 273.

#### **Math 273 Linear Algebra/Applied Calculus I (4) (FWS)**

Functions, matrices, linear programming and the  
simplex method, limits, the derivative, maxima and  
minima and applied problems. Prerequisite: Math 121  
or two years of algebra in secondary school. Not  
open to mathematics majors.

#### **Math 274 Introduction to Statistics I (4) (FWS)**

Descriptive statistics, probability distributions,  
sampling, estimation of mean and proportion, tests of  
hypotheses, confidence intervals. Prerequisite: Math  
121 or two years of algebra in secondary school.  
Students who have completed Math 233 are  
encouraged to take Math 375 rather than Math 274.  
Not open to majors in mathematics.

#### **Math 275 Introduction to Statistics II (4) (FWS)**

Hypothesis testing, linear regression, multiple  
regression, correlation, analysis of variance, time  
series, non-parametric tests. Prerequisite: Math 274.  
Not open to mathematics majors.

#### **Math 283 Applied Calculus II (4) (on demand)**

Differential calculus of one and several variables,  
introduction to integral calculus, applications to  
business problems. Prerequisite: Math 273 or 231.  
Not suitable for science majors and not open to  
students who have completed Math 232.

#### **Math 327 Introduction to Linear Algebra (4) (FWS)**

Systems of linear equations, Gauss-Jordan  
elimination, linear programming, matrices,  
determinants, vector spaces. Prerequisite: Math 232.

#### **Math 331 Differential Equations (4) (WS)**

Standard methods of solution for elementary ordinary  
differential equations. Prerequisite: Math 234.

#### **Math 340 Mathematics in the Elementary School (4) (FWS)**

Materials and methods of teaching elementary school  
mathematics. Open only to elementary education  
majors. Usually taught in PFY. Prerequisite: Math 203.

#### **Math 341(g) Special Methods in Mathematics in the Elementary School (3) (by arrangement)**

Adapted to the needs and experience of those  
enrolled. Prerequisite: Elementary school teaching  
experience.

#### **Math 344 Mathematics for Special Education (3) (WS)**

Development of content and methods for teaching  
mathematics in special education setting. Open only  
to majors or minors in special education. Does not  
substitute for Math 340. No prerequisite. Math 100  
and 203 are strongly recommended.

**Math 365 Vectors and Vector Fields (4) (S)**

Vectors, matrices, vector valued functions, line and surface integrals, Green's Theorem, Stokes' Theorem. Prerequisite: Math 234 and Math 327.

**Math 375-376 Intermediate Probability and Statistics I-II (4 each) (FW-WS)**

Probability distributions, sampling distributions, hypothesis testing, regression, analysis of variance, design of experiments. Sequential. Prerequisite: Math 233.

**Math 383(g) Applied Regression Analysis (4) (F90)**

Regression models, inferences on regression models; multiple regression; correlation; model selection techniques; forecasting. Prerequisite: Math 273 and 275 or 376 or consent of instructor.

**Math 391 Foundations of Mathematics (4) (FW)**

Axiomatic systems; symbolic logic, sets, operations relations, functions, mappings, cardinality, continuum hypothesis. Prerequisite: Math 232.

**Math 392-393 Intermediate Analysis I-II (4 each) (W-S)**

A rigorous treatment of concepts of calculus including real number properties, limit, continuity, derivative, integral, and infinite series. Sequential. Prerequisites: Math 234 and Math 391.

**Math 400(g) History of Mathematics (4) (S90)**

Topical and chronological survey of the main branches of mathematics. Prerequisite: Math 233 or consent of instructor.

**Math 405 Actuarial Science I (2) (S)**

Applications and synthesis of mathematical concepts included in the first examination administered by the Society of Actuaries. Prerequisites: Math 234 and Math 327.

**Math 410(g) Actuarial Science II (2) (S)**

Analysis and application of mathematical probability and statistical theory included in the second examination administered by the Society of Actuaries. Prerequisite: Math 475 or concurrent registration.

**Math 415(g) Foundations of Geometry (4) (F)**

Euclidean geometry, transformations, cross ratio, geometry of circles, constructions. Prerequisite: Math 391.

**Math 420(g) Mathematical Modeling (4) (F90)**

Techniques of developing and analyzing mathematical descriptions of physical phenomena. Prerequisites: Math 234, Math 327 and Math 375 or consent of instructor.

**Math 424-425(g) Abstract Algebra I-II (4 each) (F-W)**

Groups, rings, and fields studied as abstract mathematical systems. Lagrange's Theorem, factor groups, homomorphisms, polynomial rings, quotient rings, integral domains and algebraic extensions. Sequential. Prerequisites: Math 327 and Math 391.

**Math 427(g) Linear Algebra (4) (S)**

The theory of finite dimensional vector spaces. Linear transformations and their matrix representations, duality and characteristic values. Prerequisite: Math 424.

**Math 440 Mathematics in the Secondary School (4) (S)**

Objectives, methods, materials, and evaluation. Prerequisite: Math 391.

**Math 444(g) Diagnosis and Remediation of Learning Difficulties in Mathematics (3) (on demand)**

Techniques of diagnosis and remediation of mathematical learning difficulties exhibited by elementary and junior high school students. Prerequisite: Math 340 or Math 344.

**Math 450(g) Numerical Analysis I (4) (W90)**

Numerical solutions to equations, finite differences, interpolation formulas and numerical calculus. Prerequisites: Math 234 and a programming language.

**Math 451(g) Numerical Analysis II (4) (S91)**

Topics related to linear algebra and differential equations. Prerequisites: Math 327 and Math 331 and Math 450.

**Math 467(g) Complex Analysis (4) (W90)**

Complex numbers and variables, analytic functions, the Cauchy integral formula, infinite series and conformal mappings. Prerequisite: Math 392.

**Math 470(g) Introduction to Operations Research (4) (F89)**

Linear programming, network analysis, dynamic programming, queueing theory, decision analysis, advanced programming techniques. Prerequisites: Math 327 and Math 375.

**Math 474(g) Probability (4) (W89)**

Probability, probability distributions, limiting distributions. Prerequisite: Math 375.

**Math 475 Mathematical Statistics (4) (S90)**

Estimators, order statistics, hypothesis testing, likelihood tests, analysis of variance, linear models. Prerequisites: Math 392 and Math 474.

**Math 480(g) General Topology (4) (W89)**

Metric spaces, topological spaces, continuity, compactness, connectedness and separation axioms. Prerequisite: Math 392.

**Math 490 Special Problems in Mathematics (1-6)**

For advanced students to work on independent problems. May be repeated to a maximum of 6 credits. Prerequisite: Consent of instructor.

**Math 491 Seminar—Mathematics (1-2)**

Prerequisites: Senior standing and consent of staff.

**Math 495(g) Theory of Numbers (4) (S91)**

Topics from elementary number theory such as divisibility, congruences, Diophantine equations, number theoretic functions and continued fractions. Prerequisite: Math 391.

**Math 574 Statistical Methods for Business Management (3)**

Probability, sampling distributions, estimation of mean and proportion, tests of hypotheses. Prerequisite: Consent of MBA coordinator and instructor.

**Medical Technology**

See *Biology for Curricula*.

**MultiCultural Studies**

Dieter Berninger, Phyllis May-Machunda, Donna Rosh  
(See *Humanities Department*)

**MULTICULTURAL STUDIES CURRICULA****Minor in Multicultural Studies (31 credits)**

MCS 202 Traditional American Indian Culture (4)  
MCS 203 Chicano Culture (4)  
MCS 211 The Afro-American Community (4)  
Soc 310 Majority Minority Group Relations (3)  
Electives in Multicultural Studies (16)

Electives in related fields in the Social Sciences (12 credits). Related fields include Anthropology, American Studies, History, Sociology, Criminal Justice, Political Science and some courses in Economics, Psychology and Education. Elective courses should be approved by the MCS department.

**Minor in Afro-American Studies B.A. or B.S. Degree (Teaching) (28 credits)**

MCS 100 Introduction to the Minority Experience (4)  
MCS 101 The Afro-American Experience (4)  
MCS 211 Contemporary Afro-American Community (4)  
MCS 301 Afro-American Music (4)  
MCS 311 Afro-American Art (3)  
MCS 321-322 Masterworks in Afro-American Literature I-II (4 each)  
History 112 Highlights of African History (3)  
MCS 461 Readings Afro American (1)

**Minor in American Indian Studies (24 credits)**

MCS 100 Introduction to the Minority Experience (4)  
MCS 102 The Contemporary American Indian (4)  
MCS 202 Traditional American Indian Cultures (4)

**Minor in Chicano Studies (24 credits)**

MCS 100 Introduction to the Minority Experience (4)  
MCS 103 The Contemporary Chicano (4)  
MCS 203 Chicano Culture (4)  
Anth 220 Indians of Middle America (4)

**MULTICULTURAL STUDIES COURSES****MCS 100 Introduction to the Minority Experience (4)**

The historical and contemporary role of racial and ethnic groups in the United States.

**MCS 101 Afro-American Experience (4) (Fws)**

Historical background of Black Americans and contributions of Blacks to American life and culture.

**MCS 102 The Contemporary American Indian (4) (Fw)**

The experience of the indigenous peoples of North America, focusing on the past decade of both reservation and urban Indians.

**MCS 103 The Contemporary Chicano (4) (Fws)**

Political, economic and social developments within the Chicano community.

**MCS 202 Traditional American Indian Cultures (4) (FWS)**

A historical perspective on living, traditional cultures of American Indian groups. Topics include tribal entities, religion, arts, life-styles and ecological adaptations.

**MCS 203 Chicano Culture (4) (Fws)**

Key aspects of Chicano culture with an emphasis on literature, history and philosophy.

**MCS 211 Contemporary Afro-American Community (4) (Fws)**

The contemporary life and social structure of the Black American community within the United States.

**MCS 218 American Indian Belief Systems (4) (FW)**

American Indian Belief Systems focuses on common thematic elements found throughout diverse North American Indian communities. It introduces the students to the sacred ways of the Indians through oral tradition, songs, prayers, interviews, speeches and contemporary literature. There will be a critical examination of the relationships between world view, spiritualism, technologies and the human and non-human communities. No prerequisites.

**MCS 219 Plains Indian Cultures (4) (WS)**

This course focuses on past and present cultures of Plains Indians. Individual tribal traditions are compared and contrasted. The interdependence of techno-environment, socio-political organization and ideology is stressed, with emphasis on culture change. Present day adaptations to reservation and urban life are examined.

**MCS 270 Indian Education (3) (S)**

An overview of the nature, purpose, history, philosophy and programs of traditional and contemporary American Indian education. Designed especially, but not exclusively, to assist students who plan to work in some area of education where an understanding and appreciation of Indian culture is essential.

**MCS 300 Topics in Multicultural Studies (3-4)**

Exploration of a specific topic. May be repeated for credit as topics vary.

**MCS 301 Afro-American Music (3)**

A survey of the contributions in music by Black Americans.

**MCS 311 Afro-American Art (3)**

An appreciation and understanding of the art and artists of Black America from the beginning of their folk art expression to the present.

**MCS 461 Readings on the Afro-American (1-3)**

Independent reading and research on the Afro-American. May be repeated for credit.

**MCS 462 Readings on the American Indian (1-3)**

Independent reading and research on the American Indian. May be repeated for credit.

**MCS 463 Readings on the Chicano (1-3)**

Independent readings and research on the Chicano. May be repeated for credit.

**Multidisciplinary Studies**

Delmar Corrick, *Chair*; Richard Bolton, Yvonne C. Condell, Mary Ann Hanna, Dennis Jacobs, Rupa Mitra, Rae Offutt, Carl L. Schmider, Thomas Tamaro, Beverly Wesley

**MULTIDISCIPLINARY STUDIES CURRICULA**

Multidisciplinary Studies offers both liberal arts courses to meet B.A. and A.A. graduation requirements and selected career-oriented studies leading to the associate of science degrees.

**A.S. Degrees****Associate in Science, Career Education**

The Center for Multidisciplinary Studies offers an A.S. degree that allows the student and faculty advisor to design an individualized career concentration. The curriculum requires at least 42 liberal arts credits, 36 credits in the career concentration, and electives that bring the total credits to 96. The liberal arts program will include a minimum of 12 credits in English composition and 6 in Liberal Arts division B, C, D and E.

The 36 credits in the career field must be approved by an advisor from Multidisciplinary Studies and may include credit earned in a supervised career placement or a completed technical college program.

**MULTIDISCIPLINARY STUDIES COURSES****MDS 090 Sentence Improvement (1-2) (Fws)**

Effective sentence-writing skills. Underlying structure of the sentence and its basic patterns.

**MDS 091 Paragraph Development (1-2) (W)**

Skills in writing paragraphs: finding and limiting subjects, writing effective topic sentences and using various methods of order and development.

**MDS 092 Reading Development (3) (Fw)**

Vocabulary development, word attack skills, comprehension and concentration skill building and reading rate improvement. Small group and individual activities.

**MDS 093 Mathematics I (2) (Fw)**

Designed to correct mathematics deficiencies in order to insure success in areas requiring a good basic math background.

**MDS 104 Issues in Evaluation (5) (Fws)**

Collecting, organizing, and interpreting a variety of information about oneself. Clarifying values and career planning. Perspectives of "human potential."

**MDS 105 Group Skills and Democratic Processes (5) (S)**

Building effective group membership skills and understanding their relationship to democratic group functioning.

**MDS 106 Career Exploration (1-3) (Ws)**

Development of realistic concepts of work and an understanding of factors that affect career satisfaction and society's work ethic.

**MDS 107 Human Development and Growth in the Modern World (4) (S)**

Examines the continuous process of human development and growth, the male and female systems in change, the factors involved in producing positive change, and the search for fulfillment of human potential. Prerequisite: MDS 104 or consent of instructor.

**MDS 109 Individual Development Projects (2) (Fws)**

Devoted to the acquisition of skills and techniques necessary to make the successful transition to the university. Required of all MDS students.

**MDS 110 Expressive Writing (4) (Fws)**

Narrative and descriptive writing. Students keep journals and write papers which are discussed in small group sessions.

**MDS 111 Expository Writing (4) (Fws)**

Development of the expository theme. Students will examine model essays (of definition, illustration, classification, comparison and analysis) and write expository themes.

**MDS 112 Writing Research Papers (4)**

Writing papers based on library research. Documentation techniques stressed. Prerequisite: MDS 111 or Engl 101.

**MDS 113 Introduction to Critical Reading (3) (S)**

This course enhances college level reading skills in comprehension and vocabulary and introduces the student to critical reading and the analysis of literature. Prerequisite: Satisfactory score on the reading placement test.

**MDS 114 Topics in Written Communication (1-4) (Ws)**

A problem or theme focused course to develop breadth or depth in a given topic.

**MDS 115 Interpersonal Communication (4) (Fws)**

Basic elements in everyday and more formal aspects of communication: audience or listener feedback, emotional involvement and organization of ideas.

**MDS 117 College Survival Skills (2) (Ws)**

Management of time, notetaking from textbooks and lectures, effective review, preparing for tests, effective listening and analysis of individual learning styles.

**MDS 118 Listening as Communicating (2) (Fws)**

This course is designed to develop critical listening skills.

**MDS 119 Contemporary Mathematics (4) (S)**

Sets and numeration systems. Simple algebraic equations. Statistical topics: mean, median, standard deviation, normal distribution. Geometry concepts, introductory mathematics of finance.

**MDS 120 Mathematics II (2-4) (Fws)**

Basic algebra to college algebra. Prerequisite: MDS 093 or equivalent.

**MDS 121 Business Mathematics (4) (W)**

Includes review of math fundamentals, percentages, mark-up and discounting, payroll, taxes, insurance, inventory, etc.

**MDS 122 Geometry (4) (S)**

Basic Euclidean geometry, with inductive and deductive reasoning. Prerequisite: MDS 120 or equivalent background determined by math competency test score.

**MDS 124 Topics in Oral Communication/Symbolic Systems (1-4) (S)**

A theme-focused course to develop breadth or depth in a given topic. May be repeated for credit when topic changes.

**MDS 125 Introduction to Computers (2) (Fws)**

What a computer is and how it works. Determines interest and aptitude in this area.

**MDS 130 Exploring Marriage and Family (5) (Fs)**

Examination of the social institutions of marriage and family. Current trends and theoretical constructs.

**MDS 132 Human Sexuality (5) (Fw)**

Sexuality in America: biological and physiological, sex-role stereotypes, how we learn masculine or feminine roles, different forms of sexual behavior.

**MDS 160 Introduction to Dramatic Art I (3) (S)**

Acquaints student with some of the structural qualities of drama and with selected masterpieces in the genre.

**MDS 161 Introduction to Dramatic Art II (3) (W)**

Acquaints the student with drama as a means of interpretation and commentary on society. Dramatic criticism and analysis.

**MDS 170 Studies in Popular Culture (1-4) (S)**

Individual topics in contemporary culture, discussing the need for self-expression, the relationship of art and society and man's freedom and fate.

**MDS 171 Comedy—Society's Mirror (4) (Fws)**

Comedy in its various forms. Analyzes how comedy reflects societal values, morals and behavioral expectancies.

**MDS 172 Contemporary Values Through Science Fiction (4) (F)**

Contemporary values reflected in selected readings in science fiction novels and short stories.

**MDS 173 Life Stages and Literature (4) (W)**

The stages of life as depicted in fiction. Works include those written for children, adolescents and adults.

**MDS 174 Writings from Where We Are (4) (W)**

The exploration of themes found in both personal experience and published poetry and fiction from the Upper Midwest. Development of a sense of place, culminating in a family history paper.

**MDS 175 The Fabulous 50s (4) (S)**

An examination of how literature, art, music and film reflect and offer insight into the popular values of the United States during the decade of the 1950s.

**MDS 176 Voyage of the Hero (4) (F)**

An examination of the "quest motif" in classical, medieval, modern and popular literature, focusing on the "hero's" life from birth through apotheosis; attempts to understand the quest motif in relationship to the individual's personal development and quest.

**MDS 180-181 Plants and Humans I-II (3 each) (Fs)**

The importance of plants to human social and economic development and the human role in the modification and distribution of plants.

**MDS 182 Ethnobotany: Plants, People & Culture (4) (W)**

Study of the human uses of plants with special emphasis on utilizing a broader spectrum of wild and indigenous plants.

**MDS 184 Topics in Natural Sciences (1-4) (W)**

A problem or theme-focused course to develop breadth or depth in a given topic. May be repeated for credit when the topic changes.

**MDS 185 Humans and Their Environment (4)***(Fws)*

The study of the mechanisms by which balances and stability are maintained in nature.

**MDS 190 Science of the Human Body (5) (Fs)**

The human implications of biological processes as illustrated by the study of the structure and function of the human body.

**MDS 195 Astronomy (4) (Fws)**

Identification of stars, constellations, galaxies, etc., with the aid of star charts, telescopes and planetarium. Avocational interests explored.

**MDS 196 Foundation of Physical Science (4)**

To acquaint students with the basic concept of modeling in science to introduce them to the fundamentals of chemistry and physics. The course also examines how science affects our daily life and discusses some of the relevant science topics of the time. Prerequisite: Basic algebra or consent of instructor.

**MDS 197 Natural Phenomena (4)**

An experimental course structured around the questions students pose about natural phenomena: mirages, Northern Lights, rainbows, UFOs, etc.

124

**MDS 220 Social Science Research and Writing****(4) (S)**

Sampling techniques and questionnaire design, conducting original research, writing formal research papers and reports.

**MDS 224 Topics in the Behavioral Sciences (1-4)***(Ws)*

Studies integrating concepts from two or more of the behavioral sciences. Topics will focus on themes, issues, problems in the social environment. May be repeated when topic changes.

**MDS 226 Athletics in the United States (3) (W)**

Athletics from a sociological perspective, including such topics as the functions and values of sports, the impact of sports on spectators and communities.

**MDS 227 Corporations: History, Structure and Influence (4) (W)**

Multidisciplinary look at the origins and development of large corporations. Case studies of representative companies.

**MDS 228 The Automobile in America (4) (F)**

The impact of the automobile on American society through the insights of history, economics, sociology, literature and popular culture.

**MDS 229 Perspectives on 1980 (4) (S)**

Examination of a single "landmark year" from the perspectives of anthropology, history, political science, sociology and economics. Introduces the distinctive approaches of these disciplines.

**MDS 232 Women's Roles and Socialization in 19th and 20th Century America (4) (W)**

A socio-historical perspective in developing a critical understanding of women's gender-role socialization in our society in the past two centuries. A basis to develop an overall understanding of women's position in relation to society; the impact of society on women and their impact on society.

**MDS 260 Introduction to Bookkeeping and Economics (3) (S)**

Introduction to concepts such as the accounting cycle, financial statements, inventory, internal control, payroll accounting, supply and demand, circular flow of income, commercial banking.

**MDS 271 Field Experience in Allied Health (1-3)***(S)*

Each student will be assigned to work with a health agency under close professional supervision. Weekly seminar. Related reading assignments and reports will be required.

**MDS 281 Career Placement (1-16) (Fws)**

Placement on the job in a position closely related to the student's academic work. For Multidisciplinary Studies students only. Prerequisite: Consent of instructor.

**Music Department**

Robert Pattengale, *Chair*; Michael Coates, Ruth Dahlke, Theodore DiSanti, David Eyer, Alice Fasman, Mark Fasman, David Ferreira, Henry Gwiazda, Debra Harris, Nancy Harris, Dwayne Jorgenson, Terrie Manno, Jonathan May, Albert Noice, Paul Sahuc, Paul Severson, Andrew Smith, John Tesch, Ricardo Visus

Students entering a major program in Music should show a strong sensitivity to music and have a desire to communicate it to others. Entering students are assumed to have acquired basic music reading ability and performance experience in school groups and/or as soloists. Those lacking such background may have to complete additional preparation which may extend the time for program completion and graduation.

**MUSIC CURRICULA**

The Bachelor of Arts, Bachelor of Music and the Bachelor of Science in Education are offered in Music at Moorhead State University. The Bachelor of Music degree includes a program in Music Industry as well as the more traditional performance and composition programs.

**Majors in Music**

*Core courses for all majors (35 credits)*

Mus 101 Musicianship I (3)

Mus 101L Musicianship I Lab (1)

Mus 101E Ear Training I (1)

Mus 102 Musicianship II (3)

Mus 102L Musicianship II Lab (1)

Mus 102E Ear Training II (1)

Mus 103 Musicianship III (3)  
 Mus 103L Musicianship III Lab (1)  
 Mus 201 Musicianship IV (3)  
 Mus 201L Musicianship IV Lab (1)  
 Mus 201E Ear Training III (1)  
 Mus 202 Musicianship V (3)  
 Mus 202L Musicianship V Lab (1)  
 Mus 202E Ear Training IV (1)  
 Mus 203 20th Century (3)  
 Mus 203L 20th Century Lab (1)  
 Mus 205 Elements of Conducting (1)  
 Mus 209 Non-Western Music (2)  
 Mus 302 Classic/Romantic (3)  
 Mus 302L Classic/Romantic Lab (1)

### **Bachelor of Arts Major (70 credits)**

*Core courses in music (35)*

Applied study in principal performance area (9)  
 (3 credits of this must be at the 200 level)

Ensemble (9)

Choice of two: (8)

Baroque Era and Lab (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Music electives (9)

Th/Lit (3-9)

Non-Performance (0-6)

Perf/Ens (0-3)

### **Bachelor of Science Major (Teaching) Vocal Music (98)**

*Core courses in music (35)*

Applied study in voice/keyboard (21) (minimum 3 credits in upper-division)

Music ensembles (11) (including a minimum of 3 large and 3 small ensemble credits.)

Applied study in keyboard/voice (6)

Mus 114 and 115 or 116 Diction for Singers I-II-III (4)  
 (See related requirements.)

Mus 207 Choral Conducting (2)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Mus 303 Renaissance/Middle Ages (3)

Mus 303L Renaissance/Middle Ages Lab (1)

Mus 339 Elem School General Music Methods (3)

Mus 348 Middle School General Music Methods (3)

Mus 349 Sr. High School Vocal Music Methods (2)

Music Elective (non-performance) (3)

Music Related Requirements:

a) Pass Piano Proficiency

b) Pass Guitar Proficiency

c) Half Recital (30 minutes; can be taken for credit)

d) One quarter of the language not studied in

Diction (French or German); applies to the Liberal Arts requirement E.

### **Bachelor of Science Major (Teaching) Instrumental Music (97)**

*Core courses in music (35)*

Applied study in principal performance area (20)  
 (minimum 3 credits in upper-division)

Music Ensembles (11)

(including a minimum of 3 large and 3 small ensemble credits)

Applied study in secondary instrument (3)

(Secondary instrument must be in a different "family" than the principal instrument—families are string, woodwind, brass and percussion.)

Applied study in keyboard (3)

Class applied music in Strings, Woodwinds, Brass, Percussion (7)

Mus 206 Band Cond or Mus 208 Orch Cond (2)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Choice of one: (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Mus 341 Organization of the Instrumental Program (2)

Mus 348 Middle School General Music Methods (3)

Music Elective (non-performance) (3)

Related Requirements:

a) Pass Piano Proficiency

b) Pass Guitar Proficiency

c) Half recital (30 minutes) on principal instrument  
 (can be taken for credit)

### **Bachelor of Music—Music Industry (125)**

*Major Area (76)*

*Core courses in Music (35)*

Applied study in principal performance area (12)

Ensembles (11)

Applied study in piano or secondary performance area (3)

(Piano must be principal or secondary instrument.)

Ensembles (11)

Choice of two: (8)

Baroque Music and Lab (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Music electives (7)

*Music Business (17)*

Mus 321 Music Industry I (3)

Mus 322 Music Industry II (3)

Mus 381 Electronic Music (3)

Choice of one: (3)

Mus 421 Music Merchandising (3)

Mus 422 Music Arts Management (3)

Mus 423 Commercial Music (3)

Mus 481 Audio Production (3)

Mus 424 Practicum (1)

Mus 469 Internship (4)

*Business Courses (28)*

Acct 229 Principles of Accounting I (4)

Acct 230 Principles of Accounting II (4)

Acct 231 Principles of Accounting III: Managerial (4)

Mgmt 360 Principles of Management (4)

Mgmt 405 Small Business Management (4)

Mktg 310 Principles of Marketing (4)

Mktg 323 Marketing Communications (4)\*

\*Substitute Mktg 421 for Music Merchandising students

Electives (music or other) (4)

Related requirement: Economics 100 or 202 is required in Business and counts also for Liberal Arts in the Social Science Division C.



**Bachelor of Music (Performance/Composition)  
(125)**

Concentrations: Voice, Keyboard, Instrumental,  
Composition

*Major Performance Area (59)*

*Supportive Courses (66)*

**Bachelor of Music—Special Area Requirements**

*Major Performance Area—Voice Concentration (59)*

Performance Study: (30)

100-200 level at 2 credits each (12)

300-400 level at 3 credits each (18)

Recitals (2)

Ensemble on Principal Performance Area (12)

Elective Ensemble (5)

Pedagogy/Literature/Repertory and Independent  
Study—2-4 credits each (6)

Mus 114 and 115 or 116 Diction I-II-III (4)

(See related requirements)\*

*Supportive Courses (66)*

Core Courses (35 credits)

Mus 207 Choral Conducting (2)

Applied Study in Piano (6) (a piano proficiency must  
be passed.)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Mus 303 Renaissance/Middle Ages (3)

Mus 303L Renaissance/Middle Ages Lab (1)

Electives in Literature/Theory (15)

Related Requirements:

One year of the language not studied in Diction  
(French or German); applies to Liberal Arts  
requirement E.

*Major Performance Area—Keyboard Concentration  
(59)*

Performance Study: (30)

100-200 level at 2 credits each (12)

300-400 level at 3 credits each (18)

Recitals (2)

Ensemble and Accompanying—6-9 credits each (15)

Secondary Keyboard (2)

Mus 441 and 442 Piano Pedagogy (4)

Literature/Repertory and Ind. Study—2-4 crs each (6)

*Supportive Courses (66)*

Core Courses (35 credits)

One of the following courses: (2)

Band/Orchestral/Choral Conducting

Applied Study—Secondary Performance Area (6)  
(non-keyboard)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Choice of one: (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Electives in Literature/Theory (15)

*Major Performance Area—Instrumental  
Concentration (59)*

Performance Study: (30)

100-200 level at 2 credits each (12)

300-400 level at 3 credits each (18)

Recitals (2)

Ensemble on Principal Performance Area (12)

Chamber Ensemble on Prin Performance Area (2)

Elective Ensemble (5)

Pedagogy/Literature/Repertory—4-6 credits and  
Independent Study—2-4 credits (8)

*Supportive Courses (66)*

Core Courses (35 credits)

One of the following: (2)

Band/Orchestral Conducting Mus 206/8

Applied Piano (6) (a piano proficiency must be  
passed.)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Choice of one: (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Electives in Literature/Theory (15)

*Major Performance Area—Composition  
Concentration (59)*

Composition (24) (6 of these at 300 level)

Performance Study—Principal Performance Area\* (12)

Performance Study—Secondary Perform Area\* (6)

\*One of these performance areas must be piano;  
a piano proficiency must be passed.

Recital (1)

Ensemble (10)

Mus 410 Orchestration (3)

Independent Study (3)

*Supportive Courses (66)*

Core Courses (35 credits)

Choice of Band/Orchestral Conducting (2)

Mus 207 Choral Conducting (2)

Mus 301 Baroque Era (3)

Mus 301L Baroque Era Lab (1)

Choice of one: (4)

Renaissance/Middle Ages and Lab (4)

History of Rock/Pop and Lab (4)

History of Jazz and Lab (4)

Mus 381 Electronic Music (3)

Mus 481 Audio Production (3)

Mus 417 Advanced Theory and Analysis (3)

Electives in Literature/Theory and/or Advanced  
Conducting (10)

**Minor in Music (36 credits)**

Mus 111-112-113 Musicianship for Non-Majors (12)

Class or Priv Lessons in Major Performance Area (6)

Music Ensemble (6)

Electives in Music (12)

(Elementary Education majors must include Mus 214  
Survey of Music Literature II among the electives.)

**Private Lesson Fees**

There are no private lesson fees for full-time music  
majors and minors at Moorhead State University.  
Non-music students may participate when space is  
available.

**Proficiency Requirements**

Principal Performance Medium

All applied areas indicate levels of proficiency  
through the course numbers. The course levels do  
not correspond with the year of enrollment; 100 and  
200 levels are lower-division courses. The 300 and  
400 levels are upper-division courses and indicate  
advanced skills and knowledge of repertoire.

Enrollment in upper-division levels is achieved following a jury recommendation. The upper-division must be attained prior to presenting a senior recital. The applied instructors have guides suggesting appropriate literature for each level.

Upper-divisional evaluations will take place during the regular jury examinations. Further study may be recommended to individual students who then may re-apply for upper-division status. It is suggested that students may apply at the end of Winter Quarter of the sophomore year.

#### *Piano*

All Bachelor of Science and Bachelor of Music—Performance/Composition majors are required to pass a proficiency exam demonstrating basic keyboard skills.

#### *Guitar*

All Bachelor of Science students must demonstrate proficiency in basic guitar techniques.

