# The Bulletin, Undergraduate Catalog 1983-85, Volume 83, Number 5, October (1983) 

Moorhead State University

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# THE BULLETIN 

 Moorhead State University Undergraduate Catalog 1983-85

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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, extra curricular 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.

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## 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.

## National Association of Schools of Music

Moorhead State University's music department is accredited by the National Association of Schools of Music.
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, National League for Nursing.

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


The University. Moorhead State University, with an enroliment of some 7500 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.
History. Established in 1885 as a Normal SThool, 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 for the university in 1921, when it became Moorhead State Teachers College, authorized to offer the four year degrees of Bachelor of Science in Education; in 1946, when the Bachelor of Arts was added; in 1953, when a graduate program was authorized for the Master of Science in Education; 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 28 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 ScienceIndustrial 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 most recent construction is an addition to the Center for the Arts, completed in 1978.
The Faculty. There are more than 300 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 19 students to one faculty member.

## Student Enrollment and

 Retention. Fall quarter enrollment reached 7259 taking courses on the campus in 1982 (latest available data). This number includes about 2270 full-time students living in campus residence halls, 3519 fulltime commuters and 1270 part-time and evening class students.Each fall for the past five years, approximately 1200 new freshmen and 500 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 600
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 Series for the Performing Arts, monthly art exhibits and a number of dramatic and musical programs.
The character of this metropolitan community of nearly 120,000 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 nonteaching major programs include:
Accounting
American Studies
Anthropology
Art
Ceramics
Graphic \& Applied Design
History
Painting
Photography \& Film
Printmaking
Sculpture
Biology
Business Administration
Chemistry

## Computer Science <br> Criminal Justice

Economics
English
English-Mass Communications
Finance
French
German
Health
History
Hotel-Motel-Restaurant
Management
Individualized Major
Industrial Chemistry
Industrial Studies
Industrial Illustration
Industrial Technology
International Business
Languages
Legal Assistant
Management
Marketing
Mass Communications
Mathematics
Medical Technology
Music
Keyboard
String Instruments
Theory
Vocal
Wind Instruments
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 Arts
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. Secondary Education majors will choose one of the following specific academic areas:
Art Education
Business Education
Earth Science
Elementary Education
English
English-Speech
Communication/Theatre Arts
French
German
Health Education
Industrial Education
Life Science
Mathematics
Music
Broad
String Instruments
Vocal
Wind Instruments
Physical Education
Physical Science
Social Studies

## Spanish

Special Education
Speech-Pathology \& Audiology
Speech Communication/Theatre

## Arts

Vocational-Technical Education
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 transfering 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
Geography

- Geology

Government Service
*Home Economics

## Law

Medicine
Meteorology
Mortuary Science
Nursing
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 transfering 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 TriCollege University Student exchange program instead of waiting until the third or fourth year.

## Two-Year Associate Degree.

 Moorhead State University offers several terminal 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 maycontinue 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

Accounting
Business Administration
Career Education
(see Multidisciplinary Studies)
Early Childhood Education
Marketing
Medical Records Technology Secretarial Services
Graduate Studies. Graduate students at Moorhead State University may earn the Master of Business Administration, the Master of Liberal Arts, or the Master of Science degree. The latter degree may be earned with majors in Art, Business, Chemistry, Music and in Educational Theatre. Majors also are available in Elementary Education, Special Education. Remedial Reading, School Psychology, Counseling and ' Guidance, Computer Science and in Speech-Language Pathology and Audiology.

Complete information on graduate programs is provided in a separate Graduate Bulletin available from the MSU office of Graduate Studies. which will also answer any questions related to their programs.
Fifth Year Program. This program in teacher education provides the opportunity for individualized studies beyond the baccalaureate degree without meeting all the requirements for a master's degree candidacy.
The program attempts to serve a number of purposes: strengthening the teachers preparation in a major field or area of concentration: broadening the teacher's liberal arts background: providing an opportunity for new or additional specialization: and enabling partial pursuit of studies at the graduate level.
Admission to the Fifth Year Program requires a bachelors degree in education from an accredited institution and a teacher's certificate valid in the state where the applicant teaches. Policies and requirements are given in the Graduate Bulletin, but candidates should also confer with the Director of Fifth Year Studies.

## 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 specified 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:
Early Child Special Education
Elementary Remedial Reading
Kindergarten
Nursery School - Day Care (Pre-
Kindergarten)
Athletic Coach
Reading Consultant
School Psychologist I
School Psychologist 11
School Social Worker I
Secondary Remedial Reading
Secondary Developmental Reading
Special Learning Disabled (ED/LD)
Driver Education
Emotionally Disturbed
Educable Mentally Handicapped
Speech Correction
Trainable Mentally Handicapped Recreation Personnel
Because of variations in specific requirement for each license, candidates should first contact the Education Department for information and continue to work closely with an advisor.

## 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 below.
The student shall first secure a Common Market passport from the Office of Admissions and Records, list preferred courses with the signed approval of the faculty advisor, and return 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 there are no such restrictions; students can take as many courses each term as they wish.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 TriCollege University (see Graduate Bulletin).
Reserve Officers Training Corps
Program. Army and Air Force
ROTC at Moorhead State is voluntary and is open to both male and female students. Activities are

conducted under separate departments of military science and aerospace studies through a crosstown agreement whereby MSU students attend ROTC classes at NDSU.

The first two years of the regular four-year course of ROTC at NDSU are designated as the Basic Course for Army ROTC and the General Military Course for Air Force ROTC. The last two years of Army ROTC are designated the

Professional Officer Course (POC). Qualified students may apply for and be accepted in either of these courses with commission as Second Lieutenant in the United States Army or Air Force as the objective. Commissions are awarded at graduation to qualified students.
Students selected for admission to the Advanced or Professional Officer Course are required to sign a written agreement to fulfill certain conditions required by law and service regulations. Students so enrolled are required to attend a four- or a six-week summer training period. These students earn monthly pay plus travel expenses while attending summer training.
For a description of Army and Air Force ROTC courses, see the North Dakota State University catalog available in the Registrar's Office.
Other Programs: National Guard, Air National Guard, and Reserve organizations are located in Fargo and Moorhead. Qualified students may enter the Marine Corps Platoon Leaders' Class and gain a commission after college graduation.

## 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. 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 in Humanities is given under Individualized Majors in the
Department and Curricula section. Students who are interested in individualized majors are advised to wait until their sophomore year before submitting their plans.

## The Center for Multidisciplinary

## Studies. The Center for

Multidisciplinary Studies is open to selected freshmen and sophomores. It offers liberal arts courses, courses in career planning and exploration, and in mathematics, English and reading to fill gaps in a student's preparation.
Admission to the 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. Moorhead State University has an alternative route in its bachelor's degree program designed for people in the community or region whose commitments preclude full-time oncampus attendance. This program, offered through External Studies, joins the university to the community by making educational opportunities available through individualized instruction, independent study, packaged courses, television and tele-lecture courses as well as on-and offcampus courses. And it joins the community to the university by bringing into academic studies people who can share new perspectives gained through career or community service experience.
The university will grant credit for validated competencies developed through work experience or community service and will assist those who enroll to structure a program of study that can lead to a degree in an area of interest. The major may be a traditional one or individualized to meet personal needs and goals.
Details are listed in the Departments and Curricula Section. For further information contact the Director of External Studies.

## National Student Exchange.

Moorhead State University holds membership in the National Student Exchange, a cooperative relationship among some 50 schools from Maine to Hawaii, Minnesota to Florida. Through the NSE students 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.

## FOREIGN STUDY OPPORTUNITIES

## Student Teaching Abroad

Program. Each year the Student Teaching Abroad program makes it possible for 70 students to spend a 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 Australia are participating in the program.

## Oxford Program, Eurospring.

Moorhead State sponsors study abroad in interdisciplinary work in the humanities at the Center for Medieval and Renaissance Studies, Oxford, England. Students may participate for a full academic year or half-year, earning credits applicable to selected majors and liberal arts requirements. The program is coordinated on campus through the Humanities Department.
International Study Programs. Many other colleges offer foreign study programs into which Moorhead State students may be admitted. See the International Studies Coordinator for further information.

## FACILITIES AND SERVICES



Campus Visits. Prospective students or any other interested persons are invited to visit the Moorhead State University campus at any time. Campus tours may be scheduled with the Office of Admissions, which is open Monday through Friday. During the winter and spring, tours are also available on Saturday mornings. For more information call (218) 236-2161.
Residence Halls. With nine residence halls offering a variety of living arrangements, there is a capacity for 2200 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) 319
Snarr Hall (1963-67) 489
Grantham Hall (1965) 204
Nelson Hall (1966) 398
Holmquist Hall (1969) 200
Neumaier Hall (1971) 351
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 is generated through service areas within the Union. Those services that are funded and administered by the Union are: the Recreational Center, Outing Center, Student Design Center, Wooden Nickel Coffeehouse, The Exchange information/job service, University Scheduling Services and the Main Office Area Services.

Additional Union services include the Union Station/Deli, a music listening lounge, meeting rooms, lounges, 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, Student Union Program Board, New Student Orientation, Associate Dean of Students, Student Organization Development Center and Student Organization office area.

## Livingston Lord Library.

Livingston Lord Library now shelves approximately 300,000 volumes., Seating for about 700 students is available in several reading rooms and areas which provide a variety of study conditions. The building includes a lecture hall equipped with an automated student response system seating 64 for experimental education, public lectures and films. Other facilities include microform collections and reading equipment, the Northwest Minnesota Historical Archives Collection, government document collection, copying equipment, listening and viewing equipment with collections of audio-visual materials. A recently installed "on-line catalog" makes the collection more accessible. Interlibrary cooperation (the TriCollege University and MINITEX are the major examples) makes the collections of other libraries readily available to 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.
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, record listening room, 32 individual music practice rooms, scene shop, drama rehearsal room, dressing rooms, costume shop, classrooms, offices, and studios for painting, drawing, design, ceramics, sculpture, graphics, crafts and heat processing. The Center is the scene of year-round cultural activity, including the Series for the Performing Arts, 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 Health Educator and Coordinator of Alcohol/Drug Awareness Programs. 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.
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 Center staff assists students with their personal development in such areas as vocational and educational planning, personal and social adjustment and study skills improvement. Center services include individual counseling, life skill classes, career and personality testing, free peer tutoring, handicapped student services, study skills programs, minority student services, special programs for returning adult students, and a comprehensive career library containing current career and educational materials.

Services for the Handicapped. In compliance with recent legislation, all programs and services at Moorhead State University are accessible to handicapped 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 Director of Services for Handicapped Students in the Counseling Center, Flora Frick Hall, 236-2227, or the Handicapped Services 504 Coordinator, 2nd Floor, Owens Hall, 236-2131.

## 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: Director, Speech Language Pathology and Audiology, Moorhead State University.
## Veterans Office. The Veterans

 office provides counseling, GI Bill certifications and tutorial assistance and is concerned with recruiting veterans and veteran's dependents.
## Achievement Center and Reading

 Clinic. Moorhead State University maintains this achievement center as a community service. Elementary and secondary students and adults can receive individual help in reading on a year round basis. During the summer, remediation in all skill subjects is offered.Diagnostic and learning disabilities testing is available.

## Career Planning and Placement

Office. Although leaving college and finding a career may seem far away, the Career Planning and Placement Office wishes to serve students as soon as they arrive. They help plan careers, not merely seek jobs for one. 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.


The office continues to provide placement services for graduates and alumni of MSU. These placement services consist of oncampus 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.
All seniors are encouraged to register with the Placement Office 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 Placement Office 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, Inc. 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 secured through the following gift levels:Centennial Medallion (A gift of $\$ 10,000$ or annual pledge of $\$ 2,000$ for five years); Emissary Award (\$5000 or annual pledge of $\$ 1000$ ) ; Presidents Club (\$2500 or annual pledge of $\$ 500$ ); Cum Laude Club ( $\$ 1250$ or annual pledge of \$250); Phoenix Society ( $\$ 500$ or annual pledge of $\$ 100$ ); Honors Club (\$250 or annual pledge of \$50); Dragon Century Club (\$100 annually).

Alumni Association. The purpose of the Alumni Association is to promote and provide services to the university, its students and alumni. All graduate or former students who have attended Moorhead State University for at least one year may be members of the Association. The association is governed by an elected 24 member board of directors.
Activities of the association include: providing scholarships and grants to students, faculty and organizations: sponsoring special projects, such as homecoming and awards; publishing Alumnews and serving as a liaison between the community and the university.


Freshman Applicants: Procedures and Guidelines Application. 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 $\$ 10$ application fee to your high school counselor, who will complete the application and submit it to the university. 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 Center for Multidisciplinary Studies. The procedure for admission to the Center is similar to the Freshman procedure.

## Following acceptance to

Moorhead State, health, history, financial aid and housing application forms will be mailed. They should be completed and returned to MSU as soon as possible.
Transfer Applicants: Procedures and Guidelines 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 15 .
Secure an application for admission with advanced standing from the Office of Admissions and submit the completed form along with a $\$ 10$ application fee to this office.
Request each previous educational institution to forward an official transcript of credits directly to the Office of Admissions.


If fewer than 32 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 health history, financial aid and housing application forms, which should be completed and returned as soon as possible.
Foreign Students. All foreign student applicants must have earned a score of at least 500 on the TOEFL examination. The TOEFL will be offered to applicants on the MSU campus this year. 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 for admission to MSU.
There will be a fee of $\$ 15$ assessed to each student who takes the exam.
For more information about the TOEFL examination, call 1-218-236-2171 or write to the Foreign Student Advisor, Owens Hall, Moorhead State University, Moorhead, Minnesota 56560.

## Foreign Students

Freshman Procedures and Guidelines. When applying from a nation where English is not the native language, you will be required to produce evidence of English proficiency through the Test of English as a Foreign Language
(TOEFL) exam. Foreign credentials will be thoroughly evaluated to determine academic eligibility for Moorhead State University enrollment.
Please address inquiries to the Foreign 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 by submitting a Waiver of Transcript form, available from the Office of Admissions.
Should you later decide to enter a baccalaureate program at Moorhead State, you may do so by completing any remaining admissions requirements.

## Special Advanced Standing for High School Students

If you have not finished high school but show substantial academic ability, you may enroll in courses at MSU by submitting a completed Minnesota College Admission form, a $\$ 10$ application fee, and enclosing a statement from your high school principal 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.

## Special Circumstances

Any adult who has not finished high school must first successfully complete the Tests 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, need not submit another application when returning to school. However, if off-campus study began in 1965 or later, you must pay the $\$ 10$ application fee if you have not already done so. If you decide to return to the university, please notify the Office of the Registrar of your intent to enroll. An application for readmission and transcripts of previous study must be submitted before the readmission process is complete.

## STUDENT INFORMATION



## Student Services

The Office of Student Services coordinates the following programs: admissions, housing, counseling, financial aids, health services, placement, student union, orientation, student activities, student organization and student government.

## 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.

## Student Activities and <br> Organizations

In addition to numerous activities related to academic studies, various campus agencies provide opportunity for extracurricular participation by students at Moorhead State University. For a list of recognized Student Organizations on campus, contact the Student Organization Development Center, CMU 225, 236-2174.

Men's Intercollegiate Athletics
Basketball
Cross Country
Football
Golf
Tennis
Track
Wrestling
Women's Intercollegiate Athletics provide competition with other area colleges in the following sports:
Basketball
Cross Country
Field Hockey
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, coffeehouse, table tennis, video tape, and special events.
Center for the Arts is the site of photographic and art exhibits, music recitals and programs and the annual Series for the Performing Arts 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)
Cheerleaders
Journal of Social and Behavioral
Sciences
KMSC-(radio)
Student Senate
Student Union Program Board Visiting Scholar Lecture Series

## Student Organzations

Residence Hall Councils
Inter-Residence Hall Council
(IRHC)
Ballard Hall
Dahl Hall
Snarr Hall
Nelson-Grantham
Social Fraternities
Inter-Fraternity Council
Old Order of Owls
Phi Sigma Epsilon
Sigma Tau Gamma
Tau Kappa Epsilon
Social Sororities
Panhellenic Council
Alpha Delta Pi
Alpha Phi
Delta Zeta
Gamma Phi Beta
Department \& Service Clubs
Accounting Club
Ad 11 Club
Administrative Management Society
Advocate (student newspaper)
American Marketing Association
Association for Computing
Machinery
Biology Club
Blackfriars (Dramatics)
Chemistry Club
Criminal Justice Association
Circle K (Kiwanis)
Delta Pi Delta/SOTA
Construction Management Society
Distributive Education Club of America

Fourth Estate Club
French Club
Geography Club
German Club
Industrial Technology Club
Japanese Club
Mathematics Club
Medical Technology Club
New Center Student Activities
Norwegian Club
Office Education Association
Photography Club
Political Science Club
Public Relations Student Society of America
Pre-Professional Club
Psychology Club
Spanish Club
SPURS (Service)
Student Council for Exceptional Children
Student Hospitality Society
Student Social Work Association
Students Interested in the Visual
Arts
Student Minnesota Education
Association
Honorary Societies
Alpha Lambda Delta
MSU Honors Society
Kappa Delta Pi (Education) Honor Society

## Professional Fraternities

Honors Society
Iota Alpha (Industrial Arts)
Phi Mu Alpha Sinfonia (Music)
Pi Kappa Delta (Forensic-Debate)
Pi Omega Pi (Business Association)
Pi Sigma Epsilon (Business-
Marketing Co-Ed)
Sigma Alpha Eta (Speech and Hearing)
Sigma Alpha Iota (Music-Women)
Delta Pi Delta (Continuing

## Education)

Sigma Delta SOTA Chi/Fourth
Estate Club (Journalism)
Religious Organizations
Baha'i Club
Campus Crusade for Christ
Fellowship of Christian Athletes
Inter-Varsity Christian Fellowship
Lutheran Students Movement
Newman Center (Roman Catholic)
Truth Seekers
United Campus Ministry
Westgate Campus Ministry
Special Interest Organizations
KMSC Radio
Alpha TV
War Gamers Club
Bowling Club
Bread for the World
Feminist Collective
Gay Students United
General Union of Palestinian
Students
Goju Ryu Karate
Performing Dancers
Student Union Program Board

Unicorn (Handicapped)
International Club
Tae Kwon Do (Karate)
Soccer Club
Young Democratic-Farmer-Labor Concerned Black Students
Latino
Veterans Club
Students Encouraging Drug and Alcohol Awareness
Yoga
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 Dahl Hall, is an excellent outpatient clinic staffed with local doctors, nurses and other professional staff members. They offer medical treatment, referrals, health education, and counseling.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 to the university's Business Office. It is urged that all students have some form of insurance protection against the cost of accident and illness.
All students are required to pay the health service fee (included in the comprehensive fee) and to fill out a medical history form.

## FINANCIAL INFORMATION



University Expenses. Since Minnesota tax payers 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 total annual expenses at , MSU to range from $\$ 3800$ to $\$ 4150$.
The following is a table of estimated costs for the 1981-82 academic year, based on a normal undergraduate load of 16 credits per quarter.
Tuition (including mandatory comprehensive fee):

Resident $\$ 1272.00$
Non-Resident $\$ 2241.60$
Housing and Meals:
Resident $\$ 1491.00$
Non-Resident \$1491.00
Total:
Resident $\$ 2763.00$
Non-Resident $\$ 3732.60$

Incidental and personal expenses-books and supplies, clothing, laundry, recreation, transportation, etc. - may range from $\$ 1000$ to $\$ 1400$ 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 | $\$ 23.35$ |
| Graduate | 29.90 |
|  | Non-Resident |
|  | Status |
| Undergraduate | $\$ 46.70$ |
| Graduate | 59.80 |

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 not to exceed $\$ 46.75$ 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 credit, 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 two calendar years of applying for admission to MSU.
2. Graduation from a Minnesota high school followed by substantially continuous residence in this 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. Legal dependent or ward of any person stationed outside the continental United States as a federal employee or member of the U.S. Armed Forces.
6. Relocation of parental domicile into Minnesota if the student has lived at home for one of the two previous years (effective only after 12 consecutive months in Minnesota).
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. Full-time faculty members of accredited Minnesota colleges who reside in Minnesota.
10. 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.)

Temporary resident status will be granted to students' appointed to MSU graduate assistantships and to students taking only one course for less than six credits.
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 Admissions and 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, the Office of Student Services, or Student Financial Aid Office.
North and South Dakota and Wisconsin students will be charged resident tuition 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 the tuition and fee. 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 two calendar days of the fall, winter or spring quarter.

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 5 th class day $80 \%$ 6th through 10 th class day $60 \%$ 11th through 15th class day $40 \%$ 16th through 20th class day $20 \%$ After 20th class day None
During Summer Session:
On or before 5th class day $60 \%$ 6th through 10th class day $20 \%$ After 10th class day None

## Off-Campus Courses:

On or before 4th class session $50 \%$ After 4th class session None
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 your costs, room and board rates including local telephone service for each quarter of the year are:

| Room and 21 meals <br> per week | Single <br> Room Only | $\$ 574$ |
| :--- | :--- | :--- | | Double |
| :--- |
| $\$ 497$ |
| (Limited Number) <br> Summer Session |
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| Triple |

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 State Scholarship/Grant-in-Aid Programs and to the federal Pell Grant Program. Assistance is most often available through the MSU Financial Aid Office which maintains the responsibility for determining student qualifications for aid from the 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 does require evidence of the student's financial need. For qualified applicants, the Financial Aid Office will attempt to provide a "package" of combined
aids that will equal the difference between estimated costs and the amount the student and one's family can be expected to contribute.
Further information about financial aid is provided in a brochure 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 the MSU Application for Financial Aid form and return it to the Financial Aid Office. All applicants should submit a signed complete copy of their Federal Income Tax Return and, in addition, all students under 25 years of age must submit a signed copy, complete with all schedules, of their parents' Federal Income Tax Return as filed with the I.R.S. Additional documentation is required of students claiming to be self-supporting. No other application forms are necessary for National Direct Student Loan,

## Supplemental Education

 Opportunity Grant, or federal College Work-Study assistance.Aid applications should be completed and mailed as early as possible after January 1 to assure fullest consideration for the following year's aid funds. Applications will be processed and awards made to the extent that funds are available.
FFS forms are available from high school counselors, from the MSU Financial Aid Office, or by writing to the American College Testing Program, Iowa City, Iowa 52240.

## 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 in the distribution of 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 one's family has an extraordinary financial problem after applying for aid or receiving an award.

When receiving an award, the student will be notified of the times when loan, grant and scholarship funds will be made available.
Work-Study and other campus employment earnings are paid at regular two-week intervals.
Application for renewal of awards must be made each year for review by the Financial Aid Office. All such applications should be completed as early as possible after January 1 for the following year.
Please observe the different application schedules for state student aid programs, the federal Pell Grant program and nonuniversity aid sources.

## Types of Financial Aid

National Direct Student Loan (NDSL). An undergraduate may borrow up to $\$ 3000$ during the first two academic years, up to a total of $\$ 6,000$ 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. Minimum monthly NDSL payment is $\$ 30$. A portion of the principal and interest may be cancelled for certain kinds of public service and payment deferred for service in the Peace Corps, VISTA or the Armed Forces.

## Collegè Work-Study Program

 (CWSP). Full-time students have the opportunity to earn part of their educational expenses through parttime 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 eligible need for earnings.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.
Pell Grant. An undergraduate may have the opportunity to receive up to $\$ 1800$ 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 Pell Grant eligibility. When they are received, students should send their Pell Grant eligibility notification (SAR) forms to
the Aid Office for calculations of the award as specified in a payment schedule provided by the U.S. Office of Education. Receipt of a Pell Grant will not limit other chances for financial assistance as long as a student needs it. All undergraduates are encouraged to apply for Pell grants and are required to do so when applying for MSU financial aid.
Scholarships. Moorhead State awards scholarships up to $\$ 500$ to freshmen, community college, transfer students and upperclassmen with outstanding abilities, qualifications and promise (see separate section on scholarships).

## Guaranteed Student Loans.

Students may borrow up to $\$ 2500$ annually at low interest from private lending institutions with deferred interest paid in the student's behalf by the federal government when qualified under federal regulations. Contact your lender in your state or the MSU Aid Office for appropriate application forms. Repayment begins six months after leaving school with a minimum payment of $\$ 50$ per month. It is suggested that students apply both for the Pell Grant and to Moorhead State for aid (NDSL, SEOG, or Work-Study) prior to applying for a guaranteed loan.


Thus, indebtedness to MSU under NDSL and to a bank under a guaranteed loan requires two monthly payments. It is university practice to direct renewal applications for NDSL funds to non-university loan sources if a student debt history shows a combination of university and nonuniversity borrowing. If available NDSL funds are insufficient for the requirements of all eligible needy students; preference will be given to those students who manage their available resources and obligations so as to limit their indebtedness to a single creditor, Moorhead State.

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. The student-run Exchange maintains information about other forms of 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 NDSL, SEOG, and Work-Study.
Short-Term Loans. Short term loans for $\$ 25$ to $\$ 100$ are available to full-time students.
State Scholarships and Grants-inAid. Minnesota residents who plan to enroll at Moorhead State may qualify for aid under the Minnesota State Scholarship or Grant-in-Aid programs. Contact a high school or college counselor for application information, forms and schedules. If qualified, one could receive a substantial award per year for four years.
The Minnesota Higher Education Coordinating Board (MHECB) is responsible for administering these programs.

International Student Assistance. Non-U.S. residents planning to attend Moorhead State University, must plan to provide their own finances. Foreign students in the U.S. on student visas are not eligible for NDSL, SEOG, WorkStudy, Minnesota State Scholarships/Grants-in-Aid, Pell Grant, or the Guaranteed Student Loan Program. Immigrant visa status may qualify a student for these programs. Viet Nam refugee students are eligible for the various federal student aid programs.
Contact the Foriegn Student
Advisor for financial planning information.
Satisfactory Academic Progress. Upon acceptance of most federal and state student aid funds you must maintain satisfactory academic progress.
Students who receive financial aid based on full-time enrollment fulfill minimum "satisfactory progress" requirements by the completion of 12 undergraduate credits or 9 graduate credits per quarter in which aid is received. To fully utilize aid from these programs, students should complete an average of 16 credits per quarter.

Failure to complete required 12 undergraduate credits or 9 graduate credits in a probationary quarter will result in termination of financial aid in the following quarter. During termination, no financial aid will be disbursed (or Guaranteed Student Loan application approved) until the student has successfully completed at least one quarter as a full-time student without aid.
In other words, two successive aided quarters of completion of fewer than 12 undergraduate or 9 graduate credits means termination of financial aid the third quarter. Failed credits are not considered completed credits. Any incomplete ("I") credits or in-progress ("X") credits received which result in completion of fewer than 12 credits can be made up by midterm the following quarter. However the burden of proof is on the student. Probationary or termination status will not be removed until the student has provided verification of completed " I " or " X " credits from the Registrar's Office. Non-credit remedial courses and withdrawal from courses will not be counted toward completion of the minimum required credits.

The University assumes all students receiving financial aid are full-time students unless notified in advance by the student of intent to enroll on less than a full-time basis, and approval for aid for less than fulltime enrollment has been granted.
Credit requirements for students who receive financial assistance in programs which permit less than full-time enrollment are a minimum of nine credits for three-quarters time enrollment and minimum of six credits for half-time enrollment. Students who do not meet these part-time credit requirements are subject to the same condition and procedures as full-time students.
A student may appeal decisions made by the Financial Aid Office regarding satisfactory academic progress by completing the Appeal Form attached to his/her probation or termination letter. This appeal is evaluated by the Financial Aid Office Review Committee.
If the student is not satisfied with the decision of this committee, he/she can further appeal to the University Financial Aid Appeal Committee. Students are promptly notified of the results of their appeal(s).

Evaluation of academic standing and progress is done quarterly. Students receiving financial aid have 16 academic quarter ( $51 / 2$ years) to complete their undergraduate educational objectives, although eligibility for some financial aid programs will run out before the end of 16 quarters.

## 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 and admission test scores. Awards range up to $\$ 500$.
Presidential, which 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 $\$ 500$.
National Merit Finalist, provides $\$ 1000$ to entering freshmen who are National Merit Finalists.


## 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 February and March at the Financial Aid or Scholarship Offices.
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 Committee, Office of Public Affairs in care of Moorhead State.

## 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 one actively enrolls in the program.
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 12 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 12 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 the degree of Bachelor of Arts or Bachelor of Science.
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 (on campus courses) (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 junior college must complete at least 96 credits in addition to junior college study.
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 below.
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. In addition, a course with an interdivisional approach to a significant topic is required.
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, E, or X) 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, physics, and science.
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.
Division X: Interdivisional Courses-one course required for students admitted Fall 1981 or later and graduating Spring 1985 or later. Designated Liberal Arts (LART) courses as listed in the quarterly class schedule.
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 enrolled in the New Center.
In addition to the graduation requirement of a GPA of 2.00 in all MSU courses, a 2.00 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 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 another accredited institution may earn an additional degree from Moorhead State University 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.
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 catalogue and under the Teacher Education Requirements in the Department of Education.
Requirements for the majors in elementary education and special education are listed under the Department of Education.

## Associate Degrees

Moorhead State University offers two-year associate degrees as follows:
(A) Associate in Arts in Liberal Arts (B) Associate in Science in Business and Technology
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) At least 42 credits in Liberal Arts courses, including a year of Freshman English and at least 6 credits in Liberal Arts Divisions B, C, D, and E. (no Division X course is required)
(4) 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 an associate 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 for the bachelor's degree with a GPA of at least 2.0.

Remaining electives to fulfill the 96 -credit requirement are subject to the approval of the student's advisor.
A.S. in Business and Technology Specific requirements for the following associate curricula are listed under the respective departmental sections of this Bulletin (see index):
A.S. in Accounting
A.S. in Business Administration
A.S. in Career Education
A.S. in Early Childhood Education
A.S. in Marketing
A.S. in Medical Records

Technology
A.S. in Secretarial Science


## External Studies Degree Programs

A student may earn the Bachelor of Arts or Bachelor of Science degree from Moorhead State University by fulfilling all requirements specified under External Studies in the Departments and Curricula section. Further information is available from the MSU Office of External Studies.

## Resident Credits

Resident credits are those earned while attending courses offered on the Moorhead State University campus, in Tri-College or Minnesota State University Common Market courses, 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 by Common Market arrangements), 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 may be given for attending regular armed service schools. The student should discuss the possibility of such credit with the Registrar.

## Provisional Credits

Transfer students from colleges which are not fully accredited may receive provisional credit, subject to official acceptance following satisfactory study at Moorhead State University.
Students who have received provisional credits should wait at least two quarters after enrollment before requesting the Registrar to approve such credits.

## Transfer of Credits

Transfer students who have completed at least 32 credits of previous college study will receive worksheets indicating the extent and distribution of credits which are accepted by the University.
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.
Transfer students who have completed an Associate in Arts program in liberal arts at an accredited junior college will usually be deemed to have met the Liberal Arts requirement at Moorhead State. However, the program must include at least 60 credits in courses comparable to Liberal Arts at Moorhead State.
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 junior 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 pre-professional 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 and intermediate accounting, business law, shorthand, and typing (no credit for beginning typing); one course each in principles of management, marketing, corporate finance; and one course in introductory business (not applicable to MSU major requirements).
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 will be accepted in transfer.

## Vocational-Technical School Credit

A student who has successfully completed a program of at least nine months at a Minnesota Area Vocational-Technical Institute 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.
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 vocational-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 vocational-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.
For a student enrolled in an external study degree program, these guidelines will also be used for evaluating credit from military service schools, 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. Credit may not be granted by examination if the student has previously or currently registered for any 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 $\$ 22$.
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 11 (4 each)
American Literature
Analysis and Interpretation of
Literature
Biology
Business Law
Business Management
Calculus
Chemistry
College Algebra
College Algebra-Trigonometry
Computers and Data Processing
Educational Psychology
English Composition
English Literature
Fortran Programming
Freshman English
General Psychology
Geology
Human Growth and Development
Macroeconomics
Microeconomics
Introductory Sociology
Money and Banking
Psychology
Trigonometry
Western Civilization I and II (4 each)

Credit earned by 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 Office of Admissions and Records, must be signed by the student and the advisor and returned to the Office of Admissions and Records on or before the tenth class day of the quarter (fifth 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 passfail 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 reenrollment 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 O Grade points per credit
"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 ", " X ", " V ", or " W " are not included in computing the grade point average.
Credits with grades of "F" or "I" 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 control and when arrangements have been made with the instructor before the end of the quarter.
In computing GPA, an Incomplete is considered an " $F$ " until it is changed by the instructor.
It is the responsibility of the student to ascertain 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.
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 Office of Admissions and Records. 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.

## 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 imply imminent suspension.
2. A student who has enrolled for 24 or more graded credits. including transfer credits, and whose MSU cumulative GPA is less than 1.60 is subject to
suspension at the end of the current quarter. (Note that only MSU grades are included in the GPA)
3. A student whose MSU
cumulative GPA is less than 1.90 after attempting 60 or more graded credits, including transfer 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 1.90 GPA ( 1.60 for those with fewer than 60 credits) is reached.
5. Students who are subject to suspension may not pre-register 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 10 th 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 at least two full-time quarters at MSU including full-time enrollment during the fall or winter quarter of the 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 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 3.25 or better; (B) Magna Cum Laude, 3.5 or better, and (C) Summa Cum Laude, 3.75 or better. Such honors
are computed only from the cumulative GPA at Moorhead State University.
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 Assignments 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 Office of Admissions and Records.
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 trial registration form when required.
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 Office of Admissions and Records within a few weeks before the quarter begins.
Opportunities for advance registration for returning students, transfer students, or beginning freshman 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 fulltime 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 nonresident credits.
Inquiries about off-campus courses should be directed to the Director of Continuing Education.

## Late Registration

Late registration fees of $\$ 5$ for the first day and $\$ 2$ for each additional day are charged for those who register for on-campus daytime courses on or after the first class day. Registration is closed after the tenth day.
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 a grade point average of 3.0 or better and file a petition for excess load.
A petition for excess load 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.
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.
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 Admissions and 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 Admissions and Records Office.
(E) Submit the form to the Business

Office for payment of a $\$ 2.00$
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 two days of the fall, winter, or spring quarter 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.

Any refund of tuition or fees will be according to the schedule given under "Refund of Payments."
If a student withdraws from an offcampus course not later than the fourth class session, one-half of the tuition for the course will be refunded. No refund is made after the fourth class session.

## 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 Office of Admissions and Records 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
Foreign Students - Foreign
Student Advisor
Graduate Studies - Coordinator of Graduate Studies
Health Services - Supervisor of Health Services
Housing - Director of Housing
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, $\$ .75$ thereafter; inactive file- $\$ .75$ 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, 1983, 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 either activity courses or a few specified remedial or technical courses which are not applicable to college degree requirements.
Certain numbers are available in most subjects for specialized use as follows: 469-Student Internship; 199-299-399-499g-Special Topical Workshop; 489 g -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.

## ACCOUNTING DEPARTMENT

Eddy Birrer, Chair; Wagdy Abdallah, Lee Dexter, Carol Dobitz, Wilbert Fischer, Judy McLean, Wesley Monson, Joan Pasch, Cynthia Phillips, Donald Samelson, George Sanderson, Marlane Sanderson, Leonard Sliwoski, William Violet, Donald Wirries

## AREAS OF STUDY: Accounting, Business Law

The Accounting Department offers programs of study designed to prepare its graduates for a variety of accounting career options. Emphasis is placed on
development of communication skills and technical competence in accounting. Students planning to specialize in a particular areas of accounting may choose courses from a wide range of electives, including courses with computer applications. The Department's graduates are well prepared for the Certified Public Accountant (CPA) examination and other professional certification examinations.

## ACCOUNTING CURRICULA

Major in Accounting B.S. Degree
Core Requirements in Business ( 36 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)
Acct 301-302-303 Business Law I-II-III (12)
Finance 340 Corporate Finance I (4)
Mgmt 360 Principles of Management (4)
Mktg 310 Principles of Marketing (4)
Required Upper-level Accounting Courses ( 28 credits)
Acct 330-331-332 Intermediate Accounting I-II-III (12)
Acct 340 Introduction to Federal Taxation (4)
Acct 350-351 Cost Accounting I-II (8)
Acct 460(g) Auditing I (4)
Elective Accounting Courses (12 credits)
Acct 242-243-244 Work Experience I-II-III (3)
Acct 355 Governmental Accounting (4)
Acct $420(\mathrm{~g})$ International (4)
Acct 430(g) Consolidations (4)
Acct 431(g) Advanced Topics (4)
Acct 456(g) Controllership (4)
Acct $441(\mathrm{~g})$ Individual Tax (4)
Acct $443(\mathrm{~g})$ Taxation of Corporations \& Partnerships (4)

Acct 454(g) Advanced Managerial Accounting (4)
Acct $461(\mathrm{~g})$ Auditing II (4)
Acct $465(\mathrm{~g})$ Internal Auditing (4)
Acct 469 Student Internship (4-16)
Acct 470(g) Accounting Systems (4)
Acct 480 (g) Accounting Theory (4)
Acct 498(g) Problems in Accounting (1-4)

Requirements in Related Fields (28 credits)
Econ 202-204-206 Principles of Economics I-II-III (12)
Math 273 Math for Business and Social Science (4)
Math 274-275 Introduction to Statistics I-II (8)
ComS 145 Data Processing (4)

## Minor in Accounting

The following minor is open to business majors only. Core Requirements in Business ( 36 credits - see above) Acct 330-331-332 Intermediate Accounting I-II-III (12) Approved electives in Accounting beyond Intermediate III (12)

## Minor in Business Accounting

The following may not be selected by a business major and is designed to supplement the program of any student majoring in another area.
Acct 229-230-231 Principles of Accounting I-II-III (12) Acct 301 Business Law I (4)
Acct 330-331-332 Intermediate Accounting I-II-III (12) Approved elective in Accounting (4)
For the B.S. teaching degree, BEd 440 Methods of Teaching Bookkeeping and Typing (2) is required in addition to the above.
Associate in Science in Accounting (Two-Year Program - 96 credits)
Liberal Arts (42 credits)
Engl 101-102-103 Freshman Composition and Literature I-II-III (12)
Additional Liberal Arts courses, including at least 6 credits in each distributional area-B, C, D, E.
Core Requirements in Accounting (16 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)
Acct 301 Business Law I (4)
Required Upper-level Accounting Courses ( 8 credits) Acct 330-331 Intermediate Accounting I-II (8)
Elective Upper-level Accounting Courses ( 8 credits) Two additional courses must be selected from the following:

Acct 332 Intermediate III (4)
Acct 340 Introduction to Federal Taxation (4)
Acct 350-351 Cost Accounting I-II (8)
Acct 355 Governmental Accounting (4)
Acct 431 (g) Advanced Topics (4)
Acct 470 (g) Accounting Systems (4)
Related Requirements in Other Fields (16 credits)
Econ 202 Principles of Economics 1: Micro (4)
Math 131 College Algebra (4) or Math 273-Math for Business and Social Science (4)
ComS 145 Data Processing (4)
BEd 207 Business Communications and Report Writing (4)

## ACCOUNTING COURSES

Acct 229-230 Principles of Accounting I-II: Financial (4-4)
Accounting fundamentals, the recording process, preparation of financial statements.

## Acct 231 Principles of Accounting III: <br> Managerial (4)

Fundamentals of managerial accounting and decision making.
Acct 242-243-244 Work Experience in Accounting I-II-III (1 credit each) (Maximum 3)
Supervised on-the-job experience in accounting. A student obtains employment with a cooperating firm. Thirty hours of satisfactory work required for each course. For majors only.

## Acct 301-302-303 Business Law I-II-III (4-4-4)

301: Introductory course in the sequence on the legal problems of business. Topics include overview of the legal system, contracts, personal property and bailments. Prerequisite: Econ 202 and junior standing or consent of instructor. 302: Continuation of sequence. Topics include sales, commercial paper, secured transactions and agency. Prerequisite: Acct 301. 303: Continuation of sequence. Topics include
partnership, corporations, government regulation of business, real property, insurance, wills, trusts and estates. Prerequisite: Acct 302 or the consent of the instructor.

## Acct 330-331-332 Intermediate Accounting I-II-III (4-4-4)

330: Review of the accounting process. Analysis, valuation, and financial statement presentation of the working capital accounts. 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, corrections of errors, statement analysis, statements of changes in financial position. Prerequisite: Acct 231.
Must be taken in sequence.

## Acct 340 Introduction to Federal Taxation (4)

Outline of federal tax system; tax elements of business planning, including capital investment, financing and employment decisions. Prerequisite: Acct 231.

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

350: Introduction to cost accounting: job order costing, cost-volume-profit analysis, budgeting, standard costs, variance analysis, special decisions, capital budgeting. 351: Cost concepts and techniques for inventory management, process costing control of decentralized operations and cost allocations, including quantitative methods. Prerequisites: 231. Must be taken in sequence.

## Acct 355(g) Fund Accounting (4)

Principles of governmental and institutional accounting. Prerequisite: Acct 231.

## Acct 420 Introduction to International Accounting (4)

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 231
Acct 430(g) Consolidations (4)
Accounting for mergers, consolidations, and intercorporate investments. Emphasis on consolidated financial statements. Prerequisite: Acct 332 or consent of instructor.

## Acct 431(g) Advanced Topics (4)

Partnerships, special sales arrangements, branches, foreign operations, fiduciary accounting, fund accounting. Prerequisite: Acct 332 or consent of instructor.
Acct 441(g) Individual Income Taxes (4)
Individual income tax planning; fundamentals of federal and state tax return preparation. Prerequisite: Acct 340.

## Acct 443 Taxation of Corporations and

 Partnerships (4)Tax planning and return preparation for corporations and partnerships; tax research method. Prerequisite: Acct 340.
Acct 454(g) Advanced Managerial Accounting (4)
The use of analytic methods and formal models in analyzing managerial accounting problems. Computer applications in decision making. Prerequistes: Acct 351, Math 275.

## Acct 456(g) Controllership (4)

A study of managerial accounting, reporting, and decision-making with an emphasis on the controller's role in the process of organization planning and control. Prerequisites: Acct 351, Acct 530 or consent of the instructor.
Acct $\mathbf{4 6 0 ( g )}$ - $\mathbf{4 6 1}$ (g) Auditing I-II (4-4)
460: Orientation to auditing. Purpose, ethics, legal liability, internal control, EDP, evidence and planning.
461: Statistical sampling, audit objectives and
procedures and report writing. Prerequisite: Acct 332 must be taken in sequence.

## Acct 465(g) Internal Auditing (4)

The role of the internal auditor; auditing procedures and practices; operational audits; effective reporting. Prerequisite: Acct 460 and Mgmt 360.
Acct 469 Student Internship (4-16)
Acct 470(g) Accounting Systems (4)
Developing, organizing, and using accounting data; analyzing and improving accounting systems; emphasis on controls in EDP systems. Prerequisites: Acct 332 and 351.

## Acct 480(g) Accounting Theory (4)

Intensive study of current authoritative pronouncements with emphasis on prescribed procedures and suggested alternatives. Prerequisites: Acct 332 and 351 or consent of the instructor.

## Acct 498(g) Problems in Accounting (1-4)

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

## Acct 529 Corporate Financial Reporting (4)

See MBA 529
Acct 530 Managerial Accounting (4)
See MBA 530

## Acct 598 Research in Accounting (3)

Research of a specific problem designed to develop research techniques and organization. Topics selected in consultation with faculty advisor.

## 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 3 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

## Joyce Flint, 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 requirement 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)
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)

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 Twentieth Century

I-II-III (4-4-4)
221: A study of representative works of literature, art, architecture, and music as they reflect central themes of the twentieth century through World War I. 222: From 1920 through World War II. 223: From 1945 to the present.

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

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 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 COURSES

See Sociology for Curricula
Anth 110 Introduction to Cultural Anthropology and Linguistics (4)
Studies of culture and society emphasizing the integrative nature of culture; the role of language in development and transmission of culture.

## Anth 111 Introduction to Physical Anthropology

 and Archaeology (4)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 affect physiological changes with age; life-style and aging processes. See Health 202.
Anth 210 Minnesota Prehistoric People (4)
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 prehispanic native South American cultures. Prerequisite: Anth 110 or consent of instructor.

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)

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)
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 and Evolution (4) 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 lliness and Care (4)

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)
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 316 Latin American Archaeology (4)
Prehistory of Latin America to the Spanish conquest. Prerequisite: Anth 110, 111 or consent of instructor.

## Anth 320 Old World Archaeology (4)

Prehistoric archaeology of the Old World to the development of urban, literate civilizations.
Prerequisite: Anth 111 or consent of instructor.

## Anth 321 Paleopathology (4)

Disease, illness, and treatment in past cultures. Prerequisite: Anth 111 and Chem 106-107 or its equivalent 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 324 Nutritional Anthropology (4)
Cross-cultural food patterns and disease incidence related to diet. Evaluation of dietary patterns and fads in the United States. Prerequisite: Chem 103, recommend Soc/Anth 200, Anth 110 or consent of instructor.
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 326 Epidemiology (4)
A study of the distribution of disease with an emphasis upon interrelationships among culture, social organizations, environment, and population changes. See Hlth 326.

Anth 330 Social and Cultural Anthropology (4)
Comparative study of culture and social institutions.
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 Cross-Cultural Mental Health (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)
The relationship of economic organization and technology of social organization and culture.
Prerequisite: Anth 110 and Econ 100 or 110.
Anth 370 Anthropological Linguistics (4)
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)
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)Major theoretical trends in the study of human culture; the origin, development, and transformation of anthropological ideas. Prerequisite: Upper division status and consent of instructor.

## Anth 402 Seminar in Death and Dying (4)

Past and present attitudes toward death and practices
of dealing with death in western and non-western cultures. Prerequisite: Anth 202, either Anth 302 or Soc 302 or consent of instructor. See Soc 402.
Anth 421-422-423 Senior Project in Anthropology I-II-III (3 each)
Student-initiated research project under the close supervision of the members of the faculty. Prerequisite: Senior status with an Anthropology major.
Anth 440 Applied Anthropology (4)
Current issues and problems in developing cultures. Prerequisite: Anth 110, 111 or consent of instructor.
Anth 445(g) Seminar in Anthropology (4)
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)
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) Junior or senior standing with major in Anthropology.

