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The Bulletin

Moorhead State College Undergraduate Catalog 1974-76



Old Main & Friends - 1900

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For a great many years the catalogue of Moorhead State College has informed people about the widening range of educational opportunities. Taken all together, the catalogues make up a kind of history of the College.

It is a history full of names, of people and of buildings; a history of new programs, of added courses and dropped courses, of changing requirements and of new services for students.

For the careful reader, it is a history of much else besides, for the catalogues taken all together, or this catalogue, by itself, tell you something about the quality of education at Moorhead State and the abilities of those who are responsible for it; tell you about the College's faithfulness to the great traditions of learning and its recognition of the needs of its own society.

Above all, never quite hidden by the names and course titles, there is a vivid testimony to this College's concern for its students and to its hopes for their bright futures.

I hope that you read it with care.

Roland Dille
President

Roland Dille

Introduction

The College. Moorhead State College, with an enrollment of approximately 5,000, offers its students a full liberal arts curriculum leading to both the bachelor's and master's degrees with undergraduate programs that include 57 major fields and 20 areas of pre-professional study.

As a part of the higher education system established by the State of Minnesota, it provides the advantages of quality education at the lower costs made possible by the support of the citizens of Minnesota.

History. Established in 1885 as a Normal School, the College began on a six-acre plot donated by State Senator S. G. Comstock. The first ten students graduated from its two-year curriculum in 1890. Major advances took place in 1921, when it attained four-year status as Moorhead State Teachers College, authorized to offer the degree of Bachelor of Science in Education; in 1946, when the Bachelor of Arts degree was added; in 1953, when a graduate program was authorized for the Master of Science in Education, and in 1957, when the official name became Moorhead State College.

The Campus. The College occupies a 104-acre campus in Moorhead, Minnesota. Most of the 28 major buildings on the campus have been constructed since 1957, including nine residence halls, the library, student union, food service, Center for the Arts, the science-industrial arts center, a new classroom building and the Nemzek Hall complex for men's and women's physical education, health and athletics. Construction completed in 1970 included an addition to the library, doubling its size; two residence halls, one 15 stories high; separate biology building and an administration building. Several of the older buildings have been completely remodelled and refurnished. Most recent construction includes an addition to the Nemzek complex providing space for women's physical education and an olympic-size swimming pool; and an addition, doubling the capacity of Comstock Memorial Student Union.

The Community. Moorhead State College is located in a college-minded community offering a wide range of cultural and recreational opportunities. The twin cities of Moorhead and Fargo, N.D. are part of a metropolitan community of nearly 120,000, situated amid the rich farm lands of the Red River Valley. The community is a major trade, distribution and medical center, and is also the location of two other institutions of higher education, North Dakota State University in Fargo, and Concordia College in Moorhead. The three colleges cooperate in a unique educational consortium called the Tri-College University. The community is serviced by two airlines, Northwest and North

Central; the Burlington Northern Railroad; two interstate highways, 94, and 29; and four U.S. highways, 75, 52, 81 and 10. Moorhead is within easy driving distance of two of Minnesota's popular lake areas offering diverse summer and winter recreation and vacation opportunities. The twin city community supports two art galleries, a symphony orchestra, community theater and community opera. There are many movie theaters, four television stations, one of which is a community-supported educational station; five radio stations and a daily and Sunday newspaper. Moorhead State College regularly offers a Series for the Performing Arts, monthly art exhibits and outstanding dramatic and musical programs, including an eight-week Straw Hat Summer Theater.

Information Directory

For information about:

	<i>Contact</i>	<i>Phone</i>
Academic Policies	Academic Affairs	236-2762
Admission to College	Admissions Office	236-2161
Advocate	Comstock Union	236-2551
Alumni and Parents	Director	236-2555
Athletic Events	Athletic Office	236-2622
Bookstore	Manager	236-2111
Buildings and Grounds	Administrative Affairs	236-2156
Business Affairs	Business Office	236-2221
Campus Tours	Admissions Office	236-2161
Common Market	Registrar	236-2161
Computer Center	Computer Center	236-2603
Continuing Education	Academic Affairs	236-2181
Counseling	Counseling Office	236-2227
Dormitories	Director of Housing	236-2118
Employment, Student	Financial Aid Office	236-2251
EOMS Program	Coordinator	236-2109
Evening Classes	Registrar	236-2161
Extension Classes	Academic Affairs	236-2181
External Studies	Coordinator	236-2181
Facilities, Use of	Scheduling Coordinator	236-2173
Fifth Year Program	Director	236-2181
Financial Aid	Financial Aid Office	236-2251
Food Service	Slater Food Service	236-2500
Foundation and Development	Executive Vice President	236-2555
Graduate Studies	Dean of Graduate Studies	236-2181
Health Services	Health Center	236-2211
Housing	Director of Housing	236-2118