#### *Recitals*

All Bachelor of Science majors are required to present a half recital in their principal performance area. These are prepared with the help of the applied instructor and normally given during the student's senior year. Students may elect to take MUS 405 for credit for the recital. Bachelor of Music performance majors are required to present two recital programs—a half recital normally given during the junior year and a full recital during the senior year. Bachelor of Music composition majors are required to present a full recital of their works during the senior year. Credit for these is a part of the degree program and is not optional.

### **Teacher Licensure in Music for the State of Minnesota**

Licensure areas for teachers of public school music are:

- Band K-12 and classroom music 5-12;
- Orchestra K-12 and classroom music 5-12;
- Vocal and classroom music K-9;
- Vocal and classroom music 5-12.

All candidates for licenses must hold a baccalaureate degree and have completed the prescribed requirements for special areas in education. Vocal music education majors must complete the requirements for both levels of music education.

### **Pre-Professional Skills Test**

The Minnesota State Board of Teaching has mandated that beginning April 4, 1988, all candidates for an initial teaching license must pass the Pre-Professional Skills Test. *Although passing this examination is required for teacher licensure, it is not a requirement for graduation.* The examination must be taken prior to being admitted to upper-division course work in the professional education sequence. Students will be examined in reading comprehension, grammar, writing and mathematics.

### **Transfer Students**

Students transferring from other colleges will be examined upon entrance for advanced placement into the Musicianship program.

### **MUSIC COURSES**

#### **Mus 101 Musicianship I (3) (F)**

Introduction to the Art of Music. Emphasis on listening skills. Focus on basic elements, genres, forms. Exposure to variety of music repertoires. To be taken concurrently with Mus 101L.

#### **Mus 101L Musicianship Lab I (1) (F)**

Fundamentals lab for skill development in reading and writing music notation. Emphasis on rhythmic, scalar, and chordal structures, symbols and devices. Creative application through composition, improvisation, performance. To be taken concurrently with Mus 101.

#### **Mus 101E Ear Training I (1) (WS)**

Competency-based Ear Training Foundations Lab. Involves recognition, reading, and dictation of simple rhythm patterns, scale and chord types, chord progressions and melodies. CAI. Prereq: Mus 101L

#### **Mus 102 Musicianship II (3) (W)**

Continuation of Mus 101. Emphasis on theoretical principles and techniques of traditional tonal music. Literature focus on Western tonal language styles. To be taken concurrently with Mus 102L.

#### **Mus 102L Musicianship Lab II (1) (W)**

Composition, improvisation, performance application of concepts and techniques presented in 102. To be taken concurrently with Mus 102.

#### **Mus 102E Ear Training II (1) (FS)**

Development of aural/reading skills—Rhythmic concentration. Involves competency evaluation in reading and performing rhythms, aural/visual analysis of rhythmic devices, rhythm dictation and error detection. Some application to major performance medium. Prereq: Mus 101E

#### **Mus 103 Musicianship III (3) (S)**

Continuation of Mus 102. Examination of theoretical principles and techniques of musical systems outside the traditional tonal language framework: modal, extended tonal, atonal, selected non-Western systems. To be taken concurrently with Mus 103L.

#### **Mus 103L Musicianship Lab III (1) (S)**

Composition, improvisation, performance application of concepts and techniques presented in 103. To be taken concurrently with Mus 103.

#### **Mus 110 Fundamentals of Music (4) (FWS)**

Basic musicianship for classroom teachers. Knowledge and skills developed through vocal, recorder, piano, creative and listening experiences.

#### **Mus 111-112-113 Musicianship for Non-Majors (4 each) (FWS)**

Sequence encompasses music as design in sound. Study of musical elements and emphasis on broad repertory listening. Involves analysis, composition, performance, but designed for non-majors and assumes minimal previous musical experience. Must be taken in sequence.

**Mus 114-115-116 Diction for Singers I-(Italian), II-(German), III-(French) (2 each) (FWS)**

Fundamental diction in international phonetics.

**Mus 150-168 Applied Music Performance—Level I (1-2 each) (FWS)**

Private instruction, pedagogy and master classes. May be repeated for credit. Areas as follows: 150 Piano, 155 Organ, 160 Voice, 165 Brass, 166 Woodwinds, 167 Strings, and 168 Percussion.

**Mus 180 Beginning Class Piano (1) (FWS)**

Beginning instruction in piano; open to any student. No previous musical training necessary. May not count toward fulfillment of applied music requirement for music majors.

**Mus 201 Musicianship IV (3) (F)**

Musicianship IV continues to develop materials of music with emphasis on form and analysis. To be taken concurrently with Mus Lab 201L.

**Mus 201L Musicianship Lab IV (1) (F)**

Instrumentation Lab: Basic principles of composition and arranging for specific instruments and ensembles. To be taken concurrently with Mus 201.

**Mus 201E Ear Training III (1) (Fw)**

Development of aural/reading skills—Melodic concentration. Involves competency evaluation in sight singing, aural/visual analysis of melodic devices, melodic dictation and error detection. Application to major performance medium. Prereq: Mus 102E.

**Mus 202 Musicianship V (3) (W)**

Continuation of Mus 201. To be taken concurrently with Mus 202L.

**Mus 202L Musicianship Lab (1) (W)**

Continuation of Mus 201L. To be taken concurrently with Mus 202.

**Mus 202E Ear Training IV (1) (Ws)**

Development of aural/reading skills—Harmonic concentration. Involves competency evaluation in aural recognition, dictation, and error detection with various chord structures, progressions, and harmonic devices. Some application to keyboard and major performance medium. Prereq: Mus 201E.

**Mus 203 Musicianship VI (3) (S)**

Musicianship VI continues to develop materials of music with emphasis on 20th century. To be taken concurrently with Mus Lab 203L.

**Mus 203L Musicianship Lab VI (1) (S)**

Composition, improvisation, performance application of concepts and techniques presented in 102. To be taken concurrently with Mus 203.

**Mus 204 Individual Projects in Music (1-2) (FWS)**

Individualized study in specialized areas in music. May be repeated for credit. Prerequisite: Mus 103.

**Mus 205 Elements of Conducting (1) (F)**

Baton techniques and score reading.

**Mus 206 Band Conducting (2)**

Band conducting techniques, rehearsal methods and score reading. Prerequisite: Mus 205.

**Mus 207 Choral Conducting (2) (W)**

Choral conducting techniques, rehearsal methods and score reading. Prerequisite: Mus 205.

**Mus 208 Orchestral Conducting (2) (S89)**

Orchestral conducting techniques, rehearsal methods and score reading. Prerequisite: Mus 205.

**Mus 209 Non-Western Music Survey (2) (S)**

An introduction to musics outside of the Western European tradition. Selected reading and listening materials from these areas/cultures are surveyed: African, Indian, the Far East, Indonesian, American Indian, Latin America, Middle East, and Eastern Europe. Study focuses on similarities and differences in musical style and cross influences between the various repertoires. Prerequisite: Mus 103, Mus 113 or consent of instructor.

**Mus 211 Idea of Music (4) (FWS)**

The nature of musical ideas as exemplified in the literature of various periods and styles. Not intended for majors or minors in music.

**Mus 212 Music Topics (4) (on demand)**

Studies in music literature. Different repertoires will be chosen for survey studies. The topics will be presented in a non-technical manner appropriate for the general student. Not recommended for majors.

**Mus 213-214 Survey of Musical Literature I-II (4 each) (F-W)**

A historical approach to musical literature. 213: Through the time of Beethoven. 214: From Schubert through the present. Mus 211: The Idea of Music recommended as a preliminary course. Not intended for majors in music.

**Mus 215 History of Jazz (4) (FWS)**

A survey of the development of jazz from its roots through the contemporary period. Emphasis will be placed on stylistic changes. Not intended for majors in music.

**Mus 218 Composition—Beginning (1-3) (FWS)**

Private and/or seminar instruction. Study includes composition in all musical styles. Prerequisite: Mus 103 or consent of instructor. May be repeated for credit.

**Mus 219 Music Notation and Calligraphy (1) (on demand)**

Exploration of the principles and techniques of music manuscript preparation. Prerequisite: Mus 103, 113 or consent of instructor.

**Mus 252 Singing Skills in Musical Theatre (2) (FWS)**

Principles of body alignment and breathing, vocal exercises, and diction. Designed for theatre students. May be repeated for credit with consent of advisor.

**Mus 250-268 Applied Music Performance—Level II (1-2 each) (FWS)**

Private instruction, pedagogy and master classes. May be repeated for credit. Areas as follows: 250 Piano, 257 Harpsichord, 259 Organ, 260 Voice, 265 Brass, 266 Woodwinds, 267 Strings, 268 Percussion.

**Mus 270-279 Class Applied Music (1 each) (FWS)**  
Class instruction, including procedures and methods for use in public school classes. Areas as follows: 270 Double Reeds, 271 Single Reeds, 272 Flute, 273 High Brass, 274 Low Brass, 275 Percussion, 276 Percussion, 277 High Strings, 278 Low Strings, and 279 Guitar.

**Mus 280-281 Class Applied Music (1) (FWS)**  
Class instruction. May be repeated for credit. Areas as follows: 280 Piano, 281 Voice.

**Mus 301 Baroque Era (3) (W)**  
Survey of the Baroque period 1600-1750. Further development of musicianship skills. Prerequisite: Mus 203 and 203L. To be taken concurrently with Mus 301 Lab.

**Mus 301L Baroque Era Lab (1) (W)**  
Emphasizes performance, score study, and composition based on historical models. To be taken concurrently with Music 301.

**Mus 302 Classic/Romantic Styles (3) (F)**  
Survey of the Classic and Romantic periods of music (1750-1900). Further development of musicianship skills. Prerequisite: Mus 203 and 203L. To be taken concurrently with Mus 302 Lab.

**Mus 302L Classic/Romantic Lab (1) (F)**  
Emphasizes performance, score study, and composition based on historical models. To be taken concurrently with Music 302.

**Mus 303 Middle Ages/Renaissance (3) (S)**  
Historical development of music during the Middle Ages and Renaissance periods. Further development of musicianship skills. Prerequisite: Mus 203 or equivalent. To be taken concurrently with 303L

**Mus 303L Middle Ages/Renaissance Lab (1) (S)**  
Emphasizes performance, score study, and composition based on historical models. To be taken concurrently with 303.

**Mus 314 History of Rock/Pop (3) (W)**  
Historical and theoretical study of rock music from 1956 to the present. Further development of musicianship skills. Prerequisite: Mus 203. Concurrent with 314L

**Mus 314L History of Rock/Pop Lab (1) (W)**  
Emphasizes score study and transcribing. Prerequisite: Mus 203. Concurrent with Mus 314.

**Mus 315 Jazz History (3) (S)**  
Historical development of American jazz. Further development of musicianship skills. To be taken concurrently with Music 315L. Prerequisite: Mus 202.

**Mus 315L Jazz History Lab (1) (S)**  
Development of musicianship skills relating to jazz theory and jazz improvisational techniques. To be taken concurrently with Mus 315. Prerequisite: Mus 202.

**Mus 318(g) Composition—Intermediate (3) (FWS)**  
Private composition instruction one hour a week including two-hour seminar with all composition students. Study includes composition in all musical

styles. Prerequisite: Mus 218 and upper-divisional jury.

**Mus 321 Music Industry I (3) (Fs)**  
In-depth study of music industry including: Music in the marketplace, song writing, publishing, copyright, licensing, merchandising and the record industry.

**Mus 322 Music Industry II (3) (W)**  
Focuses particularly on management, agents, recording, unions and guilds, film, TV and radio, and career development.

**Mus 329(g) Women's Chorus (1) (on demand)**  
Open to all students on demand with director. May be repeated for credit.

**Mus 330(g) Concert Band (1) (FWS)**  
Open to all students. May be repeated for credit.

**Mus 331(g) Symphonic Wind Ensemble (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 332(g) Stage Band (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 333(g) Orchestra (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 335(g) Concert Choir (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 336(g) Festival Choir (1) (FWS)**  
Open to all students. May be repeated for credit.

**Mus 337(g) Pop Choir (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 338(g) Chamber Singers (1) (FWS)**  
Membership by audition only. May be repeated for credit.

**Mus 339 Elementary School General Music Methods (3) (F)**  
Objectives, teaching methods, and materials in the elementary school vocal music program. Required of majors in vocal music education.

**Mus 340 Music in the Elementary School (2) (Fw)**  
Objectives, methods, materials, and evaluation; required of elementary education majors. Prerequisite: Mus 110 or the equivalent.

**Mus 341 Organization of the Instrumental Program (2) (F)**  
Administration of an instrumental program in public schools. Required of majors in instrumental music education.

**Mus 348 Middle School General Music Methods (3) (W)**  
General music in the middle school; teaching methods and materials, evaluation and administration. Required of all majors in music education.

**Mus 349 Senior High School Vocal Music Methods (2) (S)**

Objectives, teaching methods, materials, evaluation, and administration of the high school vocal music program. Required of majors in vocal music education.

**Mus 350-368 Applied Music Performance—Level III (1-3 each) (FWS)**

Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows: 350 Piano, 355 Organ, 360 Voice, 365 Brass, 366 Woodwinds, 367 Strings, and 368 Percussion. Prerequisite: Upper divisional jury.

**Mus 357(g) Commercial Keyboards (1) (FWS)**

Study and practice of keyboard usage in popular literature of the last 100 years. Styles will range from early blues and ragtime to various Latin styles and rock. Analysis of chordal structures and idiomatic usage. May be repeated for credit.

**Mus 373(g) American Music (3) (on demand)**

History of music in the United States to include analysis of stylistic features in the context of historic, cultural, and artistic developments. On request.

**Mus 378(g) Collegium Musicum (1) (Fws)**

A workshop for the music history and musicology courses concerned with the performance of music from the Middle Ages and Renaissance. May be repeated for credit.

**Mus 379 Introduction to Ethnomusicology (3) (on demand)**

Music of various non-Western cultures.

**Mus 380 Instrument Maintenance and Repair (2) (on demand)**

Basic instrument maintenance and repair. On request.

**Mus 381(g) Electronic Music (3) (Fw)**

Equipment and techniques of electronic music, including basic synthesis and recording techniques. Permission of the instructor required.

**Mus 382(g) Solo and Ensemble Literature for Brass (1) (on demand)**

Repertoire for brass instruments. On request.

**Mus 391(g) Survey of Music Literature: Solo Song (3)**

Study of solo song literature. Intended for majors and minors in music. Prerequisite: Mus 103

**Mus 392(g) Survey of Music Literature: Orchestral (3) (on demand)**

Study of orchestral literature. Intended for majors and minors in music. Prerequisite: Mus 103.

**Mus 393(g) Survey of Music Literature: Choral (3) (on demand)**

Study of choral literature. Intended for majors and minors in music. Prerequisite: Mus 103.

**Mus 394(g) Survey of Music Literature: Chamber Music (3) (on demand)**

Study of chamber music literature. Intended for majors and minors in music. Prerequisite: Mus 103.

**Mus 395(g) Survey of Music Literature: Keyboard (3) (W)**

Study of keyboard literature. Intended for majors and minors in music. Prerequisite: Mus 103.

**Mus 396(g) Survey of Music Literature: Wind Band (3) (on demand)**

Study of wind band literature. Intended for majors and minors in music. Prerequisite: Mus 103.

**Mus 399-404(g) Small Ensemble (1 each) (FWS)**

Preparation and performance of both instrumental and vocal chamber music; accompanying. On request. May be repeated for credit. Areas as follows: 399(g) Percussion, 400(g) Vocal, 401(g) Strings, 402(g) Brass, 403(g) Woodwinds, 404(g) Keyboard.

**Mus 405 Student Recital (1) (FWS)**

On demand. May be repeated for credit.

**Mus 406(g) Opera (2) (FWS)**

Opera performance through small workshop ensembles and full productions. May be repeated for credit.

**Mus 410(g) Orchestration (3) (on demand)**

The basic principles of orchestral writing.

**Mus 411(g) Band Arranging (3) (on demand)**

Arranging for small ensembles and full band.

**Mus 414(g) Techniques of Musical Interpretation (3) (on demand)**

Structural analysis as applied to basic interpretative techniques. Prerequisite: Consent of instructor. May be repeated for credit.

**Mus 417 Advanced Theory and Analysis (3) (on demand)**

Continuation of the study of music through the use of advanced theoretical and analytical techniques. The composers and compositions studied may change each quarter. Prerequisite: Music 302 and consent of instructor. May be repeated for credit.

**Mus 418(g) Composition—Advanced (3) (FWS)**

Private composition instruction one hour a week plus two-hour seminar with all composition students. Study includes composition in all musical styles. Prerequisite: Mus 318 and upper-divisional jury. May be repeated for credit.

**Mus 421(g) Seminar in Music Merchandising (3) (F)****Mus 422(g) Seminar in Music Management (3) (S)****Mus 423(g) Seminar in Commercial Music (3) (W)****Mus 424 Practicum (1) (FWS)****Mus 441(g) Keyboard Pedagogy I (2) (W)**

Fundamentals of keyboard instruction on the elementary, secondary and adult levels. Prerequisite: Private keyboard study and consent of staff.

**Mus 442(g) Keyboard Pedagogy II (2) (S)**

Methods of keyboard instruction. Prerequisites: Mus 441 and consent of the instructor.

**Mus 444(g) String Methods and Materials (2) (on demand)**

Literature pertaining to problems of string playing. Prerequisite: 2 credits of Music 267 in a secondary string instrument. (The second credit may be taken concurrently.)

**Mus 445(g) Stage Band Methods and Materials (2) (on demand)**

Course for the prospective teacher of stage bands in the public schools. Jazz history and analysis of technical problems. Literature, organization, instrumentation, notation and improvisation. Prerequisite: Mus 341.

**Mus 446-447(g) Voice Pedagogy I-II (1 each) (on demand)**

446: Fundamental voice teaching techniques; 447: Instruction in repertoire interpretation and supervised teaching instruction. Prerequisite: Consent of instructor.

**Mus 450-468 Applied Music Performance - Level IV (1-3 each) (FWS)**

Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows: 450(g) Piano, 455(g) Organ, 460(g) Voice, 465(g) Brass, 466(g) Woodwinds, 467(g) Strings, and 468(g) Percussion. Prerequisite: Upper divisional jury and completion of 300 level.

**Mus 469 Internship (4-16) (FWS)**

**Mus 470(g) Advanced Conducting (2)**

Advanced conducting. Prerequisite: Mus 206, 207, or 208.

**Mus 481(g) Audio Production (3) (Ws)**

Equipment and techniques of electronic audio production, including multi-track recording, microphone techniques, mixing and use of effects devices. Prerequisite: Mus 381.

**Mus 482(g) Music Synthesis (3) (S)**

Equipment and techniques of electronic music synthesis, including modular and integrated systems, analog and digital synthesis, MIDI and electronic audio effects. Prerequisite: Mus 381.

**Mus 485(g) Projects in Audio Production (1-3) (FWS)**

Individual projects in audio production. May be repeated for credit. Prerequisite: Mus 481.

**Mus 486(g) Projects in Music Synthesis (1-3) (FWS)**

Individual projects in music synthesis. May be repeated for credit. Prerequisite: Mus 482.

**Mus 499(g) Workshop in Music Education (1-3) (on demand)**

Special topics in music. May be repeated for credit if topic varies.

**Mus 502 Research in Music and Music Education (3) (F)**

Research techniques and materials in music education and musicology.

**Mus 504 Workshops in Secondary School Music (2) (on demand)**

A series of one-week workshops held at the International Music Camp (International Peace Gardens) for vocal and instrumental music educators teaching in secondary schools.

**Mus 505 Graduate Recital (1-2) (on demand)**

On demand. May be repeated for credit.

**Mus 510 Directed Study in Music Theory (3) (F)**

Varied projects in the field of music theory. Course may be repeated for credit.

**Mus 511 Directed Study in Music History (3) (S)**

Varied projects in the field of music history. Course may be repeated for credit.

**Mus 540 Problems in Teaching and Supervising Music (3) (on demand)**

Advanced course in curriculum planning and materials. On request.

**Mus 541 Advanced Studies in Teaching Elementary School General Music (3) (on demand)**

Advanced study of music methods and materials for teaching music in the elementary schools.

**Mus 542 Advanced Studies in Teaching Secondary School General Music (3) (on demand)**

Advanced studies of music methods and materials for teaching music in the junior and senior high schools.

**Mus 545 Voice-Choral Techniques Institute (3) (on demand)**

An institute designed to provide practical solutions to the problems of the adolescent voice.

**Mus 550-568 Applied Music Performance—Level V (1-2 each) (Fws)**

Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows: 550 Piano, 555 Organ, 560 Voice, 565 Brass, 566 Woodwinds, 567 Strings, and 568 Percussion.

**Mus 570 Introduction to Musicology (3) (on demand)**

An introduction to musical research, bibliography, acoustics, philosophy of music, psychology of music, aesthetics, theory and pedagogy.

**Mus 571 Music in the Middle Ages (3) (on demand)**

(Mus 571 through 576 are seminar courses.)

**Mus 572 Music in the Renaissance (3) (on demand)**

**Mus 573 Music in the Baroque (3)**

**Mus 574 Music in the Classic Era (3)**

**Mus 575 Music in the Romantic Era (3)**

**Mus 576 Music in the 20th Century (3) (S)**

**Mus 595 Special Problems (1-3) (FWS)**

**Mus 597 Individual Study (1-3) (FWS)**

**Mus 599 Thesis in Music (1-6) (FWS)**

## Nursing Department

Rhoda T. Hooper, *Director*; Jane Giedt, Donna Heald, Barbara Hisley, Barbara Matthees, Joanna Snyder

### NURSING CURRICULA

The upper-division nursing program is designed for registered nurses who want to earn the degree, bachelor of science in nursing.

The program requires 57 credits in upper-division nursing and 4 credits in supporting courses.

Admission to the nursing program is limited to individuals who are licensed registered nurses or who are graduate nurses with license pending. Applicants must have earned 32 liberal arts credits before entering the program. National League for Nursing Achievement Exam must be taken by all applicants.

Graduation requirements include 57 upper-division nursing credits, 4 credits in supporting courses, 64 liberal arts credits, and lower division nursing and elective credits for a total of 192 credits.

### Major in Nursing (B.S.N. Degree)

*Required Nursing courses (57 credits)*

- Nurs 300 Nursing in Health Care (2)
- Nurs 310 Interaction and Change I (3)
- Nurs 320 Nursing Assessment: Individual (4)
- Nurs 321 Nursing Assessment: Family (3)
- Nurs 322 Nursing Assessment: Community (3)
- Nurs 340 Nursing Intervention I (2)
- Nurs 341 Nursing Intervention II (4)
- Nurs 342 Nursing Intervention III (4)
- Nurs 350 Altered Physiological Systems (4)
- Nurs 360 Research in Nursing (3)
- Nurs 410 Interaction and Change II (3)
- Nurs 415 Process of Patient Teaching (3)
- Nurs 416 Patient Teaching Laboratory (2)
- Nurs 450 Nursing Preceptorship I (1)
- Nurs 451 Nursing Preceptorship II (9)
- Nurs 460 Nursing Management/Leadership (3)
- Nurs 461 Nursing Management/Leadership Laboratory (2)
- Nurs 470 Issues and Trends in Professional Nursing (2)

*Requirement in related fields:*

- Anth 306 Cross-cultural Illness and Care (4)

### NURSING COURSES

#### **Nurs 300 Nursing in Health Care (2) (F)**

Exploration of concepts of health, clients as adaptive systems, health delivery system, philosophy of nursing and professional nursing practice.

#### **Nurs 310 Interaction and Change I (3) (W)**

Development of therapeutic interaction and awareness of self as the "nurse person." Prerequisite: Nursing majors only.

#### **Nurs 320 Nursing Assessment: Individual (4) (F)**

Study of psychosocial levels and functioning of individuals; stress and crisis theory and its application in assessment of health needs. Prerequisite: Nursing majors only, Nurs 300 or concurrent registration.

#### **Nurs 321 Nursing Assessment: Family (3) (W)**

Emphasis on family system, development and crisis theories as they relate to family health and nursing care. Prerequisite: Nurs 320.

#### **Nurs 322 Nursing Assessment: Community (3) (S)**

Focus on community as client with emphasis on health problems and intervention strategies applied to populations; evaluation methods as a component of the nursing process. Prerequisite: Nurs 321.

#### **Nurs 340 Nursing Intervention I (2) (F)**

An on-campus clinical course which focuses on the nursing process, on community health agency functions and on the role of the community health nurse. Prerequisite: Nurs 320 or concurrent registration.

#### **Nurs 341 Nursing Intervention II (4) (Ws)**

Application of the nursing process to health care of the well family in the home setting. Prerequisites: Nurs 321, 340, 350 or concurrent registration.

#### **Nurs 342 Nursing Intervention III (4) (Ws)**

Application of nursing process in community health settings with focus on families with identified health problems and on the health problems of a community. Prerequisites: Nurs 321, 340, 350 or concurrent registration.

#### **Nurs 350 Altered Physiological Systems (4) (F)**

Correlation of pathophysiology with signs and symptoms of body dysfunction; analysis of adaptive mechanisms which maintain homeostasis. Prerequisite: College level anatomy and physiology course.

#### **Nurs 360 Research in Nursing (3) (S)**

Introduction to nursing research process and its translation to nursing practice.

#### **Nurs 382 Sexuality: A Nursing Perspective (3) (S)**

A wholistic approach which focuses on fostering healthy sexuality in illness and wellness through effective nursing practice.

#### **Nurs 410 Interaction and Change II (3) (F)**

Planned change, group process, and development of group leadership skills in context of professional nursing. Prerequisite: Nurs 310.

#### **Nurs 415 Process of Patient Teaching (3) (F)**

Overview of selected teaching-learning strategies as applied to patient teaching situations. Prerequisite: Nurs 322.

#### **Nurs 416 Patient Teaching Laboratory (2) (F)**

Principles of patient teaching applied to simulated and real-life situations in health care facilities. Prerequisite: Nurs 415 or concurrent registration.

**Nurs 450 Nursing Preceptorship I (1) (W)**

Selection of preceptorship projects and development of a learning contract. Prerequisite: Nursing majors only and consent of instructor.

**Nurs 451 Nursing Preceptorship II (9) (S)**

In-depth exploration of self-selected area of nursing practice utilizing nursing process in promoting high level wellness. Prerequisite: Nurs 450.

**Nurs 460 Nursing Management/Leadership (3) (W)**

Theories and functions of management and leadership styles as they relate to professional nursing.

**Nurs 461 Nursing Management/Leadership Laboratory (2) (W)**

Application of management theories and functions to nursing roles in health care settings. Prerequisites: Nurs 460 or concurrent registration.

**Nurs 470 Issues and Trends in Professional Nursing (2) (S)**

Analysis and discussion of trends and issues in health care as they relate to and influence the practice of professional nursing.

**Nurs 496 Topics in Professional Nursing and Health Care (4) (Ws)**

Study of selected practices, issues and/or problems in health care delivery as they impact the consumer and the nursing profession. May be repeated as topics change.

**Pharmacy***Cooperative Degree Program*

MSU offers courses which enable students interested in pharmacy as a profession to complete their first two years and then apply for acceptance into the professional curriculum of any accredited School of Pharmacy. Most students normally transfer to NDSU or to the University of Minnesota to complete their pharmacy education but the academic requirements needed to successfully apply to other Pharmacy Schools can also be completed here. Curriculum requirements and application procedures vary between different universities so it is necessary to maintain close contact with the prepharmacy advisor in the Chemistry Department.

**Philosophy Department**

Mark Chekola, *Chair*; Theodore Gracyk, Arnold Johanson, Catherine Ludlum, David Myers

**PHILOSOPHY CURRICULA**

Philosophy courses are designed to encourage critical thinking about and examination of beliefs related to basic aspects of human existence (such as morality, religion, society, the self, and knowledge) as

well as to make students aware of what past and present thinkers have said about these issues. The philosophy major is suitable for students planning to enter such professions as law and theology and for those desiring a general liberal arts background, as well as for those planning on graduate study in philosophy. Philosophy is especially suitable as a second major (or as a minor) combined with almost any other major, since it provides a student with an opportunity to explore the philosophical bases of his or her other major.

**Major in Philosophy B.A. Degree***Major Course Requirements (52 credits)*

Phil 240 Symbolic Logic (4)

Phil 250 Classical Philosophy (4)

Phil 300 Ethics (4)

At least two of the following: (8)

Phil 305 Modern Philosophy: 17th Century

Phil 306 Modern Philosophy: 18th Century

Phil 307 19th Century Philosophy

Phil 330 20th Century Philosophy

At least one of the following: (4)

Phil 320 Philosophy of the Arts (4)

Phil 400 Religion and Reason (4)

At least one of the following:

Phil 365 Philosophy of Science

Phil 370 Scepticism and Knowledge

*Electives in Philosophy (24)*

At least 28 credits of the major must be 300 or 400 level courses.

*Language Recommendation*

There is no language requirement for the major in philosophy; however, students planning to do graduate work in philosophy should carefully consider the desirability of intensive work in one or more languages. German, French or Greek are typically most relevant to graduate work. Early consultation with a faculty advisor is recommended.

**Minor in Philosophy (32 credits)**

Phil 110 Practical Reasoning or Phil 240 Symbolic Logic (4)

Phil 115 Contemporary Moral Issues or Phil 300

Ethics (4)

At least one of the following: (4)

Phil 250 Classical Philosophy

Phil 305 Modern Philosophy: 17th Century

Phil 306 Modern Philosophy: 18th Century

Phil 307 19th Century Philosophy

Phil 330 20th Century Philosophy

Electives in Philosophy (20). At least 12 credits must be in 300 or 400 level courses.



## PHILOSOPHY COURSES

### **Phil 101 Discovering Philosophy (4) (FWS)**

An introduction to philosophical thinking and methods through an examination of fundamental philosophical issues drawn from such areas as morality, religion, society, the self and knowledge. No prerequisite.

### **Phil 110 Practical Reasoning (4) (FWS)**

Development of critical thinking skills, with emphasis on interpreting and evaluating the reasoning of others and constructing good arguments

### **Phil 115 Contemporary Moral Issues (4) (FWS)**

Application of ethical theory to some important moral issues, such as: abortion, euthanasia, sexual equality and discrimination, war, world hunger, animal rights, medical ethics, business ethics and capital punishment.

### **Phil 205 Philosophy of Religion (4) (Annual)**

An examination of religions from a philosophical standpoint. The course will include discussion of such issues as the existence and nature of God, religious experience and life after death. Both Western and non-Western perspectives will be considered. No prerequisite.

### **Phil 210 Special Topics in Philosophy (1-4)**

Topics will be announced in class schedule. Students may register more than once when content varies. No prerequisite.

### **Phil 211 Morals and Medicine (2-4) (Annual)**

A consideration of some moral problems that arise in medicine, such as truth-telling, experimentation, paternalism, abortion, euthanasia, allocation of sparse resources and health care systems.

### **Phil 214 Philosophy and Women (4) (Annual)**

A survey and critical analysis of the major philosophical traditions in feminism, including liberal, Marxist, and radical feminist accounts of the origins and characteristics of women's economic, social and political oppression. The history of philosophical thought about the nature of women and their proper role in society will be discussed. Topics explored include abortion, rape, prostitution, the family, marriage, housework, equal opportunity, women in politics and others.