## 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, Deborah Broad, John Holland, Lyle Laske, Donald McRaven, Philip Mousseau, Timothy Ray, Marcel Stratton.

## 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, 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. In-depth studio investigations into the various formal, conceptual, and technical applications toward effective graphic communications. Illustration, package design, symbol, typographic and diagramatic 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. Internship available.

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, gouauche, 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.
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.
*Elementary or Secondary in the B.S., K-12 in the BFA program.

## 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.

## Retention of Student Art

The Art Department reserves the right to select and retain student works produced in conventional and contract art classes under faculty direction and consultation. The samples selected are used in art instruction and displays demonstrating the levels of competency achieved in studio art course work.
Applications for reimbursement for the costs of the materials used in the works retained are considered on individual basis.

## 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, 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, 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: 3.0 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.
Of the 234 total B.F.A. degree credits, 152 art credits are required for fine art, design and crafts; and 129 art credits for the B.F.A. in Art Education.

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## Seminars in Art (6)

Art Concentration (9)
Art Electives or Internship (11-14)

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

Areas of Study
Foundation Studies in Art (15)
Introductory Studio Courses (6-8)
Art Survey and History (20)
Seminars in Art (6)
Art Concentration (18)
Art Electives or Internships (13-15)

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

Foundations in Art (15)
Introductory Courses (6-8)
Studio Concentration (87)
Seminars in Art (6)
Art Electives (12-14)
Total Credits - Studio/Theory (128)
Art History (24)
Total Art Credits (152)
Liberal Arts (64)
General Electives (18)
Total B.F.A. Credit Requirements (234)
B.F.A. Degree in Art Education, K-12
(Five Year-234 Credits)
Foundations in Art (15)
Introductory Courses (18-24)
Studio Concentration (53-59)
Methods, Art Education (7)
Seminars in Art (6)
Total Credits . Studio/Theory (105)
Art History (24)
Total Art Credits (129)
Student Teaching, K-12 \& Alternative Ed. (20)
Professional Education (15)

General Electives (6)
Liberal Arts (64)
Total B.F.A. Credit Requirements (234)
Minor in Art B.A. Degree ( 40 credits)
Art 100 Art Elements (3)
Art 101 Basic Drawing I (4)
Introductory Studio Courses (12)
Art 233-5 Survey of Art
233 Survey of Art I (4)
234 Survey of Art II (4)
235 Survey of Art III (4)
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
233 Survey of Art I (4)
234 Survey of Art II (4)
235 Survey of Art III (4)
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

Art 100 Elements of Art (3)
Basic principles of creative design. Experimental use of
various media in drawing and painting. For nonmajors.

## Art 101 Basic Drawing I (4)

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)

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

## Art 114 Design (3)

Textures, shapes, lines, space, and colors in their visual psychological relationships in compositions. For nonmajors.
Art 120, 121, 122 Foundations Theory (1)
Slide lecture and film sessions introducing formal, aesthetic, media, and vocational aspects of Twentieth Century art and design. Art 123-125 and 124-126 must be taken concurrently.

## Art 123 Foundations Drawing I (3)

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)

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)

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 and shadow, translucency, kinetic, and reflection. Art 124 and 121 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 154 Introduction to Graphic Design

Studio inquiry into the nature of graphic communications. Including: visual problem-solving, introduction to applied 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 Twentieth 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.

## 200H Drawing Studio (1-15)

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, Intro to Figure Drawing and Basic Design; completion of 20 art credits.
200B Graphic Design Studio, Visual Ideas (1-16)
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 \& II, Basic Design, Color Design and the completion of 20 Art credits.

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.

## 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 Intro. to Printmaking (Art 157).
200E Sculpture Studio (1-15)
Exploration of sculpture concepts and media. Emphasis upon introductory level technical skills, media investigation and concepts.

## 200K Life Sculpture

## 200M Portrait Sculpture

## Art 230 Basic Photography (3)

Introduction to photography as a fine art discipline, including aesthetics, elementary theory, exposure, 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)

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)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 nonmajors.
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 1950's. An understanding through slides, film and lecture of the multiplicity of contemporary styles. For non-majors.

## Art 298 Gallery Management (1-4)

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.

## 300H Drawing Studio (1-15)

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.
300B Graphic Design Studio, Systems (1-16)
Advanced visual problem solving in selected areas of component or serial image system, 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.

## 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 200 F and consent of instructor.

## 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)
Exploration of sculpture concepts and media, building upon concepts and techniques learned in 200E.
Art 304 Structure in Art and Music (4)
A study of the structural principles common to music and the visual arts. The use of aural and visual elements to shape time and space. Emphasis on the perception of underlying structures. See Music 304.

## 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.

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

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

## Art 352 Life Drawing Anatomy (4)

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 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 the student to produce work of each one's highest capabilities.

## 400H Drawing Studio (1-15)

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. Prerequisites: 60 art credits.

## 400B Graphic Design Studio, Independent work

 (1-16)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.

## 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.

## 400D Printmaking Studio (1-15)

Further development of conceptual and formal qualities of creative work in a selected printmaking media 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.

## Art 409(g) Art of Primitive Peoples (4)

The art of peoples living in village and tribal units apart from the "Historic" civilizations: African, Oceania, PreColumbian 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 and sculpture. 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 the Renaissance ideals and forms. 421: Northern Renaissance. Artistic developments in France, Germany, England, and the Netherlands in the fifteenth and sixteenth centuries. Prerequisite: Art 233-234 or consent of instructor.
Art 422(g) Baroque Art (4)
The artistic achievements of the seventeenth and eighteenth centuries in the Romance countries and the Netherlands. 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 in Europe from the nineteenth century to the present. $430(\mathrm{~g})$ :
Neoclassicism to the emergence of Impressionism. 431(g): Impressionism to World War I. 432(g): Art in Europe after World War I. Prerequisite: Junior standing or consent of instructor.
Art 433(g) Modern Architecture (4)
Architecture of the late nineteenth and twentieth centuries. The materials, techniques, and forms of the architectural conceptions. 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 nineteenth century to the present.
Prerequisite: Art 233-234-235 or consent of instructor.

Art 437(g) History of Prints (4)
A survey of the art of the relief, intaglio, and surface print from the fifteenth 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)
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 442 Studies in Elementary School Art: Grades K-6 (3)

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 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)

## 451-452-453A Ceramic Studio

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.

## 451H-452H-453H Drawing Studio

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.

## 451B-452B-453B Graphic Design Studio

Visual thesis preparation for BFA candidacy fulfillment, portfolio preparation, and thesis 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.

## 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: BFA standing and 80 credits in art.

## 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.

## Art 454(g) Special Studies in Elementary

School Art (3)
A practical delineation of creative art activities, materials, and guidance applicable to the elementary curriculum. Prerequisite: 442 and BFA candidacy or graduate standing for (g) designation.

## Art 455 Special Studies in Secondary

 School Art (4)A practical delineation of creative art activities, materials and guidance applicable to the secondary curriculum. Prerequisite: 440 and BFA candidacy or graduate standing for (g) designation.
Art 469(g) Student Internship in Art (3-16)
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)
Individual directed study in selected phase of Art

Education agreed upon by the instructor and student. Prerequisite: Graduate standing in Art Education.
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 580 Seminar in Art Education (3)

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)
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 599 Thesis (1-6)
Registration only after consultation with major advisor.

## ASTRONOMY COURSES

## See Physics-Astronomy for Curricula

Ast 100 Introduction to Astronomy (4)
A summary of current concepts of the structure of the universe from Solar System to distant galaxies.
Ast 101 Observational Astronomy (3)
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) 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)
Theoretical principles and observational evidence regarding the large-scale structure and evolution of the universe. Prerequisites: Ast 100 or permission of instructor.
Ast 230 Topics in the History of Astronomy (4)
Development of man's ideas about the physical universe from prehistory to the early 20th Century.
Ast 260 Planetary Science (4)
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)
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)
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 410 Astrophysics (3)

Mathematical consideration of various topics in introductory astrophysics. May be repeated as course titles vary. Prerequisites: Junior status in Physics. May be taken as Phys 410.
Ast 499 Topics in Advanced Astronomy (1-5) 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 3 times or 10 credits.

## BIOLOGY DEPARTMENT

Thomas W. Collins, Chair; Monroe H. Bartel, Phyllis H. Harber, Oscar W. Johnson, Jesse L. Parsons, Richard H. Pemble, Mary A. Shimabukuro, Kenneth R. Skjegstad, Robert J. Tolbert, Robert S. Weibust, Kathyrn M. Wise

## AREAS OF STUDY: Biology, Medical Technology,

 Botany, Zoology.BIOLOGY CURRICULA
The requirements for the major in Biology are set forth in detail below.
The non-teaching Biology major and teaching Biology major are very similar, differing only in certain additional study required for teacher certification. In addition to the core of required courses, opportunity for specialization is provided by advanced electives. Chemistry, Physics, and Mathematics are also
emphasized in the Biology curriculum, and most Biology majors are advised to complete a Chemistry minor. Students with any one of the Biology majors are well prepared to pursue graduate work or career opportunities in a wide variety of industrial and governmental areas. Transfer students wishing to complete the Biology major or those who already have a degree but are completing certification requirements must complete at least 8 credits selected from 300-400 level courses in the Department of Biology at Moorhead State University regardless of the number of transfer credits accepted towards the major. Transfer students with a degree, wanting to add another major in Medical Technology, must satisfy the requirements for that degree.
Major in Biology (B.A. Degree)
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 11 (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 appropriate or 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 (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )
Phys 111-112-113 Elementary Physics I-II-III (9)
Phys 111L-112L-113L Elementary Physics Laboratory I-II-III (3)
Mathematics (at least 12 credits, excluding Math 090, 100 and 203; to be determined by previous math preparation and including no more than one course in Computer Science. Must include Math 133,
Trigonometry, or the high school equivalent.) Additional Approved Electives in Chemistry, Physics, or Mathematics (At least 12 credits).

## Major in Life Science (Teaching) (B.S. Degree)

Requirements include all those listed for the Biology (B.A.) major above:

Additional certification requirements in science (15 credits)
Biol 440 Biology Methods for Secondary Schools (3)
Geol 115 Physical Geology (4)
Geol 116 Historical Geology (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 Medical Technology (B.S. Degree)

Monroe Bartel, 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 3 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. Transfer students with a degree wanting to add the major in Medical Technology must satisfy the requirements for that degree.
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 360 Pathogenic Microbiology (4)
Biol 410 Parasitology (4)
Biol 470 Immunology (4)
Requirements in Related Fields (43 credits)
Chem 111-112-113 General Chemistry I-II-III (12)
Chem 111L-112L-113L General Chemistry
Laboratory (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )
Chem 237-238-239 General Organic Chemistry
I-II-III (9)
Chem 237L-238L-239L General Organic Chemistry Laboratory (3)
Chem 321 Quantitative Analysis (4-2 lec, 2 lab)
Chem 461, 464 and 462, 465 Biochemistry l-II (8) Mathematics (At least 4 credits to be determined by previous preparation.)
Recommended Electives in Related Fields
Biol 309, 341; ComS 100; Math 274; Physics 111, 112, 113.
Internship in Clinical Education (48 credits) Biol 460-461-462 Clinical Education 1-11-III (16 each)
This requirement is fulfilled when the student completes the year of Clinical Education at one of the affiliated hospitals listed below. Admittance to the Clinical Education Program is based on an interview, recommendations, GPA, and the available student space.

Bethesda Lutheran Medical Center, St. Paul, Minnesota
Penrose Hospital, Colorado Springs, Colorado
United Hospitals, Inc., Miller Division, 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 arrange for consultation with an advisor in the department early in their collegiate career. Transfer students must complete at least 8 credits selected from 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 1 (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)

Minor in Life Science (Teaching) (71-74 credits)
Minor requirements in biology include those required in the non-teaching minor, above ( 32 credits), and Biol 440 Biology Methods for Secondary Schools (3) or a methods course in one of the areas of Natural Science.
Additional certification requirements in Science (39 credits)
Chem 111-112-113 General Chemistry (12)
Chem 111L-112L-113L General Chemistry
Laboratory (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )
Phys 111-112-113 Elementary Physics I-II-III (9)
Phys 111L-112L-113L. Elementary Physics Laboratory I-II-III (3)
Geol 115 Physical Geology (4)
Geol 116 Historical Geology (4)
Geog 241 Elementary Meteorology (4)
(This minor can be awarded only in combination with at least one teaching major.)

## BIOLOGY COURSES

Biol 102 Matter and Life (4)
Biological principles for the non-science major. Emphasis on the chemical and physical basis for life at the cellular level. Includes topics on genetics and evolution. Majors or minors in any area of biology should take Biol 111 instead.
Biol 103 Humanity and the Ecosystem (4)
Survey of general ecology for the non-biology major emphasizing human impact on the environment; population, pollution, etc. for non-science majors.

## Biol 104 Human Biology (4)

The basic structure, function, development and genetics of the human organism. For non-science majors.

## Biol 111 Cell Biology (4)

Fundamental concepts of the structure, function and reproduction of cells. With lab.

Biol 112 General Zoology: Invertebrate (4)
Comparative structure and function of major invertebrate phyla. With lab. Prerequisite: Biol 111 or consent of instructor.
Biol 113 General Zoology: Vertebrate (4)
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)

Survey of the major groups of plants, emphasizing structural and reproductive patterns. With lab.
Prerequisite: Biol 111.

## Biol 123 General Botany II (4)

Structure, function, growth and reproduction of flowering plants. 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)

Basic structure and function of the human organism. Meets needs of pre-nursing and other non-biology majors. With lab. No prerequisites; must be taken in order.

## Biol 226 Field Biology of Plants (4)

An introduction to plant identification, ethnobotany, and ecology. Laboratory activities and field trips will focus on the local flora and vegetation. There are no prerequisites and the course can be used to satisfy Liberal Arts requirements in the Natural Sciences or with the advisor's approval as an elective for Biology majors or minors.
Biol 236 Introduction to Microbiology (4)
Concepts and application of microbiology. For
paramedical, health, physical education, agriculture. Not for medical technology, biology majors, minors. With lab. No prerequisite.

## Biol 241 Principles of Human Genetics (3)

An introduction to human genetics for the non-biology major. No lab. No prerequisites. (Biol 102, 104 or 111 recommended).
Biol 301(g) Vertebrate Embryology (4)
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)
Microscopic characteristics of animal tissues and organs, structural-functional correlation, histogenesis. With lab. Prerequisite: Biol 113.
Biol 306 Animal Physiology (4)
An introductory study of functional aspects of the organ systems of animal species. With lab.
Prerequisites: Biol 113 and Chem 113, or consent of the instructor.
Biol 309 Principles of Hematology (3)
Blood formation, cell morphology and physiology with laboratory procedures. With lab. Prerequisites 1 year each of chemistry and biology or consent of instructor.
Biol 310 Comparative Vertebrate Anatomy (4)
A comparative morphological study of selected animal species including lamprey, shark, Necturus, and cat. With lab. Prerequisite: Biol 113.
Biol 315 Fauna of the Upper Midwest (4)
Taxonomy and natural history of the common regional invertebrates (excluding insects) and vertebrates (excluding birds). With lab and field work.
Prerequisites: Biol 112 and 113.
Biol 317 Ichthyology (4)
The morphology, physiology, taxonomy, and ecology of fishes, with special reference to the midwest species.

With lab and field work. Prerequisite: Biol 113.
Biol 318 General Entomology (4)
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)

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)
A survey of the modern molecular and classical Mendelian principles underlying biological inheritance. With lab. Prerequisite: Biol 111.

## Biol 343(g) Microtechnique (4)

Tissue preparation for histological, histochemical, and fluorescent studies; including whole organism preservation and plastic embedding. With lab. Prerequisite: Biol 113 (Chem 113 desirable) or consent of instructor.

## Biol 345 Principles of Ecology (4)

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)

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)
Morphology, nutrition, genetics, and physiology of bacteria and other microorganisms, as well as introduction to medical applications. With lab. Prerequisite: Chem 113.
Biol 355(g) Wildlife Ecology (4)
The application of ecological principles to the
management of wildlife populations. Population dynamics and field techniques are stressed. With labs. Prerequisite: Biol 345.

## Biol 360(g) Pathogenic Microbiology (4)

Covers the major pathogens that cause disease in humans; to include characteristics of their pathogenesis, cultivation, identification and antibiotic sensitivities. With lab. Prerequisites: Biol 350 and 470.
Biol 410(g) Parasitology (4)
Principles and importance of parasitism as exemplified by selected parasitic protozoa, helminths, and arthropods. With lab. Prerequisites: Biol 112 and 113.
Biol 414(g) Protozoology (4)
The taxonomy, physiology, reproduction and importance of the protozoa. With lab. Prerequisites: Biol 112 and 113.

## Biol 417(g) Ornithology (4)

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)
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)
A survey of plant physiology with emphasis on water relations, mineral nutrition, translocation, respiration, photosynthesis, and plant growth. With lab.
Prerequisite: Biol 123 or Chem 113 or consent of instructor.
Biol 433(g) Plant Morphology:
The Lower Forms (4)
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)
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 Biology Methods for Secondary

 Schools (3)For secondary education students. Materials and methods typical to high school biology. Prerequisite: Senior status in biology major or minor.
Biol 443 Techniques in Biological Preparations (4)
Techniques in plant and animal preparations for display, study and research. Suitable for teaching majors and inservice teachers. Prerequisite: Consent of instructor or 20 credits of biology laboratory courses.
Biol 445(g) Limnology (4)
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 1 year of college chemistry.
Biol 449(g) Advanced Cell Biology (4)
Cell structure in relation to function, reproduction, and development. Prerequisite: Biol 341, Chem. 113.
Biol 450(g) Cell Physiology (4)
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 455(g) Recent Developments in the Biological

 Sciences (2)A series of lectures and discussions based upon recent research, designed to acquaint students with advances in modern biology. Prerequisite: 30 quarter hours of biology or consent of instructor. May be repeated for a total of 6 credits.

## Biol 460-461-462 Clinical Education I-II-III (16 each)

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 469 Student Internship in Biology (8-16)
A supervised work experience generally involving research with a state or federal agency. Prerequisites: Senior standing in Biology, and approval by Department Internship Committee.
Biol 470(g) Immunology (4)
Antigens and antibodies, their properties and function in disease, vaccines, allergies, and diagnostic procedures. With lab. Prerequisites: Biol 350 and Chem 239 or 361 , or consent of instructor.
Biol 481-482-483(g) Biology Seminar I-II-III (1 each)
Presentation of reports on recent developments in biological science after a critical evaluation of the literature. Oral reports by students and staff.
Biol 490 Senior Research in Biology (1-3) 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.

## BUSINESS ADMINISTRATION DEPARTMENT

A. Clyde Vollmers, Acting Chair: M. Wayne Alexander, Charles Corcoran, Peter Geib, Linda Hoops, Marlin R.H. Jensen, Yvonne Johnson, Evelyn Larson, Alan MacDonald, Jim Noehl, Abderrahman Ben Oumlil, Mary Parrot, Charles Pettijohn, Sam Roy, Mahmoud Sarri, Deborah Strauss, James Swenson, Geun-gu Yu

## AREAS OF STUDY: Business Administration, Finance, Management, Marketing, Hotel-MotelRestaurant Management.

The Business Administration Department has approximately 1200 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 eight degree programs and 86 courses. The Department of Business Administration also offers an Associate of Science degree in two fields: (1) Marketing, and (2) Business Administration. 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 which 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 facultysupervised research and reading project.

## Four Year Programs

B.S. Degrees in Business Administration, Finance,

Management, Marketing and Hotel-Motel-Restraurant
Management are offered. The following program
descriptions are subject to change. See Departmental
Worksheets for current degree requirements.
Requirements in Related Fields ( 34 credits)
Econ 202 Principles of Economics I (4)
Econ 204 Principles of Economics II (4)
Econ 206 Principles of Economics III (4)
*Psy 113 General Psychology (4) or Soc 110
Introduction to Sociology (4)
ComS 145 Data Processing (4)

- Psy 119 Social Behavior (4) or Soc 205 Social Psychology (4)
Math 273 Math for the Behaviorial Science (4)
Math 274 Introduction to Statistics I (4)
Math 275 Introduction to Statistics II (4)
*Not required for Finance Majors
Business Core Requirements for Majors in Business
Administration, Finance, Management and Marketing (40 credits)
Acct 229 Principles I: Finance (4)
Acct 230 Principles II: Finance (4)
Acct 231 Principles III: Managerial (4)
Acct 301 Business Law I (4)
Acct 302 Business Law II (4)
Finc 340 Corporate Finance I (4)
Mktg 310 Principles of Marketing (4)
Mktg 441 Business and Society (4)
Mgmt 360 Principles of Management (4)
Mgmt 460 Business Policy (4)
Major in Business Administration B.S. Degree
Business Administration Requirements and Electives (36 credits)
Students choose 3 areas of study from the 5 areas of Accounting, Economics, Finance, Management and

Marketing. In each of the 3 areas the student will choose 3 courses. Two of the 3 courses must be selected from the cluster of core courses listed for each area. The third course may be selected from any of the courses offered in the 3 areas of study.

## Core Course Clusters

Accounting
Acct 330 Intermediate Acct I
*Acct 331 Intermediate Acct II
Acct 340 Intro to Federal Taxation
Acct 350 Cost Acct I
Acct 351 Cost Acct II
Finance
Finc 441 Advanced Corporate Finance
Finc 456 Principles of Investment
Finc 457 Portfolio Analysis

## Economics

Econ 302 Intermediate Microeconomics
Econ 304 Intermediate Macroeconomics
Econ 315 Government \& Business
Econ 320 Money/Banking
*Econ 370 Quantitative Economic Analysis
Econ 390 Econ Literature/Methods
Management
Mgmt 420 Organizational Theory
Mgmt 440 Personnel Management
Mgmt 450 Production/Operations Management
Mgmt 451 Organizational Behavior
*Mgmt 455 Quantitative Decision Making or
-421 Decision Analysis
Marketing
Mktg 311 Marketing Management
Mktg 321 Consumer Behavior
"Mktg 322 Marketing Intelligence
Mktg 323 Marketing Communication
*Mktg 410 Marketing Logistics
*As a part of the 36 hours in 3 areas, the student must
complete a minimum of one quantitative course. The 6 quantitative courses which satisfy this requirement are marked by an asterisk.
Internships and Work Experience. Although internship may be taken for $3-16$ credits, a maximum of 4 credits of Internship (Finc 469, Mktg 469, Mgmt 469) may be counted toward the Business Administration Requirements and Electives.
Work Experience (Finc, Mktg and Mgmt 242, 243, 244) may not be counted toward the Business

Administration Requirement and Electives. A maximum of 3 credits of work experience may be counted toward Free Electives.

## Major in Finance B.S. Degree

Finance Requirements (20 credits)
Finc 320 Money and Banking (4)
Finc 441 Advanced Corporate Finance (4)
Finc 456 Principles of Investment (4)
Finc 457 Portfolio Analysis (4)
Finc 458 Financial Decision Making (4)
Finance Electives (16 credits)
Finc 321 Banking Policy (4)
Finc 330 Credits and Collections (4)
Finc 350 Public Finance (4)
Finc 351 Principles of Insurance (4)
Finc 352 Life Insurance (4)
Finc 353 Health \& Social Insurance (4)
Finc 354 Real Estate I (4)
Finc 355 Real Estate II (4)
Finc 406 Small Business Management Consulting (2)
Finc 425 International Trade \& Finance (4)
Finc 442 Finance Seminar (2-4)
Finc 469 Internship (maximum 4)
Finc 498 Problems in Finance (1-4)
Mgmt 455 Quantitative Decision Making (4)
Mgmt 456 Management Information Systems (4)
Econ 302 Intermediate Microeconomics (4)

Econ 304 Intermediate Macroeconomics (4)
Acct 330 Intermediate Accounting I (4)
Acct 331 Intermediate Accounting II (4)
Acct 340 Introduction to Federal Taxation (4)
Electives may include up to eight credits of upper level courses from other disciplines. The student must obtain written approval of the course from his or her academic advisor before taking the course as an elective.
Internships and Work Experience. 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.
Work Experience (Finc 242, 243, 244) may not be counted toward Finance Electives. A maximum of 3 credits of work experience may be counted as Free Electives.

## Major in Hotel-Motel-Restaurant Management B.S. Degree

HMR Core Requirements ( 36 credits)
Acct 229 Principles I: Finance (4)
Acct 230 Principles II: Finance (4)
Acct 231 Principles III: Managerial (4)
Acct 301 Business Law I (4)
Acct 302 Business Law II (4)
Finc 340 Corporate Finance (4)
Mgmt 360 Principles of Management (4)
Mgmt 405 Small Business Management (4)
Mktg 310 Principles of Marketing (4)
HMR Professional Requirements ( 25 credits)
HMR 350 HMR Maintenance Management (4)
HMR 355 Innkeeper's Liability (4)
HMR 442 HMR Organization \& Management (4)
HMR 443 Food \& Beverage Management (4)
HMR 446 Hospitality Marketing \& Sales Promotion (4)
HMR 460 Innkeepers Design \& Aesthetics (4)
HMR 466 Current Trends in HMR Management (1-4)

## HMR Electives (16 credits minimum) <br> HMR 498 Problems in HMR (1-4)

Finance
Finc 351 Principles of Insurance (4)
Finc 441 Advanced Corporate Finance (4)
Finc 456 Principles of Investment (4)
Management
Mgmt 420 Organizational Theory (4)
Mgmt 421 Decision Analysis (4)
Mgmt 440 Personnel Management (4)
Mgmt 450 Production/Operations Management (4)
Mgmt 451 Organizational Behavior (4)
Mgmt 455 Quantitative Decision Making (4)
Mgmt 460 Business Policy (4)
Marketing
Mktg 321 Consumer Behavior (4)
Mktg 322 Marketing Intelligence (4)
Mktg 323 Marketing Communications (4)
Mktg 410 Marketing Logistics (4)
Mktg 430 Sales and Sales Management (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
Independent Study in HMR (4 credits may count as HMR Electives)
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 Management B.S. Degree
Management Requirements (20 credits)
Mgmt 420 Organizational Theory (4)
Mgmt 421 Decision Analysis or
Mgmt 455 Quantitative Decision Making (4)
Mgmt 440 Personnel Management (4)
Mgmt 450 Production/Operations Management (4)
Mgmt 451 Organizational Behavior (4)
Management Electives (16 credits)
Mgmt 315 Government \& Business (4)
Mgmt 405 Small Business Management (4)
Mgmt 406 Small Business Management Consulting (4)
Mgmt 416 Labor Economics (4)
Mgmt 421 Decision Analysis (4)
Mgmt 430 Managerial Economics (4)
Mgmt 452 Organizational Development (4)
Mgmt 455 Quantitative Decision Making (4)
Mgmt 456 Management Information Systems (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 eight credits of upper level courses from other disciplines. The student must obtain written approval of the course from his or her academic advisor before taking the course as an elective.
Internships and Work Experience. 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.

Work Experience (Mgmt 242, 243, 244) may not be counted toward Management Electives. A maximum of 3 credits of work experience may be counted as Free Electives.

Major in Marketing B.S. Degree
Marketing Requirements ( 20 credits)
Mktg 311 Marketing Management (4)
Mktg 321 Consumer Behavior (4)
Mktg 322 Marketing Intelligence (4)
Mktg 323 Marketing Communications (4)
Mktg 410 Marketing Logistics (4)
Marketing Electives (16 credits)
Mktg 406 Small Business Management Consulting (2)
Mktg 415 Industrial Marketing (4)
Mktg 420 Marketing Channels (4)
Mktg 421 Retail Management (4)
Mktg 430 Sales \& Sales Management (4)
Mktg 440 Transnational Marketing (4)
Mktg 442 Marketing Seminar (4)
Mkgt 469 Marketing Internship (maximum 4)
Mktg 470 Independent Study (1-4)
Mktg 498 Problems in Marketing (1-4)
Mktg 455 Quantitative Decision Making (4)
Mktg 456 Management Information Systems (4)
Mktg 302 Intermediate Microeconomics (4)
Electives may include up to eight credits of upper level courses from other disciplines. The student must obtain written approval of the course from his or her academic advisor before taking the course as an elective.
Internships and Work Experience. 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.
Work Experience (Mktg 242, 243, 244) may not be counted toward Marketing Electives. A maximum of 3 credits of work experience may be counted as Free Electives.
Two Year Programs
The Department of Business Administration offers an Associate of Science degree in two fields: (1)

Marketing, and (2) Business Administration. The 96 credits of requirements are as follows:
Liberal Arts (42 credits)
Engl 101-102-103 Freshman Composition \& Literature I-II-III (12)
Econ 202-204-206 Principles of Economics 1-II-III (12)
Math 121 College Algebra (4)
Additional Liberal Arts courses, including at least 6 credits in each distributional area-B, C, D \& E.
Core Requirements ( 10 credits)
Acct 229 Elementary Accounting 1 (3)
Acct 230 Elementary Accounting 11 (3)
BEd 207 Business Communications (4)
Major Requirements ( 28 credits)
The AS degree in Marketing requires 28 credits of selected marketing courses. The AS degree in Business Administration requires 28 credits of selected Business Administration courses.
Free Electives (16 credits)

## Minor Programs

Marketing Minor for Bus Adm, Mgmt, Finc, HMR, Acct, and BEd majors
24 credits of marketing courses above the marketing requirement in each of the majors. Marketing courses which satisfy major requirements cannot be used to satisfy Marketing Minor requirements.
Marketing Minor for other majors
Econ 100 The American Economy (4) or Econ 202
Microeconomic Principles (4)
Acct 229 Principles I-Financial (4)
Acct 230 Principles II-Financial (4)
Marketing Electives (24)
Management Minor for Bus Adm, Mktg, Finc, HMR, Acct, and BEd 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
Econ 100 The American Economy (4) or Econ 202
Microeconomic Principles (4)
Acct 229 Principles I-Financial (4)
Acct 230 Principles II-Financial (4)
Management Electives (24)
Finance Minor for Bus Adm, Mktg, Mgmt, HMR, Acct, and BEd majors
24 credits of finance courses above the finance requirement in each of the majors. Finance courses which satisfy major requirements cannot be used to satisfy Finance Major requirements.
Finance Minor for other majors
Econ 100 The American Economy (4) or Econ 202
Microeconomic Principles (4)
Acct 229 Principles I-Financial (4)
Acct 230 Principles II-Financial (4)
Finance Electives (24)
Business Administration Minor for Mktg, Finc, HMR, Acct, Mgmt, and BEd majors
8 credits in each of 3 of the following areas: Management, Marketing, Finance, Economics, Accounting-beyond those courses required for the major. If the major is Mgmt, for example, the 3 areas must be from Mktg, Finc, Acct, or Econ.
Business Administration Minor for other majors Econ 100 The American Economy (4) or Econ 202 Microeconomic Principles (4)
Acct 229 Principles 1-Financial (4)
Acct 230 Principles II-Financial (4)
Marketing Electives (8)
Management Electives (8)
Finance Electives (8)

Hotel-Motel-Restaurant Minor for Mktg, Finc, Bus Adm, Acct, Mgmt, and BEd majors
24 credits of Hotel-Motel-Restaurant courses.
Hotel-Motel-Restaurant Minor for other majors
Econ 100 The American Economy (4) or Econ 202
Microeconomic Principles (4)
Acct 229 Principles I-Financial (4)
Acct 230 Principles II-Financial (4)
HMR Electives (24)

## BUSINESS EDUCATION DEPARTMENT

Howard Lysne, Chair; Evelyn Grove, Wesley Monson, Molly Moore

## 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 ( 36 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)
Acct 301 Business Law 1 (4)
BEd 90 Basic Typewriting (non-credit)
BEd 207 Business Communications and Report Writing (4)
BEd 210-211 Typewriting 1-II (4)
BEd 439 Methods of Teaching Typewriting (2)
BEd 440 Methods of Teaching Bookkeeping (2)
Mgmt 360 Principles of Management (4)
Mktg 310 Principles of Marketing (4)
Major Requirements in Business Education (29-30 credits)
One of the following Areas of Specialization:

## Accounting and Data Processing

Acct 330-331-332 Intermediate Accounting I-II-III (12)
Acct $450(\mathrm{~g})$ Federal and State Tax I (4)
Coms 145 Data Processing (4)
Coms 155 COBOL Programming (4)
ComS 255 Advanced Data Processing (4)
Electives in Computer Science (2)
Secretarial
BEd 212 Advanced Typewriting (2)
BEd 220-221-222 Shorthand I-II-III (12)
BEd 320 (g) Records Management (4)
BEd 322 Office Machines (2)
BEd 324 Dictation and Transcription (3)
BEd 330 (g) Office Management (4)
BEd 441 Methods of Teaching Shorthand (2)

## Clerical

BEd 212 Advanced Typewriting (2)
BEd 250 Introduction to Business (4)
BEd 320 Records Management (4)
BEd 322 Office Machines (2)
BEd 323 Secretarial Administration (3)
BEd 325 Machine Dictation (1)
BEd 326 Machine Transcription (2)
BEd 330 (g) Office Management (4)
Electives in Business or Economics (At least 8 credits)
Basic Business or Economics
BEd 250 Introduction to Business (4)
BEd 315(g) Consumer Education (4)
BEd 325 Machine Dictation (1)
BEd 442 Methods of Teaching Basic Business and Economics (2)
Econ 302 Intermediate Micro Economic Theory (4)
Econ 320 Money and Banking (4)
One of the following courses (4):
Econ 315, 350, 415, 416, OR 430
Electives in Business or Economics (At least 7 credits)

Comprehensive Program
BEd 212 Advanced Typewriting (2)
BEd 220-221-222 Shorthand I-II-III (12)
BEd 315(g) Consumer Education (4)
BEd 322 Office Machines (2)
BEd 323 Secretarial Administration (3)
BEd 330 (g) Office Management (4)
BEd 441 Methods of Teaching Shorthand (2)
Requirements in Related Fields (16 credits)
ComS 120 Computers and Society or ComS 145

- Data Processing (4)

Econ 202-204-206 Principles of Economics I-II-III (12)
*For those electing specialization in Accounting and Data Processing

## Recommended Courses for Office Education Vocational Certification

BEd 413(g) Word Processing Methods (3)
BEd 414(g) Word Processing Lab (3)
BEd 415(g) Model Office Methods and Materials (4)
BEd $443(\mathrm{~g})$ Cooperative Business and Office Methods and Materials (4)
VoEd $440(\mathrm{~g})$ Organization and Administration of Vocational Education (3)
VoEd $443(\mathrm{~g})$ Coordination Techniques of Vocational Education (3)
VoEd 495(g) Philosophy of Vocational Education (3)
(All Teacher Education Requirements must be fulfilled to complete this major. See Education Department.)

## Major in Office Administration

Core Requirements (57 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)
Acct 301-302 Business Law I-II (8)
BEd 207 Business Communications and Report
Writing (4)
BEd 210 Typewriting I (2)
BEd 250 Introduction to Business (4)
BEd 320(g) Records Management (4)
BEd 323 Secretarial Administration (3)

BEd 325 Machine Dictation (1)
BEd 330(g) Office Management (4)
BEd 413(g) Word Processing Methods (3)
Finc 340 Corporate Finance I (4)
Mgmt 360 Principles of Management (4)
Mktg 310 Principles of Marketing (4)
Additional Major Requirements ( 23 credits)
Select Option 1 Executive Secretarial or Option 2
Office Management
Option 1 Executive Secretarial
BEd 211 Typewriting II (2)
BEd 220-221-222 Shorthand I-II-III (12)
BEd 240 Model Office Lab (2)
BEd 322 Office Machines (2)
BEd 326 Machine Transcription (2)
BEd 414 (g) Word Processing Lab (3)
Option 2 Office Management
Finc 330 Credit and Collection (4)
Mgmt 440(g) Personnel Management (4)
Mgmt 451(g) Organizational Behavior (4)
Mgmt 456(g) Management Information Systems (4)
MC 270 Public Relations Principles (3)
Math 274 Introduction to Statistics I (4)
Requirements in Related Fields ( 28 credits)
ComS 100 Computers and Society (4)
Coms 145 Data Processing (4)
Econ 202-204-206 Principles of Economics I-II-III (12)
Psy 113 General Psychology (4)
Spch 100 Beginning Speech Communication (4)
Minor in Business Education ( 36 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)
Acct 301 Business Law I (4)
BEd 207 Business Communications and Report
Writing (4)
BEd 210-211 Typewriting I-II (4)
BEd 250 Introduction to Business (4)
BEd 439 Methods of Teaching Typewriting (2)

BEd 440 Methods of Teaching Bookkeeping (2) Econ 202 Principles of Economics I (4)
(This minor can be awarded only in combination with at least one teaching major.)

## Associate in Science, Medical Records Technology

The associate in medical records is a program offered cooperatively by the Moorhead Area Vocational 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 MAVTI, 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 42 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 MAVTI, the student will complete the technical curriculum in medical records. New students seeking admission to this degree program should first contact the Office of Admissions, Moorhead Area Vocational Technical Institute, Moorhead, Minnesota, 56560; if already enrolled at MSU, students should get further information from the Center for Multidisciplinary Studies.

## A.S. in Secretarial (Two-Year Program - 96 credits)

Liberal Arts ( 42 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 (40 credits)
Acct 229-230-231 Principles of Accounting I-II-III (12)

## Acct 301 Business Law I (4)

Business Education Courses (At least 24 credits)

## BUSINESS EDUCATION COURSES

## BEd 90 Basic Typewriting (2)

Audit course for students without typewriting experience and for students who wish to renew these skills. Credit not applicable to degree.

## BEd 207 Business Communications and

 Report Writing (4)Business letters, memos, and reports. Business communications systems.
BEd 210-211 Typewriting I-II (2 each)
210: Typing letters and typing from rough draft. 211:
Business papers; tabulation problems; manuscripts.
BEd 212 Advanced Typewriting (2)
Speed and production skills; statistical typewriting, special reports, legal, medical, and business papers. Prerequisite: BEd 211.
BEd 215 Word Processing in Microcomputers (2) Principles and applications of word processing on the microcomputer. Emphasis will be on personal and professional applications. Experience with word processing programs. Prerequisite: One semester of high school typing or knowledge of alphabetic and numeric keyboard.
BEd 220-221-222 Shorthand I-II-III (4 each) Gregg shorthand, dictation and transcription. Typewriting must either precede or accompany all shorthand courses. Prerequisite: BEd 210 or equivalent. Must be taken in sequence.

## BEd 240 Model Office Lab (2)

A course to sharpen office skills, where the classroom is turned into a Model Office-an operating business. Prerequisite: BEd 211.
BEd 242-243-244 Work Experience I-II-III (1 credit each, maximum 3)
Supervised office experience in a cooperating firm.

Minimum of 60 hours of satisfactory work in each course. For majors only.

## BEd 250 Introduction to Business (4)

Current American business concepts and practice, stressing the functional areas of business with an emphasis on careers.
BEd 260 Microcomputer Business Applications (3)
Hands on experience in using the microcomputer in a variety of business data processing applications. Prerequisites: One semester of high school typing or equivalent, Acct 230, CompS 110.

## BEd 315(g) Consumer Education (4)

Selection of goods and services; aid available from government and private agencies.
BEd 320(g) Records Management (4)
The application of systematic analysis and scientific control of business records from their creation through processing, maintenance, protection and final disposition.

## BEd 321 Reprographics (1)

Preparation of materials for machine duplication and operation of ditto, mimeograph, offset, thermofax, etc. for students in business education and secretarial science. Prerequisite: BEd 211.

## BEd 322 Office Machines (2)

Business application of office machines used in mathematical computations.
BEd 323(g) Secretarial Administration (3)
Secretarial and office administration procedures.
BEd 324 Dictation and Transcription (3)
Prerequisite: BEd 221 or consent of instructor.
BEd 325 Machine Dictation (1)
How to more effectively give machine dictation of business letters, memos and reports.

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## BEd 326 Machine Transcription (2)

Course teaches student to successfully and professionally transcribe dictated material for an employer in an actual job situation. Prerequisite: Type 40 wpm.
BEd 330(g) Office Management (4)
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 business. Prerequisites: BEd 212, BEd 321 (or equivalent).

## BEd 414(g) Word Processing Lab (3)

Practical hands on experience in word processing using a micro-computer and other word processors.
Prerequisite: BEd 413(g).
BEd 415(g) Model Office Methods and
Materials (4)
Prerequisite: BEd 240 (or equivalent)
BEd 439 Methods of Teaching Typewriting (2) Prerequisite: BEd 212.
BEd 440 Methods of Teaching Bookkeeping (2) Prerequisite: Acct 231.
BEd 441 Methods of Teaching Shorthand (2)
Prerequisite: BEd 222, or consent of instructor.
BEd 442 Methods of Teaching Basic Business and Economics (2)
Prerequisites: Area of Specialization in Basic Business or Economics or consent of instructor.

## BEd 443(g) Cooperative Business and Office

 Methods and Materials (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 469 Student Internship (4-16)
BEd 470 Independent Study (1-4)
An opportunity for extensive study in a subject area beyond the formal class offering. Prerequisite: Consent of instructor.
BEd 490(g) Current Business Practices (4)
Field trips to selected businesses, lectures from selected business administrators and a review of current business literature and research.
BEd 498(g) Problems in Business and
Office Education (1-4)
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)Purposes of Business Education, changing occupational requirements, results of latest thinking and research in Business Education, curriculum innovations and changes.
BEd 570 Independent Study (1-4)
An opportunity for graduate study in a subject area not dealt with in the regular curriculum. May be repeated up to a total of 4 hours. Prerequisite: Consent of instructor.

BEd 595 Special Problems (1-3)
Registration only after consultation with major advisor.
BEd 597 Individual Study (1-3)
Project in Business Education. Registration only after consultation with major advisor.
BEd 599 Thesis in Business Education (1-6)
Registration only after consultation with major advisor.

## CHEMISTRY DEPARTMENT

Dennis L. Krzyzaniak, Chair; Dewey O. Brummond, Robert F. Drake, Nicholas Kowanko, Dennis R. Mathiason, B. Spencer Meeks, Judith A. Strong, 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 of the American Chemical Society. The conventional major is for the student who intends to enter graduate school in chemistry. 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. A revision of the requirements of this degree is in progress and should become effective sometime during the 84-85 academic year. The changes in the program will include a greater concentration of courses in chemistry while requiring fewer courses in related fields.

## 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 to seek employment as professional chemists. The degree meets the requirement 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 (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )
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)
Approved Electives in Chemistry (7)
Requirements in Related Fields ( 47 credits)
Ger 101-102-103 Beginning German I-II-III (12)
or equivalent or a year of approved Computer Science

> courses.

Math 231-234 Calculus I-IV (16)
Math 331 Differential Equations (4) or
Math 375 Intermediate Probability and Statistics I (4)
Physics 200-201-202 General Physics I-II-III (12)
Physics 200L-201L-202L (3)

## Major in Industrial Chemistry B.S. Degree

In addition to the general requirements of the University for all bachelor degree programs, this major has three components: (1) courses in chemistry and some related fields needed to support the chemistry; (2) and 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 courses providing an area of expertise complementary to chemistry (for example, business, economics, computer science, statistics, etc.).

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 (3) or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$
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)
Applied Chemistry Laboratory I-II-III (4)
Chem 410 Industrial Chemistry (4)
Chem 421-422 Instrumental Analysis (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 (12)
Phys 200L-201L-202L General Physics Laboratory I-IIIII (3)
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 co-operative educational experience in industry)
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 pre-medicine, 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 (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )

Either Chem 231-232-233 Organic Chemistry I-II-III (9) and Chem 234, 235, 236 Organic Chemistry Lab I-II-III (6) or Chem 237, 238, 239 General Organic Chemistry I-II-III (9), Chem 237L-238L-239L General Organic Chem Lab I-II-III (3) and 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 General Biochemistry I-II (6) and Chem 464-465 General Biochemistry Laboratory I-II (2)
Requirements in Related Fields ( $28-31$ credits) Math 231-232 Calculus I-II (8)
(and any prerequisites, depending on previous study) Three quarters of physics (111-112-113 and 111L-112L-113L or 200-201-202 and 200L-201L202L) (12-15)
Approved Electives in Science (8)
Major in Physical Science B.S. Degree (Teaching)
This major meets the Minnesota requirements for licensure in Physical Science, Grades 7-12. It should be chosen by students who expect to teach chemistry, physics, or physical science.
Major Requirements in Chemistry ( 31 credits)
Chem 111-112-113 General Chemistry I-II-III (12)
Chem 111L-112L General Chemistry Laboratory I-II or Chem $111 \mathrm{H}-112 \mathrm{H}$ General Chemistry Honors Laboratory I-II (2)
Chem 113L General Chemistry Laboratory III (1.)
Chem 237-238 General Organic Chemistry I-II (6)
Chem 237L-238L General Organic Chemistry
Laboratory I-II (2)
Chem 321 Quantitative Analysis (4)
Approved Electives in Chemistry (4)
(Selected from 300 or 400 level courses)

Major Requirements in Physics (31 credits)
Physics 200-201-202 General Physics I-II-III (12)
Physics 200L-201L-202L General Physics Laboratory
I-II-III (3)
Physics 305 Experimental Physics I (2)
Physics 322 Elementary Modern Physics (4)
Physics 340 Electronics (4)
Approved Electives in Physics (6)
Requirements in Related Fields (32 credits)
Ast 100 Introduction to Astronomy (4)
Biol 111 Cell Biology (4)
Biol 113 General Zoology, Vertebrate (4)
Biol 123 General Botany II (4)
Geol 115 Physical Geology (4)
Math 231-232-233 Calculus I-II-III (12)
Requirements in Teaching Methods (4 credits) Sci 440 Earth and Physical Science Teaching Methods (2)
Chem 485 Chemistry Teaching Methods (1)
Physics 485 Physics Methods for Secondary Schools (1)
(All Teacher Education Requirements shall be fulfilled to complete this major.)
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 (3) (or $111 \mathrm{H}-112 \mathrm{H}-113 \mathrm{~L}$ )
Electives in Chemistry (19)
(Must include either Chem 237, 237L, 238, 238L or Chem 341 and 342).
Minor in Chemistry (Teaching) 35 credits
Chem 111-112-113 General Chemistry I-II-III (12)
Chem 111L-112L General Chemistry I-II or
Chem 111H-112H Honors Laboratory I-II (2)
Chem 113L General Chemistry Laboratory III (1)
Chem 321 Quantitative Analysis (4)
Chem 485 Chemistry Teaching Methods (1)

Electives in Chemistry (15)
(Must include two quarters of organic chemistry lecture and laboratory or two quarters of physical chemistry lecture.)
All Teacher Education requirements shall be fulfilled to complete this minor.