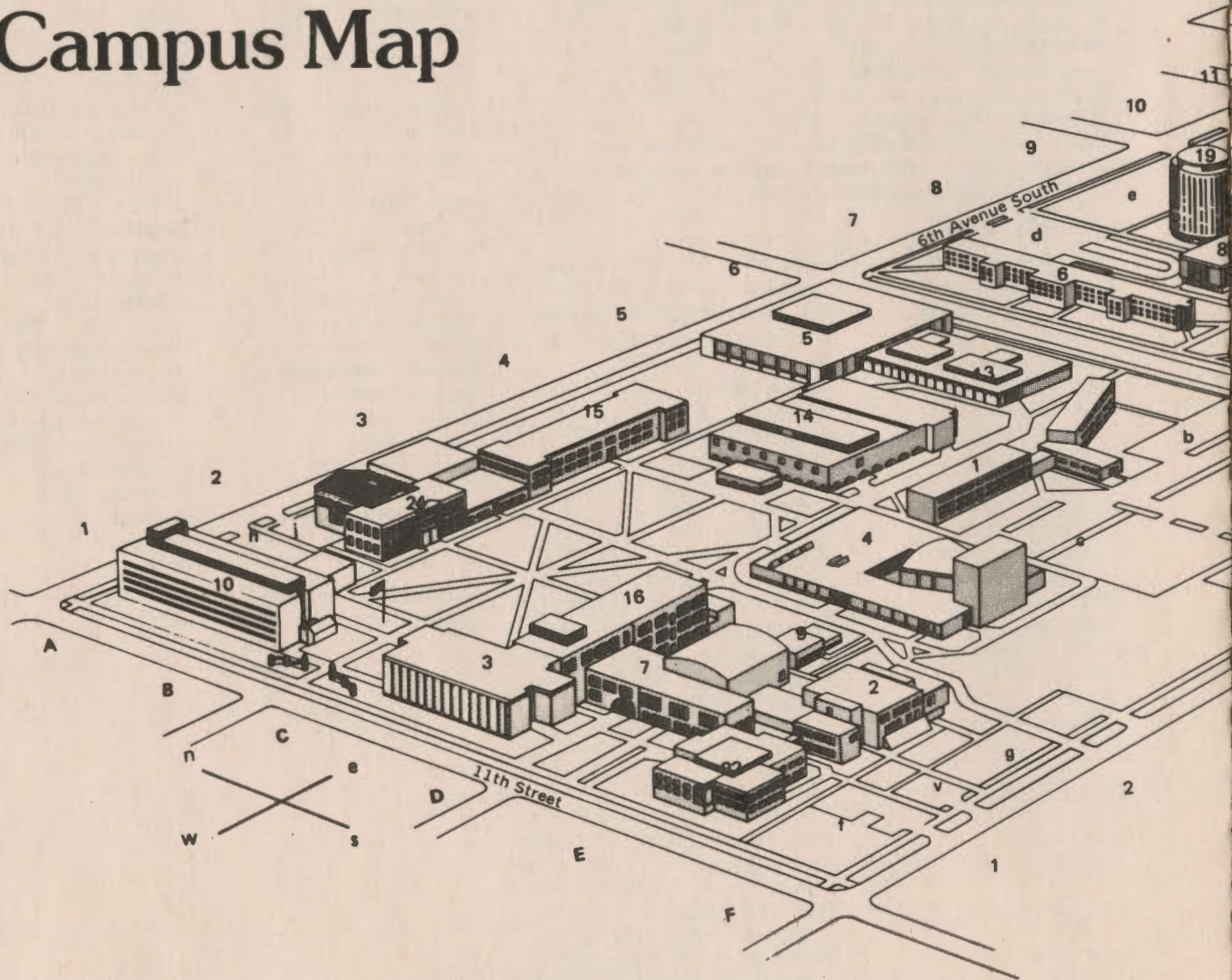
Library
New Center
News
Off Campus Courses
Organizations, Student
Performing Arts Series
Placement Services
Postal Services
President of the College
Printing
Public Relations