### **Phil 240 Symbolic Logic (4) (Annual)**

Modern symbolic logic including propositional calculus and first-order functional calculus.

### **Phil 250 Classical Philosophy (4) (F)**

A study of the development of philosophical thinking from the Presocratics through Aristotle. No prerequisite.

### **Phil 300 Ethics (4) (Annual)**

Study of major theories and figures in moral philosophy, such as: Aristotle, Kant, utilitarianism, egoism, relativism, emotivism, naturalism. Prerequisite: One course in philosophy or consent of instructor.

### **Phil 305 Modern Philosophy: 17th Century (4) (Alternate years)**

Study of some major philosophers of the 17th century, such as Descartes, Spinoza and Locke. Prerequisite: One course in philosophy or consent of instructor.

### **Phil 306 Modern Philosophy: 18th Century (4) (Alternate years)**

Study of some major philosophers of the 18th century, such as Leibniz, Berkeley, Hume and Kant. Prerequisite: One course in philosophy or consent of instructor.

### **Phil 307 19th Century Philosophy (4) (Alternate years)**

Study of selected major philosophers of the 19th century, such as Hegel, Marx, Kierkegaard, Nietzsche, Schopenhauer and Mill. Prerequisite: One course in philosophy or consent of the instructor.

### **Phil 320(g) Philosophy of the Arts (4) (Annual)**

A consideration of philosophical questions relating to the fine arts. Representative topics include the nature of art, aesthetic experience, criticism in the arts, representation, symbolism and evaluation. Prerequisite: One course in Philosophy or consent of instructor.

### **Phil 330 20th Century Philosophy (4) (Alternate years)**

Study of the major figures and movements in 20th century philosophy. Typically, the course will deal with such movements as pragmatism, existentialism, positivism, analytic philosophy and process philosophy. Philosophers considered might include Russell, Sartre, Wittgenstein, James, Dewey, Whitehead, Camus. Prerequisite: One of Phil 250, 305, 306, 307 or consent of instructor.

### **Phil 350 American Philosophy (Alternate years)**

Study of the development of American philosophy from Puritanism through Pragmatism. Prerequisite: One course in philosophy or consent of instructor.

### **Phil 355 Existentialism (4) (Alternate years)**

An examination of the writings—both philosophical and literary—of representative existentialists, such as Nietzsche, Kierkegaard, Heidegger, Sartre and Camus. Prerequisite: One course in philosophy or consent of the instructor.

### **Phil 360 Marx and Marxism (4) (Alternate years)**

An examination of the philosophy of Marxism. The course will deal with the major influences on Marx's thought (Hegel, the Young Hegelians and classical economics), Marx's social philosophy as formulated

in philosophical and economic works, and 20th century developments such as the Soviet, Yugoslav and Frankfurt schools of Marxism. Prerequisite: One course in philosophy or consent of instructor.

**Phil 365(g) Philosophy of Science (4)** (Alternate years)

An examination of traditional and contemporary views of the nature, function and value of science. Representative topics include the nature of scientific inquiry, the relationship between theory and observation, the idea that science provides an objective picture of reality, "progress" in science, and the differences between science and pseudo-science. Prerequisite: One course in philosophy or consent of instructor.

**Phil 370(g) Skepticism and Knowledge (4)** (Alternate years)

Study of some of the major issues in the theory of knowledge, focusing on the question of whether or not knowledge is possible. The course will cover such issues as: the definition of "knowledge"; rationalism and empiricism; truth; perception; self-knowledge and knowledge of others; necessary truth. Prerequisite: One course in philosophy or consent of instructor.

**Phil 380(g) Plato (4)** (Alternate years)

A study of several major dialogues of Plato. Prerequisite: One course in philosophy or consent of instructor.

**Phil 400 Religion and Reason (4)** (Alternate years)

Thorough study of some fundamental issues in the philosophy of religion, such as: the nature and justification of religious belief; the concept of God; relation of religion and science; psychological and sociological critiques of religion. Prerequisite: One course in philosophy or consent of instructor.

**Phil 440(g) Seminar in Philosophy (1-4)**

Study of selected philosophical problems, major philosopher, or philosophical movement. Specific topics will be announced in class schedule. Students may register more than once when content varies. Prerequisite: One course in philosophy or consent of instructor.

**Phil 490(g) Independent Study (2-4)**

Intensive independent study of a philosophical problem, major philosopher, philosophical movement, under the direction and supervision of one or more members of the department. May be repeated to a maximum of 9 credits. A maximum of 4 credits may be used to fulfill the requirements of the major in philosophy. Students who desire to undertake independent study will submit a written proposal indicating the problem or philosopher(s) they wish to study, and their tentative procedure for carrying out the study. The proposal must be submitted at least two weeks before the beginning of the quarter. The members of the department will examine the proposal to determine the feasibility of the plan and, if the proposal is approved by the department, the amount of credit to be given for it. Prerequisite: Approval of independent study proposal by the department of philosophy.

## Physical Education

See *Health-Physical Education-Recreation for Curricula*.

### PHYSICAL EDUCATION COURSES

**PE 100 Fundamental Activities (1)** (FWS)

Topical physical education activities (e.g., aerobic dance, tae kwon do, and aqua aerobics).

**PE 102 Weight Training (1)** (FWS)

**PE 103 Exercise and Body Development (1)**

**PE 104 Jogging (1)** (FS)

**PE 105 Junior Varsity Athletics (1)** (FWS)

Season long participation in an intercollegiate sport. Must be taken prior to PE 107. Prerequisite: Permission of athletic coach.

**PE 107 Varsity Athletics (1)** (FWS)

Season long participation in an intercollegiate sport. Prerequisite: Permission of athletic coach.

**PE 108 Racquetball (1)** (FWS)

**PE 111 Concepts of Physical Education (2)**

Examines basic concepts and principles of physical fitness and evaluates personal fitness level. Designs a personal physical fitness program to meet individual needs.

**PE 112 Beginning Bowling (1)** (FWS)

**PE 113 Intermediate Bowling (1)** (FWS)

**PE 114 Beginning Golf (1)** (FS)

**PE 115 Intermediate Golf (1)** (S)

**PE 116 Beginning Tennis (1)** (FS)

**PE 117 Intermediate Tennis (1)** (FS)

**PE 118 Gymnastics I (1)** (Fs)

**PE 119 Gymnastics II (1)** (Fs)

**PE 120 Wrestling (1)**

**PE 121 Handball (1)**

**PE 122 Track and Field (1)**

**PE 124 Badminton (1)** (Ws)

**PE 127 Beginning Archery (1)** (W)

**PE 128 Intermediate Archery (1)** (W)

**PE 130 Basketball (1)** (FWS)

**PE 131 Volleyball I (1)** (Fws)

**PE 132 Volleyball II (1)**

**PE 133 Softball (1)** (Fs)

**PE 134 Soccer (1)** (Fs)

**PE 135 Football (1)**

**PE 140 American Round and Square Dancing (1)** (Fs)

**PE 141 Intermediate Square Dance (1)****PE 142 Advanced Square Dance (1)****PE 143 Folk Dancing (1) (Fws)****PE 145 Beginning Modern Dance (1)****PE 148 Ballroom Dancing I (1) (Fws)****PE 149 Ballroom Dancing II (1) (Ws)****PE 150 Beginning Jazz (1)****PE 152 Beginning Ballet (1)****PE 153 Beginning Tap (1)****PE 160 Beginning Swimming (1) (Fws)**

This course is designed for the student to learn basic water safety skills and knowledge in order to make him/her safe in the aquatic environment.

**PE 161 Intermediate Swimming (1) (Fws)**

This course is designed to increase the watermanship of the student by adding to skills learned in the beginning course and to improve coordination and stamina.

**PE 162 Swimmers (1) (Fw)**

This course is designed to increase the student's endurance and versatility in the water by adding additional strokes, longer practice periods and placing greater emphasis on the techniques of each stroke.

**PE 163 Advanced Swimmers (1)**

This course is designed to provide advanced swimming students with additional technique information on basic strokes and to introduce students to hybrid and other strokes. The students will also gain a high proficiency level in turns, dives and aquatic survival techniques. Prerequisite: PE 162

**PE 166 Advanced Life Saving (2) (Ws)**

This course is designed to teach the student safety education in and around the aquatic environment and to teach basic rescue and resuscitation skills for emergency situations. Prerequisite: PE 161 or 162

**PE 191 Activities Course—Block I (4) (F)**

Designed for the physical education major, this course provides for skill development and knowledge of rules, terminology and strategies in soccer, softball, tennis, and non-traditional activities such as orienteering, cycling and low organization games.

**PE 192 Activities Course—Block II (4) (W)**

Designed for the physical education major, this course provides for skill development, knowledge of rules, terminology and strategies in volleyball and non-traditional winter activities such as Nordic skiing and water polo. Introduces the student to fundamental elementary school activities and the principles involved in developing a personal physical fitness program.

**PE 193 Activities Course—Block III (4) (Fs)**

Designed for the physical education major, this course provides for skill development, knowledge of rules, terminology and strategies in badminton, track and field, and gymnastics.

**PE 194 Activities Course—Block IV (4) (Fs)**

Designed for the physical education major, this course provides for the skill development and knowledge of rules, terminology and strategies in basketball and golf; the student will learn correct terminology and skills in folk, square and social ballroom dance.

**PE 200 Foundations of Physical Education (4) (Fs)**

This course investigates the nature and scope of physical education including philosophy, objectives and the role of movement and fitness. It involves the application of historical and scientific foundations as they apply to physical education and sport and considers career and professional opportunities in physical education and sport.

**PE 220 Applied Human Anatomy (4) (Fws)**

A study of the applied human anatomy with a focus on the musculoskeletal systems. The student will learn basic skeletal structure, make-up and functional capabilities at the various joints, the role of the musculature in human movement and a systematic means of establishing a conditioning program.

**PE 223 Water Safety Instructor's Course (3) (S)**

American Red Cross certification. Prerequisite: Current Advanced Life Saving (ARC) certificate and Advanced Swimming.

**PE 240 Physical Education in the Elementary School (2) (FWS)**

Games, rhythms and other activities recommended for the physical education program in the elementary school.

**PE 243 General Methods in PE (4) (Fs)**

This course is designed to teach the basic knowledge and skills to allow the student to understand the importance of effective teaching, learn a theoretical base for effective teaching, and develop performance skills necessary for effective teaching in physical education.

**PE 250 Officiating Football (2) (F)**

This course introduces the student to the role and function of the state high school leagues and local officiating associations. The student will learn the high school code of football rules and demonstrate a knowledge of the mechanics of administering a high school football contest.

**PE 251 Officiating Basketball (2) (W)**

This course familiarizes the student with state high school leagues and local official's associations. The student will learn the national federation basketball rules and will have on-the-court practical experience in learning the mechanics of administering a high school basketball game.

**PE 252 Officiating Volleyball (2) (F)**

This course is designed to teach students the officials' roles in intercollegiate and interscholastic matches, and to provide an opportunity for students to develop appropriate skills and knowledge to assume officiating responsibilities.

**PE 294 Women and Sport (4) (Fw)**

A study of women and sport. Historical, sociological and psychological factors are examined. Legislation affecting participation, present status of women and sport, and future outlook are considered. Prerequisites: Junior standing or consent of instructor.

**PE 310 Sport and Play in the United States (3) (fwS)**

This course is an investigation of sport and play in American society. It involves the application of concepts from various disciplines to sport and play and the development of an understanding of the functions that sport and play serve in the United States.

**PE 311 Motor Learning (3) (W)**

A study of theoretical and practical knowledge of the individual, instructional and environmental variables relevant to teaching, learning and performing motor skills.

**PE 320 Kinesiology (4) (Fws)**

This course is designed to develop an understanding of the mechanical principles that govern the effectiveness with which physical education and sport skills are performed.

**PE 321 Human Physiology (4) (Fws)**

This course is designed to develop an understanding of the many physiological systems of the human body. Laboratory experiences include the application of physiological principles to health-related fitness.

**PE 348 Dance History (2)**

A study of dance from primitive societies to present forms in art and education.

**PE 350 Mechanical Principles of Sport (4)**

A study of applied anatomy of the human musculoskeletal systems and the analysis of the mechanical principles applied to human motion. Credit not applicable to a Health or Physical Education major or minor.

**PE 351 Physiology of Sport (3)**

Application of physiological principles to athletic performance and physical conditioning programs. Credit not applicable to a Health or Physical Education major or minor.

**PE 360 Elementary Methods in PE (4) (Fws)**

This course is designed to prepare students to effectively teach physical education to children in grades K-6. Course content reflects the idea that teaching is goal directed and a skill that requires practice. Students are required to observe, participate, teach and evaluate elementary school physical education.

**PE 361 Secondary Methods in PE (4) (Ws)**

This course is designed to prepare students to effectively teach physical education activities to students in grades 7 through 12.

**PE 371 Coaching Football (3) (F)**

This course is intended to help prepare students for coaching football up to high school. Emphasis is placed on students developing a philosophy concerning all aspects of coaching football.

**PE 372 Coaching Basketball (3) (FWS)**

This course is designed for students to acquire the knowledge and skills necessary to successfully coach basketball at the junior and senior high school levels.

**PE 373 Coaching Baseball (3) (S)**

This course is designed to provide the student with the necessary background to coach baseball at the high school, American Legion or youth league levels.

**PE 374 Coaching Track and Field (3) (S)**

This course is designed to prepare students to effectively coach track and field to junior and senior high school students. It involves the application of strategies, placement of personnel and meet management. Students will learn about equipment, safety precautions and be able to perform basic track and field skills.

**PE 375 Coaching Wrestling (3)**

This course is designed to prepare students to coach wrestling at the junior and senior high school levels.

**PE 376 Coaching Golf/Tennis (3)**

This course is designed to prepare the student to coach competitive tennis at the junior and senior high school level.

**PE 377 Coaching Softball (3)**

This course is designed to teach the skills and knowledge necessary to coach fast or slow pitch softball. The course will also cover expectations of umpiring and score keeping.

**PE 378 Coaching Swimming and Diving (3)**

This course is designed to teach the skills and knowledge necessary to coach swimming and diving. The course will also cover expectations of officiating score keeping for swimming meets.

**PE 379 Coaching Volleyball (3) (F)**

This course prepares students to effectively coach volleyball at the elementary or secondary school level. Students learn about season and practice management, principles of physical training, development and analysis of skills, offensive and defensive team play, game management and evaluative procedures.

**PE 421(g) Physiology of Exercise (4) (Fws)**

A study of the function of those body systems most directly affected by and involved in exercise. Physiological considerations in human movement such as thermal regulations, performance at altitude and underwater, drugs and other ergogenic aids, and designing of specialized training programs will be pursued.

**PE 452(g) Adapted Physical Education (4) (Fw)**

This course provides the student with an introductory study to adapted physical education and includes strategies for meeting the needs of students with impairments in the least restrictive environment.

**PE 453(g) Assessment and Programming in D/APE(4) (S)**

A study of instructional/administrative methods and activities for the physical education program as it relates to the needs, interests and abilities of persons with physical and/or mental handicaps. Prerequisite: Consent of instructor.

**PE 456(g) Curriculum and Assessment for Severely Handicapped (4) (F)**

Examines program philosophy in teaching students with severe handicaps. Topics include curriculum approaches, methods of assessment, instructional techniques and team approaches. Cross-listed with SpEd 456g.

**PE 460 Principles of Coaching (4) (Fws)**

This course is designed to introduce students to the nature of the coaching profession and to the principles necessary for effective coaching. Psychological and sociological aspects of coaching are explored and psychological techniques that can be applied to sport to enhance performance as well as personal growth are presented.

**PE 474 Tests and Measurements in Physical Education (4) (Fs)**

This course deals with the theory of measurement in physical education, the selection and administration of appropriate tests, and the interpretation of results by fundamental statistical procedures.

**PE 475(g) Administration of Athletics (3) (S)**

This course is designed to be a culminating experience for the physical education major, providing an opportunity for the students to draw upon their classroom and practical experiences in formulating their philosophical bases for the variety of concerns related to organizing and administering athletic programs.

**PE 476 Internship in Developmental/Adapted Physical Education (5) (Fws)**

Supervised field experience in developmental/adapted physical education. This experience involves the student with persons, ages 3-21 years who exhibit various physical and/or mental handicapping conditions. 100 clock hours required.

**PE 495(g) Administration of Physical Education (3) (Fs)**

A study of problems, policies and procedures in the administration of physical education. Prerequisite: Senior standing or instructor's consent.

**PE 505 History and Philosophy of Physical Education (3)**

A study of history of physical education; influence on philosophy and programs today.

**PE 540 Problems in Physical Education (3)**

This course is designed to promote individual thought and group interactions relative to contemporary problems in physical education. Experiences include leading group discussions, classroom presentations and debating.

**PE 560 Studies in Athletic Training (3)**

Directed readings and discussions with emphasis on research in athletics. Prerequisite: Playing and/or coaching experience.

**PE 574 Tests and Measurements in Physical Education (3)**

An advanced study of statistics, standardized tests, test construction and administration.

**PE 599 Thesis in Physical Education (6)**

Registration only after consultation with advisor.

**Physical Science**

*Information on the major in Physical Science (Teaching) may be found under Chemistry or Physics*

**Physics-Astronomy Department**

Roger Sipson, *Chair*; Vijendra K. Agarwal, Gerald Hart, Walter K. Vollmers, David Weinrich, Walter Wesley, Walter Worman.

**PHYSICS-ASTRONOMY CURRICULA****Major in Physics B.S. Degree**

*Major Requirements in Physics (63 credits)*

Phys 101 Introduction to Physics (3)

Phys 101L Introduction to Physics Laboratory (1)

Phys 200-201-202 General Physics I-II-III (15)

Phys 305-306-307 Experimental Physics I-II-III (6)

Phys 322 Elementary Modern Physics (4)

Phys 330-331 Mechanics I-II (6)

Phys 340 Electronics (4)

Phys 370-371 Electromagnetic Theory I-II (6)

Phys 399 Thermodynamics (4)

Phys 430 Quantum Mechanics (4)

Phys 455 Senior Project (4)

Electives in Physics—6 hours at 300 level or higher.

*Requirements in Related Fields (42 credits)*  
Chem 111-112 General Chemistry I-II (4 each)  
Chem 111L-112L General Chemistry Laboratory I-II or 111H-112H (1 each).  
ComS 201-202 Intro to Comp/Programming I-II (4 each)  
Math 231-232-233-234 Calculus I-II-III-IV (4 each)  
Math 331 Differential Equations (4)  
Engl 287 Technical Report Writing (4)

### **Physical Science Teaching Major**

This program requires a physics major with a chemistry minor or a chemistry major with a physics minor. It meets the Minnesota requirements to teach physics, chemistry or physical science.

#### *Physics Major Requirements (51)*

Phys 101 Introduction to Physics (3)  
Phys 101L Introduction to Physics Laboratory (1)  
Phys 106 Energy and Society (3)  
Phys 200-201-202 General Physics I-II-III (15)  
Phys 305-306-307 Experimental Physics I-II-III (6)  
Phys 322 Elementary Modern Physics (4)  
Phys 330 Intermediate Mechanics I (3)  
Phys 331 Intermediate Mechanics II  
or Phys 371 Electromagnetic Theory II (3)  
Phys 340 Electronics (4)  
Phys 370 Electromagnetic Theory I (3)  
Phys 399 Thermodynamics (4)  
Phys 440 Secondary Science Teaching Methods (4)

#### *Requirements in Related Fields (20)*

Math 231-232-233 Calculus I-II-III (12)  
Biol 111,111L Cell Biology (4)

### **Minor in Physics B.A. Degree**

#### **Either**

Phys 111-112-113 Elementary Physics I-II-III (12) and an approved elective in physics (3 credits) selected from 300-400 level courses  
or Phys 200-201-202 General Physics I-II-III (15) and Phys 305-306-307 Experimental Physics I-II-III (6)  
Phys 322 Elementary Modern Physics (4)  
Phys 340 Electronics (4)  
Approved Electives in Physics (6)

### **Minor in Physics (Teaching)**

#### *Requirements in Physics (32 credits)*

Phys 200-201-202 General Physics I-II-III (15)  
or Phys 111-112-113 Elementary Physics I-II-III (12) and an approved elective in Physics (3 credits) selected from 300 or 400 level courses.  
Phys 305-306-307 Experimental Physics I-II-III (6)  
Phys 322 Elementary Modern Physics (4)  
Phys 340 Electronics (4)  
Phys 440 Secondary Science Teaching Methods (4)

(All Teacher Education Requirements shall be fulfilled to complete this minor.)

### **Minor in Astronomy B.A. or B.S. Degree (37-40 credits)**

This minor is not sufficient to qualify a person to do professional work in astronomy, nor in general will it qualify a person for graduate work in astronomy. For those interested in astronomy as a career, a physics and/or mathematics major combined with this minor, is strongly urged.

#### *Minor Requirements in Astronomy*

Ast 100 Introduction to Astronomy (4)  
Ast 100L Introductory Astronomy Laboratory (1)  
Ast 200 Cosmology (4) or  
Ast 260 Planetary Science (4)  
Ast 380 Celestial Mechanics (3)  
Ast 410 Astrophysics (3)  
Ast 499 Astronomy Project (3)  
Phys 200-201-202 General Physics I-II-III (15)  
Phys 322 Elementary Modern Physics (4)  
Phys 330 Intermediate Mechanics I (3)

### **PHYSICS COURSES**

#### **Phys 090 Science Learning Clinic (1)**

The course will consider techniques for helping students overcome science anxiety and help in the development of better science study skills. Credit not applicable to degree.

#### **Phys 101 Introduction to Physics (3) (FWS)**

Introductory survey of physical concepts: Topics from mechanics, electricity, magnetism, waves and atomic physics. Prerequisite: None. May be taken without Phys 101L.

#### **Phys 101L Introductory Physics Laboratory (1) (S)**

Experimentation in basic physics. Corequisite: Phys 101 or permission of instructor.

#### **Phys 105 Physics of Music (4) (FW)**

Physical principles governing the production, transmission and reception of musical sound. A background in music is strongly recommended.

#### **Phys 106 Energy and Society (3) (Fs)**

Energy concepts and energy conversion processes. Traditional sources and depletion. Alternate sources: solar, nuclear, hydro, wind, fusion. Environmental and ecological considerations. Prerequisites: None.

#### **Phys 109 Elementary Electronics (3)**

Topics: circuits, meters, transistors, amplifiers, oscillators, op-amps, etc. Mini-labs included. No background in electronics is presumed.

#### **Phys 110 Topics in Physics (1-3)**

A study of a specific area of physics. See instructor for specific title and prerequisite.

#### **Phys 111-112-113 Elementary Physics I-II-III (4 each) (FWS)**

Concepts and principles of mechanics. Concepts and principles of fluids, heat, sound. Concepts and principles of light, electricity and magnetism and modern physics. Includes one three-hour laboratory per week. Prerequisite: Math 133. Courses must be taken in sequence.

**Phys 200 General Physics I (5) (Fw)**

Calculus-based study of mechanics: Newton's Laws for linear and rotational motion. Work, energy, linear momentum, angular momentum and harmonic motion. Includes one 3-hour laboratory per week. Corequisite: Math 232.

**Phys 201 General Physics II (5) (Ws)**

Continuation of Phys 200. Includes gravitation, fluids, wave motion, thermal physics, electric charges and electric field and potential. Includes one three-hour laboratory per week. Prerequisite: Phys 200 or permission of instructor.

**Phys 202 General Physics III (5) (fS)**

Continuation of Phys 201. Includes capacitance, electric circuits, magnetic fields, electromagnetic waves and geometrical and physical optics. Includes one three-hour laboratory per week. Prerequisite: Phys 201 or permission of instructor.

**Phys 207 Acoustics of Speech and Hearing (3) (S)**

Basic acoustical principles applied to the generation of human speech sounds, the propagation of such sound waves, and their measurement. (Same as SLHS 207.)

**Phys 210 Topics in Modern Physics (1-3)**

Study of a specific area of modern physics. See instructor for topic title and prerequisite.

**Phys 215 Introduction to Sound Measurement (2) (S)**

Designed for anyone who needs to make or interpret sound measurements. Includes laboratory experience with typical equipment. Prerequisite: Math 134 or equivalent.

**Phys 305-306-307 Experimental Physics I-II-III (2 each) (FWS)**

Study of laboratory techniques and measuring instruments. One lecture and one three-hour laboratory per week. Prerequisites: Phys 202 or Phys 113 and Math 233 or permission of instructor.

**Phys 310 Introduction to Relativistic Physics (3)**

Topics: principle of relativity, Lorentz transformations, space-time diagrams, energy and linear momentum, and equivalence of energy and rest mass. Prerequisites: Phys 202 or Phys 113 and Math 234 or permission of instructor.

**Phys 320 Elements of Physical Science (4)**

Basic concepts of physical science in the elementary education curriculum. Emphasis on functional approach. Numerous teaching aids demonstrated. Restricted to seniors and juniors in elementary education except by permission of instructor.

**Phys 322 Elementary Modern Physics (4) (S)**

Topics: special relativity, wave-particle duality, Bohr atom, quantum mechanics, hydrogen atom, many electron atoms, nuclear properties and nuclear reactions. Prerequisite: Phys 202.

**Phys 330-331-332 Intermediate Mechanics I-II-III (3 each) (FW)**

An advanced unified approach to physical problems: Newton's Laws; algebra and calculus of vectors; particle dynamics in one, two, and three dimensions; systems of particles, gravitation, moving reference frames; Lagrange's equations, dynamics of rigid bodies; Hamilton's equations, variational principles, Hamilton-Jacobi theory, small oscillations, mechanics or continua; special theory of relativity. Prerequisites: Phys 202 and Math 331 or permission of instructor.

**Phys 340 Electronics (4) (W)**

Operational approach to circuit electronics: Network theorems, four-terminal networks, filters, feedback, nonlinear circuits, biasing, active devices, amplifiers and oscillators. Prerequisites: Phys 202 and 305 or permission of instructor.

**Phys 345 Aerospace Education Workshop (4)**

Scientific principles of aerospace topics. Field trips, guest lecturers, flying lesson. Air tour when possible. Resources for public school teachers. May be taken for pass-fail credit only. Prerequisites: Elementary or Secondary teachers and teaching candidates or permission of instructor.

**Phys 360 Theoretical Acoustics (4)**

Topics: vibrating systems, wave propagation, acoustical filters, architectural acoustics, microphones, loudspeakers, sound radiation. Prerequisites: Phys 202 and Math 331 or permission of instructor.

**Phys 361 Advanced Acoustical Measurements (2)**

Experimental study of sound radiation, acoustic filters, nonlinear systems, etc. Detailed discussion of instrumentation characteristics. Prerequisites: Phys 215 and 360 or permission of instructor.

**Phys 370-371(g) Electromagnetic Theory I-II (3 each) (F-W)**

Advanced study of electromagnetism: boundary value problems, electrostatics of microscopic media, magnetostatics, Maxwell's equations, and plane electromagnetic waves. Prerequisites: Phys 202 and Math 331.

**Phys 372(g) Optics (3) (S)**

Geometrical optics, interference, diffraction, polarization and optical instruments. Prerequisite: Phys 371.

**Phys 373 Optics Laboratory (1)**

Laboratory techniques of physical and geometrical optics. Corequisite: Phys 372.

**Phys 399 Thermodynamics (4) (On demand)**

Elements of classical thermodynamics, kinetic theory and statistical mechanics. Prerequisites: Phys 330 or Chem 341 and Math 234 or permission of instructor.

### **Phys 410 Astrophysics (3)**

Mathematical consideration of various topics in introductory astrophysics. Topics may vary slightly depending on interests of instructor and participants. Prerequisite: Junior status in physics. May be taken as Ast 410.

### **Phys 430(g) Quantum Mechanics (4)** (On demand)

Application of quantum mechanics to atoms and molecules. Prerequisites: Phys 322, 331 and 370 or permission of instructor.

### **Phys 432(g) Introductory Solid State Physics (3)**

Crystalline structure of solids. Lattice properties. Electron theory of metals. Prerequisite: Phys 322, 430, or permission of instructor.

### **Phys 440 Secondary Science Teaching Methods (4)** (W)

Materials and methods appropriate for junior and senior high school classes and laboratories. Must be taken prior to student teaching. Prerequisite: Junior or senior standing in a science education program. Cross-listed in Biology, Chemistry and Physics.

### **Phys 455 Senior Project (4)** (On demand)

A project involving experimental and/or theoretical research on a physics topic. It will involve extensive library research as well. A detailed written report and an oral presentation are required. Prerequisite: Senior standing in physics.

### **Phys 499(g) Special Problems in Physics (1-4)**

Special intermediate and advanced problems in physics. Area and credit to be specified in transcript. Prerequisite: Permission of instructor.

## **Political Science Department**

David Flint, *Chair*; Dean Alger, Philip Baumann, Andrew Conteh, James Danielson

### **POLITICAL SCIENCE CURRICULA**

#### **Major in Political Science B.A. Degree**

*Major Requirements in Political Science (52 credits)*

Pol 110 Introduction to Political Science (4)

Pol 120 National Government (4)

Pol 160 International Relations (4)

Pol 250 Comparative Governments of Western Europe (4)

Pol 310 Scope and Methods of Political Science (4)

Pol 410 Topics in Western Political Thought (4)

At least one quarter of 400-level seminar (Pol 420 or 490) to be selected by the student (3-4).

Sufficient electives in Political Science to bring total Political Science credits to 52.

#### *Requirements in Related Areas (36 credits)*

Electives in the following areas, including at least two courses each in two of the areas:

American Studies or Multicultural Studies

Anthropology or Sociology

Economics

Geography

History

Mass Communications or Speech

Philosophy

Psychology

#### *Orientation Requirement in Research Tools*

Depending on particular interests, the student will, in consultation with an advisor, fulfill a one-year orientation program in appropriate research tools to consist of one course per quarter in one or more of the following areas: language, statistics, research methods, computer science, or mathematics. The program may be a combination of courses from more than one field or a sequence in one area.

### **Major in Political Science—Social Studies (Teaching)**

Only the approved Social Studies major can be accepted for secondary teaching certification. See Social Studies.

### **Minor in Political Science (28 credits)**

Pol 110 Introduction to Political Science (4)

Pol 120 National Government (4)

Plus 20 credits of Electives

### **POLITICAL SCIENCE COURSES**

#### **Pol 110 Political Science as a Discipline (4)** (FWS)

The relationship of political science to other social and behavioral sciences, the concept of the political system and the variety of political systems throughout the world, the core problems, issues and ideologies common to political systems, and the causes and consequences of individual and group political behavior.

#### **Pol 120 National Government (4)** (FWS)

Fundamentals of political institutions, structures and processes; emphasis on American Government.

#### **Pol 160 International Relations (4)** (FW)

Nation-state and sovereignty; the network of economic, political, cultural and technological interdependence of peoples; national interests and motivations; power politics, diplomacy, intelligence and war.

#### **Pol 221 State and Local Government (4)** (F)

The structure, operation and politics of municipal, county and regional units of government; legislative, executive and judicial branches of state government.

#### **Pol 230 Introduction to the Law (4)** (WS)

The philosophy of law; its social context; justice and its implications; evolution of legal concepts.

#### **Pol 232 Criminal Law (4)** (FW)

Substantive criminal law, development and meaning of principles of criminal law, current issues.