## CHEMISTRY COURSES

Chem 102 Survey of Basic Principles of
Chemistry (4)
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)
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)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)

Fundamental principles of chemistry and stoichiometric relationships emphasized by problem solving using the unit-cancellation method. Intended for students underprepared 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 minimum requirements of chemistry major or minor.

## Chem 111-112-113 General Chemistry I-II-III

 (4 each)Fundamental principles of chemistry. Concurrent registration in Chem 111L-112L-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)
Laboratory techniques of general chemistry including qualitative and quantitative analysis. Must be taken concurrently with Chem 111-112-113. Honors laboratory program offered in $111 \mathrm{H}-112 \mathrm{H}$ for which instructor's approval is required.
Chem 202 Scientific Glass Fabrication (2)
Techniques of construction of specialized glass apparatus. Prerequisite: Instructor's approval.

## Chem 231-232-233 Organic Chemistry I-II-III

 (3 each)Fundamentals of organic chemistry: sequence intended for chemistry majors and recommended for prepharmacy majors. Prerequisite: Chem 113 or instructor's approval.
Chem 234-235-236 Organic Chemistry Laboratory I-II-III (2 each)
Techniques of organic chemistry. Intended for chemistry majors. Prerequisite: Chem 231-232-233 or concurrent registration.

## Chem 237-238-239 General Organic Chemistry

 I-II-III (3 each)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)

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)
Introduction to the chemical literature in journals, handbooks, abstracts, monographs, patents and other sources.

## Chem 314 Aquatic Chemistry (3)

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)

The theoretical principles and laboratory techniques involved in modern quantitative analysis. Prerequisite: Chem 113.
Chem 340 Introduction to Physical Chemistry (4) A survey of energetics, kinetics and chemical bonding. Prerequisites: Chem 113, Math 121 or equivalent. Phys 113 recommended. For students in the physical science teaching degree program.

## Chem 341-342-343 Physical Chemistry I-II-III (3 each)

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.

## Chem 345-346 Physical Chemistry Laboratory I-II (2 each) <br> Experimental physical chemistry. Prerequisite: Chem 342 or concurrent registration.

Chem 361(g) Introduction to Biochemistry (4)
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 410 Industrial Chemistry (3-4)
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)The theory, principles, and laboratory techniques of electro-analytical chemistry. Prerequisite: Chem 343, 346 and Chem 236 or instructor's approval.
Chem 422 Instrumental Analysis II (4-3 lecture, 1 laboratory)
The theory, principles, and laboratory techniques of ultra-violet and infra-red spectrophotometry, nuclear magnetic resonance, atomic absorption and mass spectrometry. Prerequisites: Chem 342 or concurrent registration.
Chem 424(g) Analysis of Chemical Pollutants (3-2 lecture, 1 laboratory)
The detection, separation, and analysis of substances in air, water, and soil. Prerequisites: Chem 113 and Chem 232 or 238.
Chem 427(g) Topics in Analytical Chemistry (1-3)
Selected topics such as spectroscopy, electrochemical methods, and chemical separations. Prerequisites: Chem 236 and instructor's approval. May be repeated when topic is changed.

Chem 432(g) Advanced Organic Chemistry (3)
Consideration of organic reactions on the basis of reaction mechanisms. Prerequisite: Chem 233 or 239

## Chem 434 Advanced Organic Chemistry

Laboratory (1-3)
Specialized laboratory techniques: more difficult organic syntheses. 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)
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 438(g) Chemical Pollutants (4)
A study of the nature, distribution, and chemical breakdown of pollutants in the environment.
Prerequisites: Chem 233 or 239 or instructor's approval.

## Chem 444 Advanced Physical Chemistry Laboratory (1-3)

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)
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)

Aspects of bond theory, periodicity, acid-base chemistry, kinetics, and chemistry of non-transition elements. Prerequisite: Chem 342.

## Chem 453 Inorganic Chemistry II (3)

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)
A laboratory study of modern inorganic chemistry. Prerequisites: Chem 452 and 453 or concurrent registration. May be repeated to a maximum of 3 credits.
Chem 457(g) Topics in Inorganic Chemistry (1-3)
Selected topics: Coordination chemistry, bonding, acidbase 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) 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)
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)
Selected biochemical topics. Prerequisites: Chem 463 or instructor's approval. May be repeated when topic is changed.

## Chem 469 Student Internship (3-16)

Supervised work experience. For majors only.
Prerequisites: Junior or senior standing and departmental approval.
Chem 475 Radioisotope Techniques (3)
General techniques for safe handling and use of radioisotopes. Prerequisites: Chem 113 and instructor's approval.
Chem 480(g) Seminar (1)
Prerequisite: Junior or senior standing or consent of instructor. May be repeated to a maximum of three credits.

Chem 485 Chemistry Teaching Methods (1)
For students majoring in Physical Science (Teaching). Methods and materials typical in the instruction of chemistry in senior high school. Prerequisite: Sci 440 or concurrent registration.

## Chem 490 Undergraduate Research (1-5)

Prerequisite: Instructor's approval. May be repeated to a maximum of 9 credits.

## 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-division 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)
Latin grammar and syntax, with readings adapted from original texts and with some practice in elementary Latin composition.

## Latin 201-202-203 Intermediate Latin I-II-III

 (4 each)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: Latin 101-102-103 or the equivalent.

## COMPUTER SCIENCE DEPARTMENT

Martin O. Holoien, Chair; Ali Behforooz, Curtis R. Bring, Richard Deutsch, Mohammad A. Ketabchi, Deepak Khanna, Benjamin M. Lin, Mahmoud Parsion, Onkar P. Sharma
COMPUTER SCIENCE CURRICULA
Major in Computer Science B.S. Degree
Major Requirements in Computer Science ( 60 credits)
Required Courses ( 36 credits)
ComS 201 Intro to Computers and Programming I (4)
ComS 202 Intro to Computers and Programming II (4)
ComS 204 Assembly Language Programming (4)
ComS 305 Logical Design of Computers I (4)
ComS 306 Logical Design of Computers II (4)
ComS 315 Data Structures (4)
ComS 380 Intro to Systems Software (4)
ComS 410 Theory of Language Translation (4)
ComS 415 Operating Systems I (4)
Elective Courses ( 24 credits) selected from the following:
ComS 155 COBOL Programming (4)
Coms 160 Topics in Programming Languages (2)
ComS 245 Systems Analysis and Design (4)
ComS 250 Numerical Methods (4)
ComS 255 Advanced COBOL Programming (2)
Coms 280 Statistical Analysis of Data (2)
ComS 285 Computer Simulation (4)
ComS 300 Ethical and Societal Concerns (3)
ComS 325 Microprocessors (4)
ComS 330 Survey of Programming Languages (4)

ComS 370 Advanced Data Structures (4)
Coms 411 Compiler Design Theory I (4)
ComS 420 Design/Implementation of High Level
Languages (4)
ComS 425 Computer Architecture (4)
ComS 450 Numerical Analysis (4)
ComS 469 Internship (4 maximum)
ComS 470 Computer Graphics (3)
ComS 480 Seminar (3 maximum)
ComS 490 Independent Study ( 6 maximum)

## Requirements in Related Fields

Twelve credits of approved mathematics numbered 200 and above.

## Minor in Computer Science (Business Oriented)

Minor Requirements in Computer Science ( 34 credits)
ComS 201 Intro to Computers and Programming I (4)
ComS 202 Intro to Computers and Programming II (4)
ComS 204 Assembly-Language Programming (4)
Coms 155 COBOL Programming (4)
ComS 220 Computers \& Programming Systems (4)
ComS 245 Sytems Analysis \& Design (4)
ComS 255 Advanced COBOL Programming (2)
Computer Science electives (8)
(not to include ComS 110, 120, and 140)
Requirements in Related Fields
Math 273, 274, 275

## Minor in Computer Science (Science Oriented)

Minor Requirements in Computer Science (34 credits)
ComS 201 Intro to Computers and Programming I (4)
ComS 202 Intro to Computers and Programming II (4)
ComS 204 Assembly-Language Programming (4)
ComS 220 Computers and Programming Systems (4)
ComS 250 Numerical Methods (4)
ComS 280 Statistical Methods (2)
ComS 305 Logical Design of Computers I (4)
Computer Science electives (8)
(not to include ComS 110, 120 and 145)

## Requirements in Related Fields <br> Mathematics 231, 232, 375, 376

## Major in Computer Science B.S. Degree

 (Teaching)*Major Requirements in Computer Science ( 60 credits)
ComS 145 Business Data Processing (4)
ComS 155 COBOL Programming (4)
ComS 201 Intro to Computers and Programming I (4)
ComS 202 Intro to Computers and Programming II (4)
ComS 204 Assembly-Language Programming (4)
ComS 230 Computers in Education (2)
ComS 245 Systems Analysis \& Design (4)
ComS 250 Numerical Methods (4)
ComS 255 Advanced COBOL. Programming (2)
ComS 280 Statistical Analysis of Data (2)
ComS 315 Information Structures (4)
ComS 380 Intro to Systems Software (4)
ComS 430 Methods of Teaching Computer Science (3)
ComS 431 Topics in Computer Education (3)
Approved electives in Computer Science (12)
Requirements in Related Fields
A major or minor in a teaching field
Minor in Computer Science B.S. Degree (Teaching)*
Minor Requirements in Computer Science (34 credits) ComS 130 BASIC Programming with Microcomputers (3)

ComS 201 Intro to Computers and Programming I (4)
ComS 202 Intro to Computers and Programming II (4)
ComS 204 Assembly-Language Programming (4)
ComS 230 Computers in Education (2)
Coms 245 Systems Analysis and Design (4)
ComS 430 Methods of Teaching Computer Science (3)
Approved electives in Computer Science (10)

## Required in Related Fields

A major or minor in a teaching field
"Minnesota and certain other states do not certify teachers in the area of computer science.

## COMPUTER SCIENCE COURSES

## ComS 110 Introduction to Microcomputers (2)

Instruction 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.

## ComS 120 Computers and Society (2)

Introduction to computers and their impact on society. Discussion of computer applications, trends, promises and concerns. No prerequisite.

## ComS 130 BASIC Programming with

 Microcomputers (3)Introduction to the BASIC programming language including problem solving and programming. Laboratory work required. No prerequisite.

## ComS 140 Fortran Fundamentals (4)

Introduction to the FORTRAN programming language including problem solving and programming. No prerequisite.
ComS 145 Business Data Processing (4)
Introduction to basic concepts of digital computers and programming as related to business and industry. No prerequisite.
ComS 155 COBOL Programming (4)
Introduction to COBOL programming language including problem solving and programming. Prerequisite: At least one ComS course involving programming.
ComS 160 Topics in Programming Languages (2)
A study of programming languages not offered regularly in other programming courses. A maximum of 4 credits applicable towards the major or minor. Prerequisite: Consent of instructor.

## ComS 201 Introduction to Computers and Programming I (4)

Introduction to problem solving and programming in a high-level language. Prerequisite: Departmental approval.

## ComS 202 Introduction to Computers and

 Programming II (4)Continuation of ComS 201 with emphasis on data representations and organizations, system concepts and structured programming. Prerequisite: ComS 201.
ComS 204 Assembly-Language Programming (4)
Introduction to an assembly language, machine architecture and assembly-language programming. Prerequisite: ComS 202.

## ComS 220 Computers and Programming Systems

 (4)An overview of machine organization and systems software. Prerequisite: ComS 204.
ComS 230 Computers in Education (2)
An overview of computers as educational tools including applications to instruction, classroom management and school administration. Prerequisites:
ComS 110 or equivalent and candidacy in a teaching program.
ComS 245 Systems Analysis and Design (4) A study of the process of planning, designing and implementing on computer business-related systems. Prerequisite: ComS 202 or ComS 155.
ComS 250 Numerical Methods (4)
A computer programming approach to numerical problems including error analysis, linear systems, curve fitting, polynomial approximations and numerical integration. Prerequisites: ComS 202 and Math 232.
ComS 255 Advanced COBOL Programming (2)
A continuation of ComS 155 including file structures, table handling, searching, sorting, report generation, and standard debugging. Prerequisite: ComS 155.

ComS 280 Statistical Analysis of Data (2)
A study of computer-based statistical packages, such as SPSS, SAS, MINITAB, and BMD, for data analysis with emphasis on one such package. Prerequisite: Math 275 or Math 376.

## ComS 285 Computer Simulation Models (4)

An introduction to computer simulation languages and their application to the development of real world simulation models. Prerequisites: At least one ComS programming course and one statistics course.

## ComS 300 Ethical and Societal Concerns of

 Computer Scientists (3)Ethical questions and societal concerns related to the widespread use of computers and the resulting responsibilities of computer scientists. Prerequisite: Junior standing as a Computer Science major or minor.
ComS 305 Logical Design of Computers I (4)
An introduction to the logical design of computers including Boolean Algebra, logical devices, combinational and sequential circuit analysis and synthesis. Prerequisite: ComS 204.
ComS 306 Logical Design of Computers II (4)
Continuation of ComS 305 with emphasis on timing sequence, bus structure, memory unit, arithmetic and logic unit, hardwired control, microprogrammed control, and system design. Prerequisite: ComS 305.

## ComS 315 Data Structures (4)

Discussion of information representations and processing techniques for lists, strings, trees, graphs, records and files. Prerequisite: ComS 204.
ComS 325 Microprocessors (4)
Introduction to microprocessing systems including concepts of data bus, clock cycle, direct access, I/O interface, interrupts and instruction set. Prerequisite: Coms 305.

ComS 330 Survey of Programming Languages (4)
Survey of procedure-oriented languages such as ALGOL, APL, PL/1, SNOBOL and LISP together with applications to problems. Prerequisite: ComS 315 .

## ComS 350 Introduction to Computers and

 Programming (8)An accelerated study of introductory computer and programming concepts including computer organization, internal representation, algorithm development and programming in assembly and highlevel languages. Prerequisites: One programming class, a year of college mathematics beyond algebra and trigonometry and consent of instructor.

## ComS 351 Fundamental Computer Design and Organization (8)

An accelerated study of computer organization, Boolean algebra, switching devices, combinational circuit analysis and synthesis, sequential circuit analysis and synthesis, and realization of special functions.
Prerequisites: ComS 350 and consent of instructor.
ComS 352 System Software (8)
An accelerated study of basic concepts of data structures and system software including arrays, stacks, queues, lists, trees, concepts in assembly, relocation and linking, and an introduction to batch operating systems. Prerequisites: ComS 350 and consent of instructor.
ComS 370 Advanced Data Structures (4)
A continuation of ComS 315 with emphasis on file organization, file indexing, internal/external search, sort and merge algorithms. Prerequisite: ComS 315.
ComS 380 Introduction to Systems Software (4)
Introductory concepts in systems programming including assembly, relocation, linking and loading, translation and sequential operating systems. Project required. Prerequisite: ComS 315.

ComS 410 Theory of Language Translation (4)
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)
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)
A study of operating systems as a resource manager with emphasis on memory, process, processor and file management. Project required. Prerequisite: ComS 380.

ComS 420(g) Design and Implementation of High Level Languages (4)
An examination of underlying concepts in high level programming languages and techniques for their implementation in a selected group of such languages along with discussion of the interrelationship between programming and programming languages.
Prerequisite: ComS 315.

## ComS 425(g) Computer Architecture (4)

Basic principles of processor organization, machine instructions, addressing modes, memory management, and input/output operations. Prerequisite: ComS 306.

## ComS 430(g) Methods of Teaching Computer

Science (3)
For students planning to teach computer science.
Methods and materials typically used in the instruction of elementary and secondary computer science.
Prerequisite: ComS 230 or consent of instructor.
Coms 431(g) Topics in Computer Education (3)
lssues and trends in computer science education.
Prerequisite: ComS 230 or consent of instructor.

ComS 450 Numerical Analysis 1 (4)
Numerical solutions to equations, finite differences, interpolation formulas, numerical calculus.
Prerequisites: ComS 250 and Math 331 or consent of instructor.

## ComS 469 Internship (3-16)

Provides opportunities for students to supplement classroom learning with fieldwork with a computerusing agency. A maximum of 4 credits applicable toward the major. Prerequisite: ComS 315, Junior standing and consent of department.
ComS 470(g) Computer Graphics (3)
Introduction to graphic display devices, related mathematical theory, and software for display files, interactive graphics, and 3 -dimensional graphics. Prerequisite: ComS 315.
ComS 480 Seminar in Computer Science (1) Offers advanced students opportunity to study various topics of particular timeliness. A maximum of 3 credits applicable toward major. Prerequisite: Junior standing and consent of instructor.

## ComS 490 Special Problems in Computer Science (1-6)

Independent study of advanced topics under guidance of Computer Science faculty. May be repeated to maximum of 6 credits. Prerequisite: Junior standing and consent of instructor.

## ComS 500 Fundamental Structures (3)

A study of fundamental data structures, file organization and handling, internal/external sorting, searching and merging techniques, and an indepth study of recursive programming. Prerequisite: Graduate standing.
ComS 502 Automata and Formal Languages (3)
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)

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 511 Compiler Design Theory II (3)

A continuation of ComS 411(g) including run-time memory management, code generation, and code optimization. Prerequisites: ComS 411(g) and ComS 502.

## ComS 515 Operating Systems II (3)

Continuation of ComS 415 with emphasis on concurrent programming, critical section and deadlock problems and performance evaluation. Project required. Prerequisite: ComS 415(g) and ComS 500.

## ComS 521 Database Systems I

Fundamental concepts of the three types of data bases: hierarchial, network, and relational; discussion of data base programming languages with major emphasis given to one such language. Prerequisite: ComS 500.

## ComS 522 Database Systems II

A study of techniques for designing efficient data bases. Prerequisite: ComS 521.

## ComS 525 Analysis of Computer Systems (3)

Comparison of various computer architectures based on instruction-set processors, addressing techniques, I/O structures, memory organization and protection schemes. Prerequisites: ComS $425(\mathrm{G})$ and ComS 500

## ComS 530 Advanced Computer-Based Education

 (3)Analysis of course-author languages, computer-based education networks, computer techniques and related hardware developments.

## ComS 531 Author Languages (3)

A study of author languages with major emphasis given to one such language. Prerequisite: ComS 530
ComS 532 Design Principles for CAI Systems (3)
Accepted pedagogical principles applied to the design of CAI course materials in various disciplines.
Prerequisite: ComS 531.
ComS 540 Software Engineering I (3)
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)
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)
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 Sciences (1-3)
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 (1-3)
Plan B project in Computer Science. Prerequisite: Consent of graduate advisor.
ComS 599 Thesis in Computer Science (6)
Plan A thesis in Computer Science. Prerequisite:
Consent of graduate advisor.

## CRIMINAL JUSTICE

See Sociology-Anthropology for Curricula

## CRIMINAL JUSTICE COURSES

CJ 200 Introduction to Criminal Justice (4)
Overview of the criminal justice field emphasizing history and description of the contemporary United States system.

## CJ 201 Criminal Law (4)

Substantive criminal law, development and meaning of principles of criminal law, current issues.
CJ 309 Law and Society (3-4)
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)
In-depth analysis of one area of the criminal justice system. Prerequisite: Consent of instructor.
CJ 430 Minnesota Criminal Law and Procedure (4)
The Minnesota criminal statutes, and the Minnesota rules of criminal procedure are examined.
Prerequisites: CJ 201 or Pol 231 or consent of the instructor.
CJ 461 Readings in Criminal Justice (1-4)
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)

## ECONOMICS DEPARTMENT

John Trainor, Chair: John Cooper, Vernon Dobis, Douglas Greenley, Daniel Knighton, 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 Mathematics for Business and Social
Sciences (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 231 Principles of Accounting III, Managerial (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)

A one-quarter course in principles of economics for non-business and non-economic majors with special emphasis on the American economy.
Econ 202 Principles of Economics I: Micro (4)
An introductory study of microeconomics. Emphasis on the price system, resource allocation, and income distribution.
Econ 204 Principles of Economics II: Macro (4)
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)An introductory study of regional and international economics, economic growth, developing countries, and comparative economic systems. Prerequisite: Econ 204

## Econ 210 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 290 Introduction to Economic Literature and Methodology (3)

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) 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)
An examination of national income accounting, income determination, employment, growth theory, and economic policy. Prerequisite: Econ 206
Econ 315 Government and Business (4)
A survey course which includes governmental enforcement of competition, regulation of public utilities, and public enterprise. (Same as Management 315) Prerequisite: Econ 206

## Econ 316 Labor History (4)

An investigation and analysis of the philosophical, institutional, and economic roots of the labor movement in the United States. Prerequisite: Econ 202

## Econ 317 History of Economic Thought (4)

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)
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 325 Economic Fluctuations (4)

Business cycles and other economic fluctuations, theory and experience. Introduction to economic forecasting. Prerequisite: Econ 304

## Econ 330 Economic Development (4)

Development theories and their relevance to problems of international income inequalities and growth.
Prerequisite: Econ 206
Econ 340 Comparative Economic Systems (4)
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)

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 360 Economic Anthropology (4)

An examination of how economic organization and technology relate to social organization and culture. (Same as Anth 360) Prerequisites: Anth 110 and Econ 202 or Econ 100

## Econ 370 Quantitative Economic Analysis (4)

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 SW 380). Prerequisite: Econ 100 or 202

Econ 410(g) Advanced Microeconomic Theory
Rigorous analysis of the theories of price, resource allocation, production, distribution, general equilibrium and welfare economics. Prerequisite: Econ 302.
Econ 411(g) Economic History of the United States I (4)
Analysis of the economic history of the United States from the colonial period to the eve of the industrial age. Prerequisite: One year of college history.
Econ 412(g) Economic History of the United
States II (4)
Economic history of the United States from the dawn of the industrial age to the present. Prerequisite: Econ 411 or equivalent.

## 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 Mgmt 415) Prerequisite: Econ 315.

## Econ 416(g) Labor Economics (4)

Wage and employment theory, labor unions and other institutions associated with collective bargaining, and social legislation. (Same as Mgmt 416) Prerequisite: Econ 206.
Econ 425(g) International Trade and Finance (4)
Theories and institutions of trade and finance are examined in traditional and contemporary contexts.
(Same as Finance 425) Prerequisite: Econ 304 or 320.
Econ 430(g) Managerial Economics (4)
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)
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 460(g) Advanced Macroeconomic Theory (4) Contemporary theories of money, capital, interest, economic stability and employment are examined. Prerequisites: Econ 304 and 320.
Econ 469 Internship (1-16)
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.

## EDUCATION DEPARTMENT

Barbara Wasson, Chair; Beth Anderson, Director of Early Childhood Education; L. Bergquist, Director of Elementary Education; R. Bowman, Director of Secondary Education; A. Brown, Director of Clinical Experiences; H. Freeberg, Director of Student Teaching Abroad; P. Beare, Coordinator of Special Education
Beth Anderson, Larry Anderson, Leonard Bergquist, Paul Beare, Barbara Boseker, Richard Bowman, Arlo Brown, Evelyn Brown, Norman Buktenica, Leslie Crawford, Joseph DiCola, Dorothy Dodds, Howard Freeberg, Virginia Gassner, Sandra Gordon, Charlotte Iams, Bella Kranz, Jack Neufeld, William Pockwood, G. Max Spriggs, Cherlyn Sunflower, Linda Svobodny, Joseph Thorman, Barbara Wasson, John Wasson

## AREAS OF STUDY: Elementary Education, Special Education, Secondary Education, Graduate Education which includes the above areas and Educational Administration in conjunction with TriCollege University, and Counseling and Guidance.

The Education Department offers 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 and exceptional education, elementary education, and special education are offered by the Education Department. 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) at least two credits in physical education activity courses (waived for veterans of military service who present satisfactory credentials to the Registrar), ( E ) one or more courses in health education, including instruction in the effects of narcotics and alcohol (satisfied by the MSU course Health 110), (F) student teaching as approved by the MSU Education Department.

Any person with a previous baccalaureate degree may qualify for licensure by $(A)$ completing any remaining requirements for the MSU major in the teaching field, and (B) satisfying all other teacher education requirements above. The candidate may qualify for licensure without earning an additional degree.

## Teacher Education Admission and Retention

Formal application for admission to teacher education is made when you take your first education course, usually Education 110, Career Explorations. As a candidate for teacher education, you must take a Mantoux Test and a speech-hearing test. These are administered by the University Health Center and the Speech-Language-Hearing Center, respectively.
Admission to and retention in teacher education require a cumulative grade point average (GPA) of 2.5 for all MSU courses. If your GPA is between 2.25 and
2.5, you may be admitted or retained on probation by the Teacher Education Admissions and Retention Committee (TEARC).
Admission or dismissal must be approved by the 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 grade point average (GPA) of 2.5 for the Professional Fourth Year (PFY) program. Therefore, the 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 teacher is assigned may request the 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 Education Department 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 110 Career Exploration in Education (3)
Ed 214 Human Growth and Development (3)
Ed 305 Educational Psychology (3)
Ed 307 Measurement and Evaluation (3)
Ed 413 Interpersonal Communications (3)

Ed 490 Foundations of Education (3)
SpEd 418(g) Developmental and Education Variation In Students (3)
Substitutions for these courses must be approved by the Director of Secondary Education 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 six 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, 107 Owens 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 of college 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 Department of Education.

Requirements for admission to student teaching include (A) satisfactory health and speech, (B) a GPA of 2.5 or higher in all credits earned at Moorhead State University, (C) a GPA of 2.0 or higher in professional education courses, (D) the recommendation of the student's faculty advisor and (E) a GPA of 2.5 or higher in the major.
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 at least equal 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.

## 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, busines education, early and exceptional 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 faculty coordinators of such progrmas 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 the Education Department (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.

## EDUCATION CURRICULA

## Major in Elementary Education

(Professional Fourth Year-PFY)
The Education Department offers students one teacher education preparation program-Professional Fourth Year. Students unable to participate in, or not needing a full year, full-time program should contact the department as limited alternatives for experienced teachers and transfer students nearing completion of the elementary major are available.
Faculty advisors work closely with the students on all stages of the major.

The students completing the elementary major spend their first years completing Liberal Arts, two concentrations, and prerequisites. Students are urged to begin their professional work in the freshman year by enrolling for Ed 110, Career Explorations in Education (3) to familiarize themselves with the teaching profession and have an initial field experience.

## The following must be completed before PFY

 ProgramEd 110 Career Explorations in Education (2)
Block I
Ed 214 Human Growth and Development (3)
Ed 413 Interpersonal Communications (3)
SpEd 418 Developmental and Educ. Variation in Students (2)
Art 100 Elements of Art (or equivalent class) (3)
Music 110 Fundamentals of Music (or equivalent) (4)
Math 100 Introduction to Mathematics (4)
Math 203 Foundations of Number Systems (4)
Hlth 124 First Aid class (1)
Hlth 110 Personal and Community Health (4)
Two PE activity classes (1 credit each) (2)
Completion of the 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 345 Orientation to the Teaching of Reading (3)
Ed 441 Children's Literature: Content and Methods (4)
Make application to PFY Program—Obtain forms from Elementary Education Office.
The following classes are taken during the PFY year in conjunction with the three week practicums. The third quarter is the student teaching phase.
Methods Level I ( 16 credits)
Art 340 Art (2)
Mus 340 Music (2)

Ed 420C Child Growth (2)
Ed 421B Language Arts (2)
Ed 421C Reading/Elem School (4)
Ed 421F Audio Visual (1)
Ed 467 Practicum I (3)
Methods Level II (16 credits)
Math 340 Mathematics (4)
Ed 420B Professional Teacher (4)
Ed 421D Science/Health/Social Studies (5)
Ed 467 Practicum II (3)
Student teaching (16 credits)
Ed 422A 8 credits
Ed 422B 8 credits
Two weeks of the student teaching quarter are spent in the Alternative Experience outside the Fargo-Moorhead area. The remainder of the quarter is ordinarily in a F-M area school.

## Major in Special Education

The major in Special Education qualifies for licensure as a teacher of the educable mentally retarded (EMR).
By modifying the course electives or adding other components, the prospective teacher may also meet requirements for additional license categories described below or in other departments.
All special education majors must complete all teacher education requirements including the professional education sequence outlined above.
(A student who also completes the major in elementary education-PFY may be exempted from Ed 305 and Ed 490 from the professional education sequence and SpEd 463 from the special education major.)
Requirements in Special Education (63 credits)
Math 340 or 344 SpEd Math (3)
SpEd 411 Educating the Mildly Handicapped (4)
SpEd 412 Educating the Severely Handicapped (4)
SpEd 413 Instructional Strategies Mildly
Handicapped: ELEM (4)

SpEd 414 Instructional Strategies Mildly
Handicapped: SEC (4)
SpEd 435 Selected Topics (3)
SpEd 444 Language Problems in Special
Populations (3)
SpEd 450 Student Teaching (16)
SpEd 463 Measurements and Assessments in SpEd (3)
SpEd 465 SpEd Reading (3)
SpEd 466 Reading Clinic (2)
SpEd 470 Guidance of Handicapped (3)
SpEd 471 Behavioral and Environmental
Management (3)
Plus 9 credits of electives

## Major in Early and Exceptional Education

The major in early and exceptional education will qualify for licensure in nursery school teaching and/or early child special education at the pre-kindergarten level by completing one or both of the appropriate concentrations. (Effective July 1, 1984, the nursery school license will be re-titled "pre-kindergarten.")
All majors are required to complete all teacher education requirements outlined above except that SpEd 401 Ecologic Assessment (3) will be substituted for Ed 307 in the professional education sequence
Core Requirements for All Majors (24 credits)
SLHS 204 Language Development (4)
Ed 370 Growth and Development of Young
Children (3)
Ed 371 Lab (1)
Ed 372 Art, Music, Literature for Young Children (3)
Ed 373 Foundation of Early \& Exceptional
Education (4)
Ed 375 Theories of Instruction with Young Children (3)
SpEd 471 Behavioral and Environmental
Management (3)
Ed 475 Curriculum Development for Young
Children (3)

Pre-Kindergarten (Nursery School) Concentration In addition to the above courses students seeking the pre-kindergarten licensure must enroll in the following courses:
SpEd 420 Education of Exceptional Children (3)
SpEd 425 Young Children with Special Needs (3)
SpEd 436 Problems in Special Education (1)
Ed 341 Children's Literature (4)
Ed 471 Kindergarten Curriculum and Instruction (4)
Ed 474 Language Arts in Early Education (3)
Preschool Business and Office Practice (3)
CDFR (NDSU) Organization and Adminstration in Early Childhood (3)
Ed 473 Practicum in Early Childhood (3-16)
Ed 469 Internship (3-16)
Ed 450 Student Teaching (4-16)
Early Childhood Special Education Licensure In addition to core requirements above, students seeking ECSE licenses must complete the following courses:
SpEd 411 Educating the Mildly Handicapped (4)
SpEd 412 Educating the Severely Handicapped (4)
SpEd 423 Theory \& Practice in Early Childhood Special Education (3)
SpEd 424 Assessment Strategies with Young Handicapped Children (4)
SpEd 426 Instructional Strategies with Handicapped Infants \& Toddlers (4)
SpEd 427 Instructional Strategies with Handicapped PreSchoolers (4)
SpEd 428 Family Ecology of the Handicapped (3)
SpEd 444 Language Problems of Special Populations (3)

SpEd 467E Practicum in ECSE (3-6)
Ed 473 Practicum in Early Childhood (3-6)
SpEd 477 Topical Seminar in ECSE (3)
SpEd 450E Student Teaching in ECSE (3-16)

## Associate in Science in Early Childhood Education

 (Two-Year Program 96 credits)NOTICE: Effective May 31, 1983, the State of
Minnesota discontinued all provisional licenses for teaching. As a result, this program no longer qualifies for nursery school licensure.
Liberal Arts requirements should be completed in the student's first year. Professional courses in the second year are completed in laboratory setting where students prepare materials and lessons for use with children at the campus centers.
Liberal Arts (42 credits)
(See Associate in Science requirements in the Academic Information section)

Professional Courses (43 credits)
Hlth 110 Personal and Community Health (4)
Hlth 125 First Aid Red Cross (2)
Ed 341 Children's Literature (4)
Ed 413 Interpersonal Communications (3)
SpEd 370 Survey of Mainstreaming (2)
Ed 270 Orientation and Child Development (3)
Ed 272 Early Childhood Curriculum (3)
Ed 273 Field Practicum (16)
(Typically spread over 3 quarters: 4,6 , and 6 cr . respectively)
Ed 274 Language Development of Young Child (3)
Ed 372 Art, Music and Literature for Young
Children (3)

## 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 pre-kindergarten (nursery school) teachers.
In addition to the following courses, at least three 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
(3)

Ed 478 Play and Development (3)
Minor in Developmental and Corrective Reading
Students seeking to qualify as elementary or secondary remedial reading teachers or as secondary developmental 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.
Core Requirements (19 credits)
Ed 345 Orientation to the Teaching of Reading (3)
Ed 346 Linguistic Foundations for Reading (3)
Ed 349 Developmental Reading (4)
Ed 441 Children's Literature Content/Methods (4)
Ed/SpEd 445 Remedial and Corrective Reading (3)
Ed/SpEd 446 Reading Clinic (2)
Two courses from the following: ( 6 credits)
Ed 342 Comprehension Strategies (3)
Ed 448 Reading Study Skills in the Content Areas (3)
SpEd 421 The Gifted Child (3)
SpEd 447 Teaching Basic Skills to Secondary Students (3)

SpEd 465 Special Education Reading (3)
Ed 480 Teaching Reading: Second Language (3)

Additional Electives (13 credits)
Electives may be chosen from those not used above or from the following list. Other electives may be substituted with department approval. Students completing three quarters of a foreign language may apply 3 credits toward this minor.
Ed 274 Language Development of the Young Child (3)
Ed 474 Language Arts in Early Childhood (3)
Ed 481 English for Second Language Learners (3)
Ed 489 Reading Workshops (1-3)
Engl 392 Adolescent Literature (3)
SLHS 204 Language Development (4)
SLHS 101 Intro to Speech, Language, Hearing Sciences (3)
SpEd 422 Curriculum and Methods for the Gifted (3)
SpEd 461 Education of Children with Specific Learning Disabilities (3)
SpEd 471 Behavioral and Environmental Management (3)

Spch 341 Creative Dramatics (3)

## Minor in Elementary Education (34 credits)

The minor in elementary education does not qualify for a teaching license but supplements other majors whose graduates need some knowledge of education in the elementary school, including such majors as school psychology, mathematics, physical education, music, or art. Ed 214 Human Growth and Development is a prerequisite for the following courses.
Ed 345 Orientation to Teaching Reading (3)
Ed 420C Child Growth and Development (2)
Ed 421B Language Arts (2)
Ed 421C Reading: Elementary School (4)
Ed 421D Science/Health/Social Studies (5)
Ed 441 Children's Literature (4)
SpEd 418 or SpEd 411 (2-4)
Math 203 Foundations of Number Systems (4)

Select 6-8 elective credits from the following courses. Substitutes may be made by your advisor or coordinator of elementary education.
Ed 346 Linguistic Foundations for Reading (3)
Ed 448 Reading Study Skills in the Content Area (Lab required) (4)
Ed 467 or other Field Experience (1-3)
Math 100 Introduction to Mathematics (4)
Math 340 Mathematics in the Elementary School (4)
(Prerequisites: Math 100 and Math 203)
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 or Coordinator of Elementary Education

## Minor in Special Education

Students may earn a non-license special education minor with a minimum of 36 credits in special education courses and courses in related fields to be arranged through the Special Education Office. The program will not include student teaching and will not result in special education licensure. However, the remaining requirements for one of the licenses listed below or for the special education major may be completed at a later time, and notation will be made on the student record.

## Minor in Special Learning Disabilities

Although this minor does not qualify for SLD licensure in the State of Minnesota, courses for the minor may also be applied to license requirements for the teaching of learning disabled (SLD-LD) or emotionally disturbed (SLD-ED) students. An appropriate program of at least 41 credits for the minor should be approved by the

Special Education Office after consultation with an advisor.

## Licensure in Special Education or Learning Disabilities

Programs leading to license by the State of Minnesota as teachers of the educable mentally retarded (EMR), trainable mentally retarded (TMR), learning disabled, (SLD-LD), or emotionally disturbed (SLD-ED) are offered through the Education 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 and related fields. Complete information is available from the Special Education Office.

## 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.
Ed 471 Curriculum and Instruction in Kindergarten Education (4)
Ed 474 Language Arts in Early Childhood (3)

## 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 decisionmaking 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 identity, 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 trends, 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 110 Career Explorations in Education (3)

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 142 College Reading Development (2)
Instruction in study skills. Practice use of study resources to improve vocabulary and reading.

## Ed 189 Personal Development

(Interaction Group) (2)
Exploration and work on personal development goals in small group, i.e., self-understanding, communication skills, values, goals, etc.

## Ed 214 Human Growth and Development (3)

Study of stages and principles of human development and their educational implications. Theories from behavioristic, developmental, Gestalt, cognitive theorists. Prerequisite: Ed 110. 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 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)
A systems approach to learning, learning environments, readiness, individual differences, student-teacher relationships. Prerequisite: Ed 110 and

Ed 214 or concurrent with Ed 214, Ed 413, SpEd 418.

## Ed 306 Measurement and Evaluation:

 Elementary (2)Construction and use of questioning techniques, teacher-made tests, and interpretations of standardized evaluation instruments. Prerequisites: Ed 110 and Ed $214,413, \mathrm{SpEd} 418$, Ed 305 or concurrent with Ed 305.

## Ed 307 Measurement and Evaluation: <br> Secondary (3)

Emphasizes assessment and evaluation of instruction with objective development as basis for current techniques. Normative/Criterion reference testing principles and concepts. Prerequisites: Ed 214, Ed 413 , Ed 305 or concurrent with 305, SpEd 418.
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(g) Production of Audiovisual Materials (3)
Basic methods and techniques for the production of -graphic, audio, and photographic instructional media. With lab.
Ed 342(g) Comprehension Strategies (1-3)
Analysis of juvenile books emphasizing the development of comprehension strategies for cognitive and affective understanding.
Ed 345 Orientation to the Teaching of Reading (3) General introduction and overview of reading-learning process and essential components of developmental reading program. Prerequisites: Ed 110, Ed 214, Ed 413, SpEd 418.
Ed 346(g) Linguistic Foundations for Reading Instruction (3)
Establishes a foundation of linguistic principles and
language processing as basis for understanding reading as a communication process. Prerequisite: Ed 345.

## Ed 349 (g) Developmental Reading (4)

Development of word recognition, comprehension study skills from K-12. Analyzes instructional strategies. Supervised practicum. Prerequisite: Ed 345.

## Ed 370 Growth and Development of the Young

 Child (3)Growth and development of children from conception to age six. Selected observations of children required.
Prerequisite: Ed 214.

## Ed 371 Observing and Recording Young Children's Behavior (1)

Observation, data collection and discussion of selected facets of young children's growth and development. Detailed study of one child. Prerequisite: Ed 370 taken concurrently.

## Ed 372 Art, Music and Literature for Young

 Children (3)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)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)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 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 405(g) Philosophy of Education (4)

Introduction to social, political, and educational psychology.

## Ed 408(g) Foundations of Oppression (3)

Nature, experiences and disadvantages of oppression; diagnosis and classification of structure of oppression. Prerequisite: Teaching experience.

## Ed 409(g) Self and Oppression (3)

Conflict-confrontation, interpersonal communications, understanding differences in value systems of others.
Ed 410(g) Basic Counseling Skills
(3)

Basic skills in the one-to-one counseling interview. Improve interpersonal communication skills in listening and responding.

## Ed 411(g) Counseling in the Helping Professions

 (3)Basic concepts and principles of guidance and counseling.
Ed 413(g) Interpersonal Communications (3) The "affective" course in Human Relations. Simulation, participation focus on nonverbal communication, conflict resolution, trust development, paraphrasing. Ed 413 is part of Block I. Block I also includes Ed 214 and SpEd 418.
Ed 414-415-416 Foundations of Student Personnel Administration I-II-III (2 credits each)
Examination of student personnel programs and services. Orientation, financial aids, housing, union management, counseling services, placement, health services, activities, discipline, staff development and student leadership. Prerequisite: approved program.

Ed 418(g) Sociology of Education (3)
See Soc 418(g)

## Ed 420B Professional Teacher (2)

Focuses on the study of education and the rights and responsibilities of the individual teacher within the school setting. Professional Teacher will be taken during Level II of the PFY program. Prerequisites: All PFY prerequisites.

## Ed 420C Child Growth and Development (2)

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 Teaching Language Arts in Elementary Schools (2)

The course provides instructional methods that will help the preservice teacher become an effective teacher of language arts. Prerequisites: All PFY prerequisites.

## Ed 421C Reading: Elementary School

Examines the basic skills of teaching reading grades $1-6$. Includes plans for instruction, readiness, teaching phonics, word recognition skills, comprehension, and assessing reading strengths and weaknesses.
Prerequisites: Ed 110 and Ed 345.

## Ed 421D Methods in Teaching Elementary Science, Health, and Social Studies

Methods and materials. Includes writing lessons to develop attitudes, knowledge, and cognitive and process skills. Prerequisites: All PFY prerequisites.
Ed 421F Audio Visual: Elementary School (1)
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.

Ed 422 Student Teaching: PFY Program (16)
Student teaching grades 1-6. Prerequisite: PFY program student.
Ed 423(g) Current Trends in Elementary Social Studies (3)
Examines social studies as a process approach.
Emphasis on skill development in inquiry teaching as social science study technique. Prerequisite: Teaching experience.

## Ed 425(g) Improvement of Instruction in Reading and Language Arts (3)

Designed to meet needs of teachers enrolled. All phases of reading and language arts process or evaluation are appropriate. Prerequisite: Teaching experience.
Educ 431(g), 432(g)
See SpEd 421(g)-422(g).
Ed 440 Social Studies in the Secondary School (3) Objectives, teaching strategies, curriculum materials, and evaluation at the secondary level (7-12). Prerequisites: near completion of social science major/minor and Ed 110, 214, 413, 305 and 307. SpEd 418.

## Ed 441(g) Children's Literature: Content and Methods (4)

Systematic study of trade books available for use with students preschool through adolescence. Overview of current trends, selection criteria and strategies for making literature an integral part of the curriculum are included.
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/ SpEducation (3)

Projects and experiences in industrial arts and crafts designed for teachers of the mentally handicapped. [Same as $\mathrm{SpEd} 443(\mathrm{~g})$ and IndS 443(g)].

## Ed 445(g) Remedial and Corrective Reading (3)

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 $\mathrm{SpEd} 445(\mathrm{~g})$ ].
Ed 446 (g) 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. [Same as SpEd 446(g)].

## Ed 447(g) Reading Workshop (2)

Designed for reading teachers to up-date theories and practices in teaching reading. Topics will vary as offered.

## Ed 448(g) Reading Study Skills in the Content Areas (3)

Teaching techniques to improve reading ability in content materials; vocabulary, comprehension, study skills, and provisions for individual learning differences.

## Ed 450-451E Student Teaching and Seminar-

## Elementary (8-16)

Supervised student teaching experience in an elementary school. Prerequisites: Admission to TEC, Ed 110, 214, 413, 305, 306, SpEd 418, all elementary methods and curriculum classes. Applications required two quarters prior to the field experience. Departmental approval needed.

## Ed 450-451S Student Teaching and Seminar-

Secondary (8-16)
Supervised student teaching experience in a secondary
school (7-12). Prerequisites: Admission to TEC, Ed $110,214,413,305,307$, and SpEd 418, special methods course(s), and departmental approval. Applications required two quarters prior to the field experience.

## Ed 455E, 455S Student Teaching (8-16)

Student teaching experience to qualify for additional licensure or supplemental student teaching experience. Advisor and Education Department consent required.
Ed 467 Practicum-Elementary Teaching (1-6)
Observation of children in a classroom setting; assisting classroom teacher; teaching selected lessons under supervision. May include seminar. Can be repeated once.
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 470(g) Development of Young Children (3)
Growth and development of children from conception to age six. Selected observations of children required. Prerequisite: Ed 214.
Ed 471(g) Curriculum and Instruction in Kindergarten Education (4)
Overview of early childhood education. Required for kindergarten licensure. Prerequisites: Ed 110, 213, and junior status.
Ed 472(g) Curriculum and Instruction for Early Childhood Education (3)
Guidance in the learning process and curriculum materials used in nursery schools and day care programs. Prerequisites: Ed 110, 470, and junior status.
Ed 473(g) Practicum in Early Childhood
Education (3-16)
Supervised practicum experience with pre-kindergarten 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)

In-depth study of language development; reading readiness and early reading instruction. Required for kindergarten licensure. Prerequisites: Ed 110, 214, 471, or concurrent with 471.

## Ed 475(g) Curriculum Development for Young

 Children (3)Provides knowledge of curriculum approaches and instructional methods in the content areas of mathematics, science, social studies, language, reading readiness and health. 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)
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
Constructs 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. Prerequisite: Teaching experience or consent of instructor.

## Ed 488(g) Cultural Pluralism (3)

Social/economic backgrounds and life-styles of culturally different students. Analysis of appropriate teaching strategies.
Ed 490 Foundations of Education (3)
Historical, philosophical, social, and professional foundations of American education. Prerequisites: Ed $110,214,413,305,306$, or 307 or SpEd 418, or concurrent with 450-451.