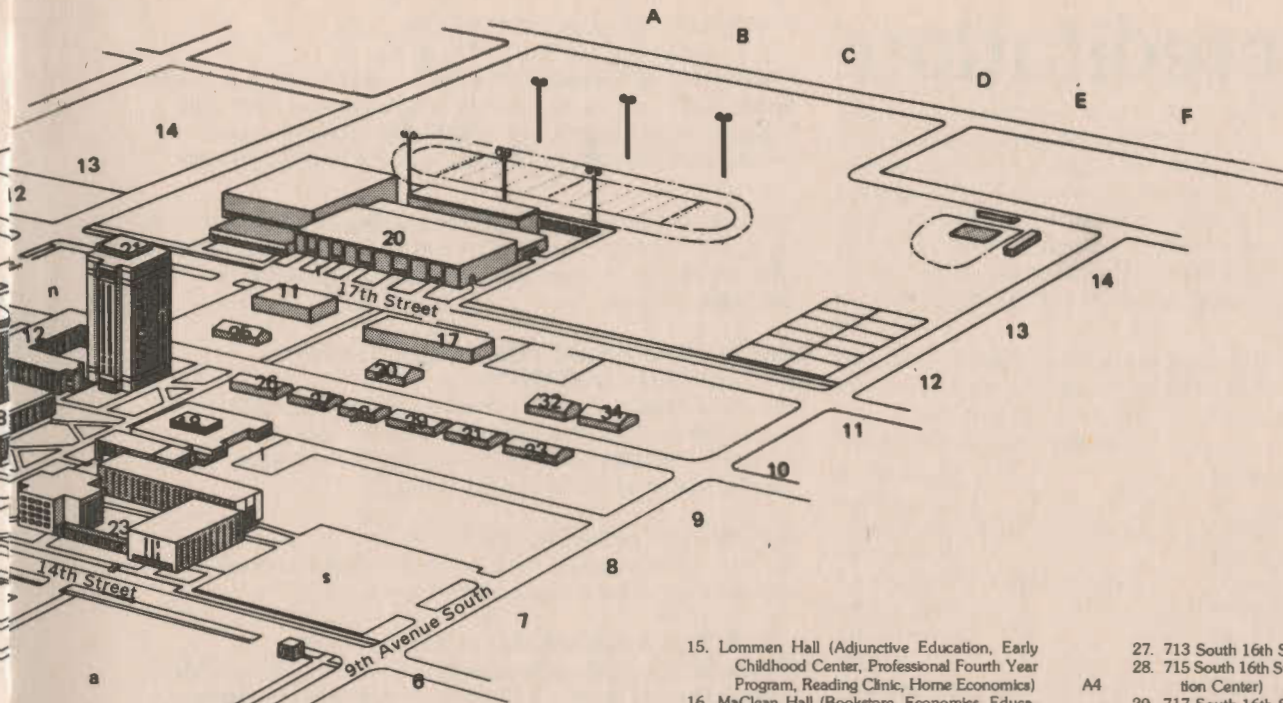
Radio Station
Registration
Residence Halls
Sports
Student Activities
Student Advisers
Student Conduct
Student Government
Student Services
Student Teaching
Student Union
Summer Sessions
Theatre
Tri-College University
Transfer Policies
Workshops

For Assistance in contacting any individual or office, dial the **Campus Operator** at 218-236-2011.