#### **Pol 240 Public Administration (4)** (W)

Public bureaucracy in the democratic political system.



**Pol 250 Comparative Governments of Western Europe (4) (S)**

Examination of the political systems of the U.K., France, the Federal Republic of Germany, and Italy; as well as trans-national cooperation between them.

**Pol 290 Introductory Seminar in Political Science (2-4) (F)**

Examination of an issue at an introductory level in seminar setting. May be repeated as topic varies.

**Pol 310 Scope and Method (3) (F)**

Approaches to the study of politics: Methodologies and techniques of political research.

**Pol 311(g) American Political Thought (4) (S)**

A survey of American political thought from New England Puritanism to modern pragmatism, conservatism and radicalism.

**Pol 312(g) Communist and Marxist Foundations of Government (3)**

Evolution of Communism in Eastern and Western cultures as a theory and practice of government. Marxism and the 19th century development of Communism.

**Pol 320 The American Congress (3) (S)**

Congressional decision-making, organization and relationships with other branches of the federal government.

**Pol 321 The American Presidency (3) (S)**

Presidential decision-making and relationships with other branches of the federal government.

**Pol 324 American Political Parties (3) (S)**

Parties and interest groups in the American political system.

**Pol 328 The Media and Politics (3-4) (WS)**

Concepts of political communication, socialization and public opinion. The media's role in politics, including relations between the media and government, with special focus on the media's impact on presidential elections. Prerequisite: Pol 120.

**Pol 330 The Judicial System (4) (F)**

The legal institutions, their functions and procedures; the Anglo-American experience; the American judicial system.

**Pol 341(g) Public Policy (3) (F)**

The policy processes and issues of the national government.

**Pol 352(g) Political Problems in Developing Countries (3) (S)**

Social and economic conditions affecting political institutions in the developing countries. The Third World in international relations.

**Pol 353 Politics of Latin American Countries (4) (S)**

Comparative analysis and interpretation of political forces in Latin America.

**Pol 360(g) American Foreign Policy (4) (W)**

U.S. foreign policy: its historical evolution, geographical position, economic, military and political interest.

**Pol 361(g) Topics in International Law (4 each) (W)**

The doctrine of sovereignty; rights and obligations of states; freedom of the high seas; disputes, conflicts and the laws of war. May be repeated.

**Pol 362(g) Topics in International Organizations (3-4 each) (W)**

The 19th century European experience; from the League of Nations to the United Nations; the UN charter and its meaning and interpretation; specialized agencies of the UN. May be repeated.

**Pol 410(g) Topics in Western Political Thought (4 each) (F)**

May be repeated.

**Pol 420(g) Seminar in American Politics (3) (WS)**

Research and advanced analysis of selected topics; supervised individual studies. May be repeated as content is changed.

**Pol 430(g) Topics in Constitutional Law (2-4 each) (WS)**

May be repeated. Interpretation of the Constitution of the United States by federal courts.

**Pol 455(g) Topics in Comparative Government (2-4 each)**

Variable topics such as the British Commonwealth, Europe, Africa, Asia, the Middle East; or comparative government. May be repeated for credit.

**Pol 460(g) International Politics (4)**

Contemporary theories of international conflict, roles of the individual, the state and the international environment in global politics.

**Pol 461(g) Independent Study in Political Science (1-6) (FWS)**

Readings, research papers, special projects under the close supervision of members of the department. Prerequisites: Pol 110 and 120 or consent of instructor.

**Pol 469 Student Internship (3-16) (FWS)****Pol 490(g) Senior Seminar in Political Science (2-4) (WS)**

Examination of an issue, problem or concept at a senior level in a seminar setting. May be repeated as the topic varies. Prerequisites: Pol 110 and 120 or consent of instructor.

**Pol 590 Graduate Seminar in Political Science (2-4) (on demand)**

Examination of an issue, problem or concept at a graduate level in a seminar setting. May be repeated as topic varies. Prerequisites: Pol 110 and 120 or consent of instructor.

**Pol 599 Thesis in Political Science (1-6)** (on demand)  
Registration only after consultation with major advisor.

## Psychology Department

Phillip Rice, *Chair*; Bradley Bremer, David Cole, James Condell, A. Derick Dalhouse, Elizabeth Danielson, Ernest Halford, Richard Kolotkin, Gary Nickell, Margaret Potter, Diane Villwock, Helen Wilson

### PSYCHOLOGY CURRICULA

#### Major in Psychology B.A. Degree (64 credits)

*Core Requirements in Psychology (28 credits)*  
Psy 103-104-105 Introductory Psychology I-II-III (12)\*  
Psy 106-107 Introductory Psychology Laboratory I-II (2)  
Psy 231-232 Psychological Statistics and Methodology I-II (10)  
Psy 481 Seminar in Psychology (4)

\* An alternative sequence (Psy 113, followed by any two of Psy 115, Psy 117, or Psy 119) may be substituted with departmental approval. Credit is given for one 12-hour sequence only.

Any two of the following courses (8):

Psy 442 Learning (4)  
Psy 444 Motivation and Emotion (4)  
Psy 445 Physiological Psychology (4)  
Psy 446 Perception (4)  
Psy 447 Comparative Psychology (4)  
Psy 448 Cognition (4)

Any five of the following courses (20):

Psy 301 People, Work, and Organizations  
Psy 303 Environmental Psychology  
Psy 320 Social Psychology  
Psy 321 Attitude Organization and Change  
Psy 322 Topics in Social Interaction  
Psy 351 Psychology of Intelligence  
Psy 352 Psychological Measurement  
Psy 353 Psychology and the Arts  
Psy 401 Child Psychology  
Psy 402 Adolescent Psychology  
Psy 403 Adulthood and Aging  
Psy 417 Child Psychopathology  
Psy 461 Theories of Personality  
Psy 463 Abnormal Behavior  
Psy 465 Clinical Psychology  
Psy 467 Chemical Dependencies  
Psy 470 History of Psychology

Electives from any 200, 300, or 400 courses (8).

*Requirement outside of Psychology (4)*

Math 121 Intermediate Algebra (this requirement may be waived if the student has had two years of high school algebra or has passed a mathematics proficiency test administered by the Mathematics Dept.); Math 121 is a prerequisite for Psy 231.

#### Minor in Psychology (Non-teaching) (38-39 credits)

*Core Requirements in Psychology (18-19)*  
Psy 103-104-105 Intro Psychology I-II-III (12)\*  
Psy 106-107 Intro Psy Lab I-II (2)  
Psy 231 Psychological Statistics/Methodology I (5); minors may substitute Math 274 (4) or Soc 350 (4).  
Psy 346 Principles of Behavior (4)

\* The alternative sequence mentioned above for psychology majors (Psy 113 followed by any two of Psy 115, or Psy 117, or Psy 119) may be substituted with departmental approval.

Elective sequence, plus one additional course at the 300 level or above from the following (16)

A. Clinical—Psy 461-463-465 (12)  
B. Developmental—Psy 401-402-403 (12)  
C. Differential—Psy 301-351-352-353 (12)  
D. Social—Psy 303-320-321-322 (12)

#### Minor in Psychology (Teaching) (38-39 credits)

*Core requirements in Psychology (18-19 credits)*  
Psy 103-104-105 Intro Psy I-II-III (12)\*  
Psy 106-107 Intro Psy Lab I-II (2)  
Psy 231 Psychological Statistics/Methodology I (5); minors may substitute Math 274 (4) or Soc 350 (4)

\* The alternative sequence mentioned above for psychology majors (Psy 113, followed by any two of Psy 115, Psy 117, or Psy 119) may be substituted with departmental approval.

Psy 320 Social Psychology (4)  
Psy 346 Principles of Behavior (4)  
Psy 351 Psychology of Intelligence (4)  
Psy 440 Psychology in the Secondary School (4)  
Psy 463 Abnormal Psychology (4)

Note: Students wishing to teach psychology in the State of Minnesota should take the Social Studies Major for Secondary Education with a core in psychology. (See Social Studies).

**Master of Science — School Psychology (48 credits).** See Graduate catalog for full description.

**Specialist in School Psychology — (42 credits).** See Graduate catalog for full description.

### PSYCHOLOGY COURSES

**Psy 103-104-105 Introductory Psychology I-II-III (4 each) (FWS)**

Year-long survey of psychological topics such as learning, motivation, emotion, intelligence, personality and social relations. Covers psychological theories, current knowledge and research techniques. Emphasizes preparation for advanced psychology courses. Enrolled students may not take Psy 113 for credit.

**Psy 106 Introductory Psychology Laboratory I (1) (FWS)**

Classical experiments in psychology with emphasis on methodology and report writing. Prerequisite: Concurrent or prior enrollment in Psy 103 or 113.

**Psy 107 Introductory Psychology Laboratory II (1)**  
(FWS)

Initiating, conducting and reporting a simple experimental procedure. Investigating research methodology on social issues in psychology. Prerequisite: Psy 106.

**Psy 113 General Psychology (4)** (FWS)

Survey of content and methods of modern psychology. Students in 113 may not take Psy 103, 104, or 105 for credit.

**Psy 115 Developmental Psychology (4)** (FWS)

Psychological development of the individual from conception to death, including genetic, pre-and post-natal influences; relations with parents and peers; social, emotional and intellectual development. Prerequisite: Psy 113.

**Psy 117 Personality (4)** (FWS)

Introduction to the study/explanation of human behavior, motivation and conflict emphasizing personality as viewed by a variety of theorists. Prerequisite: Psy 113.

**Psy 119 Social Behavior (4)** (FWS)

The influence of other people on the behavior and attitudes of individuals. Topics include attitude change, the effect of being a part of a group, attraction, aggression, sex roles and discrimination. Theory and application. Prerequisite: Psy 113.

**Psy 198 Independent Study for External Studies (1-4)**

**Psy 201 Contemporary Issues in Psychology (4)**

An in-depth look at topics in psychology and how they relate to the situations and problems of contemporary society. Prerequisite: Psy 113, 103, or the equivalent.

**Psy 217 Alcoholism and Drug abuse (4)** (FWS)

Informational survey and study of alcoholism and drug abuse, a major health problem with substantive psychological components. The socio-physiological impact of drugs in general and their misuses and abuses will be discussed. Prerequisite: 8 psychology credits or consent of instructor.

**Psy 219 Applied Psychology (4)** (S)

Introduction to applied specialties in psychology. Provides an overview of how psychology may be used in applied settings and how students may prepare themselves for professional and paraprofessional positions in business and human service agencies. Prerequisite: 8 psychology credits or consent of instructor.

**Psy 220 The Psychology of Women (4)** (FS)

The interacting effects of biology, physiology, and psychology on female development, providing evidence on sex differences and role differentiation. Prerequisite: 8 credits of psychology or consent of instructor.

**Psy 231-232 Psychological Statistics & Methodology I-II (5 each)** (Fw-Ws)

Psy 231: Introduction to research methods in psychology; descriptive and inferential statistics; elementary hypothesis testing. Laboratory included. Prerequisite: Psy 105 or equivalent, Psy 106, Math 121. Psy 232: Analysis of variance designs; multiple-comparison tests; nonparametric tests; computer applications to statistics. Laboratory included. Prerequisite: Psy 231 or equivalent.

**Psy 292 Directed Research (1-4)**

Conduct of research under direct supervision of a faculty member. Emphasis is on experience and learning with regard to research design and analysis. No more than 8 credits. Prerequisite: Psy 103 or 113.

**Psy 301 People, Work and Organizations (4)** (W)

Understanding the behavior of individuals at work plus psychology's contribution to their selection, training, evaluation and motivation. Prerequisite: 12 credits of psychology or consent of the instructor.

**Psy 303 Environmental Psychology (4)** (S)

An examination of the effects of the social, physical and ecological features of the environment on human behavior. Topics include the effects of crowding, noise, architecture and urban design. Prerequisite: 12 credits of psychology or consent of instructor.

**Psy 320 Social Psychology (4)** (F)

Theories and research involving individual's reactions to others. Topics: social perception, attraction, social influence, aggression, social exchange. Prerequisite: 12 credits of psychology or consent of instructor.

**Psy 321 Attitude Organization and Change (4)** (W)

Investigates nature of attitudes, attitude formation and change. Various theoretical orientations, research, application. Includes research project. Prerequisite: Psy 320.

**Psy 322 Topics in Social Interaction (4)** (S)

In-depth coverage of selected topics in Social Psychology. Involves discussion and individual research projects. Emphasis on current issues. Prerequisite: Psy 320.

**Psy 346 Principles of Behavior (4)** (FW)

Introduction to conditioning and related concepts; verbal learning and other cognitive processes; emphasis on application. Not intended for majors. Prerequisite: Psy 231 or equivalent.

**Psy 351 Psychology of Intelligence (4)** (F)

An overview of historical and contemporary theories of intelligence. Theories, research and applications are discussed. Prerequisite: 12 credits of psychology or the consent of instructor.

**Psy 352 Psychological Measurement (4)** (W)

An introduction to the theoretical aspects of psychological measurement covering such topics as reliability, validity, psychophysics and item analysis. Prerequisite: 12 credits of psychology or the consent of instructor.

**Psy 353(g) Psychology and the Arts (4) (S)**

An understanding of the relationship of the fundamental principles of psychology to the arts is developed from the formal beginning of psychology to the present. Prerequisite: Psy 113 or consent of instructor.

**Psy 398 Advanced Independent Study for External Studies (1-4)**

**Psy 401 Child Psychology (4) (F)**

Study of the developing child from the prenatal period to puberty with emphasis on emotional, social and cognitive factors in growth and development. Prerequisite: Consent of instructor.

**Psy 401(g) (3) (F)**

Same as above; for graduate credit only.

**Psy 402 Adolescent Psychology (4) (W)**

An introduction to the psychological study of adolescent physical, intellectual, social, emotional and sexual development. Prerequisite: Consent of instructor.

**Psy 402(g) (3) (W)**

Same as above; for graduate credit only.

**Psy 403 Adulthood/Aging (4) (S)**

Discussion of some of the major theoretical approaches and current issues in human development from young adulthood through old age and death. Prerequisite: Consent of instructor.

**Psy 403(g) (3) (S)**

Same as above; for graduate credit only.

**Psy 417(g) Child Psychopathology (3-4) (S)**

The nature, origins and consequences of behavioral disturbances in childhood. Topics include theoretical perspectives, assessment and classification, treatment and prevention. Prerequisite: 12 psychology credits, including child psychology, and upper-division status.

**Psy 440 Psychology in the Secondary School (3)**

A methods course for the preparation of teachers of psychology at the secondary level. Prerequisite: Consent of instructor.

**Psy 442(g) Learning (4) (F)**

Laboratory course emphasizing the theories and principles of classical conditioning, operant conditioning, verbal learning and memory. Laboratory included. Prerequisite: Psy 232.

**Psy 444(g) Motivation and Emotion (4) (F)**

An empirical and theoretical analysis of human and animal research in these areas. Experience and competence in research techniques are required. Laboratory required. Prerequisite: Psy 232.

**Psy 445(g) Physiological Psychology (4) (W)**

Study of the biological processes that underlie control and execution of behavior; demonstrated research competencies are required. Laboratory included. Prerequisite: Psy 232.

**Psy 446(g) Perception (4) (S)**

Information-processing approach to sensory and perceptual processes; emphasis on vision and audition. Laboratory included. Prerequisite: Psy 232.

**Psy 447(g) Comparative Psychology (4) (S)**

Ethological approach to animal behavior; intra- and inter-species comparisons of innate and learned behavioral patterns. Laboratory included. Prerequisite: Psy 232.

**Psy 448(g) Cognition (4) (W)**

Theoretical and experimental study of human cognitive processes, such as concept formation, problem solving and creativity. Laboratory included. Prerequisite: Psy 232.

**Psy 461 Theories of Personality (4) (F)**

A survey of the major theories used in the study of personality assessment and research. Prerequisite: 12 credits of psychology or the consent of instructor.

**Psy 461(g) (3) (F)**

Same as above; for graduate credit only.

**Psy 463 Abnormal Psychology (4) (W)**

Descriptive and explanatory models are detailed in relation to their relevance to behavior pathology and the prevention of abnormal behavior. Prerequisite: 12 credits of psychology or the consent of instructor.

**Psy 463(g) (3) (W)**

Same as above; for graduate credit only.

**Psy 465 Clinical Psychology (4) (S)**

Introduction to techniques of psychotherapy, crisis intervention, interviewing, clinical assessment and prevention of disorder. Emphasis on psychotherapy as a process of understanding. Prerequisite: 12 credits of psychology or consent of instructor.

**Psy 465(g) (3) (S)**

Same as above; for graduate credit only.

**Psy 467 Chemical Dependencies (4) (S)**

A study of the practical, legal and ethical problems in dealing effectively with chemical dependencies. Development and application of skills related to diagnosis, intervention and referral is stressed. Prerequisite: 12 credits of psychology or equivalent and consent of instructor. Psy 217 recommended.

**Psy 467(g) Chemical Dependencies (3) (S)**

Same as above; for graduate credit only.

**Psy 469 Student Internship in Psychology (3-16)**

**Psy 470(g) History and Systems of Psychology (4) (F)**

An overview of the development of psychology from associationism to the present. Schools, fields and areas of psychology are emphasized. Prerequisite: Consent of instructor.

**Psy 481 Seminar in Psychology (4) (Fs)**

Topics of special interest. For majors and advanced students in other areas. Course may be repeated. Prerequisite: Consent of instructor.

**Psy 481(g) (3) (Fs)**

Same as above; for graduate credit only.

**Psy 491(g) Independent Study (1-4)**

Individual topical studies of special interest. Course may be repeated. Prerequisite: Consent of instructor.

**Psy 494(g) Independent Research (1-4)**

Student assumes responsibility in the implementation of research related to interests of a faculty supervisor or in the area of their own choosing. Weekly meeting required. Prerequisite: Psy 232 or consent of instructor.

**Psy 495(g) Field Work in Psychology (2-4)**

Supervised field work, experience in social service agencies or research settings. Prerequisite: Consent of instructor. Students must have obtained prior approval from the instructor for all projects they wish to take for credit.

**Psy 500 Observation & Interview Techniques (3) (W)**

Development of skills in observation, interviewing, obtaining case histories and assessing adaptive behaviors. Field work assignments to be completed in practica. Prerequisite: Consent of instructor.

**Psy 501 Introduction to School Psychological Services (2) (F)**

An introduction to the field of school psychology. Discussion of the historical and current factors influencing the development of the profession, the roles of the school psychologist, and group processes underlying team decision-making. Prerequisite: Consent of instructor.

**Psy 502 Theory and Practice of Psychoeducational Measurement (4) (F)**

Theory and statistical principles involved in test construction and interpretation. Various types of instruments are surveyed with particular attention given to the administration of educational tests. Prerequisite: Consent of instructor.

**Psy 503 Individual Psychological Testing (3) (W)**

Theory, administration and interpretation of commonly used psychodiagnostic evaluation techniques as they apply to school-age populations. Prerequisites: Psy 502 and consent of instructor.

**Psy 504 Psychological Test Interpretation and Report Writing (3) (S)**

Advanced individual appraisal includes a case study approach to assessment. Emphasis on the interpretation and integration of test results into meaningful psychological reports. Prerequisites: Psy 503 and consent of instructor.

**Psy 505 Practicum in School Psychological Services I (2) (W)**

Supervised school psychology experience in the preschool, elementary school or secondary school setting. A total of 100 clock hours. Prerequisites: Consent of instructor, and concurrent enrollment in Psy 500 and Psy 503.

**Psy 506 Practicum in School Psychological Services II (1-5) (S)**

Supervised school psychology experience in schools with time divided among preschool, elementary and secondary levels. 250 clock hours required. Prerequisites: Psy 505 and consent of instructor. May be repeated to a maximum of 5 credits.

**Psy 509 Issues in the Practice of School Psychology (2) (S)**

Seminar to discuss relevant issues in the interpretation and application of knowledge of psychological information in schools, including consideration of ethical issues, legal factors impacting on the practice of school psychology, evaluation of self-performance, and obtaining professional supervision. Prerequisite: Psy 501, consent of instructor, and concurrent enrollment in Psy 506.

**Psy 550 Advanced Psychological Testing: Personality (1-3) (F)**

Study of the theoretical foundations, development, administration and interpretation of major tests of personality and abnormal psychology. This course is open to graduate students in school psychology who have completed first-year training including course work in personality and abnormal psychology. Prerequisite: Consent of instructor and concurrent enrollment in Psy 560 or 572. May be repeated to a maximum of 3 credits.

**Psy 552 Individual and Group Intervention Techniques (1-3) (W)**

An advanced school psychology seminar in which group processes will be analyzed and a variety of strategies for working with individuals and groups of children will be discussed. Prerequisites: Advanced standing in school psychology program, concurrent enrollment in Psy 562 or 572 and consent of instructor. May be repeated to a maximum of 3 credits.

**Psy 554 Systems Intervention (3) (S)**

A seminar for advanced graduate students in school psychology. Systems level and organizational interventions will be the focus of study. Topics include organizational development, primary intervention, child advocacy, consultation, and intervention for classes of children. Prerequisites: Advanced standing in the school psychology program, concurrent enrollment in Psy 564, and consent of instructor.

**Psy 560, 562, 564 Internship in School Psychology I-II-III (2-4 each) (FWS)**

Supervised field experience as a school psychologist intern in a school district for 200-400 hours per quarter. Concurrent enrollment in Psy 550, 552, 554 required. A project is required in each internship segment in conjunction with the advanced seminars. Prerequisites: Advanced standing in the school psychology program and consent of instructor.

**Psy 572 Practicum in School-Related Clinical Services (2)**

Supervised school psychology experience in a setting providing clinical psychological services for 100-200 clock hours per quarter. Prerequisites: Concurrent enrollment in Psy 550 or 552 and consent of instructor.

**Psy 575 Advanced Assessment of the Infant and Young Child (3)**

Intended to train advanced school psychology students to administer various developmental scales to children birth to six years and explore various theories relevant to child development. Prerequisites: Psy 504, 506 and consent of instructor.

**Psy 581 Readings in Psychology (1-3)**

Directed readings on selected topics. May be repeated to a maximum of 4 credits. Prerequisite: General psychology or consent of the instructor.

**Psy 597 Specialty Paper in School Psychology (3)**

An independent library research project which reviews in-depth the professional literature in an approved area of school psychology. Prerequisites: Completion of 24 hours toward MS degree including at least one course in statistics or research methods.

**Psy 599 Thesis in Psychology (1-6)**

Research and writing of the specialist's thesis. Registration only after consultation with major advisor.

**Recreation and Leisure Studies**

A major in Recreation and Leisure Studies is not available at this time. Some of the following courses are offered on a regular basis, while others are offered on demand.

**RECREATION COURSES**

**Rec 127 Beginning Skiing (1) (W)**

**Rec 110 Introduction to Recreation (2) (W)**

An overview of the nature, principles and scope of recreation.

**Rec 140 Camping and Outdoor Recreation (3) (S)**

Provides a broad perspective of the aims, purposes and values of the program. Leadership training for counselors.

**Rec 253 Youth Organizations (2) (F)**

A study of the history and development of selected youth organizations including objectives, administration, programs and related vocational opportunities.

**Rec 254 Scouting Organizations (2)**

An in depth study of the development, organization and operation of Cub Scouts, Boy Scouts and Explorer Programs.

**Rec 344 Recreational Activities (3) (Fw)**

Activities, materials, methods and techniques in recreation leadership.

**Rec 345 Recreation Crafts (3) (Fw)**

Fundamental handicraft activities for recreational programs.

**Rec 450 Field Work in Recreation (3) (Fws)**

Involves practical experience opportunities in local programs. Open only to Physical Education majors and Recreation minors. Prerequisite: Rec 110 or 210.

**Rec 465(g) Organization and Administration of Recreation (3) (F)**

A study of policies, procedures, and problems in establishing and operating a municipal recreation program.

**Rec 469 Internship (3-16) (Fws)**

This course is designed to give students an opportunity to gain supervised clinical experiences working with state or local recreation agencies.

**Rec 540 Problems in Recreation (3)**

This course involves individualized study and research into specific problem areas in recreation.

**Rec 599 Thesis in Recreation (6)**

Registration only after consultation with major advisor.

147

**Scandinavian Studies**

Ken Smemo, *Coordinator*

**SCANDINAVIAN STUDIES CURRICULA**

The Scandinavian Studies program at Moorhead State University is an interdepartmental offering involving the departments of art, English, languages and history.

Scandinavian Studies includes counseling and academic work in a cohesive program devoted to the languages, literature, history, culture and society of the Scandinavian peoples of northern Europe as well as their relationship to the American society. It attempts to meet the needs of: those interested in their own cultural heritage or that of a great share of the inhabitants of the Upper Midwest; those wishing an interdisciplinary liberal arts augmentation to an elementary or secondary teaching major; those contemplating careers in foreign service or international business; or those seeking some undergraduate preparation for work at the graduate level in Scandinavian studies at other American or European institutions.

Through an arrangement with the University of Oslo, MSU students may attend classes there for up to a full academic year, while earning on-campus credits. Sophomore standing and at least one year of college-level study of Norwegian language are minimum requirements for admission to the "Oslo Year."

An Individualized Major in Scandinavian Studies may be obtained upon application.

**Minor in Scandinavian Studies B.A. Degree (36 credits)**

*Electives in Scandinavian Studies to complete minor:*

- Art 439(g) Scandinavian Art (4)  
Engl 381/Scan 381(g) Older Literature of Scandinavia (4)  
Engl 382/Scan 382(g) Ibsen and Strindberg (4)  
Engl 383/Scan 383(g) Modern Scandinavian Novel (4)  
Hist 111 Modern Scandinavia in Historical Perspective (4)  
Hist 317(g) The Reformation (3)  
Hist 340(g) History of Scandinavia I-II (4 each)  
Hist 355(g) The Scandinavian Heritage in America (4)  
Hist 404(g) Seminar in European History—Scandinavia (4)  
LART 328 The Viking Age: Its History and Literature (4)  
Scan 100 Selected Emphasis in Scandinavian Language—Beginning Level (2-4)  
Scan 200 Selected Emphasis in Scandinavian Languages—Intermediate Level (2-4)  
Scan 231 Scandinavian Culture and Civilization (3)  
Scan 280 Special Topics in Scandinavian Literature and Culture/Civilization (2-4)  
Scan 325 The Novels of Knut Hamsun in Translation (3)  
Nor 201-202-203 Intermediate Norwegian I-II-III (12 credits)  
Nor 297 Independent Study in Norwegian—Intermediate Level (1-4; max. 8)  
Nor 397 Independent Study in Norwegian—Advanced Level I (1-4; max. 8)

It is recommended that students electing this minor also complete the History 101-102-103 Western Civilization I-II-III sequence in addition to the minor.

**SCANDINAVIAN LANGUAGE AND LITERATURE COURSES**

**Scan 100 Selected Emphasis in Scandinavian Language—Beginning Level (2-4) (FWS)**

Introductory course focusing on specific linguistic objectives, acquisition of certain language skills; may be repeated when course objectives are different.

**Nor 101-102-103 Beginning Norwegian I-II-III (4 each) (FWS)**

Fundamentals of spoken and written Norwegian (Bokmal).

**Nor 107-108 Beginning Norwegian A-B (6-6) (WS)**

Accelerated acquisition of basic communicative skills in Norwegian. Minimum two hours weekly of language laboratory required. Preparatory for, though not applicable toward the minor program in Scandinavian Studies.

**Scan 200 Selected Emphasis in Scandinavian Languages—Intermediate Level (2-4)**

Specific linguistic objectives for students with at least two quarters of college-level Norwegian; repeatable when objectives differ.

**Nor 201-202-203 Intermediate Norwegian I-II-III (4 each) (FWS)**

Intermediate conversation and composition with selected readings of progressive difficulty. Prerequisite: Nor 101-102-103 or equivalent.

**Scan 231 Scandinavian Culture and Civilization (3) (W)**

Introduction to the cultural development of the Scandinavian peoples from prehistoric times to the present. Taught in English; no prerequisites.

**Scan 280 Special Topics in Scandinavian Literature and Culture/Civilization (2-4)**

In-depth study of selected topics pertaining to Scandinavian literature, culture or civilization. Taught in English. May be repeated when objectives differ.

**Nor 297 Independent Study in Norwegian—Intermediate Level (1-4; max. 8)**

Supervised reading in selected areas of Norwegian language, literature or related fields. Conferences with instructor; reports. Permission of program director required.

**Scan 325 The Novels of Knut Hamsun in Translation (3)**

In-depth study of selected novels of Knut Hamsun. The course is taught in English; however, the novels may be read either in English translation or the original Norwegian.

**Scan 381(g) The Older Literature of Scandinavia (4)**

Selections from the Eddas, tales and ballads in English translation. Same as Engl 381.

**Scan 382(g) Ibsen and Strindberg (4) (W)**

Major and representative plays of Ibsen and Strindberg in English translation. Same as Engl 382.

**Scan 383(g) The Modern Scandinavian Novel (4)**

Masterpieces by the major Scandinavian novelists of the 20th Century. In English translation. Same as Engl 383.

**Nor 397 Independent Study in Norwegian—Advance Level I (1-4; max. 8)**

Supervised reading in selected areas of Norwegian language, literature or related fields. Conferences with instructor; reports. Permission of program director required.

## Science

Students may obtain a B.S. (Teaching) degree in Biology-Life Science or in Physical Science. Upon completion of the requirements for one of these programs, the student will be licensed in Grades 7-12 by the Minnesota State Department of Education. See Biology for Life Science and Chemistry or Physics for Physical Science.

Descriptions of science courses which are not characteristically offered by a specific department are provided below.

### Sci 302 Analysis of Science (3)

The analysis of presumptions, structure and contributions of science.

### Sci 340 Science in the Elementary School (2)

Objectives, methods, materials and evaluation.

### Sci 350 Seminar: Science, Technology, and Society (2)

A seminar exploring the relationship of science and its applications to society. The question of the social responsibility of scientists—both collectively and individually—will be studied.

### Sci 390(g) Special Methods in Science in the Elementary School (3)

Adapted to the special needs and experiences of those enrolled.

## Secretarial

See *Business Education for Curricula*.

## Social Studies

### Major For Secondary Education

*Program Requirements (88 credits)*

Ed 440 Social Studies in the Secondary School (4)

Distribution Courses (60 credits)

(See specific course requirements below.)

*Concentration Courses (24 credits)*

(See specific course requirements below.)

#### *Specific Course Requirements*

Distribution Requirements (60 credits)

Two courses from each of the disciplines of Anthropology, Economics, Geography, Political Science, Psychology and Sociology.

Three courses from History.

#### Anthropology

Anth 110 Culture/Symbols

Anth 111 Human Evolution/Prehistory

#### Economics

Econ 202 Principles I

Econ 204 Principles II

#### Geography

Geog 100 Intro to Geography

Geog 310 U.S. and Canada

#### History

Hist 121-122-123 History of the U.S. I-II-III

#### Political Science

Two of the following:

Pol 110 Political Science as a Discipline

Pol 120 National Government

Pol 160 International Relations

#### Psychology

Psy 113 General Psychology

Psy 117 Personality

#### Sociology

Soc 110 Introduction to Sociology

Soc 111 Social Problems

#### *Concentration Requirements*

Twenty-four credits in any one discipline. These courses are in addition to the courses taken for the distribution requirement and must include at least four courses numbered 300 or above.