## 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. By arrangement 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)

Basic theory, techniques for using descriptive and inferential statistics, and application in educational research designs.

## Ed 503 Methods of Research (3)

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)

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. Prerequisite: Ed 502, 503, or 505 recommended.
Ed 530 Intro to Education Administration (3)
Theory, principles, issues and problems involved in the execution of the school management function.
Ed 531 Teacher/Student Rights (3)
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)

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)
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)
Study of local, state and federal revenue systems to support public education. Tax theory, budgetary and accounting procedures. Prerequisites: Ed 530 or concurrent with Ed 530.

## Ed 535 The Process of Supervision (6)

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. Prerequisite: Ed 530 and Ed 535 .

Ed 537 Curriculum Theory and Principles (3)
Examination of principles, contemporary theories and change process alternatives as they impact on the school educational program.

## Ed 538 Secondary School Curriculum (3)

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)
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

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)

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 550 Counseling Theories (3)
Students will study and examine current counseling principles and theories in order to utilize counselor techniques associated with those theories. Prerequisites: Ed $410(\mathrm{~g}), 411(\mathrm{~g})$, or consent of instructor.
Ed 551 Advanced Counseling Techniques (3)
Course is designed to assist students in examining and applying counseling techniques appropriate for crisis, facilitative, preventive and developmental counseling. Prerequisites: Ed $410(\mathrm{~g}), 411(\mathrm{~g}), 550$, or consent of instructor.

## Ed 552 Group Counseling (3)

Group dynamics in theory and practice. Prerequisites: Ed 550, Psych 476, or consent of instructor.

## Ed 553 Individual Appraisal (3)

Study of various types of tests, testing programs, and appraisal techniques and tools for individuals.
Ed 554 Career Development (3)
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)Examination of principles or 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 557 Practicum in Counseling and

## Guidance (1-6)

A practical and field experience in counseling and guidance for majors. Individualized for each student. Prerequisite: Consent of instructor.

## Ed 558 Counseling the Gifted (3)

A variety of theoretical and practical issues related to counseling and teaching the gifted student.
Prerequsities: $\mathrm{SpEd} 421 \mathrm{~g} / \mathrm{Ed} 431 \mathrm{~g}$ or equivalent, and SpEd $422 \mathrm{~g} /$ Ed $432 \mathrm{~g} /$ Ed 431 g or equivalent, and SpEd $422 \mathrm{~g} /$ Ed 432 g or equivalent, or permission of instructor.
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 581 Legal Aspects of Education (3)

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)

Examination of needs assessment, goal setting, planning and evaluation systems, management systems, management by objective plans and decisionmaking 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)
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)
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)
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)

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 592 Administration and Supervision of Remedial
Reading (3)
Principles and problems in the administration and supervision of remedial reading programs.
Prerequisites: Six credits of remedial reading courses.
Ed 594 Practicum in Administration (1-9)
Supervised field experiences in various areas in educational 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)

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)
Major study in chosen area. Available for candidates for the master's or specialist degree. Project approval required from advisor committee.

## ENGINEERING DEPARTMENT

Charles Martin, Chair; Melanie Bengtson
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. Preengineering students should work closely with their advisor in planning courses of study.

## PRE-ENGINEERING CURRICULA (96-108 credits)

Engl 101-102-103 Freshman Composition and
Literature I-II-1II (12)
Math 231-232-233-234 Calculus 1-II-III-IV (16)
Math 331 Differential Equations (4)
Chem 111-112 General Chemistry I-II (10)
Phys 200-201-202 General Physics I-II-111 (15)
Eng 130 Engineering Orientation and Computation (3)
Eng 210 Engineering Design (3)
Eng 243 Engineering Mechanics I - Statics (4)
Eng 244 Engineering Mechanics 11 - Dynamics (4)
Eng 245 Engineering Mechanics Ill - Materials (5)
Approved Electives (17-29)

## ENGINEERING COURSES

Eng 113 Technical Drafting I (4)
Free hand and instrumental practices: sketching, lettering, geometric constructions, multi-view drawings, pictorial projections, dimensioning, specifications, and considerations pertaining in conceptual design.

## Eng 130 Engineering Orientation and

 Computation (3)Introduction to engineering fields, tools and methods for numerical computation graphic solutions in engineering. Prerequisite: Consent of instructor.
Eng 200 Surveying I (3-6)
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 201 Surveying: A Working Lab (3)

In depth working experience dealing with everyday problems in land surveying.
Eng 205 Public Land Surveying (5)
Complete review of the historical development of land survey systems, together with a presentation on the necessity of an efficient land system in a country, the concept of the United State Public Land System, the
principles of metes and bounds descriptions, retracement procedures in public land systems, State Plane Coordinate Systems as proposed by the National Geodetic Survey and Modern Land Data Systems.

## Eng 206 Land Law (3)

Discussion of land law and legal implications and restoration of public land survey boundaries.
Preparation of the required descriptions for transfer and documentation of land sales.

## Eng 210 Engineering Design (3)

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 and oral presentation.

## Eng 211 Engineering Communication (1-3)

Study of and participation in graphic, oral and written communication.

## Eng 213 Technical Drafting II (4)

Industrial production processing, detail and assembly drawings, geometric and limit dimensioning design of jigs, fixtures, gears and cams. Prerequisite: Basic drafting.

## Eng 214 Descriptive Geometry (4)

Fundamental principles of orthogonal projection, true length lines, angles between planes, development of surfaces, and intersection of solids.

## Eng 231 Manufacturing Processes I (2)

Wire feed, stick electrode, TIG, gas welding and cutting, testing, identification of metals, resistance welding, and blueprint weld symbols.

## Eng 232 Machining Processes II (2)

Basic metal machining experiences in operating, lathe, drill press, grinders, saws, shears, and milling machine, blueprint reading and precision measurement.

## Eng 233 Manufacturing Processes III (2)

Metal fabrication operations including forming, machining, and joining processes.
Eng 243 Engineering Mechanics I - Statics (4)
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)

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)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)
A study of methods, materials and techniques of inspection and testing of industrial materials and products; quality control.
Eng 313 Technical Drafting III (4)
Drafting practices as applied to structural steel, reinforced concrete, piping, fluid power and electrical work.

## ENGLISH DEPARTMENT

C. Lok Chua, Chair; Rufus Bellamy, Sheila Coghill, Marjorie Corner, Daniel Deneau, V. Dennis Flood, Clarence Glasrud (Emeritus), Sheila Gullickson, Allan Hanna, Patricia Hansen, Bernard Heringman, Sally Herrin, Gary Litt, Thomas McGrath (Emeritus), Joseph Miller, Elizabeth Moraghan, Byron D. Murray
(Emeritus), Robert Pender, Mary Pryor, John
Sherman, Donald Short, Rosemary Smith, Keith Tandy, Marie Tarsitano, Mark Vinz, William Woolwine.

## ENGLISH CURRICULA

Requirements for majors, dual majors, and minors in English are set forth in detail below. Anyone who wishes to major in English must see the chairperson and be assigned an advisor. The large number of elective credits in the English major demands that students visit their English Department advisors frequently and plan a series of electives that will provide them with programs both academically respectable and personally satisfying.
The B.A. and B.S. (teaching) programs presently have identical core requirements, but the B.S. program also 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 English 310 (Chaucer), 316 (Milton), and 414 (Advanced Shakespeare). They are also advised to make themselves proficient in at least one foreign language.
Students who wish to set up individualized majors with concentrations in English should consult their advisors about such suggested majors as Comparative Literature and Language Studies.
Students who plan to enter the business world after college or who wish to prepare for other professional areas should ask advisors about "Career Cluster,"
"Career Concentration," and Internship courses
available in those areas at MSU.
Major in English B.A. Degree
Major Requirements in English (64 credits)
Core Requirement ( 28 credits)
Engl 201-202-203 American Literature Survey I-II-III:
at least 8 credits with 4 more credits of American Survey or any 300- or 400-level American Literature course (12)
Engl 211-212-213 British Literature Survey I-II-III (12) Engl 314 Shakespeare (4)
Electives in English ( 36 credits)
At least 28 credits must be taken at the 300 or 400 levels, and at least 12 of these credits must be taken in courses that deal with literature of the nineteenth century or earlier, or with Old or Middle English language. Electives should be chosen in close consultation with one's English Department advisor.
Major in English B.S. Degree (Teaching)
Major Requirements ( 70.71 credits)
Core Requirement ( 28 credits)
(See B.A. major)
Electives in English (24 credits)
At least 12 credits must be taken at the 300 or 400 levels, and at least 8 of these credits must be taken in courses that deal with literature of the nineteenth century or earlier, or with Old or Middle English language. Electives should be chosen in close consultation with one's English Department advisor.
Courses Required for Teaching Certification (18-19 credits)
Engl 394 Advanced Composition (3)
One of the following:
Engl 391(g) Teaching English in Secondary Schools (4)
Engl 392(g) Adolescent Literature (3)
Engl 393(g) Grammar and Usage for Teachers (4)
One of the following:
Engl 361(g) Introduction to Descriptive Linguistics (4)
Engl $363(\mathrm{~g})$ History of the English Language (4)
Engl 364(g) American English (4)
Engl 492(g) Transformational Grammar (4)
Speech requirement:
Spch 100 Beginning Speech Commưnication (4)

One of the following:
Spch 105 Beginning Oral Interpretation (4)
Spch 224 Technical Theatre Methods (4)
Spch 344 (g) Principles of Play Direction (4)
All Teacher Education Requirements must be fulfilled to complete this major. See Teacher Education Requirements under Education Department. The Minnesota Board of Teaching has begun revision of the rules governing licensure in English/Language Arts.

## Dual Major in English and Speech Communication/ Theatre Arts B.S. Degree (Teaching)

Major requirements in English (54 credits)
Core Requirement ( 28 credits)
(See B.A. major)
Electives in English (15-16 credits)
At least 11 credits must be taken at the 300 or 400 levels and at least 8 of these credits must deal with literature of the nineteenth century or earlier. Electives should be chosen in close consultation with one's English Department advisor.
Courses required by the State Board of Education:
10-11 credits
(same as listed under English B.S. Degree [Teaching],
except for Speech Requirement.)
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 $340(\mathrm{~g})$ 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 Education Department.)
Dual Major In English and Mass Communications
B.A. Degree ( 102 credits)

Major Requirements in English (57 credits)
Core requirement ( 28 credits)
See B.A. major
Writing Requirement ( 6 credits)
Engl 251 Film Writing (3)
Engl 286 Practical Writing (3)
Engl 287 Technical Report Writing (3)
Engl 288 Introduction to Creative Writing (3)
Engl 388 Creative Writing (3)
Engl 394 Advanced Composition (3)
Electives in English (23 credits)
Note: At least 15 credits must be taken at the 300 or 400 levels and at least 8 of these credits must deal with literature of the nineteenth century or earlier. Electives should be chosen in close consultation with one's English Department advisor.
Major Requirements in Mass Communications (45 credits)
Core requirement ( 25 credits)
MC 200 Introduction to Mass Communications (3)
MC 205 Reporting I (3)
MC 215 Visual Communications (4)

MC 230 Communications Photography I (3)
MC 305 Reporting II (4)
MC 360 Mass Media: Issues and Ethics (4)
MC 440(g) Communications Law (4)
Electives in Mass Communications (20 credits)
Note: Electives in Mass Communications should be chosen in close consultation with one's MC Department advisor. All credits earned under the internship assignment count towards graduation but only three credits may be applied to the major.
At least 70 of the 192 credits needed for graduation must be at the 300 level or above.

## B.A. Minor in English ( 35 credits)

Core for the minor ( 24 credits)
Engl 202-203 American Survey II-III (8)
Engl 211-212-213 British Survey I-II-III (12)
Engl 314 Shakespeare (4)
Electives in English intended for majors: (11 credits) Electives should be chosen in close consultation with one's English Department advisor.

## B.S. Minor in English (Teaching) ( $42-43$ credits)

Core requirement for minor ( 24 credits)
(Same as above)
Courses required by the State Board of Education
(18-19 credits)
(Same as for B.S. major)
This minor can be awarded only in combination with at least one teaching major.
Minor in English, Writing (to accompany B.A. or B.S. Degree) ( 28 credits)

Writing requirement, at least 12 credits chosen from the following:
Engl 251 Film Writing (3)
Engl 286 Practical Writing (3)
Engl 287 Technical Report Writing (3)
Engl 288 Introduction to Creative Writing (3)

## Engl 350 Practical Criticism (4)

Engl 388 Creative Writing (repeatable) (3)
Engl 393(g) Grammar and Usage for Teachers (4)
Engl 394 Advanced Composition (3)
Engl 488(g) Advanced Creative Writing (3)
Electives in English (16 credits)
Electives should be chosen in close consultation with a Minor Advisor assigned by the Department of English. Elective courses should include substantial written assignments.

## ENGLISH COURSES

## Engl 090 Basic Grammar (1)

Instruction and tutoring in basic writing skills. Open to any student; required of students judged likely to do poorly 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 101-102A-102B-103A-103B Composition and

 Literature I-II-III (4 each)101: Heavy emphasis on writing and grammar; some reading and discussion of imaginative literature, including the essay. General introduction to using the library. 102A: Student writing in conjunction with reading in the novel and drama. 103A: Student writing in conjunction with reading chiefly in poetry. 102B and 103B: Student writing in conjunction with works of literary merit which may be organized by genre, topic, subject matter, or type of composition. 102B may be taken in place of 102A, 103B in place of 103A. 101 is prerequisite to 102 and 103.
Engl 111-112-113 Composition and Literature for Non-Native Speakers I-II-III (4 each)
Reading and writing of expository prose; introduction
to American culture through literature; review of English grammar, vocabulary study. Restricted to nonnative speakers who must take the course unless exempted by the department upon recommendation of the instructor, in which case they may enter English 101-103.

## Engl 191-192-193 Literature and Critical Writing I-II-III (4 each)

Close reading of literary masterpieces, criticism, and literary history. Enrollment restricted to those who earn A's in 101 and 102, and those who are approved for 191-192-193 by the Freshman English Committee on the basis of testing or of recommendation by the chairperson.

## Engl 195 Effective Reading (4 credits)

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. Before registering for any of the following courses, students should consult their advisors and read specific course descriptions, available each quarter, for detailed information about course requirements, emphasis, and reading lists. Courses marked with an asterisk may be repeated, with consent of instructor, when authors and topics vary.

## Engl 201 American Literature Survey I (4)

Historical and critical study of Puritanism, Nationalism, and Romanticism.

## Engl 202 American Literature Survey II (4)

 Historical and critical study up to American Realism.
## Engl 203 American Literature Survey III (4)

Historical and critical study of modern American literature.

## Engl 211 British Literature Survey I (4)

Historical and critical study from the beginnings through Shakespeare.

## Engl 212 British Literature Survey II (4)

Historical and critical study of the 17 th and 18 th centuries.

## Engl 213 British Literature Survey III (4)

Historical and critical study of the 19th and 20th centuries.
Engl 214 Introduction to Shakespeare (4)
A study of representative plays and poems.

## Engl 230* Individual Authors (4)

Study of one or two writers whose work is important in itself or has had a significant influence on the development of literature.
Engl 232 Film and Novel
Comparative analysis of novels adapted into films.
Focus on aesthetic and interpretative similarities and differences in the two art forms. Cross-listed as Speech 282.

## Engl 234 Mythology (4)

Introduction to the great myths and their influence upon later literature.

## Engl 240* Masterworks (4)

Extensive reading in a particular literary genre, such as 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 but concern sex-role stereotyping.
Engl 248 Introduction to American Ethnic Literature (4)
Significant writers and selected works representing
several minority ethnic backgrounds, such as American Indian, Hispanic American, Afro-American and Asian American.
Engl 251 Film Writing (3)
Techniques of writing for film with special emphasis on a documentary.
Engl 280* Introduction to World Literature (4)
Selected writers or literary traditions in world literature.

## Engl 286 Practical Writing (3)

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 (3)
Expository writing dealing with scientific subjects and planned for a specialized audience: documenting, writing abstracts, preparing reports of original investigations.
Engl 288 Introduction to Creative Writing (3)
Practice in the writing of poetry, short fiction, or drama.

## Engl 290* Special Topic (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 exclusive of Chaucer.

Engl 302* Sixteenth-Century British Literature (4)
Study of selected major authors from More through the lyricists of the 1590's.
Engl 303* Seventeenth-Century British
Literature (4)
Study of selected major authors from Donne and Jonson to Browne.

## Engl 304* Restoration and Eighteenth-Century British Literature (4)

Study of selected major authors from Dryden to Dr. Johnson.

## Engl 305* The Romantic Movement (4)

Study of selected major authors from Burns to Keats.

## Engl 306* The Victorian Period (4)

Study of selected major authors from Carlyle to Hardy.

## Engl 307* Twentieth-Century British

Literature (4)
Study of selected major British authors from the 1890's to the present.

## Engl 308* Nineteenth-Century American

Literature (4)
Study of selected major American authors of the nineteenth century.

## Engl 309* Twentieth-Century American

Literature (4)
Study of selected major American authors of the twentieth century.
Engl 310 Chaucer (4)
Study of selected major works and their background.

## Engl 312 Spenser (4)

Study of selected major works and their background.

## Engl 314 Shakespeare (4)

Study of selected plays and poems. When the works vary, students may repeat course.

## Engl 316 Milton (4)

Study of selected major works and their background.
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 such as 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, the commedia dell' arte tradition, and the drama of the Renaissance. 345: The drama since Henrik Ibsen, 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 361(g) Introduction to Descriptive Linguistics

## (4)

A broad survey of the field of descriptive linguistics.
Engl $363(\mathrm{~g})^{*}$ History of the English Language (4)
A historical and linguistic approach to the phonology and morphology of English. Emphasis may be on Old, Middle, or Modern English.

## Engl 364(g) American English <br> (4)

An examination of the grammatical system of American English with some study of dialects.

## Engl $380^{*}$ World Literature (4)

Study of selected world masterpieces grouped thematically or generically.

## 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, or plays. Partly a dialogue on contemporary writing, but mainly workshop. Students may repeat this course once when the topic varies.

## Engl 390* Special Topics (4)

Study of a particular literary genre, topic, or theme.

## Engl 391(g) Teaching English in Secondary

Schools (4)
Current practices in teaching high-school English; possible observation of high-school classes; discussion of curriculum, approaches, and techniques.

## Engl 392(g) Adolescent Literature (3)

Teaching literature in junior and senior high school. Review of current trends in adolescent literature, approaches, and techniques.
Engl 393(g) Grammar and Usage for Teachers (4) Advanced study of grammar and usage and techniques for teaching them in secondary schools.
Engl 394 Advanced Composition (3)
Principles of clear and effective writing; teaching and evaluating composition for future teachers.
Engl 396 History of Books and Printing (3)
The making of books from earliest times to the present; the invention and spread of printing, type design, bookbinding, and illustration.
Engl 408(g)* Studies in American Literature (4)
Study of selected topics, movements, or genres.
Engl 410(g)* Studies in British Literature (4)
Study of selected topics, movements, or genres.
Engl 414(g)* Advanced Shakespeare (4)
Critical approaches to Shakespeare and intensive reading of a few works. Prerequisite: Engl 314.
Engl 430(g)* Individual Author (4)
Intensive study of selected works of one author.
Engl 440(g)* Advanced Genre Studies (4)
Advanced work in a particular literary genre such as short story, novel, poetry, drama, or epic. Outside research and critical writing.

## Engl 450(g)* Critical Traditions (4)

Principal works of literary aesthetics and criticism from selected periods in history.

## Engl 469 Internship-Writing (2-16)

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 can count towards the major.

## Engl 480(g)* Advanced World Literature (4)

Intensive study of selected world masterpieces from one language, in translation.
Engl 488(g) Advanced Creative Writing (4)
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 when the topic varies.

## Engl 492(g) Transformational Grammar (4)

An introduction to the theory of generative grammar and its applications.
Engl 498(g) Tutorial (1-3)
The consideration of various problems in literature or language agreed upon by the instructor and the student.

## EXTERNAL STUDIES

Audrey Jones, Director; Lois Fisher
A student may earn the Bachelor of Arts or Bachelor of Science degree from Moorhead State University by fulfilling all requirements specified below. Further information is available from the MSU Office of External Studies.
Admission to External Studies is contingent upon (A) enrollment in ExSt 300 Educational Planning (2 credits) on a class or individual basis, (B) submission of application forms and credentials as requested.
(Admission to the program is limited to adults who need the specialized services of the External Studies office.)
The degree candidate must complete at least 45 credits as an enrolled student at Moorhead State University, although no minimum numbers of on-campus (resident) credits is stipulated.
With the endorsement of advisors, the student will submit and complete a General Education plan designed to prove, or significantly improve, the student's competency in each of seven areas of the liberal arts.
After fulfilling the General Education requirement, the student will complete an Area Study, equivalent to at least 16 credits, under the supervision of a faculty team from the appropriate department.
The student will also fulfill a traditional or individualized major under the supervision of a faculty advisor.
The entire degree program must be equivalent to at least 192 quarter credits, and the student must have a GPA of at least 2.0 ("C" average) in all MSU courses attempted and in courses applied to each of the areas listed above.
Credit in general education areas and in the major or elective credit to fulfill the total degree may be earned by regular courses, independent study, internship, examination, transfer credit, or evaluation of noncollegiate or non-institutional study or experience.

## EXTERNAL STUDIES COURSE

## ExSt 300 Educational Planning (2)

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 231 Money Management (4)

Describes the process of personal financial management and the institutional framework within which it takes place. May not be used for major credit.
Finc 242-243-244 Work Experience I-II-III (1 each)
Supervised work experience of at least 30 hours.
Written report. Open only to students majoring in finance or business administration. One credit per quarter up to a maximum of 3 credits.

## Finc 320 Money and Banking (4)

Same as Econ 320
Finc 321 Banking Policy (4)
Examination of interbank relationships and contemporary developments in banking administration. Prerequisite: Finc 320.
Finc 330 Credit and Collection (4)
Credit management dealing with different types of credit, credit extension, and collections.
Finc 340 Corporate Finance I (4)
Analysis of methods used to manage assets, liabilities and investments. Prerequisite: Acct 231.
Finc 350 Public Finance (4)
Same as Econ 350.
Finc 351 Principles of Insurance (4)
Survey of insurance and risk principles, property and liability insurance coverage, and insurance regulations. Prerequisites: Acct 301 or consent of instructor.
Finc 352 Life Insurance (4)
Life insurance policies, pension plans and financial planning tools for individuals and business.
Finc 353 Health and Social Insurance (4)
Examines systems to provide continued income,
compensate medical cost and insure property and financial guarantees.
Finc 354 Principles of Real Estate I (4)
Fundamentals of purchasing, managing, and financial real estate.
Finc 355 Principles of Real Estate II (4)
Emphasizes applications of real estate principles and techniques to an analysis of real problem situations with attention to appraisal process. Prerequisite: Finc 354.
Finc 406(g) Small Business Management Consulting (2)
Practicum in providing management assistance to small business. To 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 441 Advanced Corporate Finance (4)
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)
Selected finance topics of contemporary interest. May be repeated with different topics. Prerequisite: Consent of instructor.
Finc 450(g) International Financial Management (4)

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
Finc 456(g) Principles of Investment (4)
Studies securities and other real assets, brokerage firms and the security industry, and the mechanics of buying
and selling various assets for investment purposes. Prerequisite: Finc. 340.
Finc 457(g) Portfolio Analysis (4)
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)
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)

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.

## Finc 501 Financial Institutions (3)

Newer developments in the flow of funds concept as it relates to various financial and nonfinancial institutions in our economic systems. Prerequisite: Math 575, Econ 501, Econ 530.

## Finc 598 Research in Finance (3)

Research in a specific problem area in finance.
Designed to provide training in the use of research techniques. Topic selected through conference with faculty advisor. Prerequisite: graduate standing.

## 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 230 Map Intelligence (4)
Geog 310 United States and Canada (4)
Electives in Geography ( 6.8 credits)
One course in Regional Geography (But not Geog
$313,321,410$, or 490 g )
One course in Systematic Geography
Minor in Earth Science (Teaching) (71 credits)
Required Courses in Earth Science
Geo 110 Introductory Physical Geography (4)
Geog 225 Conservation (4)
Geog 230 Map Intelligence (4)
Geog 241 Meteorology (4) or
Geog 242 Climatology (4)
Geog 300 Geomorophology (4)
Geog 323 Aerial Photo Interpretation (4)
Geol 115 Physical Geology (4)
Geol 115 Historical Geology (4)
Ast 100 Introduction to Astronomy and Space Science (4)
Geog 485 Teaching Methods in Earth Science (1)
Sci 440 Teaching Methods in Physical and
Earth Science (4)
Chem 111 \& Lab General Chemistry I (5)
Chem 112 \& Lab General Chemistry II (5)
Phys 111 Elementary Physics and Phys IIIL Lab (4)
Biol 111 Cell Biology (4)
Biol 113 General Zoology: Vertebrate (4)
Biol 123 General Botany (4)
Electives in Earth Science (6 credits)
Geog 241 Meteorology (4)
Geog 242 Climatology (4)
Geol 221 Geology of Mineral Resources (4)
Geol 230 Oceanography (4)

Geog 496 Summer Field Studies
Ast 101 Observational Astronomy (3)
Ast 260 Planetary Science (4)
Ast 200 Cosmology (3)
It is recommended that students taking an Earth Science Minor fulfill their Liberal Arts requirements with courses in Biology, Chemistry, Physics, Mathematics and Geography.
(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 Geomorphololgy (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.

## HEALTH-PHYSICAL EDUCATIONRECREATION DEPARTMENT

Loel Frederickson, Chair; Kenneth Bladow, Lyndon Brown, Richard Bynum, D. Ellen Cromwell, Mary Curtis, Kris Diaz, Ross Fortier, Bill Garland, Dwaine Hoberg, Ronald Masanz, Margaret Moore, John Nelson, Orlow Nokken, Dean Ogg, Donella Palmer, Janet Paulsen, Randall Smith, Laurie Spaeth, William Thomas, Karen Tropp
Major in Health Education (Teaching)
Major Requirements ( 74 credits)
Core Requirements ( 38 credits)
Hlth 105 Introduction to Nutrition (4)
Hlth 110 Personal and Community Health (4)
Hlth 125 First Aid (2)
Hlth 215 Health Agencies and Services (4)
Hlth 325 Instructor's First Aid (2)
Hlth 327 Principles of Safety Education (4)
Hlth 330 Introduction to Diseases (4)
Hlth 340 Health Methodology (4)
Hlth 410 Consumer Health Education (3)
Hlth 412 Marriage and Family Life Education (4)
Hlth 465 Organization and Administration of School Health Programs (3)
Requirements in Related Areas ( 28 credits)
Selections from the following requirements will depend upon state licensure rules, prior education and experience, and educational goals of the student:
Anthropology 110, 350
Chemistry 106, 107, 108
Biology 215, 216, 236
Physical Education 220, 321, 452
Psychology 113
Sociology 219, 235
Speech 110

Electives in Health Education (At least 8 credits from the following)
Hith 200 Health and Culture (4)
Hlth 202 Health Aspects of Aging (4)
Hith 326 Epidemiology (4)
Hlth 415 Design and Evaluation of Community Health Education Programs (3)
Hith 476 Seminar in Health Problems (2-6)
All Teacher Education requirements shall be fulfilled to complete this major. (See Teacher Education
Requirements in Education Department.)
Major in Health Education (Community Health)
Major Requirements ( 87.97 credits)
Core Requirements ( $53-63$ credits)
Hlth 105 Introduction to Nutrition (4)
Hith 110 Personal and Community Health (4)
Hith 125 First Aid (2)
Hith 200 Health and Culture (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)
Hith 340 Health Methodology (4)
Hlth 410 Consumer Health Education (3)
Hith 412 Marriage and Family Life Education (4)
Hlth 415 Design and Evaluation of Community
Health Education Programs (3)
Hlth 465 Organization and Administration of School Health Programs (3)
Hith 469 Internship (6-16)
Requirements in Related Areas ( 26 credits) Selections from the following requirements will depend upon licensure rules, prior education and experience, and educational goals of the student:
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 220 Human Anatomy (4)
PE 321 Human Physiology (4)
(Biol 215-216 may be substituted for PE 220 \& 321)
VoEd 493 Occupational Safety (4)
Electives in Health Education (8 credits minimum should be in the area of human growth and development or communication skills and subject to advisor approval.)
Major in Physical Education (Teaching) B.S. Degree
Major Course Requirements (65-66 credits)
Hith 125 First Aid (2)
Hith 220 Prevention and Care of Athletic Injuries (2)
PE 110 Introduction to Physical Education (2)
PE 220 Human Anatomy (4)
PE 240 Physical Education in the Elementary School (2)
PE 243 General Methods for Teaching Physical Education and Team Sports (3)
PE 250-254 Sports Officiating (2)
PE 305 Principles of Physical Education (3)
PE 320 Kinesiology (4)
PE 321 Human Physiology (4)
PE 380 Supervision of Physical Education in the Elementary School (4)
PE 421 Physiology of Exercise (3)
PE 452 Adapted Physical Education (4)
PE 474 Tests \& Measurements in Physical Education (4)
PE 495 Administration of Physical Education (3)
Three of the following four:
PE 223 Water Safety Instructor's Course (3)
PE 244 Techniques for Teaching Gymnastics (3)
PE 343 Techniques for Teaching Individual Sports (2)
PE 345 or 346 Techniques for Teaching Dance (2)
Activity Courses (13 credits)
Aquatics (1)
Dance (2)

Gymnastics (2)
Individual (3)
Team (1)
May include up to four credits in Recreation activity courses.

All Teacher Education Requirements must be fulfilled to complete this major. (See Teacher Education Requirements under Education Department).
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 except that graduates are exempt from Teacher Education Requirements.
Minor in Health Education ( $28-29$ credits)
Hith 105 Nutrition (4)
Hlth 110 Personal and Community Health (4)
Hith 125 First Aid (2)
Hlth 340 Health Methodology (4)
Hlth 465 Organization and Administration of School Health Programs (3)
PE 220 Anatomy (4)
PE 321 Physiology (4)
(Biol 215-216 may be substituted for PE 220 \& 321)
At least one of the following courses:
Hlth 215 Health Agencies and Services (4)
Hlth 330 Introduction to Diseases (4)
Hith 410 Consumer Health Education (3)
Hlth 412 Marriage and Family Life Education (4)
Hith 415 Dis/Evol of Comm Hith Ed Programs (3)
This minor can be awarded only in combination with at least one teaching major.

## Minor in Physical Education (Teaching)

This minor would normally be selected by a student majoring in another field who would like part-time teaching in physical education. In Minnesota, a person with a Physical Education minor may teach only half-
time or less in this field. Renewal of teacher certification after seven years will require a major.

## Minor for Elementary Teaching (34 credits)

Hlth 125 First Aid (2)
PE 110 Introduction to Physical Education (2)
PE 220 Human Anatomy (4)
PE 240 Physical Education in the Elementary
School (2)
PE 243 General Methods for Teaching Physical
Education and Team Sports (3)
PE 244 Techniques for Teaching Gymnastics (3)
PE 305 Principles of Physical Education (3)
PE 345 Techniques for Teaching Dance (2)
PE 380 Supervision of Physical Education in the
Elementary School (4)
PE 452 Adapted Physical Education (4)
Activities ( 6 credits)
Dance (2) (PE 40, 41, 42, 43, 44)
Gymnastics (2)
Team Sports (2)
Minor for Secondary Teaching (33-34 credits) Hith 125 First Aid (2)
PE 110 Introduction to Physical Education (2)
PE 220 Human Anatomy (4)
PE 243 General Methods for Teaching Physical
Education and Team Sports (3)
PE 305 Principles of Physical Education (3)
PE 452 Adapted Physical Education (4)
Three of the following four: (7-8)
PE 223 Water Safety Instructor's Course (3)
PE 244 Techniques for Teaching Gymnastics (3)
PE 343 Techniques for Teaching Individual Sports (2)
PE 345 or 346 Techniques for Teaching Dance (2)
Activities (9 credits)
Aquatics (1)
Dance (2)
Gymnastics (2)

Individual (3)
Team (1)

## Minor in Recreation ( $32-36$ credits)

This minor will help the student to qualify for a parttime position in recreation. It is not a teaching minor.
Art 100 Elements of Art (3)
Hlth 125 First Aid (2)
Mus 329-338 Participation in at least one Music
Activity (1-2)
Rec 110 Introduction to Recreation Education (2)
Rec 140 Camping and Outdoor Education (3)
Rec 210 Leadership in Recreation (3)
Rec 253 Youth Organizations (2)
Rec 450 Field Work in Recreation (3)
Soc 110 Introduction to Sociology (4)
Spch 040 Stagecraft and/or
Spch 344 Principles of Play Direction (1-4)
PE Activity Courses ( 6 credits)
Aquatics (1)
Dance (1)
Individual (3)
Team (1)
Coaching Certification
For the Physical Education Major (7 credits)
PE 370-379 Coaching Course (3)
PE 460 Principles of Coaching (4)
Practicum
For the Non-Physical Education Major (29-31 credits)
Hlth 125 First Aid (2)
Hlth 220 Prevention and Care of Athletic Injuries (2)
PE 320 Kinesiology (4)
PE 370-379 Coaching Course (3)
PE 421 Physiology of Exercise (3)
PE 460 Principles of Coaching (4)
Practicum
Coaching Certification can be awarded only in combination with at least one teaching major.

## Driver Education Certification ( 12 credits)

In order to qualify for this certificate, the individual must complete the following courses and meet any prerequisites for these courses as may be specified.
Hlth 327 Principles of Safety Education (4)
Hith 489-490 Driver Education I-1I (8)

## HEALTH EDUCATION COURSES

Hlth 105 Introduction to Nutrition (4)
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 110 Personal and Community Health (4)
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)

Preparation relative to injury/illness as encountered by the elementary teacher.
HIth 125 First Aid (2)
Preparation to deal effectively with situations where emergency care is required and medical assistance is not readily available.
Hlth 200 Health and Culture (4)
Introduction to health-related disciplines.
Interrelationships among behavior, beliefs and health as they relate to medical problems.

## Hith 202 Health Aspects of Aging (4)

Models and theories of aging; environmental factors that affect physiological changes with age; life-style and aging processes.

## Hlth 215 Health Agencies and Services (4)

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)

Involves principles governing the conditioning of athletes. Prerequisite: Hith 125 or PE 220.
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 Hith 200 or consent of instructor.
Hlth 325 Instructor's Course in First Aid (2)
An opportunity to be involved in appropriate first aid experiences. A Red Cross teaching certificate will be issued upon satisfactory completion of course.
Hlth 326 Epidemiology (4)
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)
Study and evaluation of factors in safety awareness and accident prevention.

## Hlth 330 Introduction to Diseases (4)

Introduction to common degenerative and developmental disorders. Emphasis on the relationship of these disorders to health education programs. Prerequisites: Human Anatomy and Physiology.
HIth 340 Health Methodology (4)
A student-involvement approach to procedures and materials used to facilitate learning experiences in a school or community setting. Prerequisite: Hlth 330 or consent of instructor.
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.
Hith 410(g) Consumer Health (3)
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. Prerequisite: Hlth 215, Hlth 340, or consent of instructor.

## Hlth 412(g) Marriage and Family Life

Education (4)
An in-depth study of pre-marital, marital, and family relations. Group and valuing processes are involved. Prerequisite: Consent of instructor.

## Hlth 415(g) Design and Evaluation of Community

 Health Education Programs (3)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 465(g) Organization and Administration of School Health Programs (3)
A study of the philosophy of the three phases of the school health program, and the policies and procedures used in coordinating such programs. Prerequisite: Hlth 340.

Hlth 469(g) Internship (6-16)
Designed for Community Health Education majors. Involvement in fieldwork 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)
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.

## HIth 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 philosphical 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.
## HISTORY DEPARTMENT

1. Kenneth Smemo, Chair; Dieter Berninger, Robert Davies, William Eagan, Christopher Hong, Murray Kranz, Lysle Meyer, Victor Peters

## HISTORY CURRICULA

Major in History B.A. Degree ( 62 credits)
Major Course Requirements
Hist 101-102-103 History of Western Civilization (12) or Hist 104-105-106 World History (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
At least one Seminar in History (3):
Hist 402-403-404-405
Electives in History (At least 29 credits) :
Note: 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.
Historiography Recommendation
All majors, especially those planning to undertake graduate study, are strongly encouraged, although not required, to take the following course:
Hist 300 Historiography (3)

## 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-1II (12) or Hist 104-105-106 World History (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

## 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)
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)
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 world dominance by the West in the late 18 th 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)

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 108 Modern Revolutions (4)

An analysis of the phenomenon of modern revolution with emphasis placed on the time of the French Revolution to the modern War of National Liberation. The course will consider the development of an historical explanation of the general causes of revolution. Not applicable toward fulfillment of the History Major.

## Hist 109 Civil War and Reconstruction (4)

An introductory survey examining the background and causes leading to the American War between the States, the course of the war, the period of Reconstruction following it and the meaning of the period for the future. Not applicable toward fulfillment of the History Major.

## Hist 110 World War I (4)

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)

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)
121: Colonial America: growth of a new society in the 17 th and 18 th centuries. 122 : The 19 th century:

America as a new nation. 123: The 20th century: America as a world power.
Hist 141 Evolution of Social Services (4)
A study of major social problems of Western Civilization with special emphasis upon the AngloAmerican experience since the 1700's. Attention will be given to concepts and practices of social assistance, attitudes on poverty, crime, family, and individual instability.

## Hist 200 Contemporary Issues in Historical

 Perspective (2)Selected topics of contemporary interest studied through structured readings and discussions. No examinations, but required attendance. Offered on a Pass/Fail basis. May be repeated once for a maximum of 4 credits.
Hist 201-202-203 The History of Science (2 each) 201: The Scientific Revolution. 202: Science in the 18th and 19th centuries. 203: Science in the Atomic Age. Coregistration with Science 201-202-203 required.
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)

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 American Journalism (3)
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)The cultural, economic, and political growth of East Asia. 251: China. 252: Japan. 253: East Asia.
Hist 261-262-263 History of Africa I-II-III (3 each) 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) 271: Iberian heritage, pre-Columbian Indian cultures, the era of conquest, the colonial period of Wars of Independence. 272: Major trends in Latin America in the 19th and 20th centuries.

## Hist 300 Historiography and Historical

 Criticism (3)The philosophical and methodological problems of historical writing and research.

## Hist 305(g) Modern Middle East (4)

The Middle East since 1914. European imperialism and the background to the Arab-Israel struggle, nationalism, contemporary problems and the role of oil in the region's development.
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)
Selected topics in European history.
Hist 311(g) Studies in North American
History (3-4)
Selected topics in North American history.

## Hist 312-313-314(g) Ancient History I-II-III (4 each)

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: the political, social, economic, and cultural history.

## Hist 315(g) Medieval Europe (3)

European history from the decline of the Roman Empire to the Renaissance.

## Hist 316(g) The Renaissance (3)

The political, religious, cultural, economic, and social evolution of Europe from the 14th to the 16th century.
Hist $\mathbf{3 1 7}$ (g) The Reformation (3)
Sixteenth 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 late 19th century.
319: Political, social and economic developments to the present.
Hist 325(g) French Revolution and Napoleon (4) A survey of the period 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)

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)

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)

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)
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 twentieth century.

## Hist 364-365(g) Economic History of the United

 States I-II (4 each)Analysis of economic forces and their effects upon American life. 364: The 18th and 19th centuries. 365: 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)
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 371-372(g) Colonial America I-II

(3-4 each)
371: The transfer of European civilization to North America; the history and culture of the colonies in the 17th century. 372: The evolution and growth of colonial society in the 18th century.
Hist 375(g) Women in United States History (3-4)
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. The classical writings on the conditions of wornen will be used.
Hist 377(g) Afro-American History (3-4)
This course will focus on the Black Experience in America from the African Background through the present. Oral history and other unconventional sources such as Slave Narratives will be stressed. 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) 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)
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)
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.
Hist 560 Tutorial in History: Graduate (1-3)
Directed readings and discussion on particular topics in history agreed upon by the instructor and student. Prerequisite: Bachelor's degree in history and consent of both instructor and department chair.
Hist 599 Thesis in History (1-6)
Research and writing of the master's thesis.
Prerequisite: Completion of the comprehensive examination for the graduate degree in history. Registration only after consultation with major advisor.

## 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

## 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 small group discussions of significant issues or problems. Meetings will encourage informal exchange of ideas and viewpoints among instructors and students.
Reading materials will be chosen at the discretion of the instructors. Brief papers will be required.
Hon 300 Multidisciplinary Seminar (4)
Each year one or two upper division Honors seminars will be presented. Honors students will be expected to participate in at least one of the seminars. Instructors may admit other qualified students. Faculty members and academic departments are encouraged to submit proposals to their appropriate dean for consideration.

## Hon 400 Senior Honors Thesis (4)

Each Honors student will present, in consultation and under the direction of departmental or other faculty advisors, a senior thesis, project, or exhibition. Upon approval the thesis will be presented to interested faculty and members of the Honors program. An acknowledgement of this work should be made at graduation and on the student's transcript.

## HOTEL-MOTEL-RESTAURANT MANAGEMENT

See Business Administration for Curricula.

## HOTEL-MOTEL-RESTAURANT MANAGEMENT COURSES

HMR 310 Food Administration Practicum (2-4)
Supervised on-the-job experience in food administration.

## HMR 312 Beverage Administration

Practicum (2-4)
Supervised on-the-job experience in beverage administration.
HMR 314 Motel Administration Practicum (2-4)
Supervised on-the-job experience in motel administration.
HMR 316 Hotel Administration Practicum (2-4) Supervised on-the-job experience in hotel administration.
HMR 350 HMR Maintenance Management (4) Examines the organization and management of the Hotel-Motel-Restaurant maintenance department and provides technical information needed to establish effective preventive maintenance procedures. Emphasis will be given to energy conservation in the operation of lodging and food services operation.
HMR 355 Innkeeper's Liability (4)
Legal environment of hotels, motels, and restaurants. Includes HMR Investment \& Finance.

## HMR 442 Hotel-Motel-Restaurant Organization \&

 Management (4)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 443 Food and Beverage Management (4) 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 446 Hospitality Marketing and Sales

Promotion (4)
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 industrysponsored, sales blitz activities Examination of the touristic areas and current developments world wide, attracting individuals, pleasure groups or business conventions. Prerequisite: Mktg 310, HMR 442.

## 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)

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. Prerequisites: Senior or consent of instructor.

## HMR 498 Problems in Hotel-Motel.

## Restaurant (1-4)

Individual inquiry into an aspect of hotels, motels, or restaurants not covered in the regular curriculum.
Prerequisite: Consent of instructor.

## HUMANITIES DEPARTMENT

## James Stevens, Chair; Joyce Flint, Sylvia Morgan, Glenn Ringstad <br> 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 life-long 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 which best serve individual interests, such as history, philosophy, political science, literature, or history and 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 nineteenth 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)
An exploratory approach to the arts which acquaints the 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)
Basic ideas and art forms of Western Civilization studied within a thematic context.
Hum 214-215-216 Classical and Medieval Worlds, Renaissance through Eighteenth Century,
Romanticism and the Modern World (4 each)
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)

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 227 Russian Humanities (4)

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 310(g) Women's Studies (4)
Inter-disciplinary 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)

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)
A study of European social and cultural life, including a general lecture series and related classes in special subjects at the Center 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 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 Humanities (70 credits)

The student selects courses around a chosen theme or subject drawn from the humanities or humanistic branches of the social sciences. These areas include humanities, art theory and appreciation, literature, music theory and appreciation, theatre arts, philosophy, American studies and history, as well as appropriate social science courses.
Courses are divided into two categories:
Thirty credits in a central core discipline chosen by the student; or forty credits related to the core discipline to be selected from other humanities disciplines.
The above are minimum requirements; more courses in the areas listed above are recommended, especially for single major students.

## INDUSTRIAL STUDIES DEPARTMENT

Wade Swenson, Chair; James Barnett, Clyde Kale, Wallace Peck, Ronald Walker, Alan Weigleitner, Leland White
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, Industrial Illustration, Industrial Technology, and Vocational Rehabilitation Therapy. An associate degree is offered in Technical Aid. Minors in Industrial Technology are also offered.

## INDUSTRIAL STUDIES CURRICULA <br> Major in Industrial Education B.S. Degree (Teaching Option)

The Industrial Education major provides the necessary background to teach secondary level industrial arts in any of these areas: construction, communications, manufacturing or transportation. In addition to the academic requirements, students are encouraged to complete a specified amount of industrial wage-earning experience, primarily through supervised internships.
Core Requirements for Industrial Education
(40 credits)
IndS 120 Basic Wood (4)
IndS 270 Electrical Circuits I (4)
IndS 250 Explorations in Graphic Communications (4)
IndS 104 Manufacturing (4)
IndS 105 Transportation (4)
In addition to the above, five 4 -credit courses, one in each of the following required areas. Construction, Energy, Graphic Communications, Manufacturing, and Transportation.

## General Requirements for Industrial Education

 (15 credits)IndS 135 Man and Industry (4)
IndS 445 Planning \& Administration of I.E.
Facilities (4)
VoEd 439 Teaching the Vocational Subjects (4)
VoEd 495(g) Philosophy of Vocational Education (3)
Electives in Industrial Education
Secondary teaching candidates for grades $9-12$ shall complete a concentration of at least 15 credits in one of the areas below. Middle school teaching candidates for grades 5-9 are not required to fulfill the concentration requirements.
Construction
Communications
Energy
Manufacturing
Transportation

## Teaching Requirements in Industrial Education

 (36 credits)All Teacher Education and Human Relations Requirements will be fulfilled to complete this major.
See Teacher Education and Human Relations
Requirements under Education Department. Industrial Education majors take VoEd 441 Measurements \& Evaluation in VoEd in place of Ed 307.

## Major in Industrial Education B.S. Degree (Industry Option)

This Industrial Studies program consists of an individualized, balanced industrial program and does not include teaching requirements. This major provides the necessary background to enable the student in industry.
Core Requirements for Industrial Education (44 credits)
IndS 101 Construction Processes (4)
IndS 104 Manufacturing (4)
IndS 105 Transportation (4)
IndS 135 Man and Industry (4)

IndS 250 Explorations in Graphic Communications (4) IndS 270 Electrical Circuits I (4)
In addition to the above, five 4 -credit courses, one in each of the above areas (20)
Electives for Industrial Education (32 credits)
Emphasis in one or more technological areas (minimum of 20 credits) is required. A supervised industrial internship ( 16 credits) is recommended but not required for graduation. Internship credits do not apply toward the elective requirements.
Major in Industrial Illustration B.S. Degree
A variety of job opportunities exist for the industrial illustration graduate. An industrial illustrator might do the technical drawing for parts and service manuals for a large company, or might work as a one-person department in a small company, coordinating all phases of graphics, publicity, and product support materials. Some illustrators are responsible for the layout or copy in company publications which they produce. Others may organize multi-media presentations involving slides, photographs, displays etc. The possibilities for the illustrator are wide, depending on the individual's talents, experience and desire. Graduates have been placed in the midwest and the west coast.
Core Requirements for Industrial Illustration (45 credits)
Art 125 Foundations Design, Basic (3)
Art 154 Introduction to Graphic Design (4)
Eng 113 Technical Drafting I (4)
Eng 213 Technical Drafting II (4)
MC 215 Visual Communications (3)
MC 230 Communications Photography I (3)
Engl 287 Technical Report Writing (3)
IndS 350 Layout \& Design for Printing (4)
IndS 351 Offset Print/Photography I (4)
IndS 317 Technical Illustration I (4)
IndS 318 Technical Illlustraion II (4)
IndS 412 Portfolio Preparation (2)

## Industrial Studies Electives for Industrial Illustration (14 credits)

With advisor's prior approval, electives are selected from the departmental offerings.
Related Areas Electives in Industrial Illustration (10 credits)
Electives are chosen from the Art, Mass
Communication, or Business Departments to broaden and strengthen the student's knowledge about the field of technical communication. Many students elect to minor in art, mass communication/advertising or marketing. The minor credits can count toward related area electives.

## Major in Industrial Technology B.S. Degree Construction Management Program

The Construction Management program prepares students for middle management employment at a professional level. Students are trained with abilities and skills to execute architectural and engineering designs for mankind's improvement. The professional construction manager possesses skills comprising the entire construction process. Graduates will be qualified for a wide range of positions including estimator, job superintendent, project inspector, insurance inspector, building inspector, purchasing agent, safety engineer, expediter, and office manager.
The program benefits from courses in Industrial Studies, Engineering, Business, Management, and Liberal Arts. The requirements appear below.
Program Requirements (108 credits)
Eng 113 Technical Drafting I (4)
Eng 200 Surveying (3)
Eng 243 Statics (4)
Eng 245 Strength of Materials (4)
Eng 291 Materials Testing (2)
IndS 101 Construction Materials and Processes (4)
IndS 215 Architectural Planning and Codes (4)
IndS 325 Construction Estimating and Specifications (4)

IndS 326 Mechanical Systems (4)
IndS 328 Construction Planning and Scheduling (4)
IndS 329 Construction Equipment and Methods (4)
IndS 424 Soils and Foundations (4)
IndS 428 Construction Management and Contracts (4)
IndS 429 Design of Steel, Wood, and Concrete
Structures (4)
IndS 493 Industrial Safety and 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)
Acct 229 Principles of Accounting I (4)
Acct 230 Principles of Accounting II (4)
Acct 231 Principles of Accounting III: Managerial (4)
Acct 301 Business Law (4)
Acct 350 Cost Accounting I (4)
Finc 354 Principles of Real Estate I (4)
Engl 287 Technical Report Writing (3)
Related Courses ( 35 credits)
Math 131 College Algebra (4)
Math 133 Trigonometry (3)
Math 273 Math for Business (4)
Psy 113 General Psychology (4)
Psy 119 Social Behavior (4)
ComS 145 Data Processing (4)
Econ 202 Principles of Economics I (4)
Econ 204 Principles of Economics II (4)
Econ 206 Principles of Economics III (4)

## Major in Industrial Technology B.S. Degree

Electronics Technology, Electro/Mechanical Technology, Manufacturing Engineering Technology Three areas of concentration are available-Electronics, Electro/Mechanical, and Manufacturing. The industrial technology degree is a vehicle which provides the graduate with the opportunity to enter various manufacturing industries at the professional, or a
salaried level. Graduates are required to enter industry as applications engineers, customer engineers, industrial engineers, manufacturing engineers, methods engineers, production engineers, quality assurance engineers, production supervisors, and other similar types of occupations.
The program of study includes a liberal arts component, a core area requirement, an area of technical concentration, a business minor, and related courses. The requirements appear below.
Core Requirements for Industrial Technology (29 credits)
Eng 113 Technical Drafting I (4)
Engl 287 Technical Report Writing (3)
Eng 243 Engineering Mechanics I (4)
Eng 245 Engineering Mechanics II (4)
Eng 291 Materials Lab (1)
IndS 381 Plant Layout \& Materials Handling (3)
IndS 382 Time \& Motion Studies (3)
IndS 383 Quality Control (3)
IndS 493 Occupational Safety (4)
Area of Concentration
Electronics (32 credits)
IndS 270 Electrical Circuits I (4)
IndS 271 Electrical Circuits II (4)
IndS 272 Amplifier Circuits I (4)
IndS 370 Amplified 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 Concentration (35 credits)
IndS 270 Electrical Circuits I (4)
IndS 236 Metal Machining I (3)
IndS 272 Amplifiers Circuits 1 (4)
IndS 295 Automechanics I (4)
IndS 296 Internal Combustion Technology (4)
IndS 297 Power Transmission Systems (2)

IndS 298 Vehicle Electrical Systems (2)
IndS 395 Advanced Diagnosis \& Tune-up (4)
IndS 396 Diesel Engine Operation (4)
IndS 490 Fluid Power Technology (4)
Manufacturing Concentration ( 36 credits)
IndS 104 Manufacturing (4)
Eng 213 Technical Drafting II (4)
IndS 132 Electric Welding (3)
IndS 234 Metal Casting (3)
IndS 236 Metal Machining I (3)
IndS 237 Metal Machining II (3)
IndS 360 Synthetics I (4)
IndS 435 Welding Technology (4)
IndS 436 Metal Machining Technology (4)
IndS 490 Fluid Power Technology (4)

## Business Minor ( 36 credits) (one required)

Marketing Minor
Econ 100 The American Economy or Econ 201
Principles of Economics I (4)
Acct 229 Elementary Accounting I (4)
Acct 230 Elementary Accounting II (4)
Marketing Electives (24)
Management Minor
Econ 100 The American Economy or Econ 201
Principles of Economics I (4)
Acct 229 Elementary Accounting I (4)
Acct 230 Elementary Accounting II (4)
Management Electives (24)
Business Administration Minor
Econ 100 The American Economy or Econ 201
Principles of Economics I (4)
Acct 229 Elementary Accounting I (4)
Acct 230 Elementary Accounting II (4)
Marketing Electives (8)
Management Electives (8)
Finance Electives (8)

Related Courses (23 credits)
Psy 113 General Psychology (4)
Psy 119 Social Behavior (4)
Math 131 College Algebra (4)
Math 133 Trigonometry (3)
Math 274 Introduction to Statistics I (4)
ComS 145 Data Processing (4)

## Industrial Technology Minor

Without the knowledge of material processes, work flow, or machine capabilities, a graduate who is employed in any production management profession, will be severely handicapped in decision making. An Industrial Technology minor will give the graduate practical knowledge of the technological field that is needed in industrial management. The core and options apply only to the manufacturing and electronics concentration. The Construction Management minor, as listed, is complete.
Core-Minimum 12 hours
Required-IndS 113, Technical Drafting I (4)
Options-Minimum 8 hours
Occupational Safety (4)
Quality and Control (3)
Time and Motion (3)
Plant Layout (3)
Manufacturing Concentration (Minimum 26 hours)
IndS 104 Manufacturing (4)
IndS 132 Electric Welding (3)
Eng 213 Technical Drafting II (4)
IndS 236 Metal Machining I (3)
IndS 237 Metal Machining II (3)
Eng 243 Engineering Mechanics: Statics (4)
Eng 245 Engineering Mechanics: Materials (4)
Eng 291 Materials Testing Lab (1)
Electronics Concentration (Minimum 24 hours)
IndS 270 Electrical Circuits I (4)
IndS 271 Electrical Circuits II (4)

IndS 272 Amplifier Circuits I (4)
IndS 370 Amplifier Circuits II (4)
IndS 372 Digital Circuits I (4)
IndS 470 Digital Circuits II (4)
Construction Management (Minimum 36 hours)
Eng 200 Surveying (4)
IndS 101 Construction Processes (4)
IndS 113 Technical Drafting I (4)
IndS 215 Arch. Planning and Codes (4)
IndS 325 Construction Estimating \& Specifications (4)
IndS 326 Mechanical Systems (4)
IndS 328 Construction Planning \& Scheduling (4)
IndS 428 Construction Management and Contracts (4) IndS 493 Occupational Safety (4)

## Major in Vocational Rehabilitation Therapy B.S. Degree

The Vocational Rehabilitation Therapy major qualifies the graduate 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 for Vocational Rehabilitation
Therapy ( 53 credits)
IndS 105 Transportation (4)
IndS 113 Technical Drafting I (4)
IndS 120 Basic Wood (4)
IndS 131 Gas Welding (3)
IndS 132 Electric Welding (3)
IndS 220 Wood Fabrication (4)
IndS 250 General Graphic Arts (4)
IndS 270 Electrical Circuits I (4)
IndS 236 Metal Machining I (3)
IndS 360 Synthetics I (4)
IndS 445 Planning \& Administration of I.E.Facilities (4)
Industrial Studies Electives (12)
Clinical Experience (16 credits)
IndS 451 Clinical Experience (16)
Psychology Requirements (20 credits)
Psy 113 General Psychology (4)
Psy 115 Developmental Psychology ..... (4)
Psy 117 Personality (4)
Psy 320 Social Psychology ..... (4)
Psy 351 Psychology of Intelligence ..... (4)
Social Work and Support Area Electives (12 credits)SW 250 Introduction to Social Welfare (4)Psychology, Sociology, Social Work, CounselingElectives (8)
Biology Requirements (8 credits)
Biol 215 Anatomy and Physiology I (4)
Biol 216 Anatomy and Physiology II (4)
Major in Technical Aid A.S. DegreeDesigned as a two-year program, the Technical Aidprogram offers some of the basic skills andunderstanding needed in business or industry.The following two-year program should be carefullyscheduled with the advisor from Industrial Studies. Allelective courses should have the advisor's approval inadvance. Liberal Arts requirements for the Associate inScience are described under Academic Information.
Liberal Arts ( 42 credits)
Requirements in Engineering and Industrial
Education (54 credits)
IndS 113 Technical Drafting 1 (4)
IndS 213 Technical Drafting II (4)
IndS 214 Descriptive Geometry (4)
IndS 131 Gas Welding (3)
IndS 132 Electric Welding (3)
IndS 270 Electrical Circuits I (4)
IndS 271 Electrical Circuits II (4)

IndS 236 Metal Machining I (3)
IndS 237 Metal Machining II (3)

## Engl 287 Technical Report Writing (4)

Approved electives in an area of concentration in one field of technology (18)

## INDUSTRIAL STUDIES COURSES

## IndS 100 Career Opportunities in Industrial

 Studies (1)Career options available with the five majors offered in the Department of Industrial Studies.

## IndS 101 Construction Materials and Processes (4)

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, sitework, wood, and steel.

## IndS 104 Manufacturing (4)

Manufacturing organization, product research and development, sales organization, production and cost analysis. Study of select basic manufacturing processes.

## IndS 105 Transportation (4)

Survey of vehicles - land, water, air, and space. Introduction to types of engines, maintenance, tools, and repair techniques used in the transportation industries.

## IndS 113 Technical Drafting I (4)

Freehand and instrumental practices: sketching, lettering, geometric constructions, multi-view drawings, pictorial projections, dimensioning, specifications, and considerations pertaining to conceptual design.

## IndS 120 Basic Wood (4)

Basic processes, safety, proper tool and machine usage. Laboratory design and fabrication of wood products of choice.

## IndS 121 Wood Finishing (2)

Techniques and materials used for protective coating on woods. Laboratory time for applying coatings to selected woods.

## IndS 131 Gas Welding (3)

Basic welding and safety instruction, copper pipe soldering, and auto body repair, cutting torch use and introduction to electric welding.

## IndS 132 Electric Welding (3)

Basic arc welding including instruction on filler metals, safety, material preparation, testing, and cutting torch use.

## IndS 135 Man and Industry (4)

History, development, and components of industry, and the social impact of technology.

## IndS 213 Technical Drafting II (4)

Industrial production processing, detail and assembly drawings, geometric and limit dimensioning, design of jigs, fixtures, gears and cams. Prerequisite: Basic Drafting.

## IndS 214 Descriptive Geometry (4)

Fundamental principles of orthogonal projection, true length lines, angles between planes, development of surfaces, and intersection of solids.
IndS 215 Architectural Planning and Codes (4) 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 Fabrication (4)

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 Research (3)

Engineering problems in developing marketable products. Instruction in processes and materials. Prerequisites: IndS 113, 132, 236.

## IndS 234 Metal Casting (4)

Safety instruction in melting metal, lighting furnaces and pouring. Sand mold making, sand analysis and maintenance, core making, introduction to patternmaking.

## IndS 236 Metal Machining I (3)

Basic machining and fabricating with lathes, drill press, grinders, shears and saws, blue print reading and precision measurement.

## IndS 237 Metal Machining II (3)

Basic machining practices on milling machine, surface grinder, turret lathe, tracer lathe, machine tapping and die head, metal heat treatment.

## IndS 241 Home Maintenance (4)

Problems and projects relating to upkeep, repair, and improvement of the home. Safe use of hand and power tools.

## IndS 250 Explorations in Graphic Communications

 (4)Information and experiences in printing processes including letterpress, lithography, silk screen, book binding, and offset photography.
IndS 270 Electrical Circuits I (4)
A study of voltage, current, power, magnetism, capacitance, and inductive parameters in D.C. and A.C. circuits.

## IndS 271 Electrical Circuits II (4)

Topics include Thevenin's Theorem, Superposition Theorem, Branch Current Analysis, reactances, analysis of series-parallel RLC circuits, and resonance. Prerequisite: IndS 270.

## IndS 272 Amplifier Circuits I (4)

D.C. and A.C. analysis of rectifiers, BJT, and FET transistor voltage amplifiers. Prerequisite: IndS 270.

## IndS 295 Auto Mechanics I (4)

Engine tuneup, tires, brakes, and auto repair tools and equipment. Lectures, demonstrations, and actual practice work on students' automobiles.
IndS 296 Internal Combustion Technology (4) Laboratory experience in disassembly and rebuilding of an engine. Engine blueprinting procedures such as balancing, CC'ing, and clearancing. Prerequisite: IndS 295 or consent of instructor.
IndS 297 Power Transmission Systems (2) Gears, u-joints, chain, belting, and flex drives, disassembly, and repair experiences, e.g., automotive transmissions, drive shafts, and differentials.

## IndS 298 Vehicle Electrical Systems (2)

Starting, charging, ignition, and accessory systems as applied to automobiles, trucks, and recreational vehicles. Detailed disassembly and rebuilding of alternators, cranking motors, regulators, and accessories.

## IndS 313 Technical Drafting III (4)

Drafting practices as applied to structural steel, reinforced concrete, piping, fluid power and electrical work. Prerequisite: IndS 113.

## IndS 315 Architectural Drafting (4)

Complete light commercial plans with specifications.
Detailed study of select light commercial construction.
Experimentation with durability, strength, and building materials characteristics.

## IndS 317 Technical Ilustration I (4)

Technical art techniques including pictorial line drawing, airbrush, shading sheets, ink line, and others, applied in isometric, diametric, and perspective drawings. Prerequisite: Art 123, 125.

## IndS 318 Technical Illustration II (4)

Camera ready illustration: pictorials, orthographics, schematics and graphs for operations, maintenance, parts identification, sales and proposals. Prerequisite: IndS 113.

## IndS 325 Construction Estimating and <br> Specifications

A study of basic principles and theories of estimating including quantity take-off, work classifications, and specifications.
IndS 328 Construction Planning \& Scheduling (4) 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)
A study of planning, estimating and managing construction equipment in a manner which will attain the best possible result.

## IndS 330 Manufacturing Production (3)

Organization for mass producing a product. Cost estimating, development of jigs, quality control, and packaging.
IndS 335 Creative Metals (3)
Basic instruction in creative and artistic metal work such as sculpture, ornamental iron, brass and copper work.

## IndS 345 Recreational Crafts (3)

Fundamental handicraft activities for recreational programs. Tool usage, material processing, related information, teaching applications and planning specialty area craft activities.
IndS 350 Layout and Design for Printing (4) Principles of design and basic skills in layout.
Instruction in paste-up, color, communication with camera press bindery personnel.

IndS 351 Offset Printing/Photography I (4)
High contrast line photography specifically in the graphic reproduction processes. Graphic arts darkroom procedures and offset press operations.

## IndS 352 Offset Printing/Photography II (4)

Halftone, duo-tone, special effect film as related specifically to graphic reproduction processes.
Advanced darkroom procedures and offset press is emphasized. Prerequisite: IndS 351.
IndS 355 Silk Screen/Letterpress (4)
A comprehensive study of composition, lockup, and presswork for letterpress printing. Experience with hand cut and photo silk screen printing.
IndS 360 Synthetics I (4)
Introduction to plastics industry. Testing and identification of plastics. Laboratory experiences and experimental activities using various synthetic materials and processes.

## IndS 361 Synthetics II (4)

Independent study and experimentation in product development: product design, mold making and developing procedures and information for successful product production. Prerequisite: IndS 360.
IndS 370 Amplifier Circuits II (4)
Analysis of power amplifiers, special amplifier types, and linear I.C. amplifiers. Prerequisite: IndS 272.
IndS 371 Industrial Circuits (4)
Motors, generators, starting circuits, controlling circuits, power generation, and power distribution. Prerequisite: indS 272.
IndS 372 Digital Circuits I (4)
Binary numbering system, analysis and applications of logic gates, flip-flops, and clocks. Prerequisite: IndS 272.

IndS 381 Plant Layout and Materials Handling (3)
Planning for the arrangement of production equipment,
flow of materials through the plant, materials handling, packaging, storage and transportation facilities.
Prerequisite: Junior or senior standing, or consent of instructor.

## IndS 382 Time and Motion Studies (3)

Study in worker time and motion. Includes criteria for establishing work time standards, motion and materials, handling efficiency and wage incentive plans.
Prerequisite: IndS 381 or consent of instructor.

## IndS 383 Manufacturing Quality Control (3)

Quality control inspection procedures, inspection devices, statistical quality control principles and reliability. Prerequisites: Junior or senior standing and Math 274.

IndS 395 Advanced Diagnosis and Tuneup (4) Emission control systems, oscilloscope analyzers, cylinder leak tests, and dynamic timing. Students will organize and operate an automotive diagnostic clinic.

## IndS 396 Diesel Engine Operation (4)

Theory of operation of diesel engines. Emphasis on fuel injection systems and the construction of these engines.

## IndS 412 Portfolio Preparation (2)

Planning a portfolio, resumes, investigating the illustrator's image, and the types of companies that employ illustrators. Prerequisite: Senior.

## IndS 420 Wood Technology (4)

Stabilization, bending, design and fabrication of jigs and fixtures. Grading, physical and mechanical properties of wood, technology of gluing wood, modified wood, and others. Prerequisite: Eight hours of wood courses.

## IndS 424 Soils \& Foundations (4)

A study of soils, soil behavior, compaction applications, foundation techniques, and concepts of soil mechanics.
IndS 425-426 Industrial Maintenance I-II (2)
Experience in repair, modification, and improvement of
equipment. Available to upper division students as independent study.

## IndS 428 Construction Management and Contracts

 (4)A study of commercial construction managerial principles, supervision, and contract administration as applied to middle management. An investigation of on-the-site management of contract managers, project managers, and project engineers are basic phases of the course.

## IndS 429 Design of Steel, Concrete \& Wood Structure (4)

Building principles of design and fabrication using steel, concrete, and wood materials.
IndS 435 Welding Technology (4)
Advanced production and repair welding methods, wire feed, tungsten arc, spray brazing, stud welding, automatic flame cutting. Prerequisite: IndS 132.
IndS 436 Machining Technology (4)
Theory of machining and safety, carbide tooling, punch press, shear, press brake, band saw, heat treatment and hardness testing. Prerequisite: IndS 236, 237.
IndS 437 Design and Fabrication (5)
Manufacturing product design, drafting, fabrication, and finishing. For independent study consult instructor.
Prerequisites: IndS 113, 132, 236.
IndS 443(g) Industrial Arts for Elementary and Special Education Teachers (4)
Special methods, tool usage in processing materials, curriculum development for activities, projects and plans related to and coordinated with teaching.
Prerequisite: Upper division standing.

## IndS 445 Planning and Administration of Industrial Education Facilities (4)

Considerations involved in planning of industrial education and vocational school laboratory facilities,
student organizations, purchasing supplies and equipment, and administration of these facilities.
IndS 450 Graphic Arts Technology (4)
Advanced study of Graphic Arts, historical backgrounds, organization of the industry, production methods, new research, experimentation, future of the field.
IndS 451 Clinical Experience (16)
A full quarter experience as a therapist at the Veterans Administration Hospital and Work Opportunity Center in St. Cloud, Minnesota. Prerequisite: Upper division standing.
IndS 455(g) Graphic Management (4)
Organization and management of departments in a printing plant and related problem-solving techniques. Inspection tours to printing plants for study.
Prerequisite: IndS 350 and IndS 351.
IndS 461(g) Career Education (3)
Theories of career choice, methods, materials, and the vocational aspects of business and industry. Units appropriate to individual instructional areas.
IndS 469 Student Internship (3-16)
Available to all majors enrolled in the Department of Industrial Studies. Approved practical work experience.
IndS 470 Digital Circuits II (4)
Analysis and application of registers, counters, memories, and digital systems. Prerequisite: IndS 372.
IndS 471 Communication Systems (4)
A.M. and F.M. transmission, transmission lines, antennas, SSBSC transmission, multiplexing, and pulse type communication systems. Prerequisite: IndS 370.
IndS 480(g) Special Problems (Topical) (1-6) Individual study not offered in depth in the regular curriculum. Prerequisite: Upper class standing, consent of the instructor and department chairperson.

## IndS 490 Fluid Power Technology (4)

Theory and application of hydraulic and pneumatic systems. From the basic fluid power symbols and components to design of a simple industrial machine or product.

## IndS 493 Industrial Safety and Accident Prevention

 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 494(g) Trends and Developments in Industrial Education (3)
Changing concepts in industrial and vocational education, changing methods, course content, processes and materials of industry.

## LANGUAGES DEPARTMENT

Edward P. Clark, Chair; Jack Baratto, Dolores Buttry, Hi Sook Hwang, James Kaplan, Johanna Neuer, Gisela Nobel, Humberto Risso, G. Theodore Schaum, Edith Stevens
AREAS OF STUDY: French, German, Japanese, Norwegian, Portuguese, 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 catalogue.
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.

## 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 no previous instruction in a foreign language should enroll in the beginning course sequence (101-102-103).
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 or three years of high school language should enroll in an intermediate course. Without written permission of the department chairperson, they can not enroll in first-year courses for credit.
Those students who have 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, SpeechTheatre.

## 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 (24 credits)
French 201-202-203 Intermediate French I-II-III (12)
French 301-302-303 French Conversation and
Composition I-II-III (12)
Electives in French (30 credits)
At least 8 credits in advanced language courses At least 8 credits in culture and civilization courses
At least 14 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 Sci 250 Comparative Governments of Western Europe
Pol Sci 410 Topics in Western Political Thought
Spch 322-324-326 Development of Drama I-II-III
Electives should be chosen in consultation with one's advisor.

## Major in French B.S. Degree (Teaching) <br> Major Requirements in French ( 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 French ( 30 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 ( 36 credits)
See Core Requirements for B.A. Major ( 24 credits).

Electives in French (12 credits)
At least 4 credits in culture and civilization.
At least 8 credits in literature.
Electives in Related Fields
See B.A. Major.
Minor in French (Teaching) (39 credits)
See Core Requirements and Electives for B.A. Minor.
Plus Language 340, Methods and Materials in
Teaching Foreign Languages (3 credits).

## Electives in Related Fields

See B.A. Major.
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 cuture 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 318-319-320 History of Germany I-II-III
Phil 250 Modern Philosophy
Phil 265 Nineteenth Century Philosophy
Pol Sci 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 12 credits in language courses.
At least 6 credits in culture and civilization courses.
At least 12 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 8 credits in literature.
Electives in Related Fields
See B.A. Major for electives.
Minor in German (Teaching) (39 credits)
See 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 4 credits in language courses.
At least 6 credits in culture and civilization.
At least 2 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
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 Languages 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.

## FRENCH LANGUAGE AND LITERATURE

 COURSES
## Fren 100 Selected Emphasis in French - Beginning

 Level (2-4)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)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)
Intensive grammar review through oral and written
exercises for students with previous exposure to French. Prerequisite: French 102 or equivalent. Not applicable toward the major or minor program in French.

## Fren 200 Selected Emphasis in French

 -Intermediate Level (1-4)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)Rapid and intensive review of grammar and further improvement of language skills in understanding, speaking, reading and writing. Prerequisite: One year college French or equivalent.
Fren 264-265-266 French Life and/or Literature I-II-III (4 each)
Selected topics on French life and/or Literature in English translation for students with little or no French. No credit toward French major or minor.

## Fren 297 Independent Reading in French -Intermediate Level (1-4)

Selected project as agreed upon by student and instructor. Prerequisites: Completion of French 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)

Development of oral fluency and proficiency in French Composition. Individual practice in language laboratory for pronunciation, vocabulary building and conversational skills. Prerequisite: French 203 or equivalent.
Fren 311-312-313 French Literature I-II-III (4 each) Readings in major works of the earlier periods of

French literature. 1: Introduction to French literature; 11: Survey of 19th century literature; III: Survey of 20th century literature. Prerequisite: French 203 or equivalent.

## Fren 321-322 French Culture and Civilization I-II (4 each)

French culture and civilization from its origins to the present on selected topics. Lectures, discussions in French and audio-visual aids. Prerequisite: French 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 French 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)

Achievement of a high level of oral and written fluency. Emphasis on phonetics, syntax, and stylistics. Prerequisite: Completion of French 303 or consent of instructor.

## Fren 403 Applied French (4)

Advanced French for vocational uses. Vocabulary building in designated technical areas. Independent project in consecutive interpreting, translating, film dubbing, tourguiding, etc. Prerequisite: French 402.

## Fren 411-412-413 French Literature IV.V.VI

 (4 each)411: Survey of medieval and 16th century literature. 412: Survey of 17th century. 413: Survey of 18th century. Course taught in French. Lectures and discussions on major works. Prerequisite: French 311 Introduction to French Literature or consent of instructor.

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 French 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)
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)
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 105 Rapid Review of German

Fundamentals (4)
Open to students with previous exposure to the German language. Grammar review through oral and written exercises. Not applicable toward the major or minor program in German.

## Ger 200 Selected Emphasis in German -Intermediate Level (1-4)

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)

Review and expansion of the language. Reading selected from short literary works. Prerequisite: Either Ger 101-102-103 or Ger 105 or satisfactory score on placement examination.

## 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 German 201-202-203. Consent of instructor. 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)
Achievement of oral fluency and practical experience in writing. Prerequisite: Completion of second year German or a satisfactory score on placement examination.

## Ger 311-312-313 Masterpieces of German

 Literature I-II-III (4 each)Critical reading, discussion and literary analysis of representative works. Conducted in German. 311:
Twentieth Century. 312: Realism and Naturalism. 313:
The Age of Enlightenment and the Age of Idealism.
Prerequisite: Ger 201, 202, 203 or satisfactory score on placement examination.
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 361-362-363 German Literature in Translation

 I-II-III (3 each)Lectures and discussions of selected works by prominent German authors. Prerequisite: Successful completion of Freshman English. Not applicable towards a degree in German.
Ger 397 Independent Reading in German -Advanced Level I (1-4)
Selected project as agreed upon by student and instructor. Prerequisite: Ger 301-302-303. May be repeated up to a total of 8 credits. Applicable towards the major or minor program in German.

## Ger 401-402-403 Advanced German Composition

 and Conversation (4 each)Advanced composition and achievement of a high level of fluency. Prerequisite: Completion of German 301-302-303 or consent of instructor.
Ger 440(g) Advanced Seminar in German
Language, Culture and Literature (3)
Intended primarily for future teachers. Supplements Lang 340. Prerequisite: Lang 340, completion of third year course sequence, or consent of instructor.
Ger 480(g) Special Topics in German Literature and Culture (2-4)
In-depth study of a selected study 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. Prerequisite: 301-302-303. May be repeated up to total of 8 credits. Applicable towards the major or minor program in German.

## LANGUAGE <br> Lang 110 Pronunciation Skills in Foreign Languages ( $1-2$ credits)

Course intended to develop pronunciation skills in one or more foreign languages. Useful to students of vocal music, theater, 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 intermedeiate course in any foreign language.
Lang $\mathbf{4 4 0}$ (g) Advanced Seminar in Language, Culture, and Literature (3)
Discussion of, and practice in, the presentation of selected topics, reading aids, and materials pertaining to the reading of literature, culture, and language. This course supplements Lang 340. Intended primarily for future teachers. Prerequisite: Lang 340, completion of third year course sequence, or consent of the instructor.

## JAPANESE

## Japanese 101-102-103 Beginning Japanese

 I-II-III (12)Introduction to Japanese language and culture.
Emphasis placed on the spoken language and reading the Japanese alphabet.
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 to total of eight credits.

## NORWEGIAN

See Scandinavian Studies

## PORTUGUESE

Portuguese 100 The Language of Brazil (2-4)
An introductory course which focuses on specific
objectives, applications, interests, or the acquisition of certain language skills, e.g., listening comprehension, reading, speaking, writing, translation. May be repeated for credit when course objectives are different.

## Portuguese 101-102-103 Beginning Portuguese I-II-

 III (12)Introductory course. Emphasis on spoken language. Reading and inductive study of grammar.

## SPANISH LANGUAGE AND LITERATURE COURSES

Span 100 Selected Emphasis in Spanish -Beginning Level (2-4)
Introductory course which 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)

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 105 Rapid Review of Spanish

Fundamentals (4)
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)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)

Emphasis on spoken language. Rapid, intensive review of grammar; selected prose readings. Language Laboratory: As required by the instructor. Prerequisite: Spanish 101-102-103 or two years of high school Spanish.

## Span 297 Independent Reading in SpanishIntermediate 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)
Practical experience in writing and speaking Spanish.
Recommended as a prerequisite for advanced literature courses, and for freshmen with 4 years of high school Spanish.
Span 311-312-313 Introduction to Hispanic Literature I-II-III (4 each)
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 chairperson 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)

Advanced composition with emphasis on syntax and stylistics. Achievement of a high level of oral and written fluency. Prerequisite: Spanish 303 or consent of instructor.

## Span 431(g) Nineteenth Century Novel of Spain (4)

Regional and realistic fiction of the nineteenth century. Prerequisite: Spanish 311-312-313 or consent of the instructor.
Span 432(g) Twentieth Century Novel of Spain (4) Emphasis on the fiction of the Generation of '98 and on post-Civil War novels. Prerequisite: Span 311-312-313 or consent of instructor.
Span 433(g) Twentieth Century Poetry and Drama of Spain (4)
Emphasis on the lyric poetry of the Generations of '98 and '27 and on post-Civil War Drama. Prerequisite: Spanish 311-312-313 or consent of the instructor.

## Span 434-435(g) Spanish American Prose Fiction I-II (4 each)

Reading and analysis of outstanding and representative works. 434: Emphasis on the regional and realistic novels. 435: Emphasis on the more cosmopolitan contemporary trends in fiction. Prerequisite: Three years of college Spanish or consent of the instructor.
Span 436(g) Latin-American Poetry, 1890 to Present (4)
The poetry of Latin-America: modernism, post modernism, and contemporary trends. Prerequisite: Spanish 311-312-313 or consent of the 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 chairperson upon presentation of proposal. May be repeated up to a total of 8 credits.

## SWEDISH

Swedish 101-102-103 Beginning Swedish (4 each)
An introductory study of the Swedish Language stressing oral proficiency supplemented by an overview of Modern Swedish civilization.

## LEGAL ASSISTANT

Cynthia Phillips, Coordinator
The Legal Assistant Program is a professional four-year major resulting in a Bachelor of Science degree from Moorhead State University. The program is guided by a Legal Assistant Committee composed of university and community members and is administratively located with the Accounting Department.

## Major Requirements

Core Requirements
Leg A 125 Intro to Legal Assistant (2)
Leg A 250 Leg Res \& Communication (4)
Leg A 251 Leg Res \& Communication (4)
Leg A 252 Leg Res \& Communication (4)
Leg A 324 Interviewing (4)
Leg A 350 Law Office Mgmt (4)
Leg A 375 Legal Ethics
Major Tracks each Legal Assistant Major must complete at least 50 credits in one of the four alternate major tracks.
Estate and Tax
Litigation

## Public Interest

Real Estate

## Major Tracks

Estate and Tax (50 credits)
Required ( 8 credits)
Leg A 301 Methods \& Materials in Estates \& Tax (4)
Leg A 469 Internship (4)
Electives (at least 42 credits)
Leg A 310 Civil Procedure (4)
Leg A 465 Fiduciary (4)
Acct 229 Prin I (4)
Acct 230 Prin II (4)
Acct 231 Prin III (4)
Acct 301 Bus Law I (4)
Acct 302 Bus Law II (4)
Acct 303 Bus Law III (4)
Acct 330 Inter I (4)
Acct 331 Inter II (4)
Acct 332 Inter III (4)
Acct 340 Intro Fed Tax (4)
Acct 441 Ind Inc Tax (4)
Acct 443 Tax of Corp \& Part (4)
Finc 351 Prin of Insurance (4)
Finc 416 Prin of Investment (4)
Anth 402 Sem in Death \& Dying (4)
Litigation (50 credits)
Required ( 8 credits)
Leg A 302 Methods \& Materials of Litigation (4)
Leg A 469 Internship (4)
Electives (at least 42 credits)
Leg A 310 Civil Procedure (4)
Leg A 315 Med Terms \& Records (4)
Leg A 320 Domestic Relations (4)
Leg A 330 Bankruptcy (4)
Leg A 420 Debt-Cred Law (4)
Acct 229 Prin I (4)
Acct 230 Prin II (4)
Acct 231 Prin III (4)

Acct 301 Bus Law I (4)
Acct 302 Bus Law II (4)
Acct 303 Bus Law III (4)
HMR 401 Innkeeper Liability (4)
MC 440 Communications Law (3)
IndS 104 Manufacturing (4)
Phys 111 Elem I (4)
Phys 111L Elem Lab I (1)
Phys 112 Elem II (4)
Phys 112L Elem Lab II (1)
Phys 113 Elem III (4)
Phys 113L Elem Lab III (1)
Biol 103 Humans \& Ecosystem (4)
Biol 104 Human Biology (4)
Biol 215 Anat \& Phys I (4)
Biol 216 Anat \& Phys II (4)
Public Interest (50 credits)
Required ( 8 credits)
Leg A 303 Methods \& Materials in Public Law (4)
Leg A 469 Internship (4)
Electives (at least 42 credits)
Leg A 310 Civil Procedure (4)
Leg A 315 Med Terms \& Records (4)
Leg A 320 Domestic Relations (4)
Leg A 330 Bankruptcy (4)
Leg A 420 Debt-Cred Law (4)
Leg A 430 Admin Advocacy (4)
Leg A 441 Public Benefits I (4)
Leg A 442 Public Benefits II (4)
Leg A 443 Public Benefits III (4)
Leg A 460 Housing Law (4)
Acct 301 Bus Law I (4)
Acct 302 Bus Law II (4)
Finc 330 Credit \& Collection (4)
SW 425 Social Work \& the Law (4)
Hist 141 Evol of Soc Services (4)

Real Estate ( 50 credits)
Required ( 8 credits)
Leg A 304 Methods \& Materials of Real Estate Law (4)
Leg A 469 Internship (4)
Electives (at least 42 credits)
Leg A 450 Abstract \& Titles (4)
Leg A 455 Law of Mineral Int (4)
Leg A 460 Housing Law (4)
Acct 229 Prin I (4)
Acct 230 Prin II (4)
Acct 231 Prin III (4)
Acct 301 Bus Law I (4)
Acct 302 Bus Law II (4)
Acct 303 Bus Law III (4)
Finc 354 Prin Real Estate I (4)
Finc 355 Prin Real Estate II (4)
Geog 110 Intro to Phys Geog (4)
Geog 130 Field Planning (4)
Geog 235 Geog of MN \& ND (4)
Geol 115 Phys Geol (4)
Geol 221 Mineral Resources (4)

## LEGAL ASSISTANT COURSES

## Leg A 125 Introduction to Legal Assistant (2)

Provides an overview of the legal assistant profession to assist students in their career decision-making process.
Leg A 250 Legal Research \& Communication I (4)
A general introduction to recorded sources of the law and when and how it 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.
Leg A 251 Legal Research \& Communication Il (4)
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: Leg A 250.

## Leg A 252 Legal Research \& Communication III (4)

Continuation of Legal Reserch and Communication sequerice, 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: Leg A 250 and 251.

## Leg A 310 Civil Procedure (4)

The substantive and procedural law of civil litigation in both state and federal court systems. Prerequisite: Leg A 252 or consent of program director.
Leg A 320 Domestic Relations (4)
Law of Domestic Relations including marriage, separation, divorce, annulment, adoption, and custody. Prerequisite: Leg A 252 or consent of program director.

## Leg A 325 Interviewing (4)

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: Leg A 252 or consent of program director.
Additionally the following course titles have been approved for the program:
Leg A 301 Methods \& Materials in Estate \& Tax
Leg A 302 Methods \& Materials of Litigation
Leg A 303 Methods \& Materials in Public Law
Leg A 304 Methods \& Materials of Real Estate Law
Leg A 315 Med Terms \& Records
Leg A 330 Bankruptcy
Leg A 350 Law Office Management
Leg A 375 Legal Ethics
Leg A 420 Debt-Cred Law

Leg A 430 Admin Advocacy<br>Leg A 441 Public Benefits I<br>Leg A 442 Public Benefits II<br>Leg A 443 Public Benefits III<br>Leg A 450 Abstract \& Titles<br>Leg A 455 Law of Mineral Interests<br>Leg A 460 Housing Law<br>Leg A 465 Fiduciary<br>Leg A 469 Internship

## LIBERAL ARTS

All students admitted after 1981 or graduating after spring 1985, are required to take a Liberal Arts (LART) course. 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 Covenents and Codes, the philosophical grounds for and types of human rights, the state of human rights in various societies, the efforts towards 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 twentieth 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 312 Romantic Love (4)

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 570 Spec Topics-Study Abroad (2-4)

Study at locations outside of the United States, selected for historical and cultural significance. Course of study includes texts and papers appropriate to location. May be repeated for credit.

## LIFE SCIENCE (Teaching)

Information on the major in Life Science (Teaching) may be found under Biology.

## MANAGEMENT

See Business Administration for Curricula

## MANAGEMENT COURSES

Mgmt 242-243-244 Work Experience I-II-III (1 each)
Supervised work experience of at least 30 hours. Written report. Open only to students majoring in management or business administration. One credit per quarter, up to a maximum of 3 credits.
Mgmt 315 Government and Business (4)
Same as Econ 315.
Mgmt 360 Principles of Management (4)
Analyzes functions of management and the forces that shape and define the manager's role. Prerequisite: Psy 119 or Soc 205.
Mgmt 405(g) Small Business Management (4) 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)

Practicum in providing management assistance to small business. To 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 415(g) Industrial Organization and Public
Policy (4)
Same as Econ 415.

## Mgmt 416(g) Labor Economics (4)

Same as Econ 416.

## Mgmt 420 Organization Theory

Behavioral science theory applied to an understanding of the design, structure, performance, and environment of business organizations. Prerequisite: Mgmt 360.

## Mgmt 421(g) Decision Analysis (4)

Structuring and analyzing of decisions under conditions of risk and uncertainty. Prerequisites: Mgmt 360, Math 275
Mgmt 430(g) Managerial Economics (4)
Same as Econ 430.
Mgmt 440(g) Personnel Management (4)
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)
Description and analysis of the production/operations function in an organization. Prerequisites: Mgmt 360 and Math 275.

## Mgmt 451 Organizational Behavior

Studies the interaction of individuals and groups in business organizations. Prerequisites: Mgmt 360, Psy 119 or Soc 205.
Mgmt 452(g) Organizational Development (4) Techniques used to assist organizations in solving problems and dealing more rapidly with change. Prerequisites: Mgmt 360 , Mgmt 440 or 451.
Mgmt 455 Quantitative Decision Making (4) Introduction to quantitative methods applied to business decisions. Prerequisites: Mgmt 360, Math 275.

## Mgmt 456(g) Management Information

Systems (4)
Design and use of communication processes in which data are recorded, transmitted, and revised as an aid in managerial decision making. Prerequisites: Mgmt 360, ComS 145 or ComS 150.
Mgmt 458(g) International Management (4)
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 460 Business Policy (4)

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 461(g) Management Seminar (4)
Selected management topics of contemporary interest. May be repeated with different topics. Prerequisite: Mgmt 360.

## Mgmt 469 Student Internship (3-16)

Mgmt 498(g) Problems in Management (1-4)
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 242, 243, 244 Work Experience I, II, III ( 1 each)
Supervised work experience of at least 30 hours. Written report. Open only to students majoring in marketing or business administration. One credit per quarter up to a maximum of 3 credits.
Mktg 310 Principles of Marketing (4)
Principles of planning the product, price, promotion, and distributive strategies of an organization within a competitive environment. Prerequisite: Econ 206.
Mktg 311 Marketing Management (4)
Methods of marketing decision making under conditions of uncertainity. Prerequisite: Mktg 310.

## Mktg 321 Consumer Behavior (4)

Behavioral science concepts applied to the study of consumer decision making. Prerequisite: Mktg 310, Psy 119 or Soc 205.
Mktg 322 Marketing Intelligence (4)
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 323 Marketing Communications (4)

Applications of interpersonal and mass communications theories to the management of marketing promotions.
Prerequisite: Mktg 310, Psy 119 or Soc 205.

## Mktg 406(g) Small Business Management Consulting (2)

Practicum in providing management assistance to small business. To 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)

Movement and storage activities associated with the distribution of raw materials and finished goods. Prerequisite: Mktg 310, Math 275.
Mktg 415(g) Industrial Marketing (4)
Methods of marketing goods and services to manufacturers, wholesalers, retailers, institutions, and governments. Prerequisite: Mktg 310.

## Mktg 420(g) Marketing Channels and

 Institutions (4)Design, management, control, motivation, and evaluation of the interfirm relationships involved in bringing industrial goods to the final customer.
Prerequisite: Mktg 310, senior standing.

## Mktg 421(g) Retail Management (4)

Principles and concepts underlying the managerial functions of the retailer. Prerequisite: Mktg 310.

Mktg 430(g) Sales and Sales Management (4) 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 441 Business and Society (4)
Studies role of business operating within the American society and economic system. Prerequisite: Mktg 310, senior standing.

## Mktg 442(g) Marketing Seminar (4)

Selected marketing topics of contemporary interest. Prerequisite: Mktg 310. May be repeated with different topics.
Mktg 444(g) Transnational Marketing (4)
Comprehensive study of those factors affecting international marketing. Prerequisite: Mktg 310, senior standing.

## Mktg 469 Student Internship (3-16)

Mktg 470(g) Independent Study (1-4)
Individual inquiry into theoretical aspect of marketing not covered in the regular curriculum. Prerequisite: Consent of instructor.
Mktg 498(g) Problems in Marketing (1-4)
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.

## MASTERS IN BUSINESS ADMINISTRATION

See Graduate Bulletin for Curriculum
MBA COURSES
MBA 500 Professional Communication (4)

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)Regression analysis, model building, computer software packages, analysis of variance, experimental design, analysis of count data, student project. Prerequisites: Math 274-75 or Math 574.

## MBA 502 Managerial Microeconomic Analysis (4)

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)
A rigorous examination of fiscal and monetary policy, macroeconomic models and forecasting. Prerequisite: Econ 204.

## MBA 510 Marketing Administration (4)

Analysis of problems met by management in meeting consumer needs. Emphasizes marketing decision making under conditions of uncertainity. Prerequisites: MBA 501, MBA 504, Mktg 310.
MBA 529 Corporate Financial Reporting (4)
Study of reporting practices and principles, including professional pronouncements. Analysis and interpretation of corporate financial reports. Prerequisites: Acct 229-230. May not be taken for credit by students who have taken Acct 480.

## MBA 530 Managerial Accounting (4)

Use and analysis of accounting data for management planning, control and decision making. Prerequisites: Acct 231, MBA 529, MBA 501.

## MBA 542 Advanced Financial Management (4)

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 <br> (4)

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) 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)

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)
Capstone course drawing upon knowledge of management, marketing, finance, accounting, and economics. Prerequisite: Permission of instructor.

## MASS COMMUNICATIONS DEPARTMENT

Melva D. Moline, Chair; John Anderson, Marvin Bossart, Allen Carter, Martin Grindeland, Robin W. Hadfield, William B. Hall Jr.