#### Anthropology

Any two courses from among the 200-level offerings except Anth 216 and 217.

Anth 305 Primate Behavior or

Anth 310 Human Evolution

Anth 315 North American Archaeology or 216

Prehistoric Cultures or 217 Social Evolution

Anth 375 Language in Culture

Anth 400 Anthropological Theory

#### Economics

Econ 206 Principles III

Econ 302 Intermediate Microeconomics or Econ 304

Intermediate Macroeconomics

Electives—approved by department chair with at least 12 in the upper-division.

#### History

Either Western Civilization II-III, Hist 102-103 or World

History II-III, Hist 105, 106

Electives at the 200 level or above and including one 400 level seminar

European or North American History 10 credit minimum

Non-Western History (Asia, Africa, Latin America) 6 credit minimum

#### Political Science

One course from each of the following groups:

Pol 221 State and Local Government, 240 Public Administration, 321 The American Presidency, 324 American Political Parties

Pol 230 Intro to Law, 330 Judicial Systems, 430 Topics in Constitutional Law

Pol 311 American Political Thought, 312 Communist and Marxist Foundations of Government, 410 Topics in Western Political Thought, 411 Topics in Eastern Political Thought



Pol 160 (if not taken to satisfy distribution requirement), 360 American Foreign Policy, 361 Topics in International Law, 362 Topics in International Organizations, 460 International Politics

Additional electives to bring concentration to 24 credits

#### Psychology

Psy 231 Psychology Stat/Methods

Psy 320 Social Psychology

Psy 346 Principles of Behavior

Psy 351 Psychology of Intelligence

Psy 402 Adolescent Psychology

Psy 463 Abnormal Psychology

### Sociology

Any Sociology courses except Soc 461 Readings and Soc 469 Internship. The selection of courses should be planned in consultation with a departmental faculty advisor.

### Social Work Department

Gary L. Jacobson, *Chair*; Richard A. DuBord, Julius Harrington, Sandra C. Robin, James A. Svobodny, Mary Lou Ziter

The Moorhead State Social Work Program is accredited by the Council on Social Work Education. The principle educational objective of the social work major is to prepare students for beginning professional social work practice. The Bachelor of Social Work (BSW) degree is awarded upon completion of all university and major requirements both within the department and in related areas.

#### Admission to the Major

Students who wish to major in social work must complete a formal admissions process, approved by the faculty advisor and submitted to the department the quarter they are enrolled in SW 255—Human Behavior and the Social Environment (exceptions may be made for transfer students). Admission policy and procedure statements are available in the department. See faculty advisor.

Curriculum changes for the Social Work major may be made which will influence course offerings and requirements. Current major requirements will be available in the department. You are encouraged to contact the departmental chair for clarification.

#### SOCIAL WORK CURRICULA

##### Major in Social Work, B.S.W. Degree

*Requirements in the Department of Social Work (57 credits)*

SW 101 Orientation to Social Work (1)

SW 250 Introduction to Social Welfare (4)

SW 255 Human Behavior and the Social Environment (4)

(Formal Admissions process for admission to the major occurs at this point in the curriculum. See faculty advisor.)

SW 360 Research in Social Work (4)

SW 401g Social Policy (4)

SW 421 Generalist Practice: Individuals (4)

SW 422g Generalist Practice: Groups (4)

SW 423g Generalist Practice: Families (4)

SW 424g Generalist Practice: Communities and Organizations (4)

SW 469 Internship (16)

SW 470 Senior Seminar (4)

Social Work Electives (4 credits)

#### *Social Work Electives*

SW 105 Crisis Intervention (1)

SW 308 Aging in America (4)

SW 402g Child Welfare Services (4)

SW 403g Health Care Issues and Services (4)

SW 404g Rural Social Work (4)

SW 405g Human Behavior & the Social Environment Through Literature (4)

SW 409g Social Policies & Services for the Elderly (4)

SW 411g Chemical Dependency (4)

SW 425g Topical Seminar in Social Welfare (1-9)

(May be repeated to 9 credits as a variety of social welfare problems are investigated.)

SW 431g Readings in Social Welfare (2-4)

SW 432g Independent Study (2-4)

SW 499g Social Work Workshops (1-4)

(Social Work workshops are available and may be used to meet graduation requirements. They may be used to meet major elective requirements only if they grant two credits or more.)

Additional credits for social work majors under SW 369—Field Experience I or SW 479—Field Experience II and SW 499g—Social Work Workshops are available to meet graduation requirements but not as electives in the major with the exception of workshops offered for two credits or more.

#### *Requirements in Related Fields (48 credits)*

Biology 104 Human Biology (4)

Economics 100 The American Economy (4)

History 141 Evolution of Social Services (4)

Human Diversity Courses (8)

The human diversity requirement is an opportunity for students to acquire knowledge about the ways in which people are different because of biological, social and cultural characteristics. Primary emphasis is on groups who by virtue of these characteristics have a history of experiencing oppression in our society. These groups include racial minorities, women and the disabled.

Courses from which students can choose eight credits include the following: Anth 225, Engl 248, His 377(g), MCS 100, 101, 102, 103, 202, 203, 211, 270, 300, 301, 311, 461, 462, 463, Soc 310, 333, SpEd 420(g), 428(g), Anth 235, CrJs 400, Engl 246, His 375, Hum 310, 311, 312, 410, MC 425, Soc 335, PE 294, Pol 430, Psy 220, Psy 481. Four credits must be chosen from Multicultural Studies.

Political Science 120 (4) and Pol 221 or 240 (4)  
(Natural, state and local)

Psychology 113 and 115 (8) (General and Developmental)

Sociology 110 and 205 (8) (Intro and Social Psych)

Sociology 350 (4) (Intro to Research Methods)

### **Minor in Social Welfare**

Note: A minor in Social Welfare is not accepted by the Council on Social Work Education as adequate preparation for entry level professional social work practice; neither does a minor in social welfare qualify one to take state licensure examinations. This minor is offered solely for the student's learning in the area of social services.

*Required Courses in the Department of Social Work (21 credits)*

SW 101 Orientation to Social Work (1)

SW 250 Introduction to Social Welfare (4)

SW 255 Human Behavior and the Social Environment (4)

Social Work electives: 12 credits— Social work majors will be given priority for class enrollment. Required courses for a social work major may be taken as electives for a social welfare minor. (An internship in a related major does not meet the elective requirements.)

*Required Courses in Related Areas*

20 credits from among the following disciplines other than any course used in meeting the requirements of the major:

Anthropology, Child Development/Family Relations, Criminal Justice, Early Childhood Education, Economics, Gerontology, Health, History, Multicultural Studies, Political Science, Psychology, Recreation, Sociology, Special Education.

In order to obtain recognition for a minor in social welfare the student must have his/her program accepted by the Social Work Department no later than the second quarter of his/her junior year.

### **SOCIAL WORK COURSES**

#### **SW 101 Orientation to Social Work (1) (Fws)**

A course for students interested in gaining a better understanding of the field of social work including career exploration.

#### **SW 105 Crisis Intervention Experience (1) (Fws)**

Credit for successful completion of volunteer training in selected community agencies and for completion of an additional 20 hours of volunteer work in the same agency. Contact the department for details.

#### **SW 250 Introduction to Social Welfare (4) (Fws)**

Overview of social welfare and the profession and practice of social work. Content includes: social welfare policy and institution, generalist social work practice and the problem solving model.

Prerequisites: Soc 110, Psy 113, Pol 120, His 141, SW 101 or consent of instructor.

#### **SW 255 Human Behavior and the Social Environment (4) (Fws)**

Theories and analysis of individuals, families, groups, communities and society as interacting human systems. Prerequisite: SW 250, Soc 205, Psy 115, Biol 104, 4 credits in Multicultural Studies or consent of instructor.

#### **SW 308 Aging in America (4) (F)**

Mutual influences of society and the aging process. (Cross-listed as Soc 308.) Prerequisite: Soc 110 or consent of instructor.

#### **SW 360 Research Methods in Social Work (4) (Fws)**

The study of research methods (designs) and processes including assessing problems, analyzing and presenting data, and monitoring and evaluating intervention and services in social work practice.

Prerequisite: SW 250 and SOC 350.

#### **SW 369 Field Experience I (4-8) (Fws)**

A supplemental field learning experience to gain knowledge and understanding of basic social service intervention. Four credits require 10 hours per week in an approved community social service agency to a maximum of 8 credits for 20 hours per week. (Advance planning required) Prerequisite: SW 255 and consent.

#### **SW 401(g) Social Policy (4) (Fws)**

To develop knowledge and understanding of professional ethics, substantive policy, the policy process, political and economic perspectives and beginning skill analyzing social policy. Prerequisite: SW 255, Econ 100, Pol Sci 221 or 240 and consent of instructor.

#### **SW 402(g) Child Welfare Services (4)**

Problems in the area of child welfare: prevention, treatment and rehabilitation. Effectiveness of existing programs and possible change. Prerequisite: SW 250 or consent of instructor.

#### **SW 403(g) Health Care Issues and Services (4)**

Social work roles within the total health delivery system: cost, NHI, prevention, chronic illness, terminal care and the psychosocial aspects of illness.

Prerequisite: SW 250 or consent of instructor.

#### **SW 404(g) Rural Social Work (4)**

Social change in rural societies: problems, needs, programs and role of social workers in rural United States with emphasis on Upper Great Plains region.

Prerequisite: SW 250 or consent of instructor.

**SW 405(g) Human Behavior and the Social Environment Through Literature (4)**

Human behavior, social problems, social relationships and environment as seen in classic and contemporary fiction and drama. Prerequisite: SW 250 or consent of instructor.

**SW 409(g) Social Policies and Services for the Elderly (4) (S)**

A critical examination of social policies and services for the elderly. Role of the social worker in direct and indirect service. Prerequisite: SW 250 and 308 or consent of instructor.

**SW 411(g) Chemical Dependency (4)**

Exploration of chemical use, abuse, and addiction, with emphasis on alcohol as the drug of choice. Prevention, intervention, special problems of women, youth, elderly, and minority populations examined. Prerequisite: SW 250 or consent of instructor.

**SW 421 Generalist Practice: Individuals (4) (Fws)**

Generalist social work practice utilizing the problem-solving model with focus on the knowledge, values and skills for working with individuals. Prerequisite: SW 255, SW 360 and consent of instructor.

**SW 422g Generalist Practice: Groups (4) (Fws)**

Generalist social work practice utilizing the problem solving model with focus on the knowledge, values and skills for working with groups. Prerequisite: SW 421 and consent of instructor.

**SW 423g Generalist Practice: Families (4) (Fws)**

Generalist social work practice utilizing the problem solving model with focus on the knowledge, values and skills for working with families. Prerequisite: SW 421 and consent of instructor.

**SW 424g Generalist Practice: Communities and Organizations (4) (Fws)**

Generalist social work practice utilizing the problem solving model with focus on the knowledge, values and skills for working with organizations and communities. Prerequisite: SW 421 and consent of instructor.

**SW 425(g) Topical Seminar in Social Welfare (1-9)**

Selected topics of concern to social work students and human service professionals. Prerequisite: SW 250 or consent of instructor. (May be repeated to 9 credits)

**SW 431(g) Readings in Social Welfare (2-4) (Fws)**

Course designed for students interested in reading in-depth in selected areas of social work under faculty supervision. Credits determined by the extent and depth of the readings. Prerequisites: SW 255 and consent of instructor.

**SW 432(g) Independent Study (2-4) (Fws)**

Individual study, project, or research of special interest. Repeatable to eight credits but only four credits may apply to the social work elective requirements for the major. Prerequisites: SW 360 and consent of instructor.

**SW 469 Internship (16) (Fws)**

Placement in the field of practice under agency and departmental supervision. Prerequisites: SW 360, SW 401, SW 421, SW 422, SW 423, SW 424, a GPA of 2.5, volunteer experience of 60 hours and consent of instructor. Application must be made at least two quarters prior to internship.

**SW 470 Senior Seminar (4) (Fws)**

Seminar following internship to promote integration of academic and field learning. Focus on professional and ethical issues. Prerequisite: SW 469 and consent of instructor.

**SW 475 Area Study in Human Services (1-8)**

Specifically for External Studies students to fulfill the requirements for the area study in human services. May be repeated up to 16 credits. Prerequisite: Consent of three instructors.

**SW 479 Field Experience II (4-15) (Fws)**

A supplemental field learning experience used to enhance knowledge and skills acquired in SW 469 Internship. Prerequisites: SW 469 and consent of instructor (Advanced planning required)

**SW 499(g) Social Work Workshops(1-4)**

Workshops in the Department of Social Work to meet specific needs of students and agency personnel in the community.

## Sociology-Anthropology Department

Michael Hughey, *Chair*: Anne Brunton, Joel Charon, Nancy Gilliland, Mark Hansel, Ray Kawaguchi, Michael Michlovic, David Olday, Joel Powell, Swaran Sandhu, Lynn Schepartz, Poopak Taati

**SOCIOLOGY-ANTHROPOLOGY CURRICULA****Major in Sociology B.A. Degree**

The sociology major offers a student a broad liberal arts education. Students may use a degree in this major to pursue graduate study. However, those students who have career plans after graduation may consider developing a concentration in areas such as family, deviance/criminology, social research and health medicine. In either case, to plan one's course of study, regular visits with one's advisor are strongly recommended.

*Major Requirements in Sociology (63 credits)*

- Soc 110 Intro to Sociology (4)
- Soc 111 Social Problems (4)
- Soc 112 Social Deviance (4)
- Soc 205 Social Psychology (4)
- Soc 211 Sociological Theory (3)
- Soc 310 Majority-Minority Relations (3)
- Soc 350 Methods of Social Research I (4)
- Soc 351 Methods of Social Research II (4)

Soc 411 Current Sociology (3)  
Soc 412 Sociology of Complex Organizations (3)  
(Up to 8 of the electives needed to attain 63 credits for the major may be taken in Anthropology; 12 may be in Soc 469 Internship)

#### *Language Requirement*

The department has no foreign language requirement for sociology majors applying for the Bachelor of Arts degree, but those planning graduate work in sociology are urged to take a suitable foreign language at college level.

#### **Major in Sociology—Social Studies (Teaching)**

Only the approved Social Studies major can be accepted for secondary teaching certification. See Social Studies.

#### **Major in Anthropology B.A. Degree**

*Major Course Requirements (59 credits)*

Anth 110 Culture/Symbols (4)  
Anth 111 Human Evolution/Prehistory (4)\*

Any two of the following area courses (8):\*\*

Anth 210 Minnesota Prehistoric People  
Anth 215 Indians of South America  
Anth 220 Indians of Middle America  
Anth 225 Indians of North America  
Anth 230 Cultures of Africa  
Anth 235 Ethnology of Selected Areas

One of the following (4):

Anth 305 Primate Behavior and Evolution (4)  
Anth 310 Human Evolution (4)

One of the following (4):

Anth 216 Prehistoric Culture (4)  
Anth 217 Social Evolution (4)  
Anth 315 North American Archeology

One of the following (4):

Anth 370 Anthropological Linguistics (4)  
Anth 375 Language in Culture (4)

Anth 400 Development of Anthropological Theory (4)  
Anth 421,422,423 Senior Project (9)

*Electives in Anthropology and Sociology*  
(14—including a maximum of six credits in sociology)

\* No prerequisite required

\*\* See coordinator about possible course substitutes in these areas from the curriculum at North Dakota State University.

#### *Recommended Electives*

Majors are expected to study in as many fields as possible, particularly in the social and natural sciences. Further, it is highly recommended that the methods of social research course offered in the Sociology Department be included in the program.

#### **Major in Anthropology—Social Studies (Teaching)**

Only the approved Social Studies major can be accepted for secondary teaching certification. See Social Studies.

#### **Criminal Justice Major B.A. Degree (68 credits)**

Criminal Justice majors receive a broad overview of the structure of the criminal justice system and an in-depth analysis of at least one of its components. At least three courses must be on a single component of the criminal justice system. The choice of component for close study is the student's and may be in one of several areas (for example, law enforcement, pre-law, the courts, correctional counseling, criminal justice planning). All students receive a broad analysis of criminal law and of some relationships between law and society within the framework of a program which is grounded in a social or behavioral science of the student's choice.

*Major requirements in Criminal Justice (16 credits)*

CrJs 200 Introduction to Criminal Justice (4)  
CrJs 201 Criminal Law (4)  
CrJs 309 Law and Society (4)  
CrJs 400 Seminar in Criminal Justice (4)

*Requirements in Related Fields (52 credits)*

Concentration in one of the following areas:  
Political Science, Psychology, Social Work, Sociology (28)

Two courses in each of two additional areas to be chosen from the following fields:

Anthropology, Economics, History, Political Science, Psychology, Social Work, Sociology (16)

These must be fields other than the concentration.

Two courses from the following list. One course must be in each of two cultural areas (8):

MCS 101 Afro-American Experience  
MCS 102 Contemporary American Indian  
MCS 103 The Contemporary Chicano  
MCS 202 American Indian Culture  
MCS 203 Chicano Culture  
MCS 211 Contemporary Afro-American Community  
Anth 225 North American Indians

A tool requirement consistent with academic interests and/or career goals (e.g., a modern foreign language, research methodology and statistics, computer language).

The flexibility of this major makes careful planning important and students should prepare a complete plan of study at least four quarters prior to their anticipated date of graduation. At least 36 credits of the 68-credit major must be at the 300 and 400 level. Each student's major must evidence programmatic unity. At least three courses must focus upon a single area of the criminal justice system. These need not be from the same discipline.

#### **Minor in Sociology (36 credits)**

Soc 110 Intro to Sociology (4)  
Soc 111 Intro to Social Problems (4)  
Soc 211 Sociological Theory (3)  
Soc 310 Majority-Minority Relations (3)  
Soc 350 Methods of Social Research (4)  
Electives in Sociology (at least 16 credits)

**Minor in Anthropology (40 credits)**

Anth 110 Culture/Symbols (4)  
 Anth 111 Human Evolution/Prehistory (4)\*

One of the following (4):\*\*

Anth 210 Minnesota Prehistoric People  
 Anth 215 Indians of South America  
 Anth 220 Indians of Middle America  
 Anth 225 Indians of North America  
 Anth 230 Cultures of Africa  
 Anth 235 Ethnology of Selected Areas

One of the following (4):\*\*

Anth 305 Primate Behavior and Evolution  
 Anth 310 Human Evolution

One of the following (4):\*\*

Anth 216 Prehistoric Culture  
 Anth 217 Social Evolution  
 Anth 315 North American Archaeology

One of the following (4):\*\*

Anth 370 Anthropological Linguistics  
 Anth 375 Language in Culture

Electives in Anthropology (at least 20)

\* No prerequisite required.

\*\* See coordinator about possible course substitutes in these areas from the curriculum at North Dakota State University.

154

**Minor in Gerontology (32 credits)**

*Requirements (20 credits)*

Soc/Sw 308 Introduction to Gerontology (4)  
 Psy 403 Adulthood and Aging (4)  
 Health 202 Health Aspects of Aging (4)  
 Anth 302 Cultural Aspects of Aging (4)  
 SW 409 Social Policies and Services for the Elderly(4)

*Electives (12 credits)*

Phil 211 Morals and Medicine (4)  
 CDFS 461 The Elderly Consumer (NDSU) (4)  
 CDFS 494 Aging and the Family (NDSU) (3)  
 Soc 441 Sociology of Death (NDSU) (4)  
 SW 387 Mental Health Care of the Aging (CC) 2  
 SW 388 Social Service Programming (CC) 2  
 SW 411 Chemical Dependency (4)  
 SW 404 Rural Social Work (4)  
 SW 440 Field Experience in aging (4)  
 Biol 104 Human Biology, Biol 236 Introduction to Microbiology or Biology 241 Human Genetics (4)  
 Soc 235 Sociology of Health and Medicine, Hlth 326 Epidemiology or Soc 442 Sociology of Chronic Illness and Disability (NDSU) (4)

**SOCIOLOGY COURSES****Soc 110 Introduction to Sociology (4) (Fws)**

Human behavior from the sociological perspective. Emphasis on socialization, organization, institutions; and social change.

**Soc 111 Social Problems (4) (W)**

Social problems such as racism, sexism, poverty, over-population and pollution. Prerequisite: Soc 110.

**Soc 112 Social Deviance (4) (S)**

Topics may include crime, delinquency, alienation, mental illness, suicide, prostitution and homosexuality. Prerequisite: Soc 110.

**Soc 200 Health and Culture (4) (on demand)**

(See Anth 200)

**Soc 205 Social Psychology (4) (Fws)**

A survey of the field of social psychology. An introductory examination of concepts, theories and research. Prerequisite: Soc 110 or Psy 113.

**Soc 211 Introduction to Sociological Theory (3-4)**

(Fs)

An examination of the ideas of key theorists in the history of sociology. Prerequisite: Soc 110.

**Soc 215 Population (3-4) (on demand)**

Social and cultural aspects of national and international population change. Prerequisite: Soc 110.

**Soc 219 Sociology of Sexual Behavior (3-4) (on demand)**

Premarital, marital, extra-marital sexual behavior analyzed from sociological perspective. Prerequisite: Soc 110.

**Soc 220 Courtship and Marriage (3-4) (Fs)**

Structural, interactional and historical analysis of dating, mate selection, marriage. Prerequisite: Soc 110.

**Soc 235 Sociology of Health and Medicine (3-4)**

(F)

Social factors involved in health, illness and treatment of disease. Prerequisite: Soc 110 or consent of instructor.

**Soc 300 Criminology (3-4) (Fw or s)**

Definition, magnitude, causation, prevention and control of crime. Prerequisite: Soc 110 and 112 or consent of instructor.

**Soc 301 Delinquent Behavior (3-4) (S)**

Delinquent behavior and programs for its prevention, treatment and control. Prerequisites: Soc 110 or 112 or consent of instructor.

**Soc 303 Penology and Corrections (3-4) (on demand)**

Development of the penal system in the U.S. Comparison of alternative penal systems. Rehabilitation programs. Prerequisites: Soc 110 and 112 or consent of instructor.

**Soc 307 Sociology of the Criminal Court (3-4) (W or S)**

The social organization of criminal law decision-making. Prerequisite: Soc 110 or consent of instructor.

**Soc 308 Introduction to Gerontology (3-4) (F)**  
Covers aspects of the aging process and changes associated with age that influence attitudes, behavior or position in society. Prerequisite: Soc 110 or consent of instructor.

**Soc 309 Law and Society (3-4) (Fs)**  
(See Criminal Justice 309)

**Soc 310 Majority-Minority Group Relations (3-4) (Fs)**  
Relationships between dominant and subordinate groups. Distribution of social power and privilege. Prerequisite: Soc 110 and 112 or consent of instructor.

**Soc 311 Sociology of Law Enforcement (3-4) (F)**  
Basic descriptive and analytic treatment of structure, operation, history and problems of law enforcement. Some areas covered: socialization, styles of organization, professionalization, corruption/brutality and police discretion.

**Soc 412 Sociology of Complex Organizations (3-4) (W)**  
Sociological study of organizations; bureaucracy, power and role of organizations in social change. Prerequisite: Soc 110 and 111 or consent of instructor.

**Soc 314 White-Collar Crime (3-4) (on demand)**  
An examination of ways in which organizations generate and maintain criminal behaviors; with a focus on white-collar crime, organized crime, corporations and government agencies. Prerequisite: Soc 110 or consent of instructor.

**Soc 320 Sociology of the Family (3-4) (on demand)**  
The social-psychological and institutional sources of family conflict and cohesion. Prerequisite: Soc 110 and 111 or consent of instructor.

**Soc 322 Urban Sociology (3-4) (on demand)**  
Analysis of social organization, processes and action typical of urban life. Prerequisite: Soc 110 and 111 or consent of instructor.

**Soc 323 Sociology of Community (3-4) (on demand)**  
Investigation of community formations in "primitive" and "modern industrial" contexts. Emphasizes effects of penetration of traditional communities by industrial institutions. Prerequisite: Soc 110 or Anth 110.

**Soc 330 Sociology of Religion (3-4) (W)**  
Emphasizes major theoretical approaches to religion; magic, science and myth; patterns of religious organizations; religion and social change; secularization; new religious movements. Prerequisite: Soc 110.

**Soc 333 Sociology of Sex Roles (3-4) (F)**  
Differences in patterns of behavior by gender. Reasons for and consequences of differences. Prerequisite: Soc 110 or consent of instructor.

**Soc 335 The Sociology of Women and Medicine (3-4) (S)**  
Women as patients, as health care workers, and as participants in the Women's Health Movement, a social movement to alleviate the effects of sexism on women's health. A major theme in the course is medicine as a system of social control. Prerequisite: Soc 110 or consent of instructor.

**Soc 340 Topics in Sociology of Health and Medicine (3-4) (on demand)**  
Studies in selected topics from the sociology of health and medicine. Prerequisite: Soc 110 or consent of instructor.

**Soc 350 Methods of Social Research I (4) (Fws)**  
Data gathering techniques; procedures for analyzing professional reports; descriptive statistical methods and inferential techniques. Prerequisite: Soc 110 or consent of instructor.

**Soc 351 Methods of Social Research II (4) (Ws)**  
Advanced research techniques and statistical analysis; extension of inferential methods presented in Soc 350. Technical reports. Original research project design. Prerequisite: Soc 350.

**Soc 355 Society and the Ecosystem (3-4) (F)**  
Social systems and their relation to society's use of space, its distributive systems, and its value systems. Prerequisite: Soc 110 or consent of instructor.

**Soc 404 Social Power (3-4) (W)**  
The meaning of social power, models of social power and social power in America. Prerequisite: Soc 211 or consent of instructor.

**Soc 405 Probation and Parole (3-4) (W)**  
Organization and legal context of juvenile and adult probation and parole. Prerequisite: Upper-division status including Soc 300 or consent of instructor.

**Soc 411(g) Current Sociology (3-4) (W or S)**  
Current theory and research. Emphasis on theoretical models and research design. Prerequisite: Soc 211 and 351.

**Soc 416(g) Violence in the Family (3-4) (on demand)**  
Application of the sociological perspective to the following topics: family violence as an emergent social problem; violence by parents; dating, marital and sibling violence; societal-level "solutions." Prerequisite: Soc 220 or consent of instructor.

**Soc 418(g) Sociology of Education (3-4) (on demand)**  
Social factors that affect learning in education institutions. Prerequisite: Soc 110 and 9 credits in sociology or 9 credits in education or consent of instructor.

**Soc 420(g) Trends in American Society (3-4)** (*on demand*)

Examines larger social and institutional developments in American society since the Civil War: Economics concentration, bureaucratization, class structure, minority politics, societal coordination, decline of empire. Prerequisites: Soc 110, Soc 417 or consent of instructor.

**Soc 425(g) Seminar in Sociology (3-4)** (*on demand*)

Selected topics. Prerequisite: Upper-division status and consent of the instructor. May be repeated for credit.

**Soc 449(g) Topics in Social Stratification (3-4)**

Studies in the nature and processes of social inequality. Prerequisites: Upper-division status and consent of instructor. May be repeated for credit.

**Soc 452(g) Topics in Advanced Research Techniques (3-4)**

Advanced methodologies and analytic techniques for sociological research. Prerequisite: Upper-division status and consent of instructor. May be repeated for credit.

**Soc 461(g) Readings in Sociology (1-6)** (*Fws*)

May be repeated to a maximum of 6 credits. Prerequisites: Senior status and consent of instructor.

**Soc 469 Internship in Sociology (3-16)** (*Fws*)

**Soc 500-501 Sociological Theory I-II (3 each)**

Prerequisite: Graduate standing and permission of the instructor.

**Soc 510 Individual Research (3-6)**

Maximum 3 credits per quarter. May be repeated once for credit. Prerequisite: Graduate standing and consent of instructor.

**Soc 512 Topical Seminar in Sociology (3-6)**

Maximum 3 credits per quarter. May be repeated once for credit. Prerequisite: Graduate standing and permission of instructor.

**Soc 560 Studies in Sociology (3)**

Direct readings and discussion in the field agreed upon by the instructor and the student. Prerequisite: Major in Sociology or consent of instructor.

**Soc 595 Special Problems (1-3)**

Individual research for advanced graduate students. May be repeated to maximum of 6 credits.

**Soc 597 Individual Study (1-3)**

Project study open to candidates for Master's degree under Plan B. Maximum 3 credits. Permission of major advisor.

**Soc 599 Thesis in Sociology (1-6)**

Registration only after consultation with major advisor.

## Spanish

*See Languages for Curricula and Courses.*

## DEPARTMENT OF SPECIAL EDUCATION AND COUNSELING

*See Education curricula for Counseling courses*

Paul Beare, *Chair, E/BD Coordinator*; Gregory Brack, Norman Buktenica, Azar Hadadian, Evelyn Lynch (*on leave*), William Packwood, *Director, Counseling & Human Development*; Susan Severson, *MSMH Coordinator*; Linda Svobodny, *MMMh & ECSE Coordinator*; Barbara Wasson, *Mildly Handicapped Masters*; John Wasson, *SLD Coordinator*

### Major in Special Education

The major in special education qualifies for licensure as a teacher of early childhood special education (ECSE), emotional/behavioral disorders (E/BD), mild to moderate mentally handicapped (MMMh), moderate to severe mentally handicapped (MSMH), or specific learning disabilities (SLD), depending on the exact course of study. By combining components a student may meet the requirements for multiple licensures. For example, a student may also double major in E/BD and MMMh.