## MASS COMMUNICATIONS CURRICULA

The major in Mass Communications includes these areas of concentration: Print Journalism, Advertising, Public Relations, Broadcast Journalism and General. The department also offers a minor, and there is a dual major with English (102 credits).
Competence and interest in writing, ability in typing and a potential to communicate news and information through written and visual processes are basic
requirements for students selecting this major. Students also study the ways in which photography and graphics are used to convey news and information, but the Mass Communications department does not offer a concentration in photography.
A primary concern in this program is to encourage students to develop talent for gathering and processing information so that it is understood by general and/or specific audiences. Although some production and performance courses are included in the Broadcast Journalism concentration, the main emphasis is on news and information. In addition to offering an entry to basic theories and skills needed, the Mass Communications program encourages students to study broadly and draw upon the many departments of the university for more insights and understanding. The resources of the social sciences are especially recommended.
Major in Mass Communications B.S. Degree Professional Orientation: 24 credits of core courses required for all concentrations listed below:
MC 200 Introduction to Mass Communications (3)
MC 205 Reporting I (3)
MC 215 Visual Communications (4)
MC 230 Communications Photography I (3)
MC 240 History of American Journalism (3)
MC 360 Mass Media: Issues and Ethics (4)
MC $440(\mathrm{~g})$ Communications Law (4)
Print Journalism Concentration
Required: The core courses and:
MC 305 Reporting II (4)
MC 310 Copy Editing (4)
MC 330 Communications Photography II (3)
MC 400 Reporting of Public Affairs (4)
MC 425 News-Editorial Seminar (4)
MC 465(g) Investigative Processes (4)

Requirements in Other Areas:
Option A:
Pol 120 National Government (4)
Pol 221 State and Local Government (4)
Pol 311 American Political Thought (4)
Pol 330 The Judicial System (4)
Econ 202-204-206 Principles of Economics (12)
Hist 215 History of the Upper Midwest (4)
Hist 369 American Life \& Thought II (4)
Option B:
Double Major: Mass Communications and any other major.
Recommended:
*MC 469 Internship (3-16)
Hist 123 20th Century U.S. History (4)
Note: In this concentration, no more than 70 credits in Mass Communications courses may be applied toward the 192 credits required for graduation from Moorhead State University.

## Broadcast Journalism Concentration

Required: The core courses and
MC 305 Reporting II (4)
MC 320 Broadcast Journalism (4)
MC 325 Radio and Television Performance (4)
MC 350 Basic Television Production (4)
MC 357 Television News Workshop (TV News Writing or subcourses from MC 351-356) (4)
MC 465(g) Investigative Processes (4)
Requirements in Other Areas:
Option A:
Pol 120 National Government (4)
Pol 221 State and Local Government (4)
Pol 311 American Political Thought (4)
Pol 330 The Judicial System (4)
Econ 202-204-206 Principles of Economics (12)
Hist 215 History of the Upper Midwest (4)
Hist 369 American Life \& Thought II (4)

## Option B:

Double Major: Mass Communications and any other major.
Recommended:
MC 425 Journalism Seminar (4)
*MC 469 Internship (3-16)
Hist 123 20th Century U.S. History (4)
Spch 385 Advanced TV Production (4)
Note: In this concentration, no more than 70 credits in Mass Communications courses may be applied toward the 192 required for graduation from Moorhead State University.
Students interested in performance and production phases of broadcasting should consider majoring in Speech Communication with a concentration in radio, television and film.

## Public Relations Concentration

Required: The core courses and
MC 270 Public Relations Principles (4)
MC 305 Reporting Il (4)
MC 315 Layout and Typography (4)
MC 330 Communications Photography II (3)
MC 345 Multi-Media Communications (4)
MC 410 Public Information Processes (4)
Any two of the following:
MC 260 Advertising Principles (4)
MC 310 Copy Editing (4)
MC 318 Advertising Copywriting (3)
MC 325 Radio \& TV Performance (4)
MC 350 Basic Television Praduction (4)
*MC 469 Internship (3-16)

## Recommended:

MC 480 Problems (2-4)
IS 350 Layout/Design for Printing (4)
Pol 326 Public Opinion (3)
Speech 100 Beginning Speech Communication (4)
Speech 210 Effective Business Speaking (3)

AmSt 217 Introduction to American Culture (4)
Econ 100 The American Economy (4)
Mktg 310 Principles of Marketing (4)
Mgmt 360 Principles of Management (4)
Eng 287 Technical Report Writing (3)
Small Business Institute. (Mgmt 406, Mktg 406, Fin 406 (4) )
Note: In this concentration, no more than 75 credits in Mass Communications courses may be applied toward the 192 credits required for graduation from Moorhead State University.

## Advertising Concentration

Required: The core courses and
MC 260 Advertising Principles (4)
MC 315 Layout and Typography (4)
MC 318 Advertising Copywriting (3)
MC 416 Media Buying (3)
MC 419 Advertising Practicum (4) or Small Business
Institute: (Mgmt 406, Mktg 406, Fin 406 (4) )
Any three of the following:
MC 270 Public Relations Principles (4)
MC 325 Radio and Television Performance (4)
MC 350 Basic Television Production (4)
*MC 469 Internship (3-16)
Also required:
Mktg 310 Principles of Marketing (4)
Recommended:
Mgmt 360 Principles of Management (4)
Mktg 321 Consumer Behavior (4)
Mktg 322 Marketing Intelligence (4)
Psy 103-104-105 Introduction to Psychology (12)
Engl 287 Technical Report Writing (3)
IS 350 Layout/Design for Printing (4)
Note: In this concentration, no more than 75 credits in Mass Communications courses may be applied toward the 192 credits required for graduation from Moorhead State University.

## General Mass Communications

This option permits some flexibility in structuring courses to meet individual needs. It is especially recommended for students who have general, rather than specific career goals, and for those who seek Mass Communications as a second major. The following requirements are stipulated for the general major in Mass Communications:
Complete the required core of 24 credits and 28 additional credits of Mass Communications agreed upon by the student and his/her advisor.
At least 70 hours of the 192 credits required for graduation must be at the 300 level or above.
Requirements in Other Areas:
Option A:
Pol 120 National Government (4)
Pol 221 State and Local Government (4)
Pol 311 American Political Thought (4)
Pol 330 The Judicial System (4)
Econ 202-204-206 Principles of Economics (12)
Hist 215 History of the Upper Midwest (4)
Hist 369 American Life \& Thought II (4)
Option B:
Double Major: Mass Communications and any other major.
Note: In this concentration, no more than 70 credits in Mass Communications courses may be applied toward the 192 required for graduation from Moorhead State University.

## Minor in Mass Communications

Required:
MC 200 Introduction to Mass Communications (3)
MC 205 Reporting I (3)
MC 215 Visual Communications (4)
MC 230 Communications Photography I (3)
Any two of the following:
MC 240 History of American Journalism (3)

MC 360 Mass Media: Issues and Ethics (4)
MC 440(g) Communications Law (4)
And 8 hours in Mass Communications electives.
Dual Major in English and Mass Communications B.A. Degree ( 102 credits)

Major Requirements in English (57 credits) Core Requirement ( 28 credits) (See B.A. Major)
Writing Requirement ( 6 credits)
Engl 251 Film Writing (3)
Engl 286 Practical Writing (3)
Engl 287 Technical Report Writing (3)
Engl 288 Introduction to Creative Writing (3)
Engl 388 Creative Writing (3)
Engl 394 Advanced Composition (3)
Electives in English (23 credits)
Note: At least 15 credits must be taken at the 300 or 400 levels and at least 8 of these credits must deal with literature of the nineteenth century or earlier. Electives should be chosen in close consultation with one's English Department Advisor.
Major Requirements in Mass Communications (45 credits)
Core Requirement ( 25 credits)
MC 200 Introduction to Mass Communications (3)
MC 205 Reporting I (3)
MC 215 Visual Communications (4)
MC 230 Communications Photography 1 (3)
MC 305 Reporting II (4)
MC 360 Mass Media: Issues and Ethics (4)
MC 440(g) Communications Law (4)
Electives in Mass Communications ( 20 credits)
Note: Electives in Mass Communications should be chosen in close consultation with the department advisor.
*All credits earned under the internship assignment count toward graduation but only three credits may be applied to the major.

## MASS COMMUNICATIONS COURSES

MC 200 Introduction to Mass Communications (3)
Nature and functions of mass media agencies, including newspaper, radio and television, films, entertainment and advertising.

## MC 205 Reporting I (3)

Evaluation of news, reporting methods, discussions and exercises in organizing and writing news stories. Ability to type essential. Prerequisite: Grammar Test.
MC 212 University Newspaper Publication (2)
Practicum for students working on the MSU Advacate staff. Repeatable to 6 credits. Prerequisite: Consent of The Advocate publisher.
MC 215 Visual Communications (4)
An introduction to the nature and functions of visuals in the mass media.
MC 230 Communications Photography I (3)
Black and white processing, visual perception and communication. Students without acceptable cameras may rent cameras at $\$ 10$ per quarter.
MC 240 History of American Journalism (3)
Development of journalism in the U.S. from the time of the American colonies to the present.
MC 260 Advertising Principles (4)
Introduction to the principles of advertising in the print and broadcast media. Prerequisite: MC 215.
MC 270 Public Relations Principles (4)
Introduction to the principles and theories of public relations, its problems, impact and potential.
Prerequisite: MC 205.
MC 305 Reporting II (4)
Discussion and assignments in gathering information and writing all types of local news stories. Prerequisite: MC 205.
MC 310 Copy Editing (3)
Evaluating and preparing news copy for publication.

Extensive practice in editing, rewrite, headline and caption writing. Prerequisite: MC 205.
MC 315 Layout and Typography (4)
Introduction to graphic arts production with emphasis on methods of translating ideas and information to print material. Prerequisite: MC 260.

## MC 318 Advertising Copywriting (3)

Instruction and execution of advertising copywriting for both print and broadcast media. Prerequisite: MC 205 and MC 260.
MC 320 Broadcast Journalism (4)
Gathering and writing local news for broadcast. The selection of wire copy and the preparation of newscasts. Prerequisite: MC 205.
MC 325 Radio and Television Performance (4)
Course provides theory and practice in performing in the professional areas of radio and television, news, commercials and interviews. (Same as Spch 316).
MC 330 Communications Photography II (3)
Photojournalism. Spot news and feature photographs, with cutlines, for newspapers. Photographing and writing picture stories for the print media. Prerequisite: MC 205, 215, \& 230.

## MC 335 Survey of Non-Theatrical Film (3)

History/criticism of documentary, propaganda, journalistic, industrial, promotional and experimental films.
MC 345 Multi-Media Communications (4)
Introduction to the visual communications process, production methods and effective presentation techniques in business. Culminates in the production of an audio/graphic presentation. Prerequisite: MC 215 \& 230.

## MC 350 Basic Television Production (4)

Introduction to the television broadcasting studio and control room equipment and its operation;
preproduction planning and production experience. (Same as Spch 384).

## MC 351-357 Television News Workshop (1-4 each)

A practicum whereby students in broadcast news 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: 351 TV News Assignment Editor, 352 TV News Photographer/Graphic Designer, 353 TV News Producer, 354 TV News Reporter, 355 TV News Videographer, 356 TV News Videotape Editor, 357 TV News Writer. May be repeated for credit. No credit will be awarded for studio production and performance experiences in this course. Prerequisite: Consent of the instructor. Maximum of eight credits applied to the minimum requirements of the degree.
MC 360 Mass Media: Issues and Ethics (4)
An examination of the relationship between the mass media and society. Prerequisite: MC 200.
MC 400 Reporting of Public Affairs (4)
Instruction and practice in reporting municipal, school, county, state and federal administrative and legislative agencies. Prerequisite: MC 305.
MC 410 Public Information Processes (4)
Execution of theories and principles of public relations as related to the creation of public and internal information materials. Prerequisite: MC 230, 270, 315 , \& 345.

## MC 416 Media Buying (3)

Offered for advertising students with emphasis on media buying at the local level and some attention to buying at the national level. Prerequisite: MC 260.
MC 419 Advertising Practicum (4)
A seminar for advanced students in advertising with emphasis on campaign execution. Repeatable to 8 credits. Prerequisite: MC 315, 318, \& 416.

## MC 425 Journalism Seminar (4)

Advanced assignments in researching and writing news, features or editorial material. Topics chosen quarterly. Repeatable to 12 credits. Prerequisite: MC 305.
MC 430 Communications Photography III (3) Individual studies agreed upon by the instructor and students. Repeatable to 9 credits. Prerequisite: MC 330 and consent of instructor.
MC 440(g) Communications Law (4)
Consideration of the legal philosophy bearing on the mass media.
MC 465(g) Investigative Processes (4)
Reference works and source material, patterns of investigation; valid argumentation. Prerequisite: MC 205 and MC 305.
MC 469 Internship (3-16)
Practical work for an approved media agency. All credits apply toward graduation but only three credits can count towards the major.
MC 480 Problems in Mass Communications (1-6) Individual problems in areas of specific interest to the student. Credits apply toward graduation but not toward the major.
MC 496(g) Journalism Workshop (1-3)
A course designed for workshops in print or broadcast 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) Individual problems in areas of specific interest to the student.

## MATHEMATICS DEPARTMENT

Milton W. Legg, Chair; Carl T. Carlson, Sidney J. Drouilhet II, Marvel L. Froemming, James P. Hatzenbuhler, Ronald M. Jeppson, Don A. Mattson, Bette G. Midgarden, Dennis L. Rhoads, Bill V. Ritchie, Derald D. Rothmann, Bonita R. Schmidt, C. Jane Schobel, Walter S. Sizer, Warren J. Thomsen, Jeanne D. Travis, James T. Wallen, Shelda A. Warren, Ariyaratna M. Wijetunga, 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* - 300 level and above (at least 24).
At least 12 credits of electives must be chosen from:
Math $365,376,393,425,427,450,466,467,474$,
475, 480

## Major in Mathematics B.S. Degree (Teaching)

 (59 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 (3)
Math electives" - 300 level and above (at least 14)
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 ( 31 credits)
Math 231-232-233-234 Calculus 1-II-III-IV (16)
Math electives* - 300 level and above (at least 15)

## Minor in Mathematics B.S. Degree (Teaching)

 (34 credits)Math 231-232-233-234 Calculus I-II-III-IV (16)
Math 440 Mathematics in the Secondary School (3)
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 3)
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 or Computer Science (3).

## 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 (8)*
*The electives may not include: Math 340, 341, 344, 440, 444, or 574

## MATHEMATICS COURSES

Math 100 Introduction to Mathematics (4)
Axiomatic systems, logic, sets and probability. Not intended to prepare students for any subsequent course, except Math 203.**

## Math 110 Mathematics for Consumers (4)

Review of decimals and percentage, linear equations, simple and compound interest, applications. The course will provide the mathematics necessary for everyday living. Prerequisite: one year of algebra in secondary school. Not open to students who have taken Math 273 or Math 231.**

## Math 111 Elementary Algebra (4)

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. Prerequisite: Consent of instructor. Not open to students having completed Math 121 or above.

## Math 121 Intermediate Algebra (4)

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)

Functions, exponents, radicals, inequalities, induction, progressions, binomial series. Prerequisite: Math 121 or equivalent.**

## Math 133 Trigonometry <br> (3)

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) 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)
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. Prerequisite: Math 131 and 133 or equivalent high school preparation.
Math 273 Mathematics for Business and Social Sciences (4)
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)
Descriptive statistics, probability distributions, sampling, estimation of mean and proportion, tests of hypotheses, confidence intervals. Prerequisite: Math 273 or consent of instructor. 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) 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 Calculus for Business and Social

 Science (4)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)

 Systems of linear equations, Gauss-Jordan elimination, linear programming, matrices, determinants, vector spaces. Prerequisite: Math 232.Math 331 Differential Equations (4)
Standard methods of solution for elementary ordinary differential equations. Prerequisite: Math 234.

## Math 340 Mathematics in the Elementary

## School (4)

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)Adapted to the needs and experience of those enrolled. Prerequisite: Elementary school teaching experience.

## Math 344 Mathematics for Special Education (3)

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)

Vectors, matrices, vector valued functions, line and surface integrals, Green's Theorem, Stokes' Theorem. Prerequisite: Math 234.

## Math 375-376 Intermediate Probability and Statistics I-II (4 each)

Probability distributions, sampling distributions, hypothesis testing, regression, analysis of variance, design of experiments. Sequential. Prerequisite: Math 233.
Math 391 Foundations of Mathematics (4)
Axiomatic systems; symbolic logic, sets, operations relations, functions, mappings, cardinality, continuum hypothesis. Prerequisite: Math 232.
Math 392-393 Intermediate Analysis I-II (4 each) 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 (3)

Topical and chronological survey of the main branches of mathematics. Prerequisite: Math 233 or consent of instructor.
Math $\mathbf{4 1 5 ( g )}$ Foundations of Geometry (4) Euclidean geometry, transformations, cross ratio, geometry of circles, constructions. Prerequisite: Math 391
Math 416(g) Modern Geometry
Introduction to non-Euclidean geometries and projective geometry. Prerequisite: Math 415.
Math 424-425(g) Abstract Algebra I-II (4 each) Groups, rings, and fields studied as abstract mathematical systems. La Grange'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)
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 (3)
Objectives, methods, materials, and evaluation.
Prerequisite: Math 391.
Math 444(g) Diagnosis and Remediation of Learning Difficulties in Mathematics (3)
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)
Numerical solutions to equations, finite differences,
interpolation formulas, and numerical calculus.
Prerequisites: Math 331 and ComS 250 or consent of instructor.
Math 451(g) Numerical Analysis II (4)
Topics related to linear algebra and differential equations. Prerequisites: Math 450 and Math 327.

## Math 461-462(g) Introduction to Real Analysis I-II (4 each)

Theory of functions of a real variable including metric spaces, continuous functions on metric spaces, connectedness, completeness, compactness, Lebesgue integration. Prerequisite: Math 393.

## Math 466(g) Fourier Series and Boundary Value Problems (4)

Applications include finding solutions to partial differential equations. Prerequisite: Math 331.
Math 467(g) Complex Analysis (4)
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)Linear programming, network analysis, dynamic programming, queueing theory, decision analysis, advanced programming techniques. Prerequisites: Math 327 and Math 375.
Math 474(g) Probability (4)
Various probability density functions. Prerequisite: Math 375.

## Math 475-476(g) Mathematical Statistics I-II (4 each)

Mathematical derivations and applications of statistical techniques and theories. Prerequisites: Math 376 and Math 392.

## Math 480(g) General Topology (4)

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)
Topics from elementary number theory such as divisibility, congruences, Diophantine equations, number theoretic functions and continued fractions. Prerequisite: Math 391.
Math 540 Problems of Secondary School Mathematics (3)
Trends in methods and curriculum in secondary school mathematics. Prerequisite: Consent of instructor.

## Math 574 Statistical Methods for Business

Management I (3)
Probability, sampling distributions, estimation of mean and proportion, tests of hypotheses. Prerequisite:
Consent of MBA coordinator and instructor.
Math 590 Special Problems in Mathematics (1-6)
See Math 490.
Math 599 Thesis in Mathematics (1-6)
Registration only after consultation with major advisor.

## MEDICAL TECHNOLOGY

See Biology for Curricula

## MULTICULTURAL STUDIES DEPARTMENT

Dieter Berninger, Marcella Cash, James Condell
MULTICULTURAL STUDIES CURRICULA
Minor in Multicultural Studies ( $\mathbf{3 1}$ credits)
MCS 100 Introduction to the Minority Experience (4)
MCS 202 Traditional American Indian Culture (4)
MCS 203 Chicano Culture (4)
MCS 211 The Afro-American Community (4)
MCS 451 Seminar in Afro-American Studies (4)
MCS 452 Seminar on the American Indian (4)
MCS 453 Seminar on the Chicano (4)
Soc 310 Majority Minority Group Relations (3)
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)
MCS 451 Seminar in Afro-American Studies (4)
Hist 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)

MCS 332 Indians of the Southwest (4)
MCS 402 Indians of Minnesota (4)
MCS 452 Seminar on the American Indian (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)
MCS 453 Seminar on the Chicano (4)
Anth 220 Indians of Middle America (4)
Hist 311 Chicano History (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) Historical background of Black Americans and contributions of Blacks to American life and culture.
MCS 102 The Contemporary American Indian (4) 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)
Political, economic and social developments within the Chicano community.
MCS 202 Traditional American Indian Cultures (4)
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)
Key aspects of Chicano culture with an emphasis on literature, history, and philosophy.

## MCS 211 Contemporary Afro-American Community

 (4)The contemporary life and social structure of the Black American community within the United States.

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 (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 321-322 Masterworks in Afro-American Literature I-II (4 each)

An interdisciplinary survey of Black American literature from the 1800's to contemporary times.
MCS 332 Indians of the Southwest (4)
Analysis and comparison of aboriginal cultures of the southwestern region of the United States, with emphasis on tribes of New Mexico and Arizona.
MCS 402 Indians of Minnesota (4)
The experience of Indians in Minnesota, with special attention to Chippewa and Sioux history and culture, the urban Indian, and Indian education.
MCS 451 Seminar in Afro-American Studies (2-4)
Exploration of issues such as conceptual framework of Black American history, present economics and political status, racism, activism.
MCS 452 Seminar on the American Indian (2-4)
Advanced topical seminar on Native American peoples. May be repeated for credit.
MCS 453 Seminar on the Chicano (2-4)
Advanced topical examination of the Chicano experience. May be repeated for credit.
MCS 461 Readings of the Afro-American (1-3)
Independent reading and research on the AfroAmerican. 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 Condell, Mary Gardner, Mary Ann Hanna, Lynette Jett, Emil Kochis, Rae Offutt, Thomas Tammaro, Dorothy Thomsen, Beverly Wesley
MULTIDISCIPLINARY STUDIES CURRICULA
Multidisciplinary Studies offers both liberal arts courses to meet B.A. and A.A. graduation requirements and 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 which allows the student and faculty advisor to design an individualized career concentration. The curriculum requires at least 42 liberal art 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 6 credits in written communication 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 vocational technical institute program.

## MULTIDISCIPLINARY STUDIES COURSES

MDS 090 Sentence Improvement (1-2)
Effective sentence-writing skills. Underlying structure of the English sentence and its basic patterns.

MDS 091 Paragraph Development (1-2)
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)

Vocabulary development, word attack skills, comprehension and concentration skillbuilding, and reading rate improvement. Small group and individual activities.

## MDS 093 Mathematics I (2)

Designed to correct math deficiencies in order to insure success in areas requiring a good basic math background.

## MDS 104 Issues in Evaluation (5)

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)
Building effective group membership skills and understanding their relationship to democratic group functioning.
MDS 106 The Meaning of Work (3)
Development of realistic concepts of work and an understanding of factors that affect career satisfaction and society's work ethic.
MDS 109 Individual Development Projects (1-3) Opportunity to test self-directing and problem-solving skills in a real-life situation. May involve an individual student or several students. Can be repeated.

## MDS 110 Developmental Writing (4)

Narrative and descriptive writing. Students keep journals and write papers which are discussed in small group sessions.
MDS 111 Expository Writing (4)
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 English 101.
MDS 114 Topics in Written Communication (1-4) A problem or theme focused course within the liberal arts area to develop breadth or depth in a given topic.
MDS 115 Interpersonal Communication (5)
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)

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)

This course is designed to develop critical listening skills.

## MDS 119 Contemporary Mathematics (4)

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)

Basic algebra to college algebra. Prerequisite: MDS 093 or equivalent.

## MDS 121 Business Mathematics (4)

Includes review of math fundamentals, percentages, mark-up and discounting, payroll, taxes, insurance, inventory, etc.
MDS 124 Topics in Oral Communication/Symbolic Systems (1-4)
A theme focused course within the liberal arts area to
develop breadth or depth in a given topic. May be repeated for credit when topic changes.

## MDS 125 Introduction to Computers (2)

What a computer is and how it works. Determines interest and aptitude in this area.

## MDS 130 Exploring Marriage and Family (4)

Examination of the social institutions of marriage and family. Current trends and theoretical constructs.

## MDS 131 Perception (5)

Physical and physiological limitations of perception. Individual and cultural differences in perception.
Perception in the visual arts; descriptive writing.
MDS 132 Human Sexuality (5)
Sexuality in America: biological and physiological, sexrole stereotypes, how we learn masculine or feminine roles, different forms of sexual behavior.
MDS 160 Introduction to Dramatic Art 1 (3)
Acquaints student with some of the structural qualities of drama and with its power as an aid to selfunderstanding.
MDS 161 Introduction to Dramatic Art 11 (3)
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)

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)
Comedy in its various forms. Attempts to analyze how comedy reflects societal values, morals, and behavioral expectancies.
MDS 172 Contemporary Values Through Science Fiction (4)
Contemporary values reflected in selected reading in science fiction novels and short stories.

## MDS 173 Life Stages and Literature (4)

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)

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 180, 181 Plants and Humans I-II (3 each) 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)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)

A problem or theme focused course within the liberal arts area 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)
The understanding of the mechanisms by which balances and stability are maintained in nature.
MDS 190 Science of the Human Body (5)
The human implications of biological processes as illustrated by the study of the structure and function of the human body.

## MDS 195 Astronomy (4)

Identification of stars, constellations, galaxies, etc., with the aid of star charts, telescopes, and planetarium. Avocational interests explored.
MDS 197 Natural Phenomena (4)
An experimental course structured around the questions students pose about natural phenomena: mirages, northern lights, rainbows, UFO's, etc.

MDS 220 Social Science Research and Writing (4)
Sampling techniques and questionnaire design, conducting original research, writing formal research papers and reports.
MDS 224 Topics in the Behavioral Sciences (1-4) 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 for 8 credits.
MDS 226 Athletics in the United States (3)
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)
Multidisciplinary look at the origins and development of large corporations. Case studies of representative companies.

## MDS 228 The Automobile in America (4)

The impact of the automobile on American society through the insights of history, economics, sociology, literature and popular culture.

## MDS 229 Perspectives on 1980

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 241 Introduction to Photography (3)
Through slide lectures and field trips, students learn the basics of black and white photography. MDS 241 and 242 must be taken together.

## MDS 242 Photography Laboratory (2)

The student will learn to develop film and print enlargements. To be taken in conjunction with MDS 241.

## MDS 260 Introduction to Bookkeeping and Economics (3)

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) 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)

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; Ruth Dahlke, Barbara Dyer (On leave 83-84), Alice Fasman, Mark Fasman, David Ferreira, Henry Gwiazda, Earnest Harris, Nancy Harris, Keith Lemmons, Albert Noice, Vernal Richardson, Andrew Smith, John Tesch, Ricardo Visus

## MUSIC CURRICULA

The Bachelor of Arts, Bachelor of Music and the Bachelor of Science in Education are offered in Music at Moorhead State University. Individualized programs combining Music and Business, Arts Management, and Mass Communications are also available. The Individualized Major should be designed and submitted for approval during the sophomore year.

## Private Lesson Fees

There are no private lesson fees for full-time music majors and minors at Moorhead State University. Nonmusic students may study, however, such lessons can be offered only to the extent permitted by instructors' schedules.

## 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.
Advanced standing evaluations will take place during the regular Jury examinations. Further study may be recommended to individual students who then may reapply for upper division status. It is suggested that students may apply at the end of Winter Quarter of the Sophomore year.

## Piano

All Music Education majors are required to pass a proficiency exam demonstrating basic keyboard skills.
Guitar
All Music Education students must demonstrate proficiency in basic guitar techniques.

## Requirement of Senior Recital

Each Bachelor of Music and Bachelor of Science major is required to give a recital as part of the enrollment in the senior year. A candidate for the Bachelor of Arts performance* degree must give a full recital. A candidate for the Bachelor of Science (teaching) may satisfy this requirement by presenting a half recital.

## Teacher Licensure in Music

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.

## Transfer Students

Students transferring from other colleges will be examined upon entrance for advanced placement into the Comprehensive Musicianship program.

## Majors in Music

Core courses for all B.A. Majors (46 credits)
Mus 101-102-103 Comprehensive Musicianship 1-II-III (18)
Mus 201-202-203 Comprehensive Musicianship IV-V-VI (15)
Mus 301-302 Comprehensive Musicianship
VII-VIII (12)
Mus 205 Elements of Conducting (1)
Bachelor of Arts Major ( 70 credits)
Core courses in music (46)
Applied Study in Principal Performance Area (9)
( 3 credits of this must be at the 200 level)
Ensemble (9)
Music electives (6)
(3 credits of this must be non-performance electives)
Bachelor of Science Major (Teaching) Vocal Music (98)

Core courses in music (46)
Music ensembles (11) (including a minimum of 3 large and 3 small ensemble credits)
Applied study in voice (21)
Applied study in keyboard (6)
Mus 114 and 115 or 116 Diction for Singers I-II-III (4) Related requirement: One quarter of the language not studied in Diction (French or German), applies to the Liberal Arts requirements, E .

Mus 207 Choral Conducting (2)
Mus 339 Elementary School General Music Methods (3)

Mus 348 Middle School General Music Methods (3)
Mus 349 Senior High School Vocal Music Methods (2)

## Bachelor of Science Major (Teaching) Instrumental Music (97)

Core courses in music (46)
Mus 206 Band Conducting or Mus 208 Orchestral
Conducting (2)
Mus 341 Organization of the Instrumental Program (2)
Mus 348 Middle School General Music Methods (3)
Music Ensembles (11)
(including a minimum of 3 large and 3 small ensemble credits)
Applied study in principal performance area (20)
Applied study on secondary instrument (3)
Applied study in keyboard (3)
Class applied music in Strings, Woodwinds, Brass, Percussion (7)

## Bachelor of Music-General Degree Requirements (192 credits)

Major Performance Area (59)
Concentrations: Voice, Keyboard, Instrumental, Composition
Supportive Courses (66)
Liberal Arts (64)
Free Electives (3)

## Bachelor of Music-Special Area Requirements

Major Performance Area - Voice Concentration (59
credits)
Performance Study: (30)
100-200 level at 2 credits each (12)
$300-400$ level at 3 credits each (18)
Recital (2)
Ensemble on Principal Performance Area (12)
Pedagogy/Literature/Repertory
and Independent Study-2-4 credits each (6)

## Elective Ensemble (5) <br> Diction (4)

Supportive Courses ( 66 credits)
Musicianship 101, 102, 103-6 credits each (18)
Musicianship 201, 202, 203-5 credits each (15)
Musicianship 301, 302-6 credits each (12)
Elements of Conducting (1)
One of the following courses:
Band Conducting (2)
Orchestral Conducting (2)
Choral Conducting (2)
Performance Study-Secondary Performance Area (6)
(For non-keyboard majors, this must be piano; a piano proficiency must be passed)
Electives in Literature/Theory (12)
Liberal Arts (64)
As part of the Liberal Arts requirements, voice majors must study a language for one year.
Free Electives (3)
Major Performance Area-Keyboard Concentration (59
credits)
Performance Study: (30)
100-200 level at 2 credits each (12)
300-400 level at 3 credits each (18)
Recital (2)
Ensemble
and Accompanying - $6-9$ credits each (15)
Secondary Keyboard (2)
Piano Pedagogy (4)
Literature/Repertory
and Independent Study-2-4 credits each (6)
Supportive Courses ( 66 credits)
Musicianship 101, 102, 103-6 credits each (18)
Musicianship 201, 202, 203-5 credits each (15)
Musicianship 301, 302-6 credits each (12)
Elements of Conducting (1)
One of the following courses:
Band Conducting (2)

Orchestral Conducting (2)
Choral Conducting (2)
Performance Study-Secondary Performance Area (6)
(For non-keyboard majors, this must be piano; a piano
proficiency must be passed)
Electives in Literature/Theory (12)
Liberal Arts (64)
Free Electives (3)
Major Performance Area-Instrumental Concentration
(59 credits)
Performance Study: (30)
100-200 level at 2 credits each (12)
300-400 level at 3 credits each (18)
Recital (2)
Ensemble on Principal Performance Area (12)
Chamber Ensemble on Principal Performance Area (2)
Elective Ensemble (5)
Pedagogy/Literature/Repertory - 4-6 credits
and Independent Study-2-4 credits (8)
Supportive Courses ( 66 credits)
Musicianship 101, 102, 103-6 credits each (18)
Musicianship 201, 202, 203-5 credits each (15)
Musicianship 301, 302-6 credits each (12)
Elements of Conducting (1)
One of the following courses:
Band Conducting (2)
Orchestral Conducting (2)
Choral Conducting (2)
Performance Study—Secondary Performance Area (6)
(For non-keyboard majors, this must be piano; a piano
proficiency must be passed)
Electives in Literature/Theory (12)
Liberal Arts (64)
Free Electives (3)
Major Performance Area-Composition Concentration (59 credits)
Composition-6 of these credits at 300 level (24)
Performance Study—Prinicipal Performance Area* (12)
Performance Study-Secondary Performance Area* (6)

Recital (1)
Ensemble (10)
Orchestration (3)
Independent Study (3)
*One of these performance areas must be piano
Supportive Courses ( 66 credits)
Musicianship 101, 102, 103-6 credits each (18)
Musicianship 201, 202, 203-5 credits each (15)
Musicianship 301, 302-6 credits each (12)
Elements of Conducting (1)
Choice of Band/Orchestral Conducting (2)
Choral Conducting (2)
Electronic Music (6)
Electives in Literature/Theory and/or Advanced
Conducting (10)
Liberal Arts (64)
Free Electives (3)
Minor in Music ( $\mathbf{3 6}$ credits)
Mus 111-112-113 Musicianship for Non-Majors l-II-III (12)

Class or Private 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.)

## MUSIC COURSES

Mus 101-102-103 Comprehensive Musicianship I-II-III (6 each)
Sequence encompasses music as design in sound. Study of musical elements and emphasis on broad repertory listening. Development of basic music skills. Involves composition, performance, improvisation, and analysis.
Mus 110 Fundamentals of Music (4)
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)

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)

Fundamental diction in international phonetics.

## Mus 150-168 Applied Music Performance - Level 1 (1-2 each)

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 201-202-203 Comprehensive Musicianship IV-V.VI (5 each)

Sequence encompasses design in sound as musical language. Study of tonal system, modal system, nontonal systems, non-Western languages, languages of jazz, rock, pop. Further development of basic music skills. Involves composition, performance, improvisation, analysis. Prerequisite: Mus 103 or equivalent.
Mus 204 Individual Projects in Music (1-2)
Individualized study in specialized areas in music. May be repeated for credit. Prerequisite: Mus 103.
Mus 205 Elements of Conducting (1)
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)
Choral conducting techniques, rehearsal methods, and score reading. Prerequisite: Mus 205.

## Mus 208 Orchestral Conducting (2)

Orchestral conducting techniques, rehearsal methods, and score reading. Prerequisite: Mus 205.

## Mus 211 Idea of Music (4)

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)

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 1-II (4 each)

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)

A survey of the development of jazz from its roots through the contemporary period. Emphasis will be placed on stylistic changes. Designed for all students.

## Mus 218 Composition-Beginning (3)

Private composition instruction one hour a week including two-hour seminars with all composition students. Study includes composition in all musical styles. Prerequisite: Music 103 or consent of instructor. May be repeated for credit.

## Mus 250-251 Class Applied Music (1)

Class instruction. May be repeated for credit. Areas as follows: 250 Piano, 251 Voice.
Mus 252 Singing Skills in Musical Theatre (2)
Principles of body alignment and breathing, vocal exercises, and diction. Designed for theater students. May be repeated for credit with consent of advisor.

Mus 257-268 Applied Music Performance-Level II (1-2 each)
Private instruction, pedagogy, and master classes. May
be repeated for credit. Areas as follows: 257
Harpsichord, 258 Piano, 259 Organ, 260 Voice, 265
Brass, 266 Woodwinds, 267 Strings, and 268
Percussion.
Mus 270-279 Class Applied Music (1 each)
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 301-302 Comprehensive Musicianship VII-VIII (6 each)

Sequence encompasses musical language in
historical development and evolution. Study of musical genre and styles of Western cultures from antiquity to present. Further development of visual, aural, written, and performance skills. Prerequisite: Mus 203 or equivalent.

## Mus 304 Structure in Art and Music (4)

Structural principles common to music and visual arts. Use of aural and visual elements to shape time and space. Emphasis on perception of underlying structures.
Mus 318(g) Composition-Intermediate (3)
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 329(g) Women's Chorus (1)

Open to all students by arrangement with director. May be repeated for credit.
Mus 330(g) Concert Band (1)
Open to all students by arrangement with director. May be repeated for credit.

Mus 331(g) Symphonic Wind Ensemble (1)
Membership by audition only. May be repeated for credit.

Mus 332(g) Stage Band (1)
Membership by audition only. May be repeated for credit.
Mus 333(g) Orchestra (1)
Membership by audition only. May be repeated for credit.
Mus 335(g) Concert Choir (1)
Membership by audition only. May be repeated for credit.
Mus 336(g) Festival Choir (1)
Open to all students by arrangement with director. May be repeated for credit.

## Mus 337(g) Pop Choir (1)

Membership by audition only. May be repeated for credit.
Mus 338(g) Chamber Singers (1)
Membership by audition only. May be repeated for credit.

## Mus 339 Elementary School General Music

Methods (3)
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)
Objectives, methods, materials, and evaluation;
required of elementary education majors. Prerequisite: Mus 110 or the equivalent.
Mus 341 Organization of the Instrumental Program (2)
Administration of an instrumental program in public schools. Required of majors in instrumental music education.

## Mus 348 Middle School General Music <br> Methods (3)

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)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)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:
Advanced standing evaluations required.
Mus 373(g) American Music (3)
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 375-376 Opera History I-II (4 each)
375: Survey of opera from its beginnings through Mozart. 376: Opera from Mozart to the present. On request.
Mus 378(g) Collegium Musicum (1)
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(g) Introduction to Ethnomusicology (3)
Music of various non-Western cultures.
Mus 380 Instrument Maintenance and Repair (2)
Basic instrument maintenance and repair. On request.
Mus 382(g) Solo and Ensemble Literature for Brass (1)
Repertoire for brass instruments. On request.

Mus 391(g) Survey of Music Literature: Solo Song Study of solo song literature. Intended for majors and minors in music. Prerequisite: Mus 103.
Mus 392(g) Survey of Music Literature: Orchestral Study of orchestal literature. Intended for majors and minors in music. Prerequisite: Mus 103.
Mus 393(g) Survey of Music Literature: Choral Study of choral literature. Intended for majors and minors in music. Prerequisite: Mus 103.

## Mus 394(g) Survey of Music Literature:

## Chamber Music

Study of chamber music literature. Intended for majors and minors in music. Prerequisite: Mus 103.
Mus 395(g) Survey of Music Literature: Keyboard Study of keyboard literature. Intended for majors and minors in music. Prerequsite: Mus 103.
Mus 396(g) Survey of Music Literature: Wind Band Study of wind band literature. Intended for majors and minors in music. Prerequisite: Mus 103.
Mus 399-404(g) Small Ensemble (1 each) 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) String, 402(g) Brass, 403(g) Woodwinds, 404(g) Keyboard.
Mus 405 Student Recital (1)
By arrangement. May be repeated for credit.
Mus 406(g) Opera (2)
Opera performance through small workshop ensembles and full productions. May be repeated for credit.
Mus 409(g) Psychology of Music (3)
Mus 410(g) Orchestration (3)
The basic principles of orchestral writing.
Mus 411(g) Band Arranging (3)
Arranging for small ensembles and full band.

Mus 413(g) 16th Century Polyphony (3)
16th Century Polyphonic techniques. Prerequisite: Consent of instructor.

## Mus 414(g) Techniques of Musical

 Interpretation (3)Structural analysis as applied to basic interpretative techniques. Prerequisite: Consent of instructor. May be repeated for credit.

## Mus 418(g) Composition-Advanced (3)

Private composition instruction one hour a week including 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 430(g) Electronic Music I (3)

Equipment and techniques of electronic music, including basic synthesis and recording techniques. Permission of the instructor required.
Mus 431(g) Electronic Music II (3)
Advanced techniques of electronic music. Emphasis on original student composition. Prerequisite: Electronic Music I and permission of the instructor.
Mus 432(g) Projects in Electronic Music (1-3) Advanced work in electronic music. Individualized study. Prerequisites: Mus $430(\mathrm{~g})$ and $431(\mathrm{~g})$ and permission of instructor. May be repeated for credit.

## Mus 441(g) Keyboard Pedagogy I (2)

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)
Methods of keyboard instruction. Prerequisites: Mus 441 and consent of the instructor.
Mus 444(g) String Methods and Materials (2)
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)
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: Music 341.
Mus 446-447(g) Voice Pedagogy I-II (1 each) 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)
Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows: 450 (g) Piano, 455(g) Organ, 460 (g) Voice, $465(\mathrm{~g})$ Brass, 466 (g)
Woodwinds, $467(\mathrm{~g})$ Strings, and $468(\mathrm{~g})$ Percussion.
Prerequisite: Advanced standing evaluation and completion of 300 level.
Mus 470(g) Advanced Conducting (2)
Advanced conducting. Prerequisite: Mus 206, 207, or 208.

Mus 499(g) Workshop in Music (1-3)
Special topics in music. May be repeated for credit if topic varies.

## Mus 502 Research in Music and Music

 Education (3)Research techniques and materials in music education and musicology.

## Mus 504 Workshops in Secondary School

 Music (2)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)
By arrangement. May be repeated for credit.

Mus 510 Directed Study in Music Theory (3)
Varied projects in the field of music theory. Course may be repeated for credit.

## Mus 540 Problems in Teaching and Supervising

 Music (3)Advanced course in curriculum planning and materials. On request.

## Mus 541 Advanced Studies in Teaching Elementary School General Music (3)

Advanced study of music methods and materials for teaching music in the elementary schools.

## Mus 542 Advanced Studies in Teaching Secondary School General Music

Advanced studies of music methods and materials for teaching music in the junior and senior high schools.
Mus 545 Voice-Choral Techniques Institute (3) 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)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)
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)
(Mus 571 through 576 are seminar courses.)
Mus 572 Music in the Renaissance (3)
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)

Mus 595 Special Problems (1-3)
Mus 597 Individual Study (1-3)
Mus 599 Thesis in Music (1-6)

## NURSING DEPARTMENT

Eva M. Vraspir, Director; Joanna Eklund, Jane Geidt, Barbara Hisley, Rhoda Hooper, Lois Nelson

## NURSING CURRICULA

The upper division nursing program is designed for registered nurses who want to earn the degree of bachelor of science in nursing.
The program requires fifty-seven credits in upper division nursing and four 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 thirty-two liberal arts credits before entering the program. National League for Nursing Achievement Exams must be taken by all diploma applicants for validation of lower division nursing credit.
Graduation requirements include fifty-seven upper division nursing credits, four credits in supporting courses, sixty-four 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)
Requirements in related fields:
Anth 306 Cross-cultural Illness and Care (4)

## NURSING COURSES

## Nurs 300 Nursing in Health Care (2)

Current issues and trends affecting nursing and the dynamics of interplay between societal influences and forces within nursing.

## Nurs 310 Interaction and Change I (3)

Development of optimal therapeutic interaction and awareness of self as the "nurse person." Prerequisite: Nursing majors only.

## Nurs 320 Nursing Assessment: Individual (4)

Focus on individual as client with use of nursing process to promote wellness with emphasis on psychosocial development and functioning. Prerequisites: Nursing majors only, Nurs 300 or concurrent registration.
Nurs 321 Nursing Assessment: Family (3) Focus on family as client with emphasis on assessment of developmental tasks, stress and crisis theory and cultural variables as they affect family functioning. Prerequisite: Nurs 320.
Nurs 322 Nursing Assessment: Community (3)
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)

Clinical focus on functioning of community health agencies and the role of the community health nurse. Prerequisite: Nurs 320 or concurrent registration.

## Nurs 341 Nursing Intervention II (4)

Application of nursing process in clinical settings with focus on the child, gerian and well family.
Prerequisites: Nurs 321, 340, 350 or concurrent registration.

## Nurs 342 Nursing Intervention III (4)

Application of nursing process in clinical settings with focus on families with identified problems and on the health problems of a community. Prerequisites: Nurs 321, 340, 350 or concurrent registration.
Nurs 350 Altered Physiological Systems (4)
Pathophysiologic processes which explain signs and symptoms of body dysfunction and adaptive mechanisms employed to maintain homeostasis. Prerequisite: College level anatomy and physiology course.

## Nurs 351 Physical Assessment Skills (3)

Basic concepts and skills of history taking and physical examination. Prerequisite: Nurs 350.

## Nurs 360 Research in Nursing (3)

Introduction to nursing research process and its translation to nursing practice.

## Nurs 380 Psychosocial Aspects of Parenting (3-4 credits)

Psychosocial-cultural influences on parenting process with focus on selected family crisis situations and appropriate interventions. Prerequisite: R.N. or consent of instructor.

## Nurs 410 Interaction and Change II (3)

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)
Overview of selected teaching-learning as applied to patient teaching situations. Prerequisite: Nurs 322.

## Nurs 416 Patient Teaching Laboratory (2)

Principles of patient teaching to simulated and real life situation in health care facilities. Prerequisite: Nurs 415 or concurrent registration.

## Nurs 450 Nursing Preceptorship I (1)

Selection of preceptorship projects and development of a curricular contract. Prerequisite: Nursing majors only and consent of instructor.
Nurs 451 Nursing Preceptorship II (9)
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)

Theories and functions of management and leadership styles as they relate to professional nursing.

## Nurs 461 Nursing Management/Leadership Laboratory (2)

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)Analysis and discussion of present and potential trends and issues in health care as they relate to and influence the practice of professional nursing.

## PHARMACY

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 two 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.

## PHILOSOPHY DEPARTMENT

Charles Magel, Chair; Mark Chekola, Arnold Johanson, David Myers, Alan Soble

## 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 110 Logic (or Phil. 310 Symbolic Logic) (4)
Phil 115 Ethics (or Phil 405 Ethical Theory) (4)
Phil 250 Classical Philosophy (4)
At least three of the following (12)
Phil 255 Late Classical and Medieval Philosophy
Phil 260 Modern Philosophy
Phil 265 19th Century Philosophy
Phil 330 20th Century Philosophy
Phil 385 Continental Rationalism
Phil 390 British Empiricism
Electives in Philosophy (28)
At least 24 credits of the major must be at the 300 and 400 level.