All special education majors must complete the professional education requirements and Special Education core. This includes:

Professional Education Requirements  
SpEd 200 Orientation to Special Education (2)  
SpEd 213 Interpersonal Communications (3)  
SpEd 214 Human Growth and Development (3)  
SpEd 305 Educational Psychology (3)  
SpEd 388 Cultural Pluralism (3)

### Special Education Core

SpEd 320 Educational Services for Exceptional Individuals (4)  
SpEd 363 Assessment in Special Education (3)  
SpEd 364 Consultation in Special Education (3)  
SpEd 471g Behavior and Environmental Management (3)  
SpEd 494g Legal/Social Foundations of Special Education (3)

Special Education majors pursuing E/BD, MMMh or SLD must hold an elementary or secondary teaching license **or** complete the classroom teaching exemption courses listed below:

Classroom Teaching Exemption  
Math 344 Mathematics for Special Education (3)  
Ed 345 Foundations for Teaching Language & Reading (3)  
Ed 442 Curriculum Foundations (4)  
Ed 467g Practicum-Elementary Teaching (1-6)  
SpEd 445g Remedial and Corrective Reading (4)

### Early Childhood Special Education

SLHS 204 Language Development (4)  
Ed 370 Growth and Development of the Young Child (3)  
Ed 371 Observing and Recording Young Children's Behavior (1)  
Ed 372 Art, Music & Literature for Young Children (3)

Ed 475g Curriculum Development for Young Children (3)  
 Ed 478g Play & Development (3)  
 Ed 455C Early Childhood Student Teaching (3)  
 SpEd 412g Mental Retardation (4)  
 SpEd 423g Theory and Practice in Early Childhood Special Education (3)  
 SpEd 424g Assessment Strategies (4)  
 SpEd 426g Instructional Strategies: Infant (4)  
 SpEd 427g Instructional Strategies: Preschool (4)  
 SpEd 428g Family Ecology of the Handicapped (3)  
 SpEd 459g Communication Programming for Persons with Severe Handicaps (3)  
 SpEd 467E Preschool Practicum (3)  
 SpEd 468E Infant/Interagency Practicum (3)  
 SpEd 450E Student Teaching in Early Childhood Special Education (13)

### **Emotional/Behavioral Disorders**

SpEd 413g Instructional Strategies I: Elementary (4)  
 SpEd 463g Assessment Strategies: Mildly Handicapped (3)  
 SpEd 464g Educational Planning and Adaptation for Students with Learning Problems (2)  
 SpEd 466g Pre-practicum: Mildly Handicapped (2)  
 SpEd 467A Mildly Handicapped Practicum: Secondary (6)  
 SpEd 473g Educating Children with Behavior Disorders (4)  
 SpEd 478g Educational Interventions for Students with Emotional/Behavioral Disorders (3)  
 SpEd 479g Children and Adolescents in Crisis (3)  
 SpEd 468C Practicum: Emotional/Behavioral Disorders (6)

### **Mild to Moderate Mentally Handicapped**

SpEd 412g Mental Retardation (4)  
 SpEd 413g Instructional Strategies I: Elementary (4)  
 SpEd 414g Instructional Strategies II: Secondary (4)  
 SpEd 444g Language and Learning Problems in Children (4)  
 SpEd 463g Assessment Strategies: Mildly Handicapped (3)  
 SpEd 466g Pre-practicum: Mildly Handicapped (2)  
 SpEd 450 Student Teaching: Mild to Moderate Mentally Handicapped (16)

### **Moderate/Severe Mentally Handicapped**

SLHS 204 Language Development (4)  
 SpEd 412g Mental Retardation (4)  
 SpEd 417g Educating Students with Multiple Handicaps (4)  
 SpEd 428g Family Ecology of the Handicapped (3)  
 SpEd 456g Curriculum and Assessment for Severely Handicapped (3)  
 SpEd 457g Instructional Strategies for Persons with Severe Handicaps (3)  
 SpEd 459g Communication Programming for Persons with Severe Handicaps (3)  
 SpEd 470g Transitional Planning for Persons with Severe Handicaps (3)

SpEd 474g Management for Severe Maladaptive Behavior (3)  
 SpEd 467H/567H Practicum: Severely Handicapped (3)  
 SpEd 450 Student Teaching: Moderate to Severe Mentally Handicapped

### **Specific Learning Disabilities**

SpEd 444g Language and Learning Problems in Children (4)  
 SpEd 461g Educating Children & Youth with Specific Learning Disabilities  
 SpEd 463g Assessment Strategies: Mildly Handicapped (3)  
 SpEd 464g Educational Planning and Adaptation for Students with Learning Problems (2)  
 SpEd 466g Pre-practicum: Mildly Handicapped (2)  
 SpEd 475g Teacher Communication/Consultation: Specific Learning Disabilities (4)  
 SpEd 467A Mildly Handicapped Practicum: Secondary (6)  
 SpEd 468B Practicum: Specific Learning Disabilities (6)

### **Licensure in Special Education**

Programs leading to license by the State of Minnesota as teachers of E/BD, MMMH, or SLD, without completing an entire major are offered through the Special Education & Counseling Department. Such licensure requires completion of a bachelor's degree with an elementary or secondary teaching major and a program of designated courses in special education.

Licensure in the area of Mildly Handicapped is available to those who already possess a valid special education license and complete a prescribed master's degree program in mildly handicapped.

### **SPECIAL EDUCATION COURSES**

#### **SpEd 200 Orientation to Special Education (2) (FS)**

Introduction to the field of education focusing on special education. Course includes a number of field experiences involving service settings for children and adults with exceptionalities. Prerequisites: None.

#### **SpEd 220 Education of the Exceptional Child (3) (FWS)**

Introduction to recognition, incidence and educational needs of exceptional children. Prerequisites: None.

#### **SpEd 320 Educational Services for Exceptional Individuals (4) (FW)**

Introduction to the recognition, incidence and educational needs of exceptional children. A wide range of educational services for exceptional children is studied with emphasis on the shared responsibility of all education professionals. Prerequisites: None.

#### **SpEd 363 Assessment in Special Education (3) (FS)**

An introduction to assessment in special education including basic statistical and measurement concepts, use of standardized and nonstandardized assessment procedures and interpretation of assessment results. Prerequisites: None.



**SpEd 364 Consultation in Special Education (3)**  
(FS)

Through exposure to related literature and simulation exercises, develop an understanding of the process and practice of consulting with teachers, parents and children. Prerequisites: None.

**SpEd 412g Mental Retardation (4)** (F)

An introduction to the definitions, assessment characteristics and educational/training programming for learners who are severe/profound and/or multiply handicapped. Prerequisite: SpEd 320.

**SpEd 413g Instructional Strategies I: Elementary (4)** (FS)

Curriculum planning and classroom teaching techniques for elementary level mild to moderately handicapped students will be examined. Topics will include adaptation of instruction, assessment and designing individualized educational plans, as well as various content and learning problems. Prerequisites: SpEd 200, 320 and 363.

**SpEd 414g Instructional Strategies II: Secondary (4)** (FW)

Curriculum planning and classroom techniques for secondary level mild to moderately handicapped will be examined. Special emphasis is placed on interpersonal, social and community problems which appear to be at a high prevalence in the adolescent years. Strategies for teaching basic skills will be explored as well as teaching school survival skills. The focus will be on looking at lifelong needs of these special learners. Prerequisites: SpEd 200, 320, 363 and 413.

**SpEd 417g Educating Students with Multiple Handicaps (4)** (W)

An introduction to the definitions, characteristics, instructional methods/techniques and educational programming for learners with profound/multiple disabilities. Prerequisites: SpEd 200, 320, 412g and 456g or consent of instructor.

**SpEd 421g The Gifted Child (3)**

Definition, identification and current school program for the mentally-superior or specially-talented child. Prerequisites: None.

**SpEd 422g Curriculum and Methods for the Gifted (3)**

Exploration of ways to construct a curriculum suitable for the education of gifted students at elementary and secondary levels. Prerequisite: SpEd 421g

**SpEd 423g Theory and Practice in ECSE (3)** (S)

Examination of the research related to early intervention and overview of program models for services to young children with handicaps. Prerequisites: SpEd 320, 412g or consent of instructor.

**SpEd 424g Assessment Strategies (4)** (S)

Examines assessment instruments and procedures with infants, toddlers, preschoolers with handicaps. Approaches to identification, screening, assessment selection and programming are explored. Prerequisites: SpEd 401g or 423g or consent of instructor.

**SpEd 425g Teaching Young Children with Special Needs (4)** (W)

Provides the day care or kindergarten teacher with skills in assessment, child study procedures and curricular adaptations for young children with handicaps in integrated settings. Prerequisite: SpEd 320 or consent of instructor.

**SpEd 426g Instructional Strategies: Infant (4)** (W)

Investigation of goals and decision-making process to develop objectives and methods to facilitate development of handicapped children from birth to three years. Prerequisites: SpEd 412g, 423g and 424g or consent of instructor.

**SpEd 427g Instructional Strategies: Preschool (4)** (W)

Investigation of methods to design and implement individual and group instructional and behavioral programs for children with handicaps from three to six years. Prerequisites: SpEd 320, 412, 423, 424 or consent of instructor.

**SpEd 428g Family Ecology of the Handicapped (3)** (W)

Inquiry into historical and ecological/transactional perspective and functions of the family with special-needs child; school/family relationships. Prerequisite: SpEd 320g or consent of instructor.

**SpEd 435g Topics in Special Education (3)**

Advanced treatment of selected topics on research and practice in special education. Prerequisite SpEd 320.

**SpEd 436g Problems in Special Education (1-3)**

Directed field placement, reading or research in special education. Prerequisite: SpEd 320. May be repeated up to 6 credits.

**SpEd 442g Creative Activities for Exceptional Children (3)**

Creative activities for exceptional children; practical experiences in the areas of art, crafts, music, drama and their interrelationships. Prerequisite: SpEd 320.

**SpEd 444g Language and Learning Problems in Children (4)** (W)

A detailed coverage of the impact of language processes and language development on school learning problems, including the development of basic academic skills. The course will provide knowledge and basic skills in understanding the significance of language development on special educational interventions with school aged children. Prerequisites: Ed 214 and SpEd 320.

**SpEd 445g Remedial and Corrective Reading (4)** (FWS)

Presentation of causes, diagnosis and informal assessment of reading difficulties. Methods of correcting reading difficulties are studied. Prerequisite: Ed 345

**SpEd 446g Remedial and Corrective Reading Clinic (2)**

Supervised practice in remediating reading-disabled children at the primary, intermediate and secondary level. Prerequisites: Ed 345 or teaching experience, SpEd 445.

**SpEd 450 Student Teaching: MMMH (8-16) (FWS)**

Student teaching in resource or self-contained setting for pupils with mild to moderate mental retardation. Prerequisites: SpEd 364g, 412g, 413g, 414g, 444g (or concurrently), 463g, 466g, 494g (or concurrently).

**SpEd 450 Student Teaching: MSMH (8-16) (FWS)**

Student teaching in an elementary or secondary setting for pupils with moderate to severe mental retardation. Prerequisites: SpEd 364, 417g, 457g, 467H, 470g, 471g, and 474g with at least a grade average of "B."

**SpEd 450E Student Teaching in ECSE (13) (FWS)**

Student teaching in public school setting for young children with handicaps. Prerequisites: SpEd 364, 412g, 494g, 423g, 424g, 426g, 427g, 428g, (or concurrently), 459g, (or concurrently), Ed 455 and SpEd 467E.

**SpEd 456g Curriculum and Assessment for Severely Handicapped (3) (F)**

Examines program philosophy in teaching students with severe handicaps. Topics include curriculum approaches, methods of assessment, instructional techniques and team approaches. Prerequisites: SpEd 412g.

**SpEd 457g Instructional Strategies for Persons with Severe Handicaps (3) (W)**

Classroom techniques for teaching students with severe handicaps. Topics include classroom environment, scheduling, planning, record keeping and instructional strategies using a functional program approach. Prerequisites: SpEd 412g and 456g.

**SpEd 459g Communication Programming for Persons with Severe Handicaps (3) (W)**

This course covers issues related to communication program and decision-making models for communication programming with the severely handicapped. The emphasis is on assessing an individual's communication skills, selecting appropriate components for the communication system and planning intervention strategies. Prerequisites: SpEd 412g and SLHS 204.

**SpEd 461g Educating Children and Youth with Specific Learning Disabilities (4) (FW)**

An introduction to definition, assessment, characteristics and educational strategies for children and youth with specific learning disabilities. Prerequisite: SpEd 320.

**SpEd 463g Assessment Strategies: Mildly Handicapped (3) (FW)**

Assessment of scholastic achievement and aptitude, social and adaptive behavior, and instructional effectiveness through the use of norm referenced individual test instruments and informal instructor designed procedures. Report writing, establishment of objectives and participation with parents and teachers in the development of individual educational programs included. Prerequisites: SpEd 320, 363, 445g, and 471g, and concurrent registration in SpEd 466g.

**SpEd 464g Educational Planning and Adaptation for Students with Learning Problems (2) (FWS)**

Educational and transitional adaptations for learning disabled or emotionally/behaviorally disordered students based on individual cognitive, affective and behavioral characteristics. Prerequisites: SpEd 463g, 466g and concurrent registration in SpEd 467A.

**SpEd 466g Pre-practicum: Mildly Handicapped (2) (FW)**

Field experience in assessment and remediation of the academic and behavioral skills of mildly handicapped students. Prerequisite: Concurrent registration in SpEd 463g.

**SpEd 467A Mildly Handicapped Practicum: Secondary (6) (FWS)**

Directed practicum experience in secondary level special education resource room setting. Prerequisite: Concurrent registration in SpEd 464g.

**SpEd 467E Preschool Practicum (3-6) (FWS)**

Directed practicum with children with handicaps (4-6 years) in public school classroom. Prerequisite: SpEd 423g and consent of instructor.

**SpEd 467H/567H Practicum: Severely Handicapped (3) (FWS)**

Directed practicum experience in an elementary or secondary classroom for students with moderate to severe mental handicaps. Prerequisites: SpEd 457g (or concurrently), 459g, 470g and 474g.

**SpEd 468B Practicum: SLD (6) (WS)**

Directed practicum experience in specific learning disabilities teaching with emphasis on advanced assessment techniques and consultative strategies. Prerequisite: Concurrent registration in SpEd 475g.

**SpEd 468C Practicum: E/BD (6) (FWS)**

Directed practicum experience in a self-contained setting for children and/or youth with emotional behavioral problems. Prerequisites: SpEd 364, 413g, 463g, 473g, 478g, 479g and 494g.

**SpEd 468E Infant/Interagency Practicum (3-6) (FWS)**

Directed practicum with infants and toddlers with handicaps from education, health and social services perspectives in home and clinical settings. Prerequisites: SpEd 423g and consent of instructor. This practicum may be taken prior to SpEd 467E, concurrently with SpEd 426g or after successful completion of SpEd 467E.

**SpEd 470g Transitional Planning for Persons with Severe Handicaps (3) (S)**

Transitional planning for secondary students with severe handicaps including programming which reflects transition to adult environments, writing transition plans and knowledge of adult services. Prerequisites: SpEd 412g and 456g.

**SpEd 471g Behavior and Environmental Management (3) (FW)**

Analysis and programming of behavior and environmental variables as they relate to handicapped children in the classroom, community and home. Prerequisite: SpEd 320 or consent of instructor.

**SpEd 472g Educational Diagnosis and Programming (3)**

Principles and practices of diagnostic-prescriptive programming for handicapped children. Prerequisite: SpEd 320.

**SpEd 473g Educating Children with Behavior Disorders (4) (F)**

Knowledge, rationale, program components, operation of various program models for E/BD students and understanding of behavior/emotional problems of children and adolescents. Prerequisites: SpEd 320 and 471 or consent of instructor.

**SpEd 474g Management of Severe Maladaptive Behavior (3) (W)**

Advanced instruction in definition, identification, measurement and programmatic remediation of severe maladaptive behaviors in severely handicapped populations infant through adulthood. Prerequisites: SpEd 471g and 412g or SpEd 473g or equivalent course work approved by the instructor.

**SpEd 475g Teacher Communication/Consultation: Specific Learning Disabilities (4) (WS)**

Theory and practice for special education learning disabilities resource consultant including direct services, assessment and report writing, consultation with regular classroom teachers and working with parents of learners with handicaps. Prerequisites: SpEd 364, 444g (or taken concurrently), 461g, 494g (or taken concurrently), and 463g with grade average of "B," SpEd 466g with grade of B or A, concurrent registration in SpEd 468B.

**SpEd 478g Educational Interventions for Students with Emotional/Behavioral Disorders (3) (W)**

Program design, intervention techniques and management strategies for school age emotional/behaviorally disordered students. Prerequisites: SpEd 413g, 471g, and 473g.

**SpEd 479g Children and Adolescents in Crisis (3) (FS)**

Overview of life crises affecting children's behavior with special emphasis on disturbed adolescents. Topics include chemical dependency, suicide, eating disorders, delinquency, alternative school programs and special education intervention models. Prerequisite: SpEd 473.

**SpEd 494g Legal/Social Foundations of Special Education (3) (FS)**

An overview of the sociological, historical, legal and educational basis for special education within public school systems. Includes research on efficacy of special education, controversies surrounding least restrictive environments, integration and mainstreaming. Emphasis on teacher roles, professional responsibilities and best practices. Stresses knowledge and skills related to components of individualized educational plans. Prerequisites: SpEd 320.

**SpEd 505 Single Subject and Small Group Research Designs (3) (S)**

Introduction to research on single subjects and small groups, with application to problems in education and related areas. Prerequisite: Ed 502 or equivalent.

**SpEd 511 Understanding the Mildly Handicapped (3)**

Advanced coverage of definitions, assessment, characteristics and educational interventions for learners with mild to moderate mental retardation, learning disabilities or behavioral disabilities. Prerequisite: Graduate standing.

**SpEd 524 Advanced Assessment in Early Childhood (3)**

Advanced instruction in measurement, assessment and interpretation of developmental status of infants, toddlers and preschoolers with mild to severe handicapping conditions. Emphasis on family-focused assessment and individual child and family goal setting. Prerequisite: SpEd 424 or equivalent or graduate standing.

**SpEd 528 Family Focused Intervention in ECSE (3)**

Advanced instruction on the application of family systems literature to research and intervention with families of infants, toddlers and preschoolers with handicaps or at-risk for handicaps. This course is designed for professionals who are responsible for the coordination of interagency services (hospital, health, social services, educational and community) to families. Prerequisite: Graduate standing and permission of the instructor.

**SpEd 545 Diagnosis and Correction of Reading Difficulties (3)**

Advanced study of reading difficulties: Prerequisite: SpEd 445g.

**SpEd 546 Reading Clinic: Diagnosis (2)**

Individual case studies or supervision of individual case studies. Prerequisite: SpEd 545

**SpEd 562 Seminar: Special Education (3)**

Seminar in selected SpEd topics. Prerequisite: Consent of instructor.

**SpEd 563 Advanced Measurement/Assessment (3)**

Advanced coverage of measurement and assessment in special education as applied to mildly handicapped learners, including measurement concepts; use of standardized and nonstandardized assessment procedures; rating scales and observational techniques; and interpretation of assessment results. Prerequisites: Graduate standing and SpEd 463.

**SpEd 564 Theory and Process of Consultation (3) (SS)**

Exploration of theory and process of various consultation models, consultant roles, research and evaluation across community, mental health and school settings. (Same as Ed 564)

**SpEd 565 Educational Program Development: Mildly Handicapped (3)**

Selected topics in SpEd program development. Prerequisites: Consent of instructor.

**SpEd 567A Mildly Handicapped Practicum: Secondary (6) (FWS)**

Directed practicum experience in secondary level special education resource room setting. Prerequisites: 3.0 in major and consent of instructor.

**SpEd 567E Preschool Practicum (3-6) (FWS)**

Advanced practicum with children with handicaps (4-6 years) in public school classroom. Prerequisite: Consent of instructor.

**SpEd 567H Practicum: Severely Handicapped (3) (FWS)**

Directed practicum experience in an elementary or secondary classroom for students with moderate to severe mental handicaps. Prerequisites: SpEd 457g (or concurrently), 459g, 470g and 474g.

**SpEd 567M Educational Planning Practicum (3)**

Practice managing assessment, program planning and consultation for an SLD, E/BD and an MMMH student. Practicum experiences at both the elementary and secondary level. Prerequisites: SpEd 563, 571 and 572.

**SpEd 568B Practicum: SLD (6) (WS)**

Directed practicum experience in specific learning disabilities teaching with emphasis on advanced assessment techniques and consultative strategies. Prerequisites: SpEd 575g with grade of "B" or better and consent of instructor.

**SpEd 568C Practicum: E/BD (6) (FWS)**

Directed practicum experience in a self-contained setting for children and/or youth with emotional behavioral problems. Prerequisites: SpEd 364, 413g, 463g, 473g, 478g, 479g (or concurrently), and 494g, and SpEd 466g with grade of B or better.

**SpEd 568E Infant/Interagency Practicum (3-6)**

Advanced practicum with infants and toddlers with handicaps from education, health and social services perspectives in home and clinical settings. Prerequisites: Consent of instructor.

**SpEd 568M Consultative Practicum (3)**

One academic quarter or the equivalent of experience with a multidisciplinary team planning and implementing instructional programming for mildly handicapped students at the elementary and secondary level. Prerequisites: SpEd 564, 565 and 570.

**SpEd 569 Advanced Practicum in Special Education (3)**

Advanced practicum experience in indicated area of special education, includes assessment, formulation of treatment program and supervision of others. Prerequisites: Graduate standing, SpEd 468 or 568 and consent of instructor.

**SpEd 570 Transitional Planning: Mildly Handicapped (3)**

Transitional planning for mildly handicapped students. Current requirements and available resources will be examined. Procedures will be studied for developing cooperative programming between school and community agencies so that students will be prepared for transition into the community and adult life. Prerequisites: Admission to the Masters degree in Mildly Handicapped.

**SpEd 571 Advanced Planning Strategies: Mildly Handicapped (3)**

Advanced instruction in observation, assessment and interpretation of student performance including ability to observe, record and analyze the learning environment and learning style of students and then involve students parents and mainstream professionals in meeting instructional goals.

**SpEd 572 Educational Diagnosis and Programming (3)**

Critical analysis for selected applications of behavioral science to education of handicapped children and youth, including implications for use in education. Prerequisites: Graduate standing. SpEd 320, 463 and consent of instructor.

**SpEd 590 Seminar: Current Trends in Special Education (1-3)**

Exploration of current practices, relevant literature, professional practices, legal issues, research and funding patterns. Prerequisite: Graduate status.

**SpEd 595 Special Problems (1-6)**

Advanced work in a special area. Prerequisite: Consent of graduate advisor.

**SpEd 597 Individual Study (3)** (FWS)

Plan B project in special education. Prerequisite: Consent of graduate advisor.

**SpEd 599 Thesis (6)** (FWS)

Thesis in special education. Prerequisite: Consent of graduate advisor.

**Department of Speech Communication and Theatre Arts**

Delmar J. Hansen, *Chair*; Marty Birkholt, Timothy Choy, James DeBrito, Carol Gaede, Kurt Garrett, Virginia Gregg, Roray Hedges, Ted Larson, David Wheeler

**AREAS OF STUDY: Speech Communication and Theatre Arts (see also English curricula for English-Speech teaching combination).**

**SPEECH CURRICULA**

The Department of Speech Communication/Theatre Arts provides opportunities for the student to pursue career preparations in the areas of Speech Communication and Theatre Arts. Study in any one of these areas encourages the student to combine career preparation with the breadth and depth of knowledge associated with the liberal arts tradition. Within each division, a student may select from a variety of career-oriented programs which satisfy society's growing demand for individuals skilled in communication. Because of the importance of these skills, the education of every student is enhanced through study in the various areas of Speech Communication.

**Major in Speech Communication B.A. Degree (68 credits)**

This degree is designed for the student who wishes to develop an understanding and proficiency in the theory, techniques and skills of speech communication. Students majoring in speech communication are encouraged to develop an area of concentration in a related field or to take a second major in another field of interest. In addition to the core requirements, students will complete one of the following career concentrations.

*Core Requirements for all majors in Speech Communication (31 credits)*

- Spch 100 Beginning Speech Communication (4)
- Spch 101 Voice and Diction (4)
- Spch 105 Beginning Oral Interpretation (4)
- Spch 202 Introduction to Rhetoric (4)
- Spch 219 Telecommunication Appreciation (4)
- Spch 220 Theatre Form and Appreciation (4)
- Spch 490 Senior Seminar in Speech/Theatre (4)

Important Notice: All students entering after the Fall of 1989 will be required to earn a grade of "C" or better in Spch 490 Senior Seminar in order to receive departmental approval for graduation.

Three credits from at least two of the following areas:

- Spch 010 Collegiate Forensics (1)
- Spch 020 R/TV/Film Practicum (1)
- Spch 040 Theatre Practicum (1)

*One of the career concentrations listed below (36 credits)*

**Professional Communication Concentration**

The student who plans a professional career as a communication consultant, lawyer, salesperson, business manager, minister or public relations consultant should elect the following concentration of courses:

- Spch 204 Principles of Debate (4)
- Spch 209 Parliamentary Procedures (3)
- Spch 217 Radio-Television Performance (4)
- Spch 280 History of the Film (4)
- Spch 308 Small Group Communication (4)
- Spch 312 Principles of Persuasion (4)
- Departmental electives at 300 level or above (11)

**Film & Telecommunication Arts**

The student interested in a professional career in the production and performance phases of radio, television and film should elect the following concentration of courses. Students interested in the journalism area should consider taking the Broadcast News concentration in the Mass Communications Department.

- Spch 184 Radio-TV Operations (3)
- Spch 217 Radio-Television Performance (4)
- Spch 280 History of Film (4)
- Spch 284 Beginning Film Making (4)

One course from the following:

- Spch 308 Small Group Communication (4)
- Spch 310 Contemporary Rhetoric (3)
- Spch 312 Principles of Persuasion (4)

One course from the following:

- Spch 222 Principles of Acting (4)
- Spch 224 Technical Theatre Methods (4)
- Spch 344 Principles of Play Direction (4)
- Departmental electives at 300 level or above (12)

**Individualized Speech Communication Concentration**

This program is designed for the student who is not interested in pursuing a career-oriented concentration of courses but whose work involves community leadership programs which deal with a variety of communication activities found in religious, social, civic and cultural organizations. As a result, some flexibility in the structuring of courses is possible. The following requirements are stipulated for an individualized Speech Communication concentration.

Substitute the requisite number of credits in approved speech communications courses for the area of concentration through consultation with an advisor.

At least 50 percent of credits in the concentration must be at the 300 level or above.

**Minor in Speech Communication B.A. Degree (37-38 credits)**

*Core requirements except Spch 490 (26 credits)*  
As listed under the major in Speech Communication

Electives from listings in a given career concentration area as listed under the major in Speech Communication (11-12 credits)

**Major in Theatre Arts B.A. Degree (64-68 credits)**

This degree is designed for the student who wishes to pursue a broadly based humanistic theatre arts background, a career in one phase of professional theatre, or preparation for graduate study. Students majoring in theatre arts are encouraged to develop an additional area of concentration in a related field in consultation with an advisor. In addition to the core requirements, students will complete one of the following career concentrations.

*Core Requirements for all majors in Theatre Arts (32 credits)*

- Spch 040 Theatre Practicum (4)
- Spch 100 Beginning Speech Communication (4)
- Spch 101 Voice and Diction (4)
- Spch 221 Theatre in America (4)
- Spch 222 Principles of Acting (4)
- Spch 224 Technical Theatre Methods (4)
- Spch 490 Senior Seminar in Speech/Theatre (4)

Important Notice: All students entering after the Fall of 1989 will be required to earn a grade of "C" or better in Spch 490 Senior Seminar in order to receive departmental approval for graduation.

*One of the career concentrations below (32 credits)*

**Acting**

The student primarily interested in the development of his artistic skills as a stage performer should elect the following concentration of courses which will provide a sound background in stage voice, stage movement, dramatic literature and an understanding of the total theatre production process. An area of concentration in a related field is advised.

- Spch 223 Stage Make-Up (3)
- Spch 225 Stage Design Graphics (4)
- Spch 322 Development of Drama I (4)
- Spch 324 Development of Drama II (4)
- Spch 332 Stage Movement (4)
- Spch 333 Stage Voice (4)
- Theatre Arts electives at 300 level or above (9)

**Directing**

The student planning a career as a stage director in a community, institutional or professional theatre setting should elect the following concentration of courses which is designed to provide a knowledge of the entire production process as well as with special emphasis in acting, directing, dramatic literature and theatre organization.

- Spch 225 Stage Design Graphics (4)
- Spch 322 Development of Drama I (4)
- Spch 324 Development of Drama II (4)
- Spch 332 Stage Movement (4)

- Spch 333 Stage Voice (4)
- Spch 429 Advanced Play Direction (4)
- Theatre Arts electives at 300 level or above (8)

**Technical Theatre**

The student planning a career either as a scene designer, technical director or lighting technician in a community, institutional or professional theatre setting should elect the following concentration of courses.

An area of concentration in a related field such as Art or Industrial Art is recommended.

- Spch 225 Stage Design Graphics (4)
- Spch 322 Development of Drama I (4)
- Spch 324 Development of Drama II (4)
- Spch 334 Stage Design I (4)
- Spch 336 Stage Design II (4)
- Spch 337 Stage Lighting (4)
- Theatre Arts electives at 300 level or above (12)

**Theatre Arts Management**

The student planning a career in theatre arts management work, either with governmental arts organizations or with professional and regional theatre companies, should elect the following concentration of courses. Independent study projects and/or an internship should be considered as well as a strong area of concentration in a related field of study such as Business Management.

- Spch 225 Stage Design Graphics (4)
- Spch 228 Theatre Arts Management (4)
- Spch 312 Principles of Persuasion (3)
- Spch 322 Development of Drama I (4)
- Spch 324 Development of Drama II (4)
- Spch 326 Development of Drama III (4)
- Theatre Arts electives at 300 level or above (9)

**Children's Dramatics**

The student planning a career in creative dramatics or children's theatre with church, community, or professional theatre groups should elect the following concentration of courses. Independent study projects and/or an internship should be considered as well as an additional area of related study such as Recreation.

- Spch 223 Stage Make-Up (3)
- Spch 225 Stage Design Graphics (4)
- Spch 332 Stage Movement (4)
- Spch 333 Stage Voice (4)
- Spch 341 Creative Dramatics (3)
- Spch 342 Children's Theatre (3)
- Theatre Arts electives at 300 level or above (11)

**Individualized Theatre Arts**

This program is designed for the student who is not interested in pursuing a career-oriented concentration of courses but who wishes to pursue the bases of theatre through the study of theatre history, dramatic literature and dramatic theory and criticism.

Additional work in film theory and criticism is recommended as well. The following requirements are stipulated for the Individualized Theatre Arts major:

Substitute the requisite number of credits in approved theatre arts courses for the area of concentration through consultation with an advisor.

At least 50 percent of credits for the major must be at the 300 level or above.

**Minor in Theatre Arts B.A. Degree (32-36 credits)**

*Core Requirements except Spch 490 (28 credits)*

As listed under major in Theatre Arts

Electives (4-6 credits)

From listing in a given career concentration area as listed under the major in Theatre Arts (4-6 credits)

**Minor in Theatre Arts Dance B.A. Degree (36 credits)** Pending final program approval for Fall, 1989.

Spch 126 Dance for the Stage I (4)

Spch 127 Dance for the Stage II (4)

Spch 128 Dance for the Stage III (4)

Spch 332 Stage Movement (4)

Spch 335 Principles of Choreography (4)

Spch 433 Dance Production (2)

PE 220 Human Anatomy (4)

PE 320 Kinesiology (4)

PE 348 Dance History (2)

MUS 110 Fundamentals of Music (4)

or

MUS 111 Musicianship for Non-Majors I (4)

164

**Major in Speech Communication and Theatre Arts (Teaching)**

The Bachelor of Science degree in Education with a major in Speech Communication/Theatre Arts is designed for the student who wishes to pursue a career in the teaching profession. This degree will allow the student to receive certification necessary to qualify as a Speech Communication-Theatre Arts instructor in secondary schools.

The student may also wish to consider an additional area of study in order to have greater flexibility for employment in teaching; the fields of English and Mass Communications are particularly recommended.

*Major Course Requirements (60-64 credits)*

Spch 100 Beginning Speech Communication (4)

Spch 101 Voice and Diction (4)

Spch 105 Beginning Oral Interpretation (4)

Spch 202 Introduction to Rhetoric (4)

Spch 204 Principles of Debate (4)

Spch 220 Theatre Form and Appreciation (4)

Spch 222 Principles of Acting (4)

Spch 224 Technical Theatre Methods (4)

Spch 280 History of Film (4)

Spch 312 Principles of Persuasion (3)

Spch 340 The Teaching of Speech (4)

Spch 344 Principles of Play Direction (4)

Spch 490 Senior Seminar in Speech/Theatre (4)

SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)

Electives in Speech Communication Theatre Arts at 300 level or above (10)

To satisfy the requirements of the State Board of Education for secondary certification with a major in Speech Communication/Theatre Arts, students must participate in at least two speech activities: forensics, theatre, oral interpretation, or broadcasting.

(All Teacher Education requirements shall be fulfilled to complete this major. See Education Department)

**Minor in Speech Communication (Teaching) (34-38 credits)**

Spch 100 Beginning Speech Communication (4)

Spch 101 Voice and Diction (4)

Spch 202 Introduction to Rhetoric (4)

Spch 204 Principles of Debate (4)

Spch 209 Parliamentary Procedures (3)

Spch 308 Small Group Communication (3)

Spch 340 The Teaching of Speech (4)

SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)

Electives in 300 level or above Speech Communication courses (9)

(This minor can be awarded only in combination with at least one teaching major.)

**Minor in Theatre Arts (Teaching) (34-38 credits)**

Spch 101 Voice and Diction (4)

Spch 105 Beginning Oral Interpretation (4)

Spch 220 Theatre Form and Appreciation (4)

Spch 222 Principles of Acting (4)

Spch 224 Technical Theatre Methods (4)

Spch 225 Scenery Design Techniques (4)

Spch 334 Principles of Play Direction (4)

Electives in 300 level or above Theatre Arts courses (8)

(This minor can be awarded only in combination with at least one teaching major.)

**Dual Major in English and Speech Communication/Theatre Arts B.S. Degree (Teaching)**

*Major Requirements in English (64 credits)*

*Core Requirements (28 credits)*

Engl 211-212-213 Major British Writers I-II-III (12)

Engl 371-372-373 Survey of American Literature I-II-III (12)

Engl 314 Shakespeare (4)

*Electives in English (12 credits)*

Elective, any level (4)

Electives, 300 or 400-level (8). One course in literature recommended.

*Courses Required for Teaching Certification (24 credits)*

Engl 380 Literature: East and West (4)

Engl 365 Language and Learning (4)

Engl 391(g) Teaching English in Secondary Schools (4)

Engl 392(g) Teaching Adolescent Literature and Reading (4)

Engl 393(g) Grammars of English (4)

Engl 394 Advanced Composition (4)

*Major Requirements in Speech*

*Communication/Theatre Arts (56 credits)*

Spch 100 Beginning Speech Communication (4)

Spch 101 Voice and Diction (4)

Spch 105 Beginning Oral Interpretation (4)

Spch 202 Introduction to Rhetoric (4)

Spch 204 Principles of Debate (4)

Spch 220 Theatre Form and Appreciation (4)

Spch 222 Principles of Acting (4)

Spch 224 Technical Theatre Methods (4)

Spch 280 History of the Film (4)

Spch 312 Principles of Persuasion (3)

Spch 340 The Teaching of Speech (4)

Spch 344 Principles of Play Direction (4)

Spch 490 Senior Seminar in Speech/Theatre (4)

SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)

To satisfy the requirements of the State Board of Education for secondary certification with a major in Speech Communication/Theatre Arts, students must participate in at least two speech activities: forensics, theatre, oral interpretation or broadcasting.

All Teacher Education Requirements must be fulfilled to complete this major.

**SPEECH COMMUNICATION COURSES**

**Spch 010 Collegiate Forensics (1) (Fws)**

Practical experience in individual and group speaking events and oral interpretation for inter-collegiate tournaments and on-campus activities. (Maximum 4 credits)

**Spch 020 R/TV/Film Practicum (1) (Fws)**

Practical experience in radio/television, or film performance and production activities. (Maximum 4 credits)

**Spch 100 Beginning Speech Communication (4) (Fws)**

The theory and practice of public and personal speaking, stressing both content and delivery in speech communication.

**Spch 101 Voice and Diction (4) (W)**

The study of the speaking voice and of sound production designed to develop proficiency in voice usage and articulation improvement.

**Spch 105 Beginning Oral Interpretation (4) (Fws)**

The theory and practice of the oral presentation of literature and critical listening; performances include poetry, prose and drama.

**Spch 184 Radio/Television Operations (3) (Fws)**

Theory of and practical experience with basic radio and television equipment in studio and remote production. Projects include knowledge, application and aesthetics concerning equipment function, selection and operation. (Cross-listed as MC 184)

**Spch 202 Introduction to Rhetoric (4) (F)**

The principles and techniques of speech communication in the light of classical and modern rhetorical theory.

**Spch 204 Argumentation and Debate (4) (F)**

The theory and practice of argumentation and debate on questions of fact, value and policy in public affairs.

**Spch 209 Parliamentary Procedures (3) (on demand)**

The theory and practice of parliamentary rules used to conduct business and professional meetings.

**Spch 210 Effective Business Speaking (4) (Fws)**

Theory and practice of communications in business and professional meetings.

**Spch 217 Radio-Television Performance (4) (Fw)**

Theory and practice in the professional areas of radio and television. Projects include news anchoring/announcing, interviewing, hosting and delivering public service announcements. (Cross-listed as MC 217)

**Spch 219 Telecommunications Appreciation (4) (alternate years)**

An introduction to telecommunications theory, appreciation and criticism and its impact on the speech communication process. Speech communication is studied through the interrelationships among various functional and aesthetic elements of radio, television and film.

**Spch 251 Phonetics (4)**

The analysis of sound structure. The production and perception of sounds of English speech. The use of the International Phonetic Alphabet. The applications of the principle of phonetics analysis to oral communication. (Cross-listed as SLHS 201)

**Spch 253 Language and Communication (4) (Fws)**

The development of speech and language. The psychological basis of speech behavior. (Cross-listed as SLHS 203)

**Spch 284 Beginning Film Making (4) (alternate years)**

Theory and practice for the pre-professional film maker. Students learn to operate basic motion picture equipment. Projects include planning, shooting and editing short films.

**Spch 305 Advanced Oral Interpretation (4) (alternate years)**

The analysis and performance of literary forms and styles. Prerequisite: Spch 105 or Consent of Instructor.

**Spch 308 Small Group Communication (4) (S)**

The theory and practice of communication in a variety of formal and informal group situations. Prerequisite: Spch 100 or Consent of Instructor.



**Spch 309 Rhetorical Criticism (4) (W)**

Criteria for evaluating the problems, process and effects of individual and/or group efforts to communicate.

**Spch 310 Contemporary Rhetoric (3) (S)**

Communication problems, strategies techniques and issues in the contemporary community.

**Spch 311 Readers' Theatre (4) (alternate years)**

Theory and techniques of the interpretation of literature through the readers' and/or chamber theatre format. Prerequisite: Spch 105 or consent of instructor.

**Spch 312 Principles of Persuasion (4) (W)**

Theory and practice of the logical and psychological aspects of persuasive speaking. Prerequisite: Spch 100 or Consent of Instructor.

**Spch 317 Radio-Television Acting (4) (on demand)**

Theory and practice in acting roles in the professional areas of radio and television. Character portrayal situations such as commercials and dramas are included. Consent of Instructor. (Recommended preparation: Spch 222)

**Spch 340 The Teaching of Speech (4) (on demand)**

Methods of conducting high school communication classes, structuring speech curriculum, selecting textbooks and methods of speech evaluation. Prerequisite: Core courses or equivalent.

**Spch 382 Survey of Film Styles (4) (on demand)**

A genre approach to the styles and types of films which have developed in the cinema. Representative forms such as westerns, comedies, musicals, social dramas and/or suspense thrillers are examined and evaluated.

**Spch 384 Television Production (4) (Ws)**

Theory and practice in the production aspects of television. Content includes: message/audience analysis, script preparation, studio and crew management in producing a variety of television formats. Prerequisite: Spch 184/MC 184. (Cross-listed as MC 384)

**Spch 416(g) Special Projects in Speech Communication (4) (on demand)**

Advanced individualized creative or investigative work in a particular phase of speech communication. May be taken more than once if content is substantially different. Prerequisite: Consent of Instructor.

**Spch 453(g) General Semantics (3) (on demand)**

Analysis of the limitations and of the effects of verbal habits; application of general semantics principles and techniques. (Cross-listed as SLHS 453)

**Spch 469(g) Internship in Speech Communication (3-16) (on demand)****Spch 484 Television Directing (4) (on demand)**

Theory and practice in methods of directing TV talent, blocking cameras and sets and directing TV crews. Projects include a variety of TV dramas, talk shows, comedy, music and instructional television productions. Prerequisite: Spch 184/MC 184 and Spch 384/MC 384, or consent of instructor.

**Spch 486 Techniques of Film Directing (4) (on demand)**

Theory and practice of developing artistic and technical skills in directing motion pictures. Major film making projects are included in class activities. Prerequisite: Spch 281 and Spch 284, or consent of instructor.

**Spch 490 Senior Seminar in Speech/Theatre (4) (S)**

Written exam of student's ability to integrate knowledge from the areas of concentration taken in Speech and/or Theatre. Proposal, completion, and presentation of individualized project in student's area of specialization. Prerequisite: Completion of core requirements; senior standing.

**Spch 499(g) Topical Workshop (1-4) (on demand)****Spch 540 Problems in Speech Education (3) (on demand)**

Problems involved in the development of speech communication programs.

**THEATRE ARTS COURSES****Spch 040 Theatre Practicum (1) (Fws)**

Training in the technical phases of theatre production; experience in set construction, painting, properties construction, backstage organization, house management and running crews.

**Spch 126 Dance for the Stage I (4) (F)**

A beginning course in dance technique and skills used in Musical Theatre, including the dance forms of jazz, ballet and tap dance.

**Spch 127 Dance for the Stage II (4) (W)**

An intermediate course in dance technique and skills used in Musical Theatre with an emphasis on continuity, phrasing and performing. Prerequisite: Spch 126 or consent of instructor.

**Spch 128 Dance for the Stage III (4) (S)**

An advanced course in dance technique and skills used in Musical Theatre. Through movement exercises and experiences designed to develop dancer's creative imagination, students should begin to develop their own personal style in dance performance. Prerequisite: Spch 127 or consent of instructor.

**Spch 220 Theatre Form and Appreciation (4) (Fw)**

The study of theatre form and basic dramatic theory and criticism for viewing plays.

**Spch 221 Theatre in America (4) (S)**

An examination of the significant contributions of American theatre drama that are related to reading of representative American plays.

**Spch 222 Principles of Acting (4) (Fs)**

Basic theory and techniques used by the actor in creating a role for the stage; practical experience in scenes and one-act plays.

**Spch 223 Stage Make-Up (3) (alternate years)**

Techniques of types and styles of stage make-up used in make-up for stage characterizations.

**Spch 224 Technical Theatre Methods (4) (F)**

The theory and practice of working with stage equipment; the methods and procedures of scenery construction, stage rigging and shifting stage scenery.

**Spch 225 Stage Design Graphics (4) (W)**

Acquiring the basic artistic skills needed for stage design; practice in theatrical drafting, perspective drawing, rendering, model building and scenery painting techniques. Prerequisite: Spch 224 or consent of instructor.

**Spch 226 Dance for the Stage (4) (on demand)**

The theory and practice of basic dance skills used in musical theatre production.

**Spch 228 Theatre Arts Management (3) (on demand)**

The study of sound fiscal operation, production cost preparation, public relations, and promotion and laws affecting theatre operations.

**Spch 280 History of the Film (4) (F)**

A chronological approach to the artistic and technical development of the American motion picture medium. Influential films are viewed and discussed.

**Spch 281 Film Form and Criticism (4) (S)**

A critical approach to artistically significant motion pictures and motion picture directors. Analysis of film content, structure and directorial technique is presented through screenings and discussion.

**Spch 282 Film and the Novel (4) (F)**

A comparative analysis of major novels with their screen versions. Emphasis is on the aesthetic and interpretive similarities and differences in the two art forms. (Cross-listed as English 232)

**Spch 283 Film and the Stage (4) (on demand)**

A comparative analysis of major dramas with their screen versions. Emphasis is on the aesthetic and interpretive similarities and differences in the two art forms.

**Spch 322(g) Development of the Drama I (4) (F)**

Greek and Roman tragic and comic playwrights, Aristotelian criticism and classical theatre history. (Cross-listed as Engl 343)

**Spch 324(g) Development of the Drama II (4) (W)**

Early native farce, religious drama, and the drama and theatrical innovations of the Renaissance through the 18th century. (Cross-listed as Engl 344)

**Spch 326(g) Development of the Drama III (4) (S)**

The drama of the modern era, beginning with the 19th century Romantics, viewed as a revolutionary, cultural, political and artistic force. (Cross-listed as Engl 345)

**Spch 327 Musical Theatre History (4) (W)**

Musical Theatre productions past and present are examined and critically evaluated. An analysis of the various forms of musicals with an emphasis on the libretto, lyrics and production elements.

**Spch 330(g) Dramatic Production I (3-6) (summer only)**

Play production techniques (acting and directing, technical theatre) through the process of staging weekly productions for summer theatre audiences. May be repeated by undergraduates. Prerequisite: Consent of instructor.

**Spch 331(g) Dramatic Production II (3-6) (summer only)**

Play production techniques (acting and directing, technical theatre) through the process of staging weekly productions for summer theatre audiences. May be repeated by undergraduates. Prerequisite: Consent of instructor.

**Spch 332(g) Stage Movement (4) (alternate years)**

The theory and practice of movement, pantomime, and improvisation in the actor's creation of a physical characterization for the stage. Prerequisite: Spch 222 or consent of instructor.

**Spch 333(g) Stage Voice (4) (alternate years)**

The theory and practice of voice usage as it pertains to the actor's creation of a vocal characterization for the stage. Prerequisite: Spch 101.

**Spch 334(g) Stage Design I (4) (F)**

The fundamentals of designing for the stage; the designer's responsibilities, including the study of position, color, line and form. Practical experience in design presentation through the execution of color renderings and scale models. Prerequisite: Spch 225 or consent of instructor.

**Spch 335 Principles of Choreography (4) (W)**

Adaptation of choreographic assignments, in-class critiques and analyses permit students to evolve a personal, original style appropriate to the non-concert dance form. Prerequisite: Consent of instructor.

**Spch 336(g) Stage Design II (4) (on demand)**

Advanced investigation into designing for the stage, includes designing for different types of theatres and theatrical events. Designs presented through the execution of color renderings and scale models. Prerequisite: Spch 334(g) or consent of instructor.

**Spch 337(g) Stage Lighting (4) (alternate years)**

The use and capabilities of light in dramatic productions, lighting instruments, control devices and lighting design. Prerequisite: Spch 224.

**Spch 341(g) Creative Dramatics (3) (S)**

The principles and practices of informal drama and storytelling with children; the use of creative dramatics in the elementary classroom.

**Spch 342(g) Children's Theatre (3) (alternate years)**

The principles which govern children's theatre; the analysis of scripts, production problems and procedures to be used for young audiences.

**Spch 344(g) Principles of Play Direction (4) (W)**

The theory and practice of selecting and blocking plays; a consideration of composition picturization, movement, stage business and pantomimic dramatization.

**Spch 382 Survey of Film Styles (4) (on demand)**

A genre approach to the styles and types of films which have developed in the cinema. Representative forms such as westerns, comedies, musicals, social dramas and/or suspense thrillers are examined and evaluated.

**Spch 429(g) Advanced Play Direction (4) (S)**

Advanced study of techniques of visual dramatization through the use of movement, pantomime, tempo and the analysis of character. Prerequisite: Spch 344 or consent of instructor.

168

**Spch 430(g) Styles of Directing (4) (on demand)**

Principles and problems in direction of major historical and theatrical styles. Prerequisite: Spch 344 or consent of instructor.

**Spch 431(g) Styles of Acting (4) (on demand)**

Principles and problems in the acting of major historical and theatrical styles. Prerequisite: Spch 222 or consent of instructor.

**Spch 432 Shakespearean Acting (4) (alternate years)**

Techniques for and problems in acting and staging Shakespeare's plays in the contemporary theatre.

**Spch 433 Dance Production (2) (S)**

The course explores theory and practice in the production aspects of dance. Students in the class will be required to rehearse and perform dances choreographed by faculty or visiting guest artists. Prerequisite: Consent of instructor.

**Spch 434(g) Special Projects in Theatre Arts (4) (on demand)**

Opportunity for the advanced student to do individual creative or investigative work in a particular phase of theatre. May be taken more than once if content is substantially different. Prerequisite: Consent of instructor.

**Spch 437(g) Stage Design History (4) (on demand)**

The study of historical styles of theatre architecture and stage design through history.

**Spch 438(g) Contemporary Playwrights (4) (alternate years)**

Individual British, American, and continental playwrights; may be elected twice when the reading lists are substantially different.

**Spch 469 Internship in Theatre (3-16) (on demand)****Spch 486 Techniques of Film Directing (4) (on demand)**

Theory and practice to develop artistic and technical skills in directing motion pictures. Major film making projects are included in class activities. Prerequisite: Spch 281 and Spch 284, or consent of instructor.

**Spch 490 Senior Seminar in Speech/Theatre (4) (S)**

Written exam of student's ability to integrate knowledge from the areas of concentration taken in Speech and/or Theatre. Proposal, completion and presentation of individualized project in student's area of specialization. Prerequisite: Completion of core requirements; senior standing.

**Spch 499(g) Topical Workshop (1-4) (on demand)****Spch 520 Seminar in Educational Theatre (3) (on demand)**

Problems involved in the development of educational theatre programs. Prerequisite: Consent of instructor.

**Spch 522 Dramatic Theory and Criticism (3) (on demand)**

Principles of dramatic criticism from Aristotle to the present day. Critical standards and methods, and theory application in the evaluation of drama in performance. Prerequisite: Consent of instructor.

## Department of Speech, Language, Hearing Science

Arne D. Teigland, *Chair*; Louis DeMaio, Molly Fortney, Dale Gronhovd, Bruce Hanson, LaRae McGillivray, Davis A. Scott, Marie Swanson

### SPEECH/LANGUAGE/HEARING SCIENCE CURRICULUM

#### Major in Speech, Language, and Hearing Sciences B.S. Degree (Non-Teaching)

The programs of study offered in Speech, Language, and Hearing at Moorhead State University are designed for students who are interested in the normal and disordered processes of human communication. A major in this area is a part of the preparation for clinical, teaching, research or service careers in speech pathology, language pathology, audiology, and speech, language and hearing science. The major is also appropriate for those who will pursue careers in hearing conservation, education of the hearing impaired and related areas. Individual courses are appropriate as electives for students with majors in speech communication, elementary education, special education, reading, psychology, sociology, anthropology or health.

In order to practice as a speech-language pathologist or audiologist, the masters degree is a national requirement. Therefore, the undergraduate and

graduate degree programs described here should be viewed as a whole. The process begins during the freshman year in the introductory course and culminates with the completion of the final examination for the masters degree. The undergraduate (B.S.) degree is only the first stage in helping students achieve the entry-level qualifications for this profession. The title of the undergraduate major, Speech-Language-Hearing Science, suggests that it is a pre-professional degree. It is designed to qualify students for admission to professional study at the graduate level at this or other universities.

The graduate (M.S.) major is the professional degree. Its title, Speech-Language Pathology and Audiology, suggests that it is the terminal clinical degree in our field. Students completing this program are qualified for clinical positions in communication disorders throughout the nation.

Admission to any graduate program at Moorhead State University is limited to those who qualify by virtue of their undergraduate grade point average and Graduate Record Examination score. In addition, department faculty selects applicants for admission to the graduate program based on the number of students for whom the minimum practicum experience requirements of the American Speech-Language-Hearing Association can be provided. Additional details about graduate study may be found in the Graduate Bulletin.

Students who plan to seek clinical positions in Minnesota schools will be required to complete an additional set of requirements determined by the Minnesota Board of Teaching. Courses satisfying these requirements are recommended to all of our students to allow them a maximum of flexibility when entering the job market.

*Major requirements in SLHS (67 credits minimum)*

SLHS 101 Introduction to SLHS  
SLHS 201 Phonetics  
SLHS 202 Speech Science  
SLHS 204 Language Development  
SLHS 207 Acoustics of Speech and Hearing  
SLHS 245 Observation of Clinical Practicum I  
SLHS 321 Articulation Disorders  
SLHS 322 Developmental Language Disorders  
SLHS 323 Voice Disorders  
SLHS 341 Clinical Instrumentation  
SLHS 343 Clinical Procedures II  
SLHS 371 Audiology  
SLHS 372 Audiometry I  
SLHS 373 Rehabilitation Audiology  
SLHS 424 Fluency Disorders  
SLHS 440 Communication Behavior Management  
SLHS 446 Clinical Practicum: Speech-Language  
SLHS 447 Diagnostic & Appraisal Procedures

*Required Courses in Related Fields (8 credits minimum)*

SPCH 100 Beginning Speech Communication  
SPCH 253 Language and Communication

#### *Practicum-Proficiency Requirements*

A student must accumulate at least 25 clock hours of observation and at least 75 clock hours of supervised clinical experience in speech, language and hearing evaluation and treatment. If minimum proficiencies are not achieved within that amount of time, additional clock hours will be required before a student is recommended for graduation.

### **SPEECH, LANGUAGE & HEARING SCIENCE COURSES**

#### **SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3) (FWS)**

A study of the basic processes of speech, hearing and language, the development of speech and language in children, and the major speech, hearing and language disorders.

#### **SLHS 201 Phonetics (4) (Fs)**

The production and perception of sounds of English speech; the use of the International Phonetic Alphabet; the application of the principles of phonetic analysis to oral communication. (Cross-listed as Spch 251.)

#### **SLHS 202 Speech Science (4) (Ws)**

The basic scientific concepts fundamental to the understanding of speech production and perception with primary emphasis on the anatomy and function of the speech and hearing mechanism.

#### **SLHS 203 Language and Communication (4) (FWS)**

The use of speech and language; the psychological and sociological bases of speech behavior. (Cross-listed as Spch 253.)

#### **SLHS 204 Language Development (4) (F)**

Normal development of cognitive, linguistic and social systems of language in children.

#### **SLHS 207 Acoustics of Speech and Hearing (3) (S)**

Basic acoustical principles applied to the generation of human speech sounds, the propagation of such sound waves and their measurement. (Cross-listed as Phys 207.)

#### **SLHS 207L Acoustics of Speech and Hearing Laboratory (1)**

A laboratory experience in the use of instrumentation used to generate, measure, store and modify speech and related acoustical signals. Prerequisites: SLHS 201 or Phys 204 or consent of the instructor.

#### **SLHS 245 Observation of Clinical Practicum I(1) (FS)**

Supervised observation of evaluation and management procedures of speech, language and hearing disorders. Prerequisite: Junior standing or faculty consent.

#### **SLHS 321 Articulation Disorders (4) (Wf)**

The nature, etiology, assessment and treatment disorders of articulation. Prerequisites: SLHS 201 and SLHS 202 or consent of the instructor.

**SLHS 322 Developmental Language Disorders (4) (S)**  
Nature, etiology, and clinical management of language disorders in children. Prerequisite: SLHS 204 or consent of instructor.

**SLHS 323 Voice Disorders (4) (Fw)**  
Study of organic and functional voice disorders; their symptomatology, etiology, assessment, and clinical management. Prerequisite: SLHS 202 or consent of the instructor.

**SLHS 341 Clinical Instrumentation (2) (Sw)**  
A study of the principles, operation and application of clinical instruments (hardware) used in the management of speech, language and hearing disorders. Prerequisite: SLHS 207.

**SLHS 343 Clinical Procedures (2) (Ws)**  
Development of reporting skills to include lesson plans, report writing and conferring and consulting with clients, parents and related professionals.

**SLHS 345 Observation of Clinical Practicum II (1) (Fws)**  
Direct observation of one client or client group throughout one academic quarter; also some actual planning and implementing of therapy procedures. May be repeated once. Prerequisites: SLHS 245 and junior standing.

**SLHS 371 Audiology (4) (F)**  
The study of hearing and hearing disorders. Prerequisite: SLHS 207.

**SLHS 372 Audiometry I (4) (W)**  
Measurement of hearing; diagnostic variables related to hearing impairment; supervised practice administering hearing tests. Prerequisite: SLHS 371 or consent of the instructor.

**SLHS 373 Rehabilitation Audiology (4) (S)**  
The principles and procedures of auditory training, speech reading, language and speech training for individuals with hearing impairment. Prerequisites: SLHS 371 and SLHS 372 or consent of the instructor.

**SLHS 401(g) Psycholinguistics (3) (W)**  
Nature, structure, and function of language with special emphasis on comprehension and production processes.

**SLHS 422(g) Organic Speech Disorders in Children (3) (W)**  
Nature, etiology and management of cleft lip/palate in children.

**SLHS 423(g) Organic Speech Disorders in Adults (4) (S)**  
Etiology, diagnosis evaluation, and treatment of brain damaged, communicatively impaired adults (including aphasia, agnosias, apraxias); opportunities for observation of evaluation and treatment of adult brain-injured individuals.

**SLHS 424 (g) Fluency Disorders (4) (F)**  
A study of the nature and management of fluency disorders. Prerequisite: SLHS 202.

**SLHS 440 Communication Behavior Management (3) (Ws)**  
Basic procedures for the observation and management of behavior, speech-related anxiety and maintenance of learned behavior.

**SLHS 444(g) Language and Learning Problems in Children (4) (W)**  
A detailed coverage of the impact of language processes and language development on school learning problems, including the development of basic academic skills. The course will provide knowledge and basic skills in understanding the significance of language development on special educational interventions with school-aged children. Graduate students in the Department of Speech-Language-Hearing Sciences may not apply this course toward their graduate program. Prerequisites: Ed 214 and SPED 320.

**SLHS 446 Clinical Practicum: Speech-Language (1) (FWS)**  
Supervised clinical experience with children or adults who present speech or language problems; should be repeated—usually taken in blocks of 3 credits for a total of 9 quarter hours of credits. Prerequisites: SLHS 245, 321, 322, 341, 343 and consent of the academic advisor.

**SLHS 447(g) Diagnostic and Appraisal Procedures (4) (W)**  
The evaluation and use of diagnostic tools; participation in evaluations and preparation of clinical reports. Prerequisites: Senior standing and consent of the instructor.

**SLHS 448(g) Program Management in Speech-Language Pathology (3) (F)**  
The organization, management and administration of speech-language pathology programs in various clinical settings such as public schools, hospitals and clinics.

**SLHS 453(g) General Semantics (3)**  
Analysis of the limitations of language and of the effects of verbal habits; application of general semantics principles and techniques.

**SLHS 476 Clinical Practicum: Audiology (1) (FWS)**  
Supervised clinical experience in evaluation or management of children or adults with impaired hearing; may be repeated. Prerequisites: SLHS 245, 372, or 373, and consent of the academic advisor.

**SLHS 491(g) Independent Study in SLHS (1-3) (FWS)**  
Selected readings or a guided independent research project in some aspect of communication disorders. may be repeated for up to 6 credits. Prerequisite: Consent of academic advisor and project supervisor.

**SLHS 499(g) Topical Workshop (1-4)**

**SLPA 501 Research in Speech-Language Pathology and Audiology (3) (F)**

Basic methodology of descriptive, experimental and single-case designs for research in speech-language pathology and audiology. Emphasis also on the development of research and report writing.

**SLPA 509 Seminar in Scientific Topics (3)**

Examination of a selected aspect of the scientific bases of communication.

**SLPA 521 Seminar in Articulation (3) (F)**

A critical review of research related to the nature, assessment and treatment of articulatory disorders.

**SLPA 522 Seminar in Child Language (3)**

Selected topics in the area of language development and disorders in children with emphasis on specific scientific inquiry. Prerequisite: SLHS 401(g).

**SLPA 523 Seminar in Voice (3) (W)**

Advanced study of the pathologies and malfunctions that produce voice defects; laryngectomy and other organic disorders emphasized; evaluation of current therapeutic procedures and pertinent findings.

**SLPA 524 Seminar in Fluency (3) (S)**

A critical review of research related to the nature, etiology and treatment of fluency disorders.

**SLPA 541 Language Assessment and Intervention (3) (FS)**

Assessment and intervention of cognitive, linguistic and social deficits in children's language with special emphasis on informal assessment procedures. Prerequisite: SLHS 401(g).

**SLPA 542 Augmentative and Alternative Communication (3) (W)**

Advanced appraisal techniques for speech, language and related areas as they apply to determining a need for augmentative communication systems; with additional emphasis on selecting appropriate aids and initial programming.

**SLPA 543 Seminar in Supervision (3)**

Review of literature, techniques and systems specific to supervision in speech-language pathology.

**SLPA 544 Supervision Practicum (1)**

Supervised practicum experience in supervision; includes planning, observing and analyzing the clinical work of student clinicians. Prerequisite: SLPA 543.

**SLPA 546 Clinical Practicum: Speech-Language (1) (FWS)**

Supervised clinical experience with children or adults who present speech or language problems; usually taken in blocks of 4 credits. Should be repeated for a total of 8 credits. Prerequisites: 9 credits of SLHS 446, graduate standing, and consent of the academic advisor.

**SLPA 548 Internship (6) (FWS)**

Supervised experience in a public or private agency; goals, nature of experience and criteria for evaluation established beforehand by student, departmental advisor, and a representative of the agency. Prerequisite: Departmental approval of proposal.

**SLPA 571 Seminar in Rehabilitation Audiology (3) (S)**

A review of the major concepts that influence the delivery and shape consequences of rehabilitative services to the hearing impaired.

**SLPA 576 Clinical Practicum: Audiology (1) (FWS)**

Supervised clinical experience in evaluation or management of children or adults with impaired hearing; may be repeated. Prerequisites: Graduate standing and consent of the academic advisor.

**SLPA 591 Topical Seminar in Speech, Language Pathology and Audiology (3)**

The examination of the literature on a selected topic of current interest.

**SLPA 593 Readings in Speech, Language Pathology and Audiology (1-3) (FWS)**

Selected readings in speech pathology, language pathology, audiology or speech and hearing science under the direction and supervision of members of the department. Prerequisite: Approval of departmental advisor and the project supervisor.

**SLPA 595 Seminar in Professional Issues (3) (Ws)**

A consideration of current topics and issues pertaining to the profession of speech-language pathology and audiology.

**SLPA 597 Research Project (1-3) (Fs)**

Registration only after consultation with major advisor.

**SLPA 599 Thesis (1-6) (Fws)**

Registration only after consultation with major advisor.

## **Women's Studies**

Beverly Wesley, *Coordinator*

### **WOMEN'S STUDIES CURRICULUM**

The minor in Women's Studies provides students an opportunity for interdisciplinary learning related to women in society. Students are expected to interrelate various kinds of knowledge and perspectives from the natural and social sciences, humanities, and education.

The minor is particularly appropriate for students preparing for careers in education, law, the ministry, medicine, social service, mass communications, or the pursuit of advanced degrees in Women's Studies at other institutions.