## 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)

At least one of the following (4)
Phil 101 Discovering Philosophy
Phil 110 Logic
Phil 115 Ethics
At least one of the following (4)
Phil 250 Classical Philosophy
Phil 255 Late Classical and Medieval Philosophy
Phil 260 Modern Philosophy
Phil 265 19th Century Philosophy
Phil 330 20th Century Philosophy
Phil 385 Continental Rationalism
Phil 390 British Empiricism
At least four additional credits at 200 level (4)
Electives in Philosophy, including at least 12 credits at the 300 and 400 level (20)

## PHILOSOPHY COURSES

Phil 101 Discovering Philosophy (4)
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 Logic (4)

Methods and principles for the evaluation of arguments. No prerequisite.

## Phil 115 Ethics (4)

Examination of several basic ethical systems, with considerations of fundamental moral issues exemplified by the following: Are there absolute standards of
morality? How can ethical disagreements be resolved? Is there free will? No prerequisite.

## Phil 205 Philosophy of Religion (4)

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 nonwestern 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)
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 215 Animal Rights (2)
A study of ethics and animals, with special emphasis on animal rights in relation to human rights. Philosophical and religious traditions as they have influenced views of and attitudes toward treatment of animals will be considered. Major ethical theories will include utilitariansim, contractarianism and Kantianism.

## Phil 250 Classical Philosophy (4)

A study of the development of philosophical thinking from the Presocratics through Aristotle. No prerequisite.
Phil 255 Late Classical and Medieval
Philosophy (4)
Study of Stoicism, Epicureanism, scepticism, and medieval philosophy. No prerequisite.

## Phil 260 Modern Philosophy (4)

The development of western philosophy from
Descartes through Kant. No prerequisite.

## Phil 265 19th Century Philosophy (4)

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 310 Symbolic Logic (4)
Modern symbolic logic including propositional calculus and first-order functional calculus. Prerequisite: Phil 110 or consent of instructor.
Phil 320(g) Philosophy of the Arts (4)
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)

Study of the major figures and movements in twentieth-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 course in philosophy or consent of instructor.

## Phil 350 American Philosophy

Study of the development of American Philosophy from Puritanism through Pragmatism. Prerequisite: One course in philosophy or consent of instructor.

## Phil 355 Existentialism (4)

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)
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 twentieth century developments such as the Soviet, Yugoslav and Frankfurt schools of Marxism. Prerequisite: One course in philosophy or consent of instructor.
Phil 380(g) Plato (4)
A study of several major dialogues of Plato. Prerequisite: One course in philosophy or consent of instructor.
Phil 385(g) Continental Rationalism (4)
Analysis of philosophical thought of Descartes, Spinoza, and Leibniz. Prerequisite: One course in philosophy or consent of instructor.
Phil 390(g) British Empiricism (4)
Analysis of philosophical thought of Locke, Berkeley, and Hume. Prerequisite: One course in philosophy or consent of instructor.
Phil 400 Advanced Philosophy of Religion (4)
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 405(g) Ethical Theory (4)

An examination of problems in ethical theory including the justification of moral principles, the nature of ethical language, the relationship between fact and values.
Major ethical theories will be examined, including naturalism, intuitionism, varieties of noncognitivism, and utilitarianism. 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 COURSES

See Health-Physical Education-Recreation for Curricula
PE 1 Fundamental Activities (1)
PE 2 Human Motion (1)
PE 5 Junior Varsity Athletics (1)
PE 7 Varsity Athletics (1)
PE 9 Beginning Archery (1)
PE 10 Intermediate Archery (1)
PE 12 Beginning Bowling (1)
PE 13 Intermediate Bowling (1)
PE 14 Beginning Golf (1)
PE 15 Intermediate Golf (1)

PE 16 Gymnastics I (1)
PE 17 Beginning Tennis (1)
PE 18 Intermediate Tennis (1)
PE 19 Gymnastics II (1)
PE 20 Wrestling (1)
PE 22 Track and Field (1)
PE 24 Beginning Badminton (1)
PE 25 Intermediate Badminton (1)
PE 30 Basketball (1)
PE 31 Volleyball (1)
PE 32 Field Hockey (1)
PE 33 Softball (1)
PE 34 Soccer (1)
PE 35 Football (1)
PE 40 American Round and Square Dancing (1)
PE 41 Intermediate Square Dance (1)
PE 42 Advanced Square Dance (1)
PE 43 Folk Dancing (1)
PE 44 Advanced Folk Dance (1)
PE 45 Beginning Modern Dance (1)
PE 46 Intermediate Modern Dance (1)
PE 47 Advanced Modern Dance (1)
PE 48 Ballroom Dancing I (1)
PE 49 Ballroom Dancing II (1)
PE 50 Beginning Jazz (1)
PE 52 Beginning Ballet (1)
PE 53 Beginning Tap (1)
PE 60 Beginning Swimming (1)
Non-swimmers only.

PE 61 Intermediate Swimming (1)
PE 62 Swimmers Course (1)
Prerequisite: PE 61 or instructor's consent
PE 63 Advanced Swimming (1)
Prerequisite: PE 62 and 66, or instructor's consent.
PE 66 Advanced Life Saving (2)
Prerequisite: PE 62 or instructor's consent.
PE 67 Synchronized Swimming (1)
PE 68 Diving (1)
PE 110 Introduction to Physical Education (2) Foundations, nature and scope of the Professional Field.
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 220 Human Anatomy (4)
Study of the applied anatomy of the human musculoskeletal systems.
PE 223 Water Safety Instructor's Course (3)
American Red Cross certification. Prerequisite: Current Advanced Life Saving (ARC) certificate and Advanced Swimming.

PE 240 Physical Education in the Elementary
School. (2)
Games, rhythms, and other activities recommended for the physical education program in the elementary school.
PE 243 General Methods for Teaching Physical Education and Team Sports(3)

A variety of methods useable for instructing activity classes and team sports. Prerequisite: One team activity and sophomore standing.

PE 244 Techniques for Teaching Gymnastics (3)
Techniques, skills and methods for teaching gymnastic activities. Prerequisite: PE 16 and PE 19.
PE 250 Officiating Football and Wrestling (2)
Study of the rules and mechanics of officiating; responsibilities and qualifications of an official.
PE 251 Officiating Basketball and Baseball (2)
PE 252 Officiating Volleyball (2)
PE 253 Officiating Girl's Basketball (2)
PE 254 Officiating Women's Gymnastics (2)
PE 305 Principles of Physical Education (3)
Study of the facts and principles providing the basis for modern physical education. Prerequisite: PE 110 or instructor's consent.
PE 311 Motor Learning (3)
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)
Analysis of movements of the human body, and the kinesthetic laws involved. Prerequisite: PE 220.
PE 321 Human Physiology (4)
Study of the functions of the human body. Lab included.
PE 343 Techniques for Teaching Individual Sports (2)

Techniques and methods for teaching individual and dual activities. Prerequisite: PE 243 and three individual activities.
PE 345 Techniques for Teaching Dance (2)
Techniques and methods for teaching folk, square and ballroom dance. Prerequisite: PE 243 and two related dance activities.

PE 346 Techniques for Teaching Dance (2)
Techniques and methods for teaching ballet, jazz and modern dance. Prerequisite: PE 243 and two related dance activities.

## PE 348 Dance History (2)

Dance from primitive societies to present forms in art and education.

## PE 370 Coaching Gymnastics (3)

Theory, skills, knowledge and current techniques related to coaching the sport.

## PE 371 Coaching Football (3)

PE 372 Coaching Basketball (3)
PE 373 Coaching Baseball (3)
PE 374 Coaching Track and Field (3)
PE 375 Coaching Wrestling (3)
PE 376 Coaching Golf and Tennis (3)
PE 377 Coaching Softball (3)
PE 378 Coaching Swimming and Diving (3)
PE 379 Coaching Volleyball (3)
PE 380(g) Supervision of Physical Education in the Elementary School (4)
Supervisory and teaching experience in the elementary school physical education program. Prerequisite: PE 240.

PE 421(g) Physiology of Exercise (3)
Problems, responsibilities, and procedures of physical education for the handicapped. Prerequisite: PE 220, 321 or consent of instructor.
PE 452(g) Adapted Physical Education (4)
Activities, administration and programs related to the handicapped.

## PE 453(g) Physical Education for the Mentally

Retarded (3)
Activities, administration and programs related to the mentally retarded. Prerequisite: Instructor's consent.

## PE 460 Principles of Coaching (4)

The nature, psychology and sociology of sport and factors influencing performance. Prerequisite: 4-6 hours of coaching courses and senior standing or instructor's consent.
PE 474 Tests and Measurements in Physical Education (4)
Basic statistics, measurements, and evaluation in physical education.
PE 475(g) Administration of Athletics (3)
Problems, policies and procedures in the administrative procedures of a high school athletic program.
Prerequisite: Senior standing or instructor's consent.
PE 495(g) Administration of Physical Education (3) 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)

History of physical education; influence on philosophy and programs today.
PE 540 Problems in Physical Education (3) Individual problems and problems common to groups in physical education.

## PE 560 Studies in Athletic Training (3)

Directed reading and discussion with emphasis on research in athletics. Prerequisite: Playing and/or coaching experience.

## PE 574 Tests and Measurements in Physical Education (3)

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; Gerald Hart, Walter Vollmers, Walter Wesley, Walter Worman, Hsin-Yang Yeh
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 151 Graphical Mechanics (2)
Phys 200-201-202 General Physics I-II-III (12)
Phys 200L-201L-202L General Physics Laboratory (3)
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 (3)
Phys 455 Senior Project (4)
Electives in Physics - 4 hours at 300 level or higher
Requirements in Related Fields ( 37 credits)
Chem 111-112 General Chemistry I-II (4 each)
Chem 111L-112L General Chemistry Laboratory I-II (1 each) (or $111 \mathrm{H}-112 \mathrm{H}$ )
Math 231-232-233-234 Calculus I-II-III-IV (16)
Math 331 Differential Equations (4)
Math 365 Vectors and Vector Fields (4)
Engl 287 Technical Report Writing (3)

## Minor in Physics B.A. or B.S. Degree

Minor Requirements in Physics ( 35 credits)
Phys 200-201-202 General Physics I-II-III (12)
Phys 200L-201L-202L General Physics Laboratory (3)
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 ( 30 credits)
Either Physics 200-201-202 General Physics I-II-III and Physics 200L-201L-202L General Physics Laboratory I-II-III (15)
Or Physics 111-112-113 Elementary Physics I-II-III, Physics 111L-112L-113L Elementary Physics Laboratory I-II-III (12) and an approved elective in Physics (3) 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 485 Physics Methods for Secondary Schools (1)
(All Teacher Education Requirements shall be fulfilled to complete this minor.)

## Minor in Astronomy B.A. or B.S. Degree (37-40 credits)

The minor is primarily intended for liberal arts students, to broaden their perspective. It 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 is strongly urged.
Minor Requirements in Astronomy
Ast 100 Introduction to Astronomy (4)
Ast 101 Observational Astronomy (3)
Ast 230 Topics in the History of Astronomy (4)
Ast 260 Planetary Science (4)

Phys 111-112-113 Elementary Physics I-II-III (9) AND Phys 111L-112L-113L Elementary Physics Laboratory I-II-III (3) or
Phys 200-201-202 General Physics I-II-III (12) AND Phys 200L-201L-202L General Physics Laboratory (3)
Approved Electives in Astronomy, Physics or Geology including one of the following courses: (10)
Ast 300 Topics in Modern Astronomy (1)
Ast 499 Topics in Advanced Astronomy (1)
Major in Physical Science B.S. Degree (Teaching)
This major meets the Minnesota requirements for certification in Physical Science, Grades 7-12. It should be chosen by students who expect to teach chemistry, physics, or physical science.
Major Requirements in Physics (31 credits) Physics 200-201-202 General Physics I-II-III (12) Physics 200L-201L-202L General Physics Laboratory I-II-III (3)
Physics 305 Experimental Physics I (2)
Physics 322 Elementary Modern Physics (4)
Physics 340 Electronics (4)
Approved Electives in Physics (6)
Major Requirements in Chemistry (31 credits)
Chem 111-112-113 General Chemistry I-II-III (12)
Chem 111L-112L General Chemistry Laboratory I-II or Chem 111H-112H General Chemistry Honors Laboratory I-II (2)
Chem 113L General Chemistry Laboratory III (1)
Chem 237-238 General Organic Chemistry I-II (6)
Chem 237L-238L General Organic Chemistry
Laboratory I-II (2)
Chem 321 Quantitative Analysis (4)
Approved Electives in Chemistry (4)
(Selected from 300 or 400 level courses)
Requirements in Related Fields (32 credits)
Ast 100 Introduction to Astronomy (4)
Biol 111 Cell Biology (4)
Biol 113 General Zoology, Vertebrate (4)

Geol 115 Physical Geology (4)
Math 231-232-233 Calculus I-II-III (12)
Requirements in Teaching Methods (4 credits) Sci 440 Earth and Physical Science Teaching Methods (2)
Chem 485 Chemistry Teaching Methods (1)
Physics 485 Physics Methods for Secondary Schools (1)
A revision of the requirement of this degree is in progress and should become effective during the 84-85 academic year. The changes in the program will include a greater concentration of courses in physics while requiring fewer courses in related fields.
(All Teacher Education Requirements shall be fulfilled to complete this major.)

## PHYSICS COURSES

Phys 101 Introduction to Physics (3)
Introductory survey of physical concepts: mechanics, electricity, magnetism, waves, and atomic physics.
Prerequisites: None.
Phys 101L Introductory Physics Laboratory (1)
Experimentation in basic physics. Corequisite: Phys 101 or permission of instructor.

## Phys 105 Physics of Music (4)

Physical principles governing the production, transmission, and reception of musical sound. A background in music is strongly recommended.

## Phys 106 Energy and Society (3)

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 (3 each)

111: Concepts and principles of mechanics. 112:
Concepts and principles of fluids, heat, sound. 113:
Concepts and principles of light, electricity and magnetism, and modern physics. Emphasis on application to biology, medicine and other professional fields except engineering. Prerequisite: Math 133. Courses must be taken in sequence.

## Phys 111L-112L-113L Elementary Physics

Laboratory I-II-III ( 1 each)
Laboratory techniques of elementary physics. One three hour laboratory per week. Must be taken concurrently with Phys 111-112-113 except by permission of instructor.

## Phys 151 Graphical Mechanics (2)

Introduction to the development and use of physical theory using classical mechanics as a vehicle. Extensive use will be made of computers. Prerequisites:
Trigonometry and algebra. Some previous experience with computers is recommended. Must be taken by physics majors in their freshman year. Prerequisite: Phys 101
Phys 200 General Physics 1 (4)
Calculus-based study of mechanics: Newton's Laws for linear and rotational motion. Work, energy, linear momentum, angular momentum and harmonic motion. Corequisite: Math 232.

## Phys 200L General Physics Laboratory (1)

Laboratory techniques of general physics. One three hour laboratory per week. Must be taken concurrently with Phys 200 except by permission of instructor.
Phys 201 General Physics II (4)
Continuation of Phys 200. Includes gravitation, fluids,
wave motion, thermal physics, electric charges, and electric field and potential. Prerequisite: Phys 200 or permission of instructor.
Phys 201L General Physics Laboratory II (1) Laboratory techniques of general physics. One three hour laboratory per week. Must be taken concurrently with Phys 201 except by permission of instructor.
Phys 202 General Physics III (4)
Continuation of Phys 201. Includes capacitance, electric circuits, magnetic fields, electromagnetic waves, and geometrical and physical optics. Prerequisite: Phys 201 or permission of instructor.
Phys 202L General Physics Laboratory III (1) Laboratory techniques of general physics. One three hour laboratory per week. Must be taken concurrently with Phys 202 except by permission of instructor.
Phys 207 Acoustics of Speech and Hearing (3)
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 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. Prerequisite: SLHS 207 or Physics 207 or consent of instructor. (Same as SLHS 207L.)

## 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)

Designed for anyone who needs to make or interpret sound measurements. Includes laboratory experience with typical equipment. Prerequisites: Math 134 or equivalent.

## Phys 305-306-307 Experimental Physics I-II-III

 (2 each)Study of laboratory techniques and measuring instruments. One lecture and one three hour laboratory per week. Prerequisite: 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)

Topics: special relativity, wave-particle duality, Bohr atom, quantum mechanics, hydrogen atom, many electron atoms, nuclear properties and nuclear reactions. Prerequisites: Phys 202 and Math 331.

## Phys 330-331-332 Intermediate Mechanics I-II-III

 (3 each)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, HamiltonJacobi theory, small oscillations, mechanics or continua; special theory of relativity. Prerequisites: Phys 202 and Math 331 or permission of instructor.

## Phys 340 Electronics (4)

Operational approach to circuit electronics: Network theorems, four-terminal networks, filters, feedback,
nonlinear circuits, biasing, active devices, amplifiers, and oscillators. Prerequisites: Phys 202, 305, and Math 331 or permission of instructor.
Phys 345 Aero-Space Education Workshop (4) Scientific principles of aero-space 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. Prerequisite: 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. Prerequisite: Phys 215 and 360 or permission of instructor.

## Phys 370-371(g) Electromagnetic Theory

I-II (3 each)
Advanced study of electromagnetism: boundary value problems, electrostatics of microscopic media, magnetostatics, Maxwell's equations, and plane electromagnetic waves. Prerequisite: Phys 202, Math 331, and Math 365.

## Phys 372(g) Optics (3)

Geometrical optics, interference, diffraction, polarization and optical instruments. Prerequisites:
Phys 371.
Phys 373 Optics Laboratory (1)
Laboratory techniques of physical and geometrical optics. Corequisite: Phys 372.
Phys 399 Thermodynamics (4)
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. Prerequisites: Junior status in physics. May be taken as Ast 410.

## Phys 430(g) Quantum Mechanics (4)

Application of quantum mechanics to atoms and molecules. Prerequisites: Phys 322, 331 and 370 or permission of instructor.

## Phys 432(g) Solid State and Nuclear Physics (3)

Crystalline structure of solids. Lattice properties.
Electron theory of metals. Basic properties of nuclei, radioactivity, and nuclear reactions. Prerequisites: Phys 322, 430, or permission of instructor.

## Phys 455 Senior Project (4)

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 485 Physics Methods for Secondary Schools (1)

For students majoring in Physical Science (Teaching).
Problems unique to physics laboratories and classroom demonstrations will be considered. Prerequisite: Science 440 and permission of instructor.
Phys 499(g) Special Problems in Physics (1-4) Special intermediate and advanced problems in physics. Area and credit to be specified in transcript. Prerequsite: Permission of instructor.

## POLITICAL SCIENCE DEPARTMENT

A. Khoshkish, Chair; Dean Alger, David Feldman, David Flint

## POLITICAL SCIENCE CURRICULA

## Major in Political Science B.A. Degree

Major Requirements in Political Science (48 credits)
Pol 110 Political Science as Discipline (4)
Pol 120 National Government (4)
Pol 160 International Relations (4)
Pol 250 Comparative Governments of Western
Europe (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).
Electives in Political Science (24-25).
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 ( 24 credits)

Pol 110 Political Science as a Discipline (4)
Pol 120 National Government (4)
Pol 160 International Relations (4)
Pol 250 Comparative Governments of Western Europe (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).
Elective in Political Science: One course.

## POLITICAL SCIENCE COURSES

Pol 110 Political Science as a Discipline (4)
The relationship of political science to other sciences; man's behavior in the political context; order, justice, and liberty; authority and government.

## Pol 120 National Government (4)

Fundamentals of political institutions, structures and processes; emphasis on American Government.

## Pol 160 International Relations (4)

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)

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 (3)

The philosophy of law; its social context; justice and its implications; evolution of legal concepts.

Pol 232 Criminal Law (4)
Substantive criminal law, development and meaning of principles of criminal law, current issues.
Pol 240 Public Administration (4)
Public bureaucracy in the democratic political system.

## Pol 250 Comparative Government of Western

## Europe (4)

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)

Examination of an issue at an introductory level in a seminar setting. May be repeated as topic varies.
Pol 310 Scope and Method (3)
Approaches to the study of politics: methodologies and techniques.
Pol 311(g) American Political Thought (4)
A survey of American political thought from New
England Puritanism to modern pragmatism and conservatism.
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 nineteenth century development of Communism.

## Pol 320 The American Congress (3)

Congressional decision making, organization, and relationships with other branches of the federal government.

## Pol 321 The American Presidency (3)

Presidential decision making and relationships with other branches of the federal government.

Pol 323 American Minority Group Politics (4)
Political and social interaction of minority groups and political institutions, processes and behavior.
Pol 324 American Political Parties (3)
Parties, interest groups, and public opinion in the American political system.
Pol 325 Urban Politics (3)
The urban political system; urban problems and policies.

## Pol 326 Public Opinion (3)

The formation, structure, and manipulation of public opinion.

## Pol 328 The Media and Politics (3-4)

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)
The legal institutions, their functions and procedures; the Anglo-Saxon experience; the American judicial system.

## Pol 341(g) Public Policy (3)

The policy processes and issues of the national government.
Pol 352(g) Political Problems in Developing Countries (3)
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)
Comparative analysis and interpretation of political forces in Latin America.
Pol 355(g) Politics of Scandinavia (3)
Current political structures and problems of the Scandinavian Countries.

Pol 360(g) American Foreign Policy (4)
U.S. foreign policy: its historical evolution, geographical position, economic, military, and political interest.
Pol 361(g) Topics in International Law (3 each)
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 each)
The nineteenth century European experience; from the League of Nations to the United Nations; the UN charter and its meaning; interpretation; specialized agencies of the UN. May be repeated.
Pol 410(g) Topics in Western Political Thought (4 each)
May be repeated.
Pol 411(g) Eastern Political Thought (3)
Traditional concepts of government in China, India, and Persia. Developments in Japan and the Middle East.
Pol 420(g) Seminar in American Politics (3)
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) May be repeated. Interpretation of the Constitution of the United States by federal courts.

## Pol 431(g) Social Work and the Law (3)

Legal procedures and services involving social work, court system, probation and parole, evidence and court procedures, marriage annulment, divorce, support and paternity, guardianship and paternity, adoption, foster home placement, child abuse. Same as SW 431(g).

## 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)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)

Pol 490(g) Senior Seminar in Political Science (2-4)
Examination of an issue, problem, or concept at a senior level in a seminar setting. May be repeated as topic varies. Prerequisites: Pol 110 and 120 or consent of instructor.

## Pol 590 Graduate Seminar in Political Science (2-4)

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)

Registration only after consultation with major advisor.

## PORTUGUESE

See Language for Curriculum

## PSYCHOLOGY DEPARTMENT

Phillip Rice, Chair; Bradley Bremer, Elizabeth Bull, Rudolph Chang-Yit, David Cole, James Condell, Richard Kolotkin, Gary Nickell, Richard Townsend, Mildred Treumann, Helen Wilson

## PSYCHOLOGY CURRICULA

Major in Psychology B.A. Degree ( 60 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; however, the student must maintain an overall " $B$ " average or better over the three courses. 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); at least 16 credits should be at the 300 level and above:
Psy 201 Contemporary Issues in Psychology
Psy 217 Alcoholism and Drug Abuse
Psy 219 Applied Psychology
Psy 220 Psychology of Women
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
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 adminstered 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 credits) Psy 103-104-105 Introductory Psychology I-II-III (12) * Psy 106-107 Introductory Psychology Laboratory I-II (2)
Psy 231 Psychological Statistics and 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; an overall " $B$ " average must be maintained.
Elective sequence, plus one additional course at the 300 level or above from the following (16)
A. Social-Psy 320, 321, 322 (12)
B. Differential-Psy 301, 351, 352 (12)
C. Developmental-Psy 401, 402, 403 (12)
D. Clinical-Psy 461, 463, 465 (12)

Minor in Psychology (Teaching) (38-39 credits)
Core requirements in Psychology ( $18-19$ credits) Psy 103-104-105 Introductory Psychology I-II-III (12) *
Psy 106-107 Introductory Psychology Laboratory I-II (2)
Psy 231 Psychological Statistics and 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; an overall " B " average must be maintained.
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)

## PSYCHOLOGY COURSES

## Psy 103-104-105 Introductory Psychology I-II-III (4 each)

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)
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) Initiating, conducting, and reporting a simple
experimental procedure. Investigating research methodology on social issues in psychology.
Prerequisite: Psy 106.

## Psy 113 General Psychology (4)

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)

Psychological development of the individual from conception to death, including genetic, pre- and postnatal influences; relations with parents and peers; social, emotional and intellectual development. Prerequisite: Psy 113.

## Psy 117 Personality (4)

Introduction to the study/explanation of human behavior, motivation, and conflict emphasizing personality as viewed by a variety of theorists. Prerequisite: Psu 11.3

## Psy 119 Social Behavior (4)

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)
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: 3 psychology credits or consent of instructor.

## Psy 219 Applied Psychology (4)

Introduction to several different areas of applied psychology including personnel psychology, psychology and law, psychology and medicine, and consumer behavior. Prerequisite: 8 credits of psychology or consent of instructor.

## Psy 220 The Psychology of Women (4)

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)

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; multiplecomparison 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 "hands 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)

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)
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)

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)

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)

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)

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)
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)

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 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.
Psy 398 Advanced Independent Study for External Studies (1-4)

## Psy 401 Child Psychology (4)

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)
Same as above; for graduate credit only.
Psy 402 Adolescent Psychology (4)
An introduction to the psychological study of adolescent physical, intellectual, social, emotional, and sexual development. Prerequisite: Consent of instructor.
Psy 402(g) (3)
Same as above; for graduate credit only.

## Psy 403 Adulthood/Aging (4)

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)
Same as above; for graduate credit only.

## Psy 417(g) Child Psychopathology (3-4)

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)

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)

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)
Study of the biological processes that underly control and execution of behavior; demonstrated research competencies are required. Laboratory included. Prerequisite: Psy 232.

## Psy 446(g) Perception (4)

Information-processing approach to sensory and perceptual processes; emphasis on vision and audition. Laboratory included. Prerequisite: Psy 232.
Psy 447(g) Comparative Psychology (4)
Ethological approach to animal behavior; intra- and inter-specific comparisons of innate and learned behavioral patterns. Laboratory included. Prerequisite: Psy 232.

## Psy 448(g) Cognition (4)

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)

A survey of the major theories used in the study of personality and an introduction to personality assessment and research. Prerequisite: 12 credits of psychology or the consent of instructor.
Psy 461(g) (3)
Same as above; for graduate credit only.

## 202

Psy 463 Abnormal Psychology (4)
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)
Same as above; for graduate credit only.
Psy 465 Clinical Psychology (4)
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)
Same as above; for graduate credit only.
Psy 467(g) Chemical Dependencies (3-4)
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 psychology or equivalent and consent of instructor. Psy 217 recommended.
Psy 469 Student Internship in Psychology (3-16)
Psy 470(g) History and Systems of Psychology (4)
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)
Topics of special interest. For majors, and advanced students in other areas. This may be repeated.
Prerequisite: Consent of instructor.
Psy 481(g) (3)
Same as above; for graduate credit only.
Psy 491(g) Independent Study (1-4)
Individual subjects of special interest. This may be repeated. Prerequisite: Consent of instructor.

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 (4)

Development of skills in observation, interviewing, obtaining case histories, and assessing adaptive behaviors. Field work to include four hours weekly observing a variety of educational settings. Prerequisite: Consent of instructor.

## Psy 501 Introduction to School Psychological Services (2)

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)

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)

Theory, administration, and interpretation of commonly used psychodiagnostic evaluation techniques as they
apply to school-age populations. Prerequisite: Psy 502 and consent of instructor.

## Psy 504 Advanced Individual Psychological

 Testing (3)Advanced individual appraisal includes a case study approach to assessment. Additional intelligence tests are introduced plus measures of self-esteem, adaptive behavior, and self, peer, and teacher ratings. Emphasis will be on the interpretation and integration of test results. Prerequisite: Psy 503 and consent of instructor.

## Psy 505 Practicum in School Psychological

## Services I (2)

Supervised school psychology experience in the preschool, elementary school, or secondary school setting. A total of 100 clock hours. Prerequisite: Consent of instructor, and concurrent enrollment in Psy 503.

## Psy 506 Practicum in School Psychological

 Services II (6)Supervised school psychology experience in schools with time divided among pre-school, elementary, and secondary levels. 300 clock hours required.
Prerequisite: Psy 503, consent of instructor, and concurrent enrollment in Psy 504.

## Psy 509 Issues in the Practice of School

 Psychology (2)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 560, 562, 564 Advanced Practicum in School Psychology I-II-III (5 each)
Supervised fulltime field experience in individual, small group, and systems level assessment and intervention.

Prerequisite: Admission to Level II School Psychology Program and consent of instructor.

## Psy 561, 563, 565 Advanced Seminar: Level II School Psychology (2 each)

Seminars to accompany the $560,562,564$ sequence. To focus on individual, small group and systems levels of intervention. Prerequisite: Admission to Level 11 School Psychology Program and consent of instructor.

## Psy 570 Advanced Psychological Testing

Personality (3)
Study of the theoretical foundations, development, administration and interpretation of major tests of personality and emotional status for children and adolescents. Open to students in school psychology who have completed first year training and course work in personality and abnormal psychology. Prerequisite: Consent of instructor.

## Psy 572 Practicum in School-Related Clinical

## Services (4)

Supervised school psychology experience in a setting providing clinical psychological services. 200 clock hours will be required. Prerequisite: Psy 570 and consent of instructor.

## Psy 575 Advanced Assessment of the Infant and

 Young Child (3)Intended to train practicing school psychologists to administer various developmental scales and explore various theories relevant to child development. Prerequisite: Level I School Psychology certification and consent of instructor.

## Psy 581 Readings in Psychology (2-4)

Directed readings on selected topics. May be repeated to a maximum of 4 credits. Prerequisite: General psychology or consent of the instructor.

## Psy 599 Thesis in Psychology (1-6)

Research and writing of the master's thesis. Registration only after consultation with major advisor.

## 204

## RECREATION

See Health-Physical Education-Recreation for Curricula

## RECREATION COURSES

Rec 10 Table-Net Games (1)
Rec 21 Curling (1)
Rec 23 Beginning Ice Skating (1)
Rec 25 Beginning Figure Skating (1)
Rec 27 Beginning Skiing (1)
Rec 34 Scuba Diving (1)
Rec 40 Beginning Horsemanship (1)
Rec 41 Intermediate Horsemanship (1)
Rec 42 Advanced Horsemanship (1)
Rec 50 Self-defense (1)
Various oriental self-defense techniques: includes karate, judo and aikido.
Rec 110 Introduction to Recreation (2)
Overview of the nature, principles, and scope of recreation.
Rec 140 Camping and Outdoor Recreation (3)
Provides a broad perspective of the aims, purposes, and values of the program. Leadership training for counselors.
Rec 253 Youth Organizations (2)
History and development of selected youth organizations. The objectives, administration, program, and vocational opportunities.
Rec 254 Scouting Organizations (2)
Cub Scouts, Boy Scouts, Explorer Program - their organization and operation.

## Rec 344 Recreational Activities (3)

Activities, materials, methods and techniques in recreation leadership.
Rec 345 Recreational Crafts (3)
Fundamental handicraft activities for recreational programs.

## Rec 450 Field Work in Recreation (3)

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)Policies, procedures, and problems in establishing and operating a municipal recreation program.

## Rec 469 Internship (3-16)

A practical opportunity for students to work with state and/or local recreation agencies. Prerequisite:
Recommendation of HPER advisor.

## Rec 540 Problems in Recreation (3)

Individual projects; problems common to the group.

## Rec 599 Thesis in Recreation (6)

Registration only after consultation with major advisor.

## SCANDINAVIAN STUDIES

## Dolores Buttry, 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:

1. Those interested in their own cultural heritage or that of a great share of the inhabitants of the Upper Midwest.
2. Those wishing an interdisciplinary liberal arts augmentation to an elementary or secondary teaching major.
3. Those interested in Scandinavia to meet the Area of Interest requirement of the Liberal Arts Program.
4. Those contemplating careers in foreign service or foreign trade.
5. Those seeking some undergraduate preparation for work at the graduate level in Scandinavian studies at other American or European institutions.
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 $340(\mathrm{~g})-341(\mathrm{~g})$ 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)
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)
Nor 297 Independent Study in NorwegianIntermediate Level (1-4; max. 8)
Scan 325 The Novels of Knut Hamsun in Translation (3)
Nor 397 Independent Study in NorwegianAdvanced Level I (1-4; max. 8)

Maximum of 12 credits in Norwegian Language Applicable
Nor 101-102-103 Beginning Norwegian I-II-III (12 credits)
Nor 201-202-203 Intermediate Norwegian I-II-III (12 credits)
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)
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)

Fundamentals of spoken and written Norwegian (Bokmal).
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)Intermediate conversation and composition with selected readings of progressive difficulty. Prerequisite: Nor 101-102-103 or equivalent.
Scan 231 Scandinavian Culture and Civilization (3)
Introduction to the cultural development of the Scandinavian peoples from prehistoric times to the present. Taught in English; no prerequisites.

## 206

## 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)

Major and representative plays of Ibsen and Strindberg in English translation. Same as Engl 382.
Scan 383(g) The Modern Scandinavian Novel
Masterpieces by the major Scandinavian novelists of the 20th Century. In English translation. Same as Engl 383.
Nor 397 Independent Study in NorweiganAdvanced Level I (1-4; max. 8) Supervised reading in slected 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, in Earth 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, GeographyGeology for Earth Science, Chemistry or Physics for Physical Science.

## SCIENCE COURSES

Information on courses in Biology and Chemistry is provided in the parts of the catalog devoted to the departments of those names. Descriptions of courses in Earth Science and in Physics are provided under the Departments of Geography-Geology, and PhysicsAstronomy, respectively.
Descriptions of science courses which are not characteristically offered by any certain department are provided below.
Sci 201-202-203 The History of Science (2 each) 201: The Scientific Revolution. 202: Science in the 18th to 19th Century. 203: Science in the Atomic age. Co-registration with History 201-202-203 required.
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 experience of those enrolled.

## Sci 440 Earth and Physical Science Teaching Methods (2)

For students majoring in Earth Science (Teaching) or Physical Science (Teaching). Consisting of objectives, methods, materials, and evaluations applicable to the teaching of physical science. Prerequisite or corequisite: Ed 307.

## SECRETARIAL

See Business Education for Curricula

## SOCIAL STUDIES <br> Major For Secondary Education

Program Requirements ( 84 credits)
Ed 440 Social Studies in the Secondary School (4)
Distribution Courses ( 60 credits)
Two courses from each of the disciplines of Anthropology, Economics, Geography, Political Science, Psychology and Sociology. (See specific course requirements below.)
Three courses from History: U.S. History I, II, III.
Concentration Courses ( 24 credits)
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. (See specific course requirements below.)
Specific Course Requirements
Distribution Requirements
Anthropology
Anth 110 Intro to Cultural Anthropology
Anth 111 Intro to Physical Anthropology and
Archaeology
Economics
Econ 202 Principles I
Econ 204 Principles II

Geography
Geog 100 Intro to Geography
Geog 310 U.S. and Canada
Political Science
Two of the following:
Pol Sci 110 Political Science as a Discipline
Pol Sci 120 National Government
Pol Sci 160 International Relations
Psychology
Psy 113 General Psychology
Psy 117 Personality
Sociology
Soc 110 Principles I
Soc 111 Principles II
Concentration Requirements
Anthropology
Any two courses from among the 200 level offerings
Anth 305 Primate Behavior and Human Evolution or
Anth 310 Human Evolution
Anth 315 North American Archaeology or 316 Latin
American Archaeology or 320 Old World Archaeology
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 Sci 221, State and Local Government, 240 Public Administration, 321 The American Presidency, 324 American Political Parties
Pol Sci 230 Intro to Law, 330 Judicial Systems, 430 Topics in Constitutional Law
Pol Sci 311 American Political Thought, 312
Communist and Marxist Foundations of Government, 410 Topics in Western Political Thought, 411 Topics in Eastern Political Thought
Pol Sci 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

Richard A. DuBord, Chair; Nancy C. Gilliland, Gary L. Jacobson, Peter Stoddard, Sandra C. Robin, James A. Svobodny

## Admissions to the Major

Students who wish to major in social work must complete a formal admissions process, submitted to the Department the quarter they are enrolled in SW 259-Social Work Practice I (exceptions may be made for transfer students.) Admission policy and procedure statements are available in the Department.

## SOCIAL WORK CURRICULA

Major in Social Work B.S.W. Degree
SW 250 Introduction to Social Welfare (4)
SW 255 Human Behavior and the Social Environment (4)

SW 259 Introduction to Social Work Practice I (4)
[Formal Admissions process for admission to the major occurs at this point in the curricula.
SW 359 Social Work Practice II-Interviewing (4)
SW 451 Social Policy (4)
SW 459 Social Work Practice III (4)
SW 469 Internship (16)
SW 470 Senior Seminar (4)
Electives in Social Work courses (8 credits)
Social Work Electives
SW 101 Orientation to Social Work (1)
SW 302 Children's Services (4)
SW 303 Social Work and Health Services (4)
SW 304 Social Work in a Rural Environment (4)
SW 308 Aging in America (4) (Also Soc 308)
SW 311 Social Work with the Chemically
Dependent (4)
SW 380 Economic and Social Security (4) (Also
Econ 380)
SW 405 Human Behavior and the Social Environment
through Literature (4)
SW 406(g) Advocacy (4)
SW 407(g) Social Group Work (4)
SW 408(g) Community Organization (4)
SW 409(g) Social Work with the Elderly (4)
SW 421 Readings in Social Welfare (2-4)

SW 425(g) Topical Seminar in Social Welfare (1-9) (May be repeated to 9 credits as a variety of social welfare problems are investigated)
SW 432 Independent Study (4)
Additional credits for Social Work majors under SW 440 -Field Experience and SW 499(g) - Social Work Workshops are available to meet graduation requirements but not as electives in the major with the exception of workshops offered for 2 credits or more.
Requirements in Related Fields (56 credits)
Biology 103, or 104 or 241 (4)
Economics 100 (4)
History 141 (4)
Multicultural Studies (8)
Political Science 120 (4)
Psychology (16) Recommend 113, 115, 117, 463/465
Sociology (16) Sociology 350 required

## Minor in Social Work

Note: A minor in Social Work is not accepted by the Council on Social Work Education as adequate preparation for entry level professional Social Work practice. This minor is offered solely for the student's learning in the area of social services.
Required Courses in the Department of Social Work (20 credits)
SW 250 Introduction to Social Welfare (4)
SW 259 Introduction to Social Work Practice I (4)
SW Electives: 12 credits - of which 8 may be in SW 440 Field Experience if placement and appropriate supervision are available. (An internship in a related major does not meet the electives for a Social Work minor.) Social Work majors will be given priority for class enrollment.

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, Health, History, Multicultural Studies, Political Science, Psychology, Recreation, Sociology, Special Education
In order to obtain recognition for a minor in Social Work the student must have his/her program accepted by the Social Work Department no later than the second quarter of the Junior year.

## SOCIAL WORK COURSES

## SW 101 Orientation to Social Work (1)

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)

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)
Introduction to and overview of the field of social welfare and the profession of social work: understanding human needs and diversity; the problem solving model; social welfare policy and institutions, and service delivery systems. Prerequisites: Soc 110, Psy 113, Econ 100, Pol 120, His 141 or consent of instructor.

## SW 255 Human Behavior and the Social

 Environment (4)Approaches in the analysis of the individual, family, groups, communities, organizations, and society. Prerequisite: SW 250, Soc course, Psy 115, Biol 103, 104 or 241, 4 credits in Multicultural Studies or consent of instructor.

## SW 259 Social Work Practice I (4)

Basic systems, principles, and concepts of social work practice, problem solving, processes of contract,
assessment, planning, intervention, evaluation and termination. Prerequisite: SW 255 or consent of instructor.

## SW 302 Children's 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 303 Social Work and Health 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 304 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 308 Aging in America (4)

Mutual influences of society and the aging process. (Also Soc 308). Prerequisite: Soc 110 or consent of instructor.

## SW 311 Social Work with the Chemically

 DependentExploration 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 259, or consent of instructor.
SW 359 Social Work Practice II-Interviewing (4)
Basic skills in interviewing and counseling in human services. Role plays and audiovisual techniques. Prerequisites: SW 259 and consent of instructor.
SW 380 Economic and Social Security (4)
Investigation of institutional arrangements and theoretical framework in economic transfer mechanisms
and poverty programs. (Also Econ 380). Prerequisite: Econ 100 or Econ 201.

## SW 405 Human Behavior and the Social Environment Through Literature (4)

Human behavior, social problems, and environment as seen in classic and contemporary fiction and drama.
Prerequisite: SW 250 or consent of instructor.
SW 406(g) Advocacy (4)
Concepts, issues, principles of advocacy. Social worker as advocate, the advocacy process, strategies of effective advocacy. Social worker as agent of social change. Prerequisite: SW 250 or consent of instructor.

## SW 407(g) Social Group Work (4)

Social Work practice with groups. Understanding the stages of group process, the role of the social group worker in working with groups, group assessment and intervention. Prerequisite: SW 259 or consent of instructor.

## SW 408(g) Community Organization (4)

Social work practice with communities around community issues and problems. Understanding several models of community organization, the role of the community organizer, community assessment, and intervention. Prerequisite: SW 259 or consent of instructor.

## SW 409(g) Social Work with the Elderly (4)

A critical examination of social policies and services for the elderly. Role of the social worker in direct and indirect service. Prerequisite: SW 259 and 308 or consent of instructor.

## SW 421 Readings in Social Welfare (2-4)

Course designed for students intersted 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 355 and consent of instructor.

SW 425(g) Topical Seminar in Social Welfare (1-9) Selected topics of concern to Social Work students and human services professionals. Prerequisite: SW 250 or consent of instructor.

## SW 432 Independent Study (2-4)

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 250 and consent of the instructor.

## SW 440 Field Experience (4-15)

Short-term field experience either prior to or following the internship. Application must be made to the internship coordinator two quarters prior to assignment. Prerequisite: SW 259 and consent of instructor.

## SW 451 Social Policy (4)

Structural problems in the development of social policy in America. Analytical models for examining social issues and problems. Prerequisite: SW 259 and consent of instructor.
SW 459 Social Work Practice III (4)
Intervention expanded to cover roles performed by social workers in practice; processes and methods applied to different size systems for human service. Prerequisites: SW 359 and consent of instructor.

## SW 469 Internship (16)

Placement in the field of practice under agency and departmental supervision. Prerequisites: SW 459, a GPA of 2.50, 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)
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 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

Anne M. Brunton, Chair; Joel Charon, Nancy Gilliland, Mark Hansel, Michael Hughey, Ray Kawaguchi, Sally McBeth, James Messerschmidt, Michael Michlovic, David Olday, Swaran Sandhu

## 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. Those students who, however, have career plans after graduation may consider developing a concentration in areas such as family, deviance/criminology, social research, health medicine, and social stratification. In either case, for the planning of 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 (3)
Soc 211 Sociological Theory (3)
Soc 310 Majority-Minority Relations (3)
Soc 312 Sociology of Complex Organizations (3)
Soc 350 Methods of Social Research I (4)
Soc 351 Methods of Social Research II (4)

Soc 411 Current Sociology (3)
Electives (27-up to 12 may be taken in Anthropology; eight may be in Soc 469 Internship)
Language Requirements
The department has no foreign language requirement for sociology majors applying for the Bachelor of Arts degree, but possible future graduate students in sociology will be 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 Intro to Culture/Linguistics (4)
Anth 111 Intro to Physical Anthropology/
Archeology (4) *
Any two of the following area courses (8): "
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
Anth 305 Primate Behavior and Evolution or 310 Human Evolution (4)
Anth 315 New World Archeology (4) or
Anth 316 Latin American Archeology (4) or
Anth 320 Old World Archeology (4)
Anth 370 Anthropological Linguistics (4) or
Anth 375 Language in Culture (4)
Anth 400 Development of Anthropological Theory (4)
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)
The primary objective for criminal justice majors is to provide students with a broad understanding of the structure of the criminal justice system and an in depth understanding of at least one of its components. The major requires a broad overview and provides a choice among several areas of specialization (for example, law enforcement, pre-law, the courts, correctional counseling, criminal justice planning). The major exposes the student to criminal law and also to questions about relationships between law and society. Finally, each student's major is grounded in a traditional social or behavioral science.
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 that of the concentration.
Two courses from the following list. One course must be in each of 2 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
A tool requirement consistent with academic interests and/or career goals (e.g., a modern foreign language, research methodology and statistics, computer language).
An internship in addition to required and related courses is encouraged, but not required.
A complete plan of study must be prepared with an advisor from the area of concentration at least four quarters prior to anticipated date of graduation. At least 36 of the credits must be at the 300 to 400 level. This must be reviewed and approved by the coordinator of the Criminal Justice Program and forms the student's requirements for graduation.
Minor in Sociology ( 36 credits)
Soc 110 Intro to Sociology (4)
Soc 111 Intro to Social Problems (4)
Soc 211 Intro to 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 Intro to Culture/Linguistics (4)
Anth 111 Intro to Physical Anthropology/
Archeology (4) ${ }^{\circ}$

One of the following(4):**
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 315 New World Archeology
Anth 316 Latin American Archeology
Anth 320 Old World Archeology
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.

## SOCIOLOGY COURSES

## Soc 110 Introduction to Sociology (4)

Human behavior from the sociological perspective.
Emphasis on socialization, organization, institutions;
and social change.

## Soc 111 Social Problems (4)

Social problems such as racism, sexism, poverty, overpopulation and pollution. Prerequisite: Soc 110.

## Soc 112 Social Deviance (4)

Topics may include crime, delinquency, alienation, mental illness, suicide, prostitution, and homosexuality. Prerequisite: Soc 110.
Soc 200 Health and Culture (4)
(See Anthro 200)

## Soc 205 Social Psychology (4)

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)
An examination of the ideas of key theorists in the history of sociology. Prerequisite: Soc 110.
Soc 215 Population (3-4)
Social and cultural aspects of national and international population change. Prerequisite: Soc 110.
Soc 219 Sociology of Sexual Behavior (3-4)
Premarital, marital, extra-marital sexual behavior analyzed from sociological perspective. Prerequisite: Soc 110 .