**Minor in Women's Studies (24 credits)**

*Core Courses (12-14 credits)*

Hum 310(g) Women's Studies (4)  
Psy 220 Psychology of Women (4) or  
Soc 335 Women in Medicine (4)  
Hist 375 Women in U.S. History (4) or  
Engl 246 Women in Literature (4) or Minority Women  
Writers (4)  
Hum 410(g) Directed Readings in Women's Studies  
(1-8)

*Electives (10-12 credits)*

Anth 445(g) Cross-cultural Study of Women  
Bio 304 Biology of Women  
CRJS 400 Sociology of Rape  
Engl 246 Women in Literature or Minority Women  
Writers (4)  
Hist 375 Women in U.S. History (4)  
Hum 311(g) Special Topics in Women's Studies (3-4)  
Hum 312(g) Women in Humanities (4)  
Hum 410(g) Directed Readings in Women's Studies  
(1-8)  
MC 425 Women in Media (4)  
MDS 232 Women's Roles and Socialization in 19th  
and 20th Century America (4)  
PE 294 Women and Sports (4)  
Poi 430(g) Sex-Based Discrimination  
Psy 481 Women and Work (4)  
Psy 220 Psychology of Women (4)  
Psy 416 Violence in the Family (4)  
Soc 308 Aging in America (4)

Soc 340 Women and Health (4)  
Soc 333 Sociology of Sex Roles (4)  
LART 314 Images of Women in Film & Literature  
LART 327 The Childhood Experience in Literature  
and Autobiography  
LART 320 Men-Speak, Women-Speak  
LART 325 Gender, Culture & Society (4)  
LART 312 Romantic Love (4)

Other appropriate courses or seminars are often  
available as topics listings in cooperating  
departments.

## Administration

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**Roland Dille** *President*

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Lois Selberg *Assistant to the Vice President for Academic Affairs*  
Sharon Ferris *Administrative Assistant for Academic Affairs*  
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Mary Ellen Schmider *Dean of Graduate Studies and Grants Coordinator*  
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Marcia Kierscht *Director of Special Projects*

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Dean Webster *Building Services Supervisor*  
Lester A. Bakke *Director of Computer Services*  
Verlee Thies *Business Manager*  
Ben Blair *Personnel Director*  
James Aasness *Bookstore Manager*

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Marv Gerhardson *Associate Dean for Student Development*  
Kathy Scott *Orientation/Student Activities*  
Abner Arauza *Acting Coordinator of Minority Student Affairs*  
Floyd Brown *Director of Admissions*  
Cliff Schuette, *Director of Counseling*  
David Anderson *Director of Financial Aid*  
Lynne Ebner *Director of Health Services*  
Michael Pehler *Director of Housing and Security*  
Melvin Schmitz *Director of Career and Placement Services*

#### Public Affairs

Ron Matthies *Director for Public Affairs*  
Jude Poseley *Director of Communications/Marketing*  
Pat Johnson *Art Director*  
Glenn Tornell *News Director*  
Dennis Aune *Director of Development*  
Diane Schoenecker *Foundation Accountant*  
Jim Shipp *Alumni Director*  
Jill Holsen *Assistant Director of International Programs*

## FACULTY

**Roland Dille, 1963.** President and Professor of English. B.A., Ph.D., University of Minnesota.

**James Aasness, 1970.** Bookstore Manager. B.A., Moorhead State University.

**Kerri L. Acheson, 1989.** Associate Professor of Business Administration. A.A.S., University of MN-Crookston; B.S.Ed., University of North Dakota; M.S., Utah State University; Ph.D., University of So. Calif. (Leave of Absence 1989-90)

**Vijendra K. Agarwal, 1987.** Associate Professor of Physics. B.S., Agra University; M.S., Meerut University; Ph.D., Roorkee University.

**Earl Alberts, 1985.** Chair and Professor, Department of Business Administration. B.S., Morningside College; M.A., University of Nebraska; D.B.A., University of Colorado.

**M. Wayne Alexander, 1977.** Professor of Business Administration. B.S., M.B.A., Fresno State College; Ph.D., University of Illinois at Urbana-Champaign.

**Dean Alger, 1982.** Associate Professor of Political Science. M.A., Ph.D., University of California (Riverside).

**Sayel A. Ali, 1988.** Assistant Professor of Mathematics. B.Sc., University of Jordan; M.Sc., University of Dundee; Ph.D., The Ohio State University.

**Roman Alvarez, 1985.** Associate Professor of Spanish. B.A., University of Santiago; M.A., Temple University; Ph.D., University of Pennsylvania.

**Beth C. Anderson, 1969.** Associate Professor of Secondary Education and Foundations. B.A., Jamestown College; M.A., Washington State University; Ed.D. University of North Dakota.

**David H. Anderson, 1965.** Director of Financial Aids and Assistant Professor. B.S., M.A., University of Minnesota; Specialist, Boston University.

**James Anderson, 1988.** Admissions Counselor. B.S., M.S., Moorhead State University.

**Kristin J. Anderson, 1986.** Coordinator of Chemical Dependency Program. B.S., University of North Dakota.

**Lawrence R. Anderson, 1966.** Professor of Secondary Education and Foundations. B.S., Valley City State College; M.S. in Ed., North Dakota State University; Ph.D., George Peabody College for Teachers.

**Abner Arauza, 1989.** Acting Coordinator of Minority Student Affairs. B.S., Moorhead State University.

**Dennis Aune, 1989.** Director of Development. B.S., Moorhead State University; M.A., Mankato State University.

**Robert S. Badal, 1971.** Dean of Arts and Humanities and Associate Professor of Speech. B.A., University of Illinois; M.A., Ph.D., Northwestern University.

**Mary Bader, 1986.** Assistant Professor of Accounting. B.S., B.A., University of North Dakota; J.D., Marquette University. CPA (Leave of Absence 1989-91)

**Lester Bakke, 1972.** Director, Computer Services and Data Privacy Officer. B.A., M.S., Moorhead State University.

**Marilyn Bakke, 1984.** Associate Professor of Accounting and Head Coach, Women's Golf. B.A., M.S., Moorhead State University. CPA

**Roland Barden, 1989.** Vice President for Academic Affairs. B.S., University of North Dakota; M.S., Ph.D., University of Wisconsin-Madison.

**James Barnett, 1982.** Director of Facilities Management. B.S.E., M.A., North East Missouri State University; Ed.D., East Texas State University.

**Doris Amanda Baron, 1988.** Instructor of Languages. B.A., M.S., Universidad de Los Andes.

**Virginia Barsch, 1976.** Professor of Art. B.A., Barat College; M.A., San Francisco College; Ph.D., Northwestern University.



- Monroe H. Bartel, 1963.** Professor of Biology. A.B., Tabor College; M.S., Ph.D., Kansas State University.
- Mary A. Barton, 1981.** Circulation and Reference Librarian and Assistant Professor. B.A., Wartburg College; M.A.L.S., Rosary College; M.L.A., Moorhead State University.
- Mary Bartscher, 1987.** Director of Housing and Security Staff. B.A., College of St. Catherine; M.A., Bowling Green State University.
- Abdel Bashir, 1989.** Associate Professor of Computer Science & Information Systems. B.S., University of Khartoum; M.S., Ph.D., University of Wisconsin.
- Philip R. Baumann, 1989.** Assistant Professor of Political Science. B.A., M.S., Iowa State University; M.A., Ph.D., Michigan State University.
- Paul Beare, 1979.** Chair and Professor. Department of Special Education & Counseling. B.A., M.Ed., Ph.D., University of Missouri.
- Rufus T. Bellamy, 1964.** Assistant Professor of English. B.A., M.A., Yale University. (Sabbatical Leave 1989-90)
- Leonard W. Bergquist, 1969.** Director of Clinical and Field Experiences and Professor of Elementary and Early Childhood Education. B.S., M.S., Moorhead State University; Ph.D., University of Minnesota.
- Dieter G. Berninger, 1970.** Professor of History and Multicultural Studies. B.A., M.A., Ph.D., University of Wisconsin.
- Marty Birkholt, 1986.** Instructor of Speech Communication and Theatre Arts. B.S., M.A., South Dakota State University.
- Kenneth P. Bladow, 1959.** Assistant Professor of Health, Physical Education and Recreation. B.A., Concordia College; M.S., North Dakota State University.
- Ben Blair, 1982.** Director of Personnel. B.S., Lincoln University; M.Ed., University of Illinois. (Sabbatical Leave 1989-90)
- Richard Bolton, 1979.** Associate Professor of Multidisciplinary Studies. B.A., Stanford University; M.A., California State University, Los Angeles; Ph.D., Washington State University.
- Cynthia Booth, 1987.** Instructor of Health, Physical Education and Recreation. B.S., West Virginia University; M.S., University of Kansas.
- Barbara J. Boseker, 1980.** Associate Professor of Secondary Education and Foundations. B.S., University of Wisconsin, Milwaukee; M.A., Ph.D., University of Wisconsin, Madison.
- Marvin D. Bossart, 1967.** Assistant Professor of Mass Communications. B.A., University of North Dakota; M.S., Northwestern University.
- Richard F. Bowman, 1978.** Chair and Professor. Department of Secondary Education and Foundations. B.S., M.Ed., Ohio University; Ph.D., University of Toledo.
- Gregory L. Brack, 1989.** Assistant Professor of Counseling and Human Development. B.A., Indiana University; M.S., Purdue University; M.S., Ph.D., Indiana University.
- Shirley A. Brattland, 1963.** Catalog Librarian and Associate Professor. B.A., B.S., Moorhead State University; M.S. in L.S., University of Illinois; Specialist Certificate in Library Science Education, University of Minnesota.
- Daniel Brekke, 1985.** Assistant Professor of Computer Science and Information Systems. B.A., Concordia College; M.S., Moorhead State University.
- Paula Brekke, 1986.** Instructor of Norwegian. B.A., Luther College.
- Bradley A. Bremer, 1968.** Professor of Psychology. B.A., Moorhead State University; M.A., Ph.D., Michigan State University. (Sabbatical Leave 1989-90)
- John Bremer, 1987.** Instructor of English. B.A., St. Cloud State University; M.A., North Dakota State University.
- Curtis Bring, 1973.** Chair and Professor. Department of Computer Science and Information Systems. B.S., M.A., North Dakota State University; Ed.D., University of Northern Colorado.
- Deborah Broad, 1981.** Associate Professor of Art. B.A., Hollins College; M.F.A., University of Tennessee.
- Kent R. Brorson, 1989.** Instructor of Speech/Language/Hearing Science. B.S., North Dakota State University; M.S., Ithaca College.
- Kimetha Brodsahl, 1989.** Associate Director of Housing & Security—Operations. B.A., Concordia College; M.S., Moorhead State University.
- Cheri Brown, 1986.** Chair and Assistant Professor, Department of Languages. B.A., Creighton University; M.A., Ph.D., University of Nebraska-Lincoln.
- Floyd W. Brown, 1960.** Director of Admissions and Instructor of Education. B.S., M.S., North Dakota State University.
- Lyndon E. Brown, 1979.** Head Coach. Men's Tennis; Chair and Associate Professor of Health, Physical Education and Recreation. B.A., University of North Carolina; M.S., Ph.D., University of New Mexico. (Sabbatical Leave Winter Quarter 1989-90)
- Dewey O. Brummond, 1966.** Professor of Chemistry. B.S., North Dakota State University; M.S., Ph.D., University of Wisconsin, Madison.
- M. Anne Brunton, 1969.** Associate Professor of Sociology and Anthropology. B.A., M.A., Ph.D., Washington State University.
- Omran A. Bukhres, 1986.** Assistant Professor of Computer Science and Information Systems. B.S., Indiana University; M.S., University of Dayton.
- Norman A. Buktenica, 1976.** Professor of Special Education and Counseling. B.A., Wabash College; M.A., Roosevelt University; Ph.D., University of Chicago.
- Dolores Buttry, 1978.** Coordinator of Scandinavian Studies and Associate Professor of Languages. B.A., M.A., Illinois State University; M.A., Middlebury College; Ph.D., University of Illinois. (Leave of Absence 1989-90)
- Richard F. Bynum, 1979.** Associate Professor of Health, Physical Education and Recreation. B.S., M.S., Florida State University; Ed.D., University of Tennessee. (Sabbatical Leave 1989-90)
- Carl T. Carlson, 1968.** Associate Professor of Mathematics. B.A., Concordia College; M.A., Boston College.
- Henry Y. Chan, 1989.** Assistant Professor of History. B.A., University of Hong Kong; M.A., Ph.D., Indiana University.
- Joel M. Charon, 1972.** Professor of Sociology. B.S., M.A., Ph.D., University of Minnesota.
- Mark G. Chekola, 1969.** Chair and Professor, Department of Philosophy. B.A., Concordia College; M.A., Ph.D., University of Michigan.
- Wanxi Chen, 1988.** Assistant Professor of Mathematics. B.S., University of Science & Technology (China); Ph.D., University of Notre Dame.
- Timothy Y. C. Choy, 1969.** Professor of Speech Communication and Theatre Arts. B.A., Pacific University; M.A., Ph.D., Pennsylvania State University.
- Grace Chu Te, 1986.** Associate Professor of Business Administration. B.S.C., University of San Carlos; M.S., University of Illinois. (Leave of Absence 1989-90)
- Michael Coates, 1986.** Instructor of Music. B.A., M.S., Moorhead State University.
- Sheila Coghill, 1983.** Assistant Professor of English. B.A., Markato State University; M.A., Pittsburgh State University; Ph.D., Ball State University.
- David D. Cole, 1970.** Professor of Psychology. B.S., Purdue University; A.M., Ph.D., West Virginia University.
- Donald C. Cole, 1987.** Coordinator of American Studies and Associate Professor of Humanities and Multicultural Studies. A.B., Peru State College; M.A., University of Northern Iowa; Ph.D., University of New Mexico.

**Thomas W. Collins, 1962.** Professor of Biology. B.S., Southern Illinois University; Ph.D., University of Minnesota.

**James F. Condell, 1965.** Professor of Psychology. A.B., Kentucky State College; M.A., Teacher's College, Columbia University; Ed.D., University of Nebraska.

**Yvonne C. Condell, 1965.** Professor of Multidisciplinary Studies and Biology. B.S., Florida A & M; M.A., Ph.D., University of Connecticut.

**Andrew Conteh, 1985.** Associate Professor of Political Science. L.L.M., Ph.D., Kiev State University.

**Arnold Cooper, 1986.** Assistant Professor of Secondary Education and Foundations. B.S., West Chester State University; M.A., Duke University; M.A., Pepperdine University; Ph.D., Iowa State University.

**John M. Cooper, 1972.** Assistant Professor of Economics. A.B., Sacramento State College.

**Marjorie K. Corner, 1966.** Professor of English. B.A., Hamline University; M.A., Ph.D., Washington State University.

**Delmar G. Corrick, 1976.** Director and Professor, New Center. B.A., M.A., University of New Hampshire; Ph.D., Washington State University.

**Leslie W. Crawford, 1972.** Professor of Elementary and Early Childhood Education. B.S., M.S., Eastern Montana College; Ed.D., University of California, Berkeley.

**D. Ellen Cromwell-Cecrle, 1968.** Assistant Professor of Health, Physical Education and Recreation. B.S., Slippery Rock State College; M.Ed., University of Oklahoma.

**Mary Curtis, 1983.** Director of Women's Athletics, Head Volleyball Coach and Assistant Professor of Health, Physical Education and Recreation. B.S., Western Montana College; M.A., University of Iowa.

**Ruth N. Dahlke, 1976.** Professor of Music. B.M., Lawrence University; M.M., D.M.A., Eastman School of Music, University of Rochester.

**A. Derick Dalhouse, 1987.** Professor of Psychology. B.A., Wilmington College; M.A., University of Nebraska; Ph.D., Ohio State University.

**Elizabeth Bull Danielson, 1982.** Associate Professor of School Psychology. B.A., Baylor University; M.A., Ph.D., University of Colorado.

**James Danielson, 1987.** Associate Professor of Political Science. B.A., Concordia College; M.A., Ph.D., University of Minnesota.

**Susan Darge, 1989.** Residence Hall Director. B.S., Mankato State University.

**Robert B. Davies, 1966.** Professor of History. B.A., College of Wooster; M.A., Rutgers University; Ph.D., University of Wisconsin.

**Alan Davis, 1985.** Assistant Professor of English. B.A., M.A., University of Southwestern Louisiana; Ph.D., University of Denver.

**James DeBrito, 1985.** Instructor of Speech Communication and Theatre Arts. B.S., Moorhead State University; M.A., North Dakota State University.

**Richard DeHaan, 1989.** Field Broker. B.A., Bemidji State University.

**Sheila L. Delbier, 1988.** Instructor of Business Administration. B.S., Moorhead State University; MIM, American Graduate School of International Management.

**Louis J. DeMaio, 1980.** Associate Professor of Speech/Language/Hearing Sciences. B.S., Brescia College; M.A., Montclair State College; Ph.D., Southern Illinois University.

**Daniel P. Deneau, 1976.** Chair and Professor, Department of English. B.A., St. Joseph's College; M.A., Ph.D., University of Notre Dame.

**Rodney A. DeSautel, 1989.** Assistant Professor of Elementary and Early Education. B.S., M.Ed., Ed.D., University of North Dakota.

**Debra J. DeWitz, 1989.** Assistant Professor of Social Work. B.S.W., University of North Dakota; M.S.W., University of Nebraska.

**Frances Dexter, 1987.** Chair and Instructor, Department of Business Education. B.S., M.A., University of Nebraska.

**Lee C. Dexter, 1988.** Professor of Accounting. B.A., Concordia College; M.B.A., Ph.D., University of Nebraska. CPA, CMA

**Joseph M. DiCola, 1973.** Professor of Elementary and Early Childhood Education. B.A., Shimer College; M.S.Ed., Ed.D., Northern Illinois University. (Sabbatical Leave Spring Quarter 1989-90)

**Theodore A. DiSanti, 1989.** Visiting Professor of Music. B.M., M.M., Youngstown State University.

**Larry J. Dobesh, 1989.** Professor of Business Administration. B.S., University of Idaho; Ph.D., Washington State University. (Leave of Absence 1989-90)

**Vernon J. Dobis, 1981.** Instructor of Economics. B.A., St. John's University; M.S., North Dakota State University.

**Carol Dobitz, 1978.** Chair and Associate Professor, Department of Accounting. B.A., Moorhead State University; M.S., Ph.D., University of North Dakota. CPA

**Sidney J. Drouilhet, 1981.** Associate Professor of Mathematics. B.A., M.A., Ph.D., Rice University.

**Richard DuBord, 1973.** Professor of Social Work. A.B., St. Francis College; M.S.W., St. Louis University; D.S.W., University of Utah.

**William E. Eagan, 1967.** Professor of History. B.A., St. Michael's College; M.A., University of Vermont; Ph.D., University of Western Ontario.

**John Early, 1987.** Instructor of English. B.A., Sioux Falls College; M.A., Western Illinois University.

**Lynne Ebner, 1985.** Director of Health Services. B.S., University of North Dakota; M.S., Moorhead State University.

**Gary M. Edverson, 1989.** Assistant Professor of Chemistry. B.S., University of Iowa.

**Scott Emmert, 1987.** Instructor of English. B.S., Moorhead State University; M.A., University of Iowa.

**Rodney O. J. Erickson, 1966.** Acquisition Librarian and Associate Professor. B.A., Augsburg College; M.A., University of Minnesota; Specialist Certificate in Library Science, University of Minnesota.

**Sheri L. Erickson, 1987.** Assistant Professor of Accounting. B.S., M.B.A., Moorhead State University. CPA

**Dianne E. Farrell, 1986.** Assistant Professor of History. B.A., M.A., Ph.D., University of Wisconsin, Madison.

**Alice Fasman, 1980.** Assistant Professor of Music. B.M.E., M.M., Indiana University. (Sabbatical Leave 1989-90)

**Mark J. Fasman, 1979.** Associate Professor of Music. B.A., Cornell University; M.M., D.M., Indiana University. (Sabbatical Leave 1989-90)

**David C. Ferreira, 1974.** Professor of Music. B.M., Illinois Wesleyan University; M.M., Ph.D., University of Cincinnati.

**Sharon Ferris, 1965.** Administrative Assistant/Academic Affairs. B.S., Moorhead State University; M.S., Tri-College University.

**Rhonda K. Ficek, 1987.** Assistant Professor of Computer Science. B.S., Dickinson State College; M.S., North Dakota State University.

**Wilbert B. Fischer, 1971.** Professor of Accounting. B.S., in Ed., State University of North Dakota at Ellendale; M.S., Ph.D., University of North Dakota. CPA (Sabbatical Leave Spring Quarter 1990)

**Lois Fisher, 1977.** Director of Continuing Education and External Studies and Assistant Professor. B.S., University of Minnesota; M.S., Moorhead State University; Ph.D., University of North Dakota.

- Janet Flagel, 1985.** Assistant Director of External Studies. B.A., Wartburg College; B.B.A., University of Wisconsin, Madison; M.B.A., Moorhead State University.
- David P. Flint, 1971.** Chair and Professor, Department of Political Science. B.S., University of North Dakota; M.A., Ph.D., Washington State University.
- Oscar Flores, 1989.** Assistant Professor of Economics. B.A., University of Nuevo Leon (Mexico).
- Ross S. Fortier, 1970.** Director of Men's Athletics, Head Coach, Football and Associate Professor of Health, Physical Education and Recreation. B.S., North Dakota State University; M.S.Ed., Moorhead State University; Ed.D., University of North Dakota.
- Howard Freeberg, 1965.** Coordinator of International Studies and Professor of Secondary Education and Foundations. B.S., University of North Dakota at Ellendale; M.Ed., Ed.D., University of North Dakota.
- Laura French, 1987.** Instructor of English and Mass Communications. B.A., Moorhead State University; M.A., North Dakota State University; M.A.R.S., United Theological Seminary.
- Karla Friederichs, 1987.** Admissions/Financial Aid Counselor. B.S., Moorhead State University.
- Marvel L. Froemming, 1963.** Associate Professor of Mathematics. B.S., Moorhead State University; M.S., University of Oregon.
- Ellen Fuchsel, 1989.** Residence Hall Director. B.A., The College of St. Catherine.
- Carol Gaede, 1975.** Professor of Speech Communication and Theatre Arts. B.A., Concordia Teachers College; M.S., Ph.D., Southern Illinois University.
- John C. Gaffrey, 1988.** Assistant Professor of Computer Science and Information Systems. B.A., St. John's University; M.A., University of Arizona; M.D., University of North Dakota; M.S., North Dakota State University.
- Kurt L. Garrett, 1989.** Associate Professor of Speech Communication and Theatre Arts. B.A., M.A., Ph.D., Wayne State University.
- Virginia H. Gassner, 1969.** Assistant Professor of Elementary and Early Childhood Education. A.B., Hunter College; M.A., University of Texas.
- Susan A. Gebhardt-Burns, 1988.** Instructor of English. B.A., Caidwell College; M.A., Western Illinois University.
- Peter Geib, 1982.** Associate Professor of Business Administration. B.A., University of Minnesota; M.A., Ph.D., University of Michigan.
- Mark Geller, 1988.** Student Activities Adviser. B.A., Moorhead State University.
- James Gemar, 1983.** Assistant Professor of Health, Physical Education and Recreation. B.S.Ed., University of South Dakota; M.A., University of Iowa; Ed.D., Brigham Young University.
- Marvin E. Gerhardson, 1968.** Associate Dean of Students and Instructor of Education. B.S.Ed., M.Ed., University of North Dakota.
- Jane Giedt, 1983.** Assistant Professor of Nursing. B.S.N., Mary College; M.S.N., University of North Dakota.
- Iris R. Gill, 1989.** Research Specialist for MSUS Institutional Research Project. B.S., North Dakota State University.
- Nancy Gilliland, 1977.** Associate Professor of Sociology-Anthropology. B.A., Nebraska Wesleyan University; M.A., University of Nebraska, Omaha; Ph.D., University of Nebraska, Lincoln.
- Sandra L. Gordon, 1980.** Chair and Professor, Department of Elementary and Early Childhood Education. B.S., St. Louis University; M.A., Ph.D., University of New Mexico.
- Theodore A. Gracyk, 1986.** Assistant Professor of Philosophy. M.A., Ph.D., University of California-Davis.
- Douglas A. Greenley, 1978.** Chair and Professor, Department of Economics. B.A., M.A., North Dakota State University; Ph.D., Colorado State University.
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# Index

- Academic Honors 26
- Academic Probation and Suspension 26
- Academic Standing 26
- Academic Year 20
- Accounting 29
- Accreditation 2
- Activities and Organizations 12
- Add Courses 28
- Admissions 10
  - Freshman 10
  - International 10
  - Readmission 11
  - Special Circumstances 11
  - Special Students 11
  - To the College 10, 11
  - Transfer 10
- Advanced Placement 11, 24
- Advisor Assignments and Changes 27
- Advisors—Student 12
- Agriculture 31
- Alcohol-Drug Awareness Program 9
- Alumni Association 10
- American Studies 31
- Anthropology 32, 154
- Appeal of Academic Policies 29
- Application 11
  - Deadlines 11
    - For Financial Aid 16
    - For Graduation 20
    - For Housing 16
- Architecture 33
- Armed Services Credit 23
- Art 33
- Associate Degrees 5, 22
- Astronomy 41, 139
- Athletics 12
  - Men 12
  - Women 12
- Auditing Courses 25
- Baccalaureate Degrees 4
- Biology 42
- Board and Room 16
- Bookstore 8
- Business Administration 46
- Business Education 51
- Cafeteria 8
- Campus 3
- Campus Visits 11
- Career and Placement Services 9
- Center for the Arts 8, 12
- Center for Multidisciplinary Studies 6
- Certification Programs 5
- Change of Program 28
- Change of Requirements 20
- Chemistry 53
- Chinese 104
- Chiropractic 4
- Classics 57
- Classification of Students 27
- Coaching 87
- College Level Examination Program 24
- Common Market 5
- Common Market Quarter in Washington 6
- Community College Career Programs 23
- Computer Information Systems 58
- Computer Science 58
- Confidential Records 28
- Cooperative Degree Programs 4, 5
- Correspondence Study 24
- Counseling Center 9
- Course Load 29
- Credit by CLEP Examination 24
- Credit by Departmental Examination 24
- Credits
  - Armed Services 23
  - Resident 22
  - Transfer 23
- Criminal Justice Program 63, 155
- Dean's List 28
- Degrees
  - Associate 5, 23
  - Education 4
  - Fine Arts 4
  - Liberal Arts 4
- Dentistry 4
- Dining Facilities 8
- Dormitories 7
- Dropping Courses 29
- Economics 64
- Education 67
  - Elementary and Early Childhood 65
  - Secondary and Foundations 65
  - Special Education and Counseling 158
  - Student Teaching 66
  - Teacher Education Requirements 65
- Education Degrees 4
- Energy Management 77
- Engineering 78
- English 79
- Enrollment 3
- Eurospring 7
- Evening Course Registration 29
- Expenses
  - Dining 16
  - Fees 14
  - Housing 16
  - Payment 16
  - Refund 17
  - Tuition 14
- External Studies 6, 84
- Faculty 3, 173
- Fargo-Moorhead 3
- Fees
  - Change of Program 28
  - Comprehensive 14
  - Late Registration 27
- Finance 84
- Financial Aid 16, 19
- Fine Arts Degree 4
- Foreign Service 4
- Foreign Studies 7
- Forestry 4
- Fraternities 13
  - Social 13
- French 102, 104
- Freshman Requirements 21
- Geology-Geography 85
- German 103, 105
- Government Service 4
- Grade Points 25
- Grade Point Average (GPA) 26
- Graduate Degrees 5
- Graduation Requirements 20
- Grants
  - Pell 17
  - SEOG 17
  - State 17
- Handicapped Services 9
- Health, Physical Education & Recreation 86
- Health Service and Insurance 13
- History 89
- History of University 3
- Home Economics 92
- Honors, Academic 28
- Honors Program 92
- Hotel-Motel-Restaurant Management 93
- Housing Policies 13
- Human Relations Requirement 66
- Humanities 94
- Incomplete Credits 26
- Individualized Major 6, 22, 95
- Industrial Studies 95
- Intramurals 13
- International Business 7
- International Study 7
- Internship 7
- Japanese 106
- Languages 102
- Late Registration 29
- Latin 57
- Law 4
- Legal Assistant 107
- Liberal Arts Courses 110
- Liberal Arts Degrees 4
- Liberal Arts Requirements 21
- Library 8
- Licensure 5
- Life Science 42
- Loans
  - Loan Counseling 18
  - Minnesota Supplemental Loan (SELF) 17
  - Perkins Loan 17
  - Short Term 18
  - Stafford Student Loan 17
- Management 111
- Marketing 112
- Mass Communications 114
- Mathematics 118
- MBA 115
- Medical Records Technology 54
- Medical Technology 43
- Medicine 4
- Meteorology 4
- Minors through Exchange 22
- Moorhead-Fargo Community 3
- Moorhead State University Foundation 10
- Mortuary Science 4
- Multicultural Studies 94, 121
- Multidisciplinary Studies 122
- Multidisciplinary Studies Center 6
- Multiple Majors and Degrees 21
- Music 124
- National Student Exchange 7
- New Center 6
- Non-Resident Tuition 14
- Non-Resident Status 14
- Nursing 132
- Norwegian 106, 151
- Off-Campus Registration 29
- Office Administration 53
- Optometry 4
- Organizations and Activities 12
- Oxford Program 7
- Parking 13
- Pass/Fail Courses 25
- Pass/No Credit Grades 25
- PFY 67
- Pharmacy 133
- Philosophy 133
- Physics 138
- Physical Education 86, 135
- Placement Office 9
- Planetarium 8
- Political Science 141
- Pre-Professional Studies 4
- Probation and Suspension 28
- Professional Majors 4
- Psychology 143
- Readmission 11
- Reciprocal Tuition Agreements 15
- Recreation and Leisure Studies 147
- Refund of Payments 17

Registration 27  
 Evening Courses 27  
 Off-Campus 27  
 Procedures 27  
 Tri-College University 27  
 Religious Organizations 13  
 Repeating Courses 26  
 Residence Halls 7  
 Resident Credit 22  
 Resident Tuition 14  
 Resident Status 15  
 Retention 3  
 Room and Board Expenses 16  
 ROTC 6  
 Scandinavian Studies 147  
 Scholarships 18  
 Science 149  
 Science Facilities 8  
 Secondary Teaching 5  
 Secretarial 52

Social Studies 149  
 Social Work 150  
 Sociology 150  
 Sororities 13  
 Spanish 103, 106  
 Special Education 156  
 Speech Communication 162  
 Speech, Language & Hearing Clinic 9  
 Speech, Language & Hearing Science 168  
 Special Students 11  
 Student Advisors 12  
 Student Senate 12  
 Student Services 12  
 Student Teaching 66  
 Student Teaching Abroad 7  
 Suspension and Probation 28  
 Swedish 107  
 Teaching  
 Elementary 65  
 Secondary 65

Teacher Certification 5  
 Teacher Education Requirements 65  
 Teaching Majors and Minors 22  
 Theatre Arts 162  
 TOEFL Testing 10  
 Transfer Credit 23  
 Tri-College University 6, 29  
 Tuition 14  
 Refunds 17  
 Two-Year Degrees 5  
 Union, Comstock Memorial 8, 13  
 Units of Credit 20  
 Veterans Office 9  
 Veterinary Science 4  
 Vocational Rehabilitation Therapy 98  
 Vocational Technical School Credit 25  
 Wildlife Management 4  
 Withdrawal From Enrollment 28  
 Women's Studies 171  
 Work Study Program 18