## Soc 220 Courtship and Marriage (3-4)

Structural, interactional and historical analysis of dating, mate selection, marriage. Prerequisite: Soc 110.
Soc 235 Sociology of Health and Medicine (3-4)
Social factors involved in health, illness, and treatment of disease. Prerequisite: Soc 110 or consent of instructor.

## Soc 300 Criminology (3-4)

Definition, magnitude, causation, prevention and control of crime. Prerequisite: Soc 110 and 112 or consent of instructor.

## Soc 301 Delinquent Behavior (3-4)

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)
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 306 Social Movements and Collective

## Behavior (3-4)

Myths, rumors, riots, public opinion, and propaganda.
Theories of political, religious, and minority
movements. Prerequisite: Soc 110 or consent of instructor.
Soc 307 Sociology of the Criminal Court (3-4)
The social organization of Criminal law decision making. Prerequisite: Soc 110 or consent of instructor.
Soc 308 Aging in America (3-4)
Covers aspects of the aging process and changes associated with age which influence attitudes, behavior, or position in society. Prerequisite: Soc 110 or consent of instructor.
Soc 309 Law and Society (3-4)
(See Criminal Justice 309)
Soc 310 Majority-Minority Group Relations (3-4)
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)
Basic descriptive analytic treatment of structure, operation, history, and problems of law enforcement. Some areas cover: socialization, styles of organization, professionalization, corruption/brutality, and police discretion.
Soc 312 Sociology of Complex Organizations (3-4)
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)

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)
The social-psychological institutional sources of family conflict and cohesion. Prerequisite: Soc 110 and 111 or consent of instructor.

## Soc 321 Rural Sociology (3-4)

Analysis of social organization, processes and action typical of rural life. Prerequisite: Soc 110 and 111 or consent of instructor.

## Soc 322 Urban Sociology (3-4)

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)

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)
Emphasizes major theoretical approaches to religion; magic, science, and myth; patterns of religious organizations; religion and social change; secularization; new religious movements. Prerequisite: $\operatorname{Soc} 110$.
Soc 333 Sociology of Sex Roles (3-4)
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)

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)

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)
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 11 (4)

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)
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 402 Seminar in Death and Dying (4)

(See Anth 402)

## Soc 404 Social Power (3-4)

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)
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)
Current theory and research. Emphasis on theoretical models and research design. Prerequisite: Soc 211 and 351.

Soc 414(g) Topics in Political Sociology (3-4)
Variable topics such as the sociology of the political
elite, revolutions, violence and non-violence.
Prerequisite: Upper division status and consent of instructor. May be repeated for credit.
Soc 416(g) Violence in the Family (3-4)
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 417(g) Topics in Sociology of Change (3-4) Theories of socio-political change, future, counter cultures, and utopias. Prerequisites: Upper division status and consent of instructor. May be repeated for credit.
Soc 418(g) Sociology of Education (3-4)
Social factors which 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)
Examines larger social and institutional developments in
American society since the Civil War: Economic 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) 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)
May be repeated to a maximum of 6 credits.
Prerequisites: Senior status and consent of instructor.
Soc 469 Internship in Sociology (3-16)
Soc 500-501 Sociological Theory I-II (3 each)
Prerequisite: Graduate standing and permisison 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 LANGUAGE AND LITERATURE COURSES

See Languages for Curricula and Courses.

## SPECIAL EDUCATION COURSES

## See Education for Curricula

## SpEd 370 Survey of Mainstreaming (2)

Overview of exceptional learners in the regular classroom.

## SpEd 371 Techniques for Instruction in Mainstreaming (2)

Classroom instruction, organization, and management processes designed to assist handicapped learners in the regular classroom.

## SpEd 372 Curriculum and Materials for

 Mainstreaming (2)An examination of curriculum, materials, and equipment for exceptional children in the regular classroom.
SpEd 401(g) Ecological Assessment (3)
Transactional-ecological approach to observation and screening of children in the natural context of classrooms. Prerequisite: Consent of instructor.

## SpEd 411(g) Educating the Mildly

Handicapped (4)
An introduction to definition, assessment, characteristics, and educational programs for learners with mild and moderate mental retardation, learning disabilities, or behavioral disabilities. Prerequisites: SpEd 418 or SpEd 420.

## SpEd 412(g) Educating the Severely

 Handicapped (4)An introduction to the definitions, assessment, characteristics, and educational/training programming for learners who are severe/profound and/or multiply handicapped. Prerequisites: SpEd 420, Professional core or consent of instructor.
SpEd 413(g) Instructional Strategies Mildly
Handicapped: Elementary (4)
Classroom techniques for teaching elementary level mildly handicapped learners. Topics include classroom
structures, adapting of instruction, curriculum, assessment and various content area learning problems. Prerequisites: SpEd 411.
SpEd 414(g) Instructional Strategies Mildly Handicapped: Secondary (4)
Classroom techniques for teaching secondary level mildly handicapped students. Topics include alternative educational resources, methods and materials, classroom adaptations, and techniques of basic skills instruction. Prerequisite: SpEd 411.
SpEd 415(g) Career Education for the Mildly Handicapped (3)
Career development of mildly handicapped children and youth. Topics include teaching strategies for academic, communication daily living skills, survival skills, self-concept, social and interpersonal relations skills, and occupational guidance and preparation as they relate to careers. Prerequisites: SpEd 414 or consent of instructor.
SpEd 417(g) Orientation to the Physically Handicapped (3)
Finding and determining psychological, educational, and medical needs of children with physical handicaps.
SpEd 418(g) Developmental and Education Variation in Students (2)
Orientation for all prospective educators to understand special needs of children with handicaps in regular and special classes.
SpEd 420(g) Education of the Exceptional Child (3)
Introduction to recognition, incidence, and educational needs of exceptional children.

## SpEd 421(g) The Gifted Child (3)

Definition, identification, and current school program for the mentally superior or specially talented child.

## SpEd 422(g) 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 421.
SpEd 423(g) Theory and Practice in Early Childhood Special Education (3)
Examination of the research related to early intervention and overview of program models for services to young handicapped children. Prerequisites: SpEd 418, 411, 412 or consent of instructor.
424(g) Assessment Strategies with Young Handicapped Children (4)
Examines assessment instruments and procedures with handicapped infants, toddlers, preschoolers. Approaches to identification, screening, assessment selection and programming are explored. Prerequisites: SpEd 401 (g) or SpEd $423(\mathrm{~g})$ or consent of instructor.

## SpEd 425(g) Teaching Young Children with Special

 Needs (4)Provides the day care or kindergarten teacher with skills in assessment, child study procedures and curricular adaptations for young handicapped children in integrated settings. Prerequisites: SpEd 418 or SpEd 420 or consent of instructor.

## SAd 426(g) Instructional Strategies with

 Handicapped Infants \& Toddlers (4)Investigation of goals and decision-making process to develop objectives and methods to facilitate development of handicapped children from birth to 3 years. Prerequisites: $\operatorname{SpEd} 411,412,423$ \& 424 or consent of instructor.

## SpEd 427(g) Instructional Strategies with Handicapped Preschoolers (4)

Investigation of methods to design and implement individual and group instructional and behavioral
programs for handicapped children from 3-6 years. Prerequisites: SpEd 411, 412, 423, 424 or consent of instructor.

## SpEd 428(g) Family Ecology of the

Handicapped (3)
Inquiry into historical and ecological/transactional perspective, and functions of the family with special needs child; school-family relationships. Prerequisites: SpEd 420 (g) or consent of instructor.
SpEd 431(g) Teaching Occupational Education to the Mentally Retarded (3)
Designed to help teachers of the mentally retarded to prepare their pupils for a gainful occupation.
Prerequisite: SpEd 411.

## SpEd 435(g) Topics in Mental Retardation (3)

Advanced treatment of selected topics on research and practice in mental retardation. Prerequisites: SpEd 411
SpEd 436(g) Problems in Special Education (1-3)
Directed field placement, reading, or research in special education. Prerequisites: SpEd 411. May be repeated up to 6 credits.

## SpEd 442(g) Creative Activities for Exceptional

 Children (3)Creative activities for exceptional childreñ; practical experiences in the areas of art, crafts, music, drama, and their interrelationships. Prerequisites: SpEd 416 , 420, 436.

## SpEd 444(g) Language Problems in Special

 Populations (3)Nature, etiology and management of language problems among Learning Disabled, Educably Mentally Handicapped, and Behaviorally Disturbed children and youth. Prerequisites: SLHS 204 Language
Development (Same as SLHS 444) (Available for 2 graduate credits).
SpEd 445(g) Remedial and Corrective Reading (3)
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 Ed 445g)

## SpEd 446(g) 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. (Same as Ed 446g)

## SpEd 450 Student Teaching of the Mentally

 Retarded (8-16)Experience under qualified supervising teacher in special education classroom. Prerequisite: Consent of instructor.

## SpEd 456(g) Curriculum Development and

 Teaching the Trainable Mentally Retarded (3) Investigation of educational goals, objectives, methods and techniques, organizing and planning curriculum units and plans.SpEd 457(g) Personal, Social and Vocational Education for the TMR (3)
Personal, social, and vocational adjustment needs and problems are studied. Emphasis placed upon work activity, sheltered workshops, or competitive employment.
SpEd 458(g) Recreative Skills for the Severely Handicapped (3)
Motor development, physical education, recreation and leisure activity skills for handicapped children.

## SpEd 459(g) Language Development for the

Severely Handicapped (3)
Methods, materials, and alternative communication systems for language development in the severely handicapped.
SpEd 460(g) Education of the Emotionally
Disturbed Child (3)
Causes of and classroom procedures with the
emotionally disturbed child. Prerequisite: SpEd 420 or consent of instructor.

## SpEd 462(g) Topics in Learning Disabilities (3)

Advanced treatment of selected topics on research and practice in learning disabilities. Prerequisites: SpEd 411 and consent of instructor.

## SpEd 463(g) Measurement and Assessment in Special Education (3)

An introduction to assessment in special education including statistics, measurements and the use of tests. Prerequisites: SpEd 418 or SpEd 420.

## SpEd 465(g) Special Education Reading (3)

Presents methods, materials useful in teaching reading to children with behavior problems, mental retardation, neurological, visual, or auditory impairment.
Prerequisites: Ed 345, SpEd 411.
SpEd 466(g) Special Education Reading Clinic (2) Supervised practice in diagnosis and remediation of reading problems of handicapped children.
Prerequisites: Ed 345, SpEd 411, SpEd 465.
SpEd 467(g) Practicum: I (6)
Prerequisites: SpEd 418, 445, 446, 411, 413, 463, 471 , and 472 with 3.0 average, consent of instructor.

## SpEd 468(g) Practicum: II (6)

Prerequisites: SpEd 467, consent of instructor.

## SpEd 469 Student Internship (3-16)

SpEd 470(g) Guidance of the Handicapped (3)
Principles and techniques of guiding handicapped children and youth to personal, social and occupational adequacy. Includes field projects. Prerequisites: SpEd 411.

SpEd 471(g) Behavioral and Environmental Management (3)
Analysis and programming of behavior, environmental variables as they relate to handicapped children in the classroom. Prerequisite: SpEd 418 or SpEd 420.

## SpEd 472(g) Psychoeducational Diagnosis and

 Programming (3)Principles and practices of diagnostic-prescriptive programming for handicapped children. Prerequisite: SpEd 418 or 420 .
SpEd 473(g) Behavior Problems in Children (3)
Descriptive etiology of behavior deviancy and the methods and techniques used to alleviate problems resulting from deviancy. Prerequisite: SpEd 460 or consent of instructor.

## SpEd 475(g) Teacher as a Resource

Consultant (3)
Theory and practice for special education resource teacher including direct services, consultation with regular classroom teachers and working with parents of handicapped learners. Prerequisites: SpEd 418 or 420, or consent of instructor.

## SpEd 477(g) Seminar in Early Childhood Education of the Handicapped (3)

Exploration of current childhood education of handicapped topics, legislation, political, funding, assessment, instruction, and parent education models. Prerequisites: Consent of instructor.

## SpEd 478(g) Methods of Teaching Students with

 Behavioral Disorders (3)Non-behavioristic classroom techniques for educating Emotionally Disturbed/Behavioral Disordered students. Prerequisites: SpEd 460 or consent of instructor.
SpEd 479(g) Children \& Adolescents in Crisis (3) Overview of life crises affecting children's behavior with special emphasis on disturbed adolescents.
Prerequisites: SpEd 460 or consent of instructor.

## SpEd 494(g) Administration of Special

 Education (3)Focus on problems in special education administration emphasizing organization çharacteristics, laws, current
issues, judicial decisions, and trends. Prerequisite: SpEd 450.

## SpEd 505 Single Subject and Small Group

 Research Designs (3)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 Ed 505)
SpEd 545 Diagnosis and Correction of Reading Difficulties (3)
Advanced study of reading difficulties. Prerequisites: SpEd 445.
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 564 Theory Process of SpEd

 Same as Ed 564.
## SpEd 565 Program Development/

Administration (3)
Selected topics in SpEd program development.
Prerequisite: Consent of instructor.

## SpEd 567 Practicum 1 (3-9)

Prerequisites: 3.0 in major and consent of instructor.
SpEd 568 Practicum II: (3-9)
Prerequisites: SpEd 567 and consent of instructor.

## 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.
Prerequisite: Graduate standing, SpEd 468 or 568 , and consent of instructor.

## SpEd 572 Educational Diagnosis and

 Programming (3)Critical analysis of selected applications of behavioral science to education of handicapped children and youth, including implications for use in education. Prerequisites: Graduate standing, SpEd 411/463 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 592 Administration and Supervision of Reading Instruction (3)
Problems in the administration and supervision of remedial reading programs. Prerequisites: Six credits of remedial reading courses.

## SpEd 595 Special Problems (1-6)

Advanced work in a special area. Prerequisites: Consent of graduate advisor.

## SpEd 597 Individual Study (3)

Plan B project in Special Education. Prerequisite:
Consent of graduate advisor.
SpEd 599 Thesis (6)
Thesis in Special Education. Prerequisite: Consent of graduate advisor.

## DEPARTMENT OF SPEECH COMMUNICATION AND THEATRE ARTS

Delmar J. Hansen, Chair; Timothy Choy, Jon Clark, Carol Gaede, Virginia Gregg, Theodore Larson, Jon Lotzenhiser, Hazel Scott

## AREAS OF STUDY: Speech Communication,

 Theatre Arts. (See also English Curricula for English-Speech Teaching combination major.)
## SPEECH CURRICULA

The Department of Speech Communication and Theatre Arts provides opportunities for the student to pursue career preparations in the areas of Speech Communication and Theatre Arts. Study in either 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 careeroriented 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 ( $60-64$ credits)

This degree is designed for the student who wishes to develop an understanding and proficiency in the theory, techniques and practice 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 Communications
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 220 Theatre Form and Appreciation (4)
Spch 253 Language and Communication (4)

## One of the Career Concentrations listed below

(40 credits)
PRE-PROFESSIONAL COMMUNICATION
The student who plans a professional career as a communication consultant, lawyer, salesman, 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 280 History of the Film (4)
Spch 308 Small Group Communication (3)
Spch 312 Principles of Persuasion (3)
Spch 316 Radio and Television Performance (4)
Departmental Electives at the 300 level or above (19)

## COMMUNITY COMMUNICATION

The student who plans a career concerned with society-related organizations such as park boards, community action groups, prison communities, or senior citizen services should elect the following concentration of courses. Students choosing this career concentration are encouraged to develop an area of concentration in a related field such as social work, psychology, art and music.
Spch 010 Collegiate Forensics (2)
Spch 209 Parliamentary Procedures (3)
Spch 226 Dance for the Stage (4)
Spch 308 Small Group Communication (3)
Spch 311 Readers' Theatre (4)
Spch 312 Principles of Persuasion (3)
Sp-h 341 Creative Dramatics (3)
Departmental Electives at 300 level or above (18)
RADIO-TELEVISION-FILM COMMUNICATION
The student interested in a professional career in the performance phases of radio, television or film work should elect the following concentration of courses. Students interested in the news and information area should consider taking the Broadcast News

## concentration in the Mass Communications

Department.
Spch 280 History of the Film (4)
Spch 316 Radio and Television Performance (4)
Spch 317 Advanced Radio-Television Performance (4)
Spch 383 Experimental Film Making (4)
Spch 384 Basic Television Production (3)
Spch 486 TV-Film Directing (4)
Departmental Electives at 300 level or above (17)

## PREPARATION FOR GRADUATE STUDY IN SPEECH COMMUNICATION

The student who intends to pursue a graduate degree in speech in order to become a teacher in higher education, a communication specialist, or a professional speech writer should elect the following concentration of courses. Related courses in other departments should be selected with the assistance of an advisor.
Spch 204 Principles of Debate (4)
Spch 206 Advanced Oral Interpretation (4)
Spch 209 Parliamentary Procedures (3)
Spch 308 Small Group Communication (3)
Spch 309 Rhetorical Criticism (4)
Spch 310 Contemporary Rhetoric (3)
Spch 312 Principles of Persuasion (3)
Departmental Electives at 300 level or above (16)

## INDIVIDUALIZED SPEECH COMMUNICATION

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 major:
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 major must be at the 300 level or above.

## Minor in Speech Communication B.A. Degree (32-36 credits)

Core requirements (23 credits)
Listed under major in Speech Communication
Electives from listings in a given career concentration area as listed under the major in Speech Communication (10-12 credits)
Major in Theatre Arts B.A. Degree ( $\mathbf{6 0 - 6 4}$ 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
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 344 Principles of Play Direction (4)
One of the career concentrations below ( 36 credits) ACTING
The student primarily interested in the development of his/her 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 Elective at 300 level or above (13)

## 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 are designed to provide a knowledge of the entire production process as well as with special emphases in acting, directing, dramatic literature, and theatre organization.
Spch 225 Scenery Design Techniques (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 (12)

## 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 Studies 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 Il (4)
Spch 326 Development of Drama III (4)
Theatre Arts Electives at 300 level or above (13)

## 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 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 (15)

## 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.

## Minor in Theatre Arts B.A. Degree (32-36 credits)

 Core Requirements ( 28 credits) Listed under major in Theatre Arts (28 credits) Electives 4-6 creditsFrom listing in a given career concentration area as listed under the major in Theatre Arts (4-6 credits)

## 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.
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 the Film (4)
Spch 312 Principles of Persuasion (3)
Spch 340 The Teaching of Speech (4)

Spch 344 Principles of Play Direction (4)
SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)
Electives in Speech Communication-Theatre Arts at 300 level or above (14)
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 Teacher Education requirements under Education Department.

## Minor in Speech Communication (Teaching) (34-38 credits)

Spch 100 Beginning Speech Communication (4)
Spch 101 Beginning Oral Interpretation (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 Speech Communication/Theatre Arts and English (Teaching)

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 The Teaching of Speech (4)
Spch 344 Principles of Play Direction (4)
SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)
Electives in Speech Communication or Theatre Arts (4)
To satisfy the requirements of the State Board of Education for seconcary certification with a major in Speech Communication-Theatre Arts, students must participate in at least two speech activities: forensics, theatre, oral interpretation, or broadcasting.
Major Requirements in English (54 credits)
Core Requirement ( 28 credits)
Engl 201-202-203 American Literature Survey I-II-III (12)
At least 8 hours of American Survey with 4 more hours of American Survey or any 300 or 400 level American Literature course (12)
Engl 211-212-213 British Literature Survey I-II-III (12) Engl 314 Shakespeare (4)
Electives in English (15-16 credits)
At least 11 credits must be taken at the 300 or 400
levels, and 8 of these credits must deal with literature of the nineteenth century or earlier. Electives should be chosen in consultation with one's English Department advisor.
Courses Required by State Board of Education: 10-11 credits
(Same as listed under English B.S. Degree [Teaching] except for Speech Requirement).
All Teacher Education Requirements shall be fulfilled to complete this major. See Teacher Education requirements under Education Department.

## SPEECH COMMUNICATION COURSES

## Spch 010 Collegiate Forensics (1)

(Maximum 4 credits) Practice in debate, discussion, readers' theatre, oral interpretation, and individual speaking events in inter-collegiate tournaments and in on-campus activities.
Spch 020 Radiocraft (1)
(Maximum 4 credits) Activity course for the development of radio performance and production skills.
Spch 100 Beginning Speech Communication (4)
The theory and practice of public and personal speaking, stressing both content and delivery in speech communication.
Spch 101 Voice and Diction (4)
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)
Theory and practice of oral reading and critical listening; performances include poetry, prose, and drama.
Spch 200 Speech in a Free Society (4)
An examination of the responsibilities and restrictions
placed upon various kinds of communication in a democratic society.

## Spch 202 Introduction to Rhetoric (4)

The principles and techniques of speech
communication in the light of classical and modern rhetorical theory.

## Spch 204 Principles of Debate (4)

The theory and practice of debating in tournament situations and in public affairs.

## Spch 206 Advanced Oral Interpretation (4)

Analysis and performance of literary form and style; adaptation of materials to various performance settings. Prerequisite: Spch 105 or consent of instructor.

## Spch 209 Parliamentary Procedures (3)

The theory and practice of parliamentary rules used to conduct business and professional meetings.
Spch 210 Effective Business Speaking (3)
Theory and practice of speaking done by business and professional people.
Spch 251 Applied Phonetics (4)
The analysis of sound structure of English, use of International Phonetic Alphabet; applications to oral communication. (Same as SLHS 201.)
Spch 252 Speech Science (5)
Basic scientific concepts fundamental to understanding speech production and reception. (Same as SLHS 202.)

Spch 253 Language and Communication (4)
Analysis of the use and effects of language and communicative behavior with special reference to interpersonal and cross-cultural considerations. (Same as SLHS 203.)
Spch 308 Small Group Communication (3)
The theory and practice of communication in a variety of formal and informal small group situations.
Prerequisite: Spch 100 or consent of instructor.

## Spch 309 Rhetorical Criticism (4)

Criteria for evaluating the problems, process, and effects of individual and/or group efforts to communicate.
Spch 310 Contemporary Rhetoric (3)
Communication problems, strategies, techniques and issues in the contemporary community.
Spch 311 Readers' Theatre (4)
Theory and techniques of the interpretation of drama, novels, and short stories through the readers' and/or chamber theatre format. Prerequisite: Spch 105 or consent of instructor.

## Spch 312 Principles of Persuasion (3)

Theory and practice of persuasive speaking-logical and psychological aspects are considered. Prerequisite: Spch 100, 202, or consent of instructor.
Spch 316 Radio-Television Performance (4) This course provides theory and practice in performing in the professional areas of radio and television; projects include news, commercials, and interviews.
Spch 317 Advanced Radio-TV Performance (4) Performance theory and practice in the professional fields of television and radio broadcasting. Students will prepare a series of performance projects in the areas of radio and TV news commentary, program hosting, interviewing, TV narration, and radio-TV character portrayal. Prerequisite: Spch 316/MC 325, Radio and Television Performance.
Spch 340(g) The Teaching of Speech (4)
Methods of conducting high school communication classes, structuring speech curriculum, selecting textbooks, and methods of speech evaluation. Prerequisite: Core courses or equivalent.
Spch 345(g) Speech in the Elementary
Classroom (3)
Survey and evaluation of objectives, procedures, and
materials for promoting effective oral communication in elementary classrooms.
Spch 384 Basic Television Production (3)
Television broadcasting studio and control room equipment and its operation; pre-production planning and production experience. (Cross listed as MC 350.)
Spch 385 Advanced Television Production (4)
Production theory and practice for television; color studio production, remote production and videotape editing. Prerequisite: Spch 384/MC 350, Basic Television Production.

## Spch 416(g) Special Projects in Speech

Communication (4)
Advanced individualized investigative work in a particular phase of speech communication. May be taken more than once. Prerequisite: consent of instructor.

## Spch 469(g) Internship in Speech Communication (3-16)

Spch 499(g) Topical Workshop (1-4)
Spch 540 Problems in Speech Education (3)
Problems involved in the development of speech communication programs.
Spch 599 Thesis in Speech (1-6)
Registration only after consultation with major advisor.

## THEATRE ARTS COURSES

Spch 040 Theatre Practicum (1)
Training in the technical phases of theatre production; experience in set construction, painting, properties construction, backstage organization, house management, and running crews.
Spch 220 Theatre Form and Appreciation (4)
The study of theatre form and basic dramatic theory and criticism for viewing plays.

Spch 221 Theatre in America (4)
An examination of the significant contributions of American theatre and drama which are related to reading of representative American plays.
Spch 222 Principles of Acting (4)
Basic theory and techniques used by actors in creating a role for the stage; practical experience in scenes and one-act plays.

## Spch 223 Stage Make-Up (3)

Techniques of types and styles of stage make-up used in make-up for stage characterizations.
Spch 224 Technical Theatre Methods (4)
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)

Acquiring the basic artistic skills needed for stage design; practice in theatrical drafting, perspective drawing, rendering, model building, and scenery painting techniques. Prerequisite: Speech 224 or consent of instructor.
Spch 226 Dance for the Stage (4)
The theory and practice of basic dance skills used in musical theatre production.
Spch 227 Singing Skills in Musical Theatre (2)
Principles of body alignment and breathing, vocal exercises, and diction. May be repeated for credit with consent of advisor.
Spch 228 Theatre Arts Management (3)
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)

A chronological approach to the history of the American motion picture medium. Films will be viewed and discussed.

Spch 281 Film Form and Criticism (4)
A critical approach to a limited number of artistically significant motion pictures and motion picture directors.

## Spch 282 Film and Novel (4)

Film and the novel through a comparative analysis of fiction adapted to the film medium. (Same as English 232)

Spch 283 Film and the Stage (4)
Film and theatre arts through a comparative analysis of dramas adapted to the film medium.
Spch 322(g) Development of the Drama I (4)
Greek and Roman tragic and comic playwrights,
Aristotelian criticism, and classical theatre history.
(Cross-listed as English 343)
Spch 324(g) Development of the Drama II (4)
Early native farce, religious drama, the commedia dell' arte tradition, and the drama of the Renaissance as reflected in representative readings. (Cross-listed as Engl 344)
Spch 326(g) Development of the Drama III (4)
The drama since Henrik Ibsen, viewed as a revolutionary, cultural, political, and artistic force. (Cross-listed as English 345)
Spch 330(g) Dramatic Production I (3-6)
Play production techniques (acting, 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)

Play production techniques (acting, directing, technical theatre) through the process of staging weekly production for summer theatre audiences. May be repeated by undergraduates. Prerequisite: Consent of Instructor.

## Spch 332(g) Stage Movement (4)

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)

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, Voice and Diction.

## Spch 334(g) Stage Design I (4)

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 rendering and scale models. Prerequisite: Spch 225 or consent of instructor.
Spch 336(g) Stage Design II (4)
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 $334(\mathrm{~g})$ or consent of instructor.

## Spch 337(g) Stage Lighting (4)

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)

The principles and practices of informal drama and storytelling with children; the uses of creative dramatics in the elementary classroom.

## Spch 342(g) Children's Theatre (3)

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)

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)

A genre approach to the forms which have developed in the cinema. Films are viewed and critically evaluated. Prerequisite: Spch 280 and Spch 281 or consent of instructor.

## Spch 383 Experimental Film Making (4)

A practical approach for the non-professional filmmaker. Experimental films are viewed and discussed. Students learn to operate super 8 mm motion picture equipment and produce short films.

## Spch 429(g) Advanced Play Direction (4)

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.

## Spch 430(g) Styles of Directing (4)

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)

Principles and problems in the acting of major historical and theatrical styles. Prerequisite: Spch 222 or consent of instructor.

## Spch 432 Shakespearean Acting (4)

Techniques for and problems in acting and staging Shakespeare's plays in the contemporary theatre.
Spch 434(g) Special Projects in Theatre Arts (4)
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)
The study of historical styles of theatre architecture and stage design through history.
Spch 438(g) Contemporary Playwrights (4)
Individual British, American, and continental playwrights; may be elected twice when the reading lists are substantially different.
Spch 469 Internship in Theatre (3-16)
Spch 486 Television and Film Directing (4)
A practical approach to the problems encountered by the student interested in developing directorial skills for television and film. Prerequisite: Spch 384 and Spch 316 or consent of instructor.
Spch 499(g) Topical Workshop (1-4)
Spch 520 Seminar in Educational Theatre (3)
Problems involved in the development of educational theatre programs. Prerequisite: Consent of the instructor.
Spch 522 Dramatic Theory and Criticism (3) Principles of dramatic criticism from Aristotle to the present day. Critical standards and theory application in the evaluation of drama in performance.
Prerequisite: Consent of the instructor.

## DEPARTMENT OF SPEECH, LANGUAGE, HEARING SCIENCE

Arne D. Teiglund, Chair; Louis De Maio, 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 and hearing science. The major is also appropriate for those who will pursue careers in hearing conservation, education of the hearing impaired, and other 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 master's degree is a national requirement. Therefore, the undergraduate degree is designed to qualify students for admission to professional study at the graduate level at this or other universities rather than to enter professional practice.
The master's degree is the professional degree. Students completing the graduate program are qualified for clinical positions in communication disorders throughout the nation.
Students who plan to seek clinical positions in Minnesota schools will be required to meet requirements established by the Minnesota State Department of Education. Courses satisfying these requirements are, in fact, recommended to all majors.
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, the faculty in Communication Disorders 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.

Required Courses ( 78 credits minimum)
Spch 100 Beginning Speech Communication (4)
Spch 253 Language and Communication (4)
SLHS 101 Introduction to Speech, Language and Hearing Sciences (3)
SLHS 201 Phonetics (4)
SLHS 202 Speech Science (4)
SLHS 204 Language Development (4)
SLHS 207 Acoustics of Speech and Hearing (3)
SLHS 321 Articulation Disorders (4)
SLHS 322 Developmental Language Disorders (4)
SLHS 323 Voice Disorders (4)
SLHS 341 Clinical Instrumentation (2)
SLHS 342 Clinical Procedures I (2)
SLHS 343 Clinical Procedures II (2)
SLHS 344 Observation of Clinical Practicum (1)
SLHS 371 Audiology (4)
SLHS 372 Audiometry 1 (4)
SLHS 373 Rehabilitation Audiology (4)
SLHS 424 Fluency Disorders (4)
SLHS 446 Clinical Practicum: Speech-Language (9*)
SLHS 447 Diagnostic \& Appraisal Procedures (4)
*Grade B required
Practicum-Proficiency Requirements
At least 25 clock hours of observation of evaluation and treatment of communication disorders are required for the B.S. degree. Also, at least 75 clock hours of supervised patient contact experience in speech-language-hearing evaluation and treatment are required for graduation.

## SPEECH, LANGUAGE \& HEARING SCIENCE COURSES

SLHS 101 Introduction to Speech, Language, and Hearing Sciences (3)
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)

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. (Same as Spch 251.)

## SLHS 202 Speech Science (4)

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)

The development of speech and language; the psychological and sociological bases of speech behavior. (Same as Spch 253.)

## SLHS 204 Language Development (4)

Normal development of cognitive, linguistic, and pragmatic systems of language in children.

## SLHS 207 Acoustics of Speech and Hearing (3)

Basic acoustical principles applied to the generation of human speech sounds, the propagation of such sound waves, and their measurement. (Same as Physics 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. Prerequisite SLHS 207 or Physics 207 or consent of instructor. (Same as Physics 207L.)

## SLHS 321 Articulation Disorders (4)

The nature, etiology, assessment and treatment disorders of articulation. Prerequisite: SLHS 201 and SLHS 202 or consent of the instructor.
SLHS 322 Developmental Language Disorders (4)
Nature, etiology, and clinical management of language disorders in children. Prerequisite: SLHS 204 or consent of instructor.

SLHS 323 Voice Disorders (4)
Study of organic and functional voice disorders; their symptomotology, etiology, assessment, and clinical management.

## SLHS 341 Clinical Instrumentation (2)

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 342 Clinical Procedures I (2)
Orientation to the operating procedures of a speech, language, and hearing clinic, professional ethics, and reporting procedures including lesson plans. Introduction to basic procedures for the observation and management of behavior and speech-related anxiety.

## SLHS 343 Clinical Procedures II (2)

Development of writing and interviewing skills, advanced reinforcement systems and maintenance of learned behaviors. Prerequisites: SLHS 342 and SLHS 344.

SLHS 344 Observation of Clinical Practicum (1)
Supervised observation of evaluation and management procedures of speech, language and hearing disorders. Prerequisite: Junior standing or faculty consent. Prior or concurrent enrollment in SLHS 342.
SLHS 371 Audiology (4)
Study of hearing and hearing disorders. Prerequisite: SLHS 207.

## SLHS 372 Audiometry I (4)

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 (3)
The principles and procedures of auditory training, speech reading, language and speech training for
individuals with hearing impairment. Prerequisite:
SLHS 371 and SLHS 372 or consent of the instructor.

## SLHS 401(g) Psycholinguistics (3)

Nature, structure, and function of language with special emphasis on comprehension and production processes.

## SLHS 422(g) Organic Speech Disorders in

 Children (3)Nature, etiology, and management of cleft lip/palate in children.

## SLHS 423(g) Organic Speech Disorders in

 Adults (4)Etiology, diagnosis, evaluation, and treatment of braindamaged, communicatively impaired adults (including aphasia, agnosias, apraxias); opportunities for observation of evaluation and treatment of adult braininjured individuals.

## SLHS 424(g) Fluency Disorders (4)

A study of the nature and management of fluency disorders. Prerequisite: SLHS 202.

## SLHS 444(g) Language Problems in Special

 Populations (3)Nature, etiology and management of language problems among learning disabled, educably mentally handicapped, and behaviorally disturbed children and youth. Prerequisite: SLHS 204 Language
Development. [Same as SpEd 444(g).]

## SLHS 446 Clinical Practicum:

## Speech-Language (1)

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 321, SLHS 322, SLHS 341, SLHS 342, SLHS 344 and consent of the academic advisor.

## SLHS 447(g) Diagnostic and Appraisal

Procedures (4)
The evaluation and use of diagnostic tools;
participation in evaluations and preparation of clinical reports. Prerequisite: Senior standing in the speech/language/hearing science major and consent of the instructor.
SLHS 476 Clinical Practicum: Audiology (1)
Supervised clinical experience in evaluation or management of children or adults with impaired hearing; may be repeated. Prerequisite: SLHS 344, SLHS 372, or SLHS 373, and consent of the academic advisor.
SLHS 491(g) Independent Study in SLHS (1-3)
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)
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 disorders.

## SLPA 521 Seminar in Articulation (3)

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)

Advanced study of the pathologies and malfunctions which produce voice defects; laryngectomy and other organic disorders emphasized; evaluation of current therapeutic procedures and pertinent findings.

## SLPA 524 Seminar in Fluency (3)

A critical review of research related to the nature, etiology, and treatment of fluency disorders.

## SLPA 541 Language Assessment and

## Remediation (3)

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 Advanced Clinical Procedures (3)
Supervised clinical practice in the use of advanced appraisal techniques for speech and language disorders; provision for in-depth experience with alternate communication systems; and to provide supervised experience in the supervision of personnel who provide services within the clinical setting.
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)
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 547 Program Management in Speech-

Language Pathology (3)
The organization, management and administration of speech/language pathology programs in various clinical settings such as public schools, hospitals, and clinics. Prerequisite: Consent of instructor.

## SLPA 548 Internship (6)

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)

A review of the major concepts which influence the delivery and shape consequences of rehabilitative services to the hearing impaired.
SLPA 576 Clinical Practicum: Audiology (1)
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)
Selected in speech, 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 proposed supervisor of study.
SLPA 595 Seminar in Professional Issues (3)
A consideration of current topics and issues pertaining to the profession of speech-language pathology and audiology.
SLPA 599 Thesis (1-6)
Registration only after consultation with major advisor.

## Vocational Education

See Industrial Studies for Curricula

## VOCATIONAL EDUCATION COURSES

VoEd 438(g) Occupational Analysis (3)
Identification, breakdown, and separation of competencies utilized in the performance of a task, job, or project for curriculum purposes.

## VoEd 439 Teaching the Vocational Education

 Subjects (4)Principles pertaining to the instructional methods used by teaching in the practical arts area.

## VoEd 440(g) Organization and Administration of

 Vocational Education (3)Administration of vocational programs under state and federal legislation, planning and organizing programs for secondary, post-secondary, and adult vocational education.

## VoEd 441(g) Measurement and Evaluation in Vocational Education (3)

Principles and techniques for measuring and evaluating student achievement in the vocational education setting.

## VoEd 443(g) Coordination Techniques of Vocational

 Education (3)Development of coordination techniques through the study of objectives, programs, practices, laws, standards, and certification requirements of vocational education.
VoEd 469 Student Internship (3-16)
Approved practical work experience. Available to all students desiring work-experience credit.

## VoEd 480(g) Special Problems in Vocational

 Education (1-6)Individual study of some phase of vocational education not offered in depth in the regular curriculum but of special interest. Prerequisite: Senior status, consent of the instructor and department chair.

## VoEd 485(g) Vocational Guidance (3)

Development of the vocational guidance movement, individual inventory services, occupational information service, job placement and follow-up.

## VoEd 493(g) Occupational Safety (4)

Occupational hazards and regulations. OSHA publications will be studied and specific applications will be practical.

## VoEd 495(g) Philosophy \& Practices of Vocational Education (3)

Philosophical, social, and economic forces that create the need for and the purposes of vocational education are examined.

## VoEd 496(g) Literature in Vocational Education (3)

Survey of periodicals, books, professional journals, yearbooks, and state and federal materials from the field of vocational education.
VoEd 497(g) Curriculum Planning (3)
Principles of occupational analysis and course construction; selection and organization of instructional materials; trends and new concepts in curriculum development.

## Women's Studies

Sylvia Morgan, 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, medicines, 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 $310(\mathrm{~g})$ Women's Studies (4)
Psy 220 Psychology of Women (4) or
Soc 333 Sociology of Sex Roles (3)
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)
Phil 210 Philosophy of Women
Psy 220 Psychology of Women (4)
Psy 481 (Topics seminar) Women and Work
Hist 375 Women in U.S. History (4)
Engl 246 Women in Literature or Minority Women Writers (4)
Soc 320 Sociology of the Family (3-4)
Soc 333 Sociology of Sex Roles (3-4)
Soc 335 Women and Health
Pol $430(\mathrm{~g})$ Sex-Based Discrimination
SW 425(g) Women and Mental Health
CRJS 400 (Topics seminar) Sociology of Rape
Ed 341 Survey of Children's Literature (4)
Bio 104 Human Biology (4)
Hum 311(g) Special Topics in Women's Studies (3-4)
Hum 312(g) Women in the Humanities (4)
Hum 410(g) Directed Readings in Women's Studies (1-8)

Other appropriate courses or seminars are often available as topics listings in cooperating departments.

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## Administration

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David Nelson Dean of Business, Industry and Applied Programs
Nancy Parlin Dean of Natural and Behavioral Sciences
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Judy Johnson Director, Early Childhood Education Center Audrey Jones Director of External Studies
Mary Ellen Schmider Director of Continuing Education and Coordinator of Graduate Studies
Lois Selberg Assistant to the Vice President for Academic Affairs

## Administrative Affairs

Earl R. Herring Vice President for Administrative Affairs
James Aasness Bookstore Manager
Benjamine Blair Personnel Director
Duane M. Grier Director of Physical Plant
Lester E. Johnson Director of Design and Construction
Verlee Thies Business Manager

## Student Services

Robert MacLeod Vice President for Student Personnel Services
Kathy Allen Student Union Director
David Anderson Director of Financial Aid

Floyd Brown Director of Admissions
Mary Curtis Director of Women's Athletics
Judy Dulski Director of Health Services
Ross Fortier Director of Men's Athletics
Michael Pehler Acting Director of Housing
Marv Gerhardson Associate Dean and Director of Student
Development
Eileen Hume Associate Dean and Director of Human Relations
Ronald Kopita Director of Counseling
Connie Oxton Business Manager of the Student Union
Melvin Schmitz Director of Career Planning and Placement
Roberta Shreve Director of The Children's House

## Public Affairs

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Ron Matthies Director of Publications and Information Services
Pat Johnson Director of Graphic Design
Ed Fearing Printing Manager
Glenn Tornell Director of Press Information
Dennis Aune Director of Alumni Affairs

## 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.
Wagdy M. Abdallah, 1981. Associate Professor of Accounting. B.B.A., M.S., Cairo University; M.B.A., Mankato State University; Ph.D., North Texas State University.
Samuel Abel, 1983. Instructor of Speech Communication and Theatre Arts. A.B. Dartmouth College; M.A. Indiana University.
M. Wayne Alexander, 1977. Professor of Business Administration. B.S., M.B.A., Fresno State College; Ph.D., University of lllinois at Urbana-Champaign.
Dean Alger, 1982. Assistant Professor of Political Science. M.A., Ph.D., University of California (Riverside).
Kathleen Allen, 1979. Comstock Memorial Union Director. B.A., Kent State University; M.Ed., University of New Hampshire.
Beth C. Anderson, 1969. Assistant Professor of Secondary Education. 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.

John Anderson, 1980. Instructor of Mass Communications. B.S Moorhead State University; M.S. North Dakota State University.

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## Facility

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BRIDGES HALL - Accounting, Business Administration. Business Education. Small Business Center, Philosophy. Psychology. Planetarium
CENTER FOR THE ARTS - Art. Music. Speech and Theatre
COMSTOCK MEMORIAL UNION-Advocate. Student Employment Center. Scheduling Office
DAHL HALL-Residence Hall. Student Health Center
FLORA FRICK HALL - Computer Center. Computer Science, Counseling Center. Printing and Duplicating. Word Processing Center. Student Advisor's Office
GRANTHAM HALL—Residence Hall
GRIER HALL-Speech Language Hearing Sciences
HAGEN HALL—Physics and Astronomy. Chemistry. Industrial Studies, Pre-Engineering HEATING PLANT
HOLMQUIST HALL—Residence Hall
KISE COMMONS-Food Service
LIVINGSTON LORD LIBRARY - Audio-Visual Center
LOMMEN HALL-Education. Achievement Center (Reading Clinic). Special Education Depi.. Early Childhood Center
MACLEAN HALL-Bookstore. Criminal Justice, Custodial Services, Economics. History Languages. Mass Communications. Math. Political Science. Multi-Cultural Studies, Socia Work. Sociology and Anthropology
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NEUMAIER HALL-Residence Hall

OWENS HALL - Administration Building: President's Office. Academic Affairs.
Administrative Affairs, Admissions and Records, Business Office, Continuing Education. Public Affairs News Services and Publications. Financial Aid, Foundation Development and Alumni. Graduate Studies. Personnel, Placement. Post Office, Registrar. Student Personne Services. External Studies
SNARR HALL COMPLEX-Residence Hall
WELD HALL-English. Humanities. T.V. Center. Geography, Geology
706 South 16th Street-Campus Housing
711 South 16th Street-Campus Housing
713 South 16th Street-Campus Housing
715 South 16th Street-Minority Cultural Center
717 South 16th Street-Campus Housing
811 South 16th Street-Campus Housing
817 South 16th Street-The Children's House

## Parking lots

A. Commuters and Ballard Hall Residents A Annex.-Commuters
B. Residents
C. Faculty and Staff Zone Permits
D. Residents
D. Residents
F. Faculty and Staff Zone Permits
G. Faculty and Staff Zone Permits
H. Faculty and Staff Zone Permits
J. Faculty and Staff Zone Permits
K. All University Permits
L. Faculty and Staff Zone Permits
M. Faculy and Staff Zone Permits
N. Residents
O. All University Permits
P. All University Permits

[^1]
## Moorhead State University Tentative 1983-85 Calendars

## Fall 1983

Sept 6.7 Registration Orientation
Sept 8 Classes Begin
Nov 7 (4 p.m.)
Nov 711
Nov 1618
Nov 19 (Noon)
Withdrawal Deadline Winter Class Registration Final Class Schedule Residence Halls Close

## Winter 1983-84

Nov 27 (Noon) Residence Halls Open
Nov 28 Final Registration
Nou 28
Nov 30 Dec 2
Dec 17
Dec 16 (7 p.m.) Jan 3 (Noon) Jan 4
Jan 18
Feb 15 ( 4 p.m.)
Feb $20-24$
Feb 2729
Mar 1 (Noon)

## Spring 1984

| Mar 11 (Noon) | Residence Halls Open |
| ---: | :--- |
| Mar 12 | Final Registration |
| Mar 12 | Classes Begin |
| Mar 1416 | Tuition Fee Payment |
| Apr 20 | Holiday (No Classes) |
| Ap 13 | Quarter Midterm |
| May 10 | Withdrawal Deadline |
| May 7.11 | Summer Pre Registration |
| May 14 18 | Fall Pre Registration |
| May 22 24 | Final Class Schedule |
| May 25 (2 p. m ) | 198384 Commencement |
| May 25 (7 p m mesidence Halls Close | Residence |

## Fall 1984

Sept 4.5 Registration Orientation
Sept 6 Classes Begin
Veterans Day (No Classes)
Nov $1517 \quad$ Final Class (Exam) Schedule
Winter 1984-85
Dec 3 Registration
Dec 3 Classes Begin
Dec 22, Jan $6 \quad$ Holiday Recess
Feb 27. Mar 1 Final Class (Exam) Schedule

## Spring 1985

Mar 11 Registration
Mar 11 Classes Begin
Apr 5 Holiday (No Classes)
May $22.24 \quad$ Final Class (Exam) Schedule
May 24 Commencement

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[^0]:    Major in Art Education B.S. Degree (80 credits) Areas of Study
    Foundation Studies in Art (15)
    Introductory Studio Courses (9-12)
    Art Survey and History (20)
    Art Education Method Courses (7)

[^1]:    R. Faculty and Staff Zone Permits
    S. Residents

    X . Assigned X Permit only
    HANDICAPPED
    \$ - Handicapped Parking
    \$- Handicapped Access