Livingston Lord Library 236-2922
Director 236-2954
News Bureau 236-2555
Academic Affairs 236-2181
Student Personnel 236-2171
Director 236-2101
Placement Office 236-2131
Post Office 236-2205
Office of the President 236-2243
Supervisor 236-2239
College Relations Office
236-2555
KMSC 236-2115
Registrar 236-2161
Director of Housing 236-2118
Sports Information 236-2622
Activities Office 236-2173
Flora Frick 236-2282
Student Personnel 236-2171
Student Senate 236-2150
Student Personnel 236-2171
Student Teaching Office 236-2612
Student Union Office 236-2261
Academic Affairs 236-2762
MSC Box Office 236-2271
Academic Affairs 236-2762
Admissions Office 236-2161
Academic Affairs 236-2762

Campus Map





FACILITY

- 1. Ballard Hall (Residence Hall, Housing Office)
- 2. Biology Hall (Biology)
- 3. Bridges Hall (Business, Geography, Mathematics, Philosophy, Planetarium, Psychology and Theatre)
- 4. Center for the Arts (Art, Music, Speech and Theatre)
- 5. Comstock Memorial Union (Student Activity Center)
- 6. Dahl Hall (Residence Hall, Student Health Center)
- 7. Frick Hall (Counseling Center, Computer Center, Computer Science, Printing and Duplicating, Student Advisers' Office)
- 8. Grantham Hall (Residence Hall)
- 9. Grier Hall (Speech Pathology and Audiology)
- 10. Hagen Hall (Chemistry, Industrial Education, Physics, Pre-Engineering)
- 11. Heating Plant
- 12. Holmquist Hall (Residence Hall)
- 13. Kise Commons (Dining Hall)
- 14. Livingston Lord Library (Audio-Visual Center, Library)

- 15. Lommen Hall (Adjunctive Education, Early Childhood Center, Professional Fourth Year Program, Reading Clinic, Home Economics)
- 16. MacClean Hall (Bookstore, Economics, Education, Foreign Language, History, Mass Communications, Minority Group Studies, The Forum, Political Science, Sociology-Anthropology)
- 17. Maintenance Building (Motor Pool, Receiving, Shops)
- 18. Murray Commons (The New Center)
- 19. Nelson Hall (Residence Hall)
- 20. Nemzek Complex (Health, Physical Education, Recreation, and Fieldhouse, Athletic Fields)
- 21. Neumaier Hall (Residence Hall)
- 22. Owens Hall (Administration Building: President's Office, Academic Affairs, Administrative Affairs, Admissions and Records, Business Office, Educational Relations — News Services and Publications, Financial Aid, Foundation-Development and Alumni, Graduate Studies, Placement, Post Office, Registrar, Student Employment Center, Student Personnel Services)
- 23. Snarr Hall Complex (East, South and West) (Residence Hall)
- 24. Weld Hall (English, Humanities, Regional Television Center)
- 25. 706 South 16th Street (Harbor School Day Activity Center)
- 26. 711 South 16th Street (Social Services Department)

- 27. 713 South 16th Street (Project EMPATHY) D10
- 28. 715 South 16th Street (Region C Drug Information Center) D10
- 29. 717 South 16th Street (Clay County Developmental Activity Ctr) D10
- 30. 722 South 16th Street (Cultural Center) D10
- 31. 811 South 16th Street (Min-Dak Area Health Planning Center) E10
- 32. 812 South 16th Street (Music Department Annex) E10
- 33. 817 South 16th Street (Day Care Center) E10
- 34. 818 South 16th Street (Music Department Annex) E10

PARKING LOTS

- a. Residents and Commuters F5
- b. Residents D5
- c. Faculty and Staff Zone Permits E4
- d. Residents A8
- e. Residents and Commuters A9
- f. Faculty and Staff Zone Permits F1
- g. Faculty and Staff Zone Permits F2
- h. Faculty and Staff Zone Permits A2
- i. Faculty and Staff Zone Permits A2
- j. Faculty and Staff Zone Permits E8
- n. Residents and Commuters A11
- r. Faculty and Staff Zone Permits C11
- s. Residents and Commuters F7
- v. Visitors F1

Accreditation

NORTH CENTRAL ASSOCIATION

Undergraduate Program. Moorhead State College 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 College is accredited by the North Central Association of Colleges and Secondary Schools to offer the Master of Science and the Master of Science in Education Degrees.

NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION

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

COUNCIL ON SOCIAL WORK EDUCATION

Moorhead State College is accredited by the Council on Social Work Education to offer a Bachelor of Arts in Social Services.

NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC

Moorhead State College's music department is accredited by the National Association of Schools of Music.

Academic Programs

Baccalaureate Degrees. The four-year degrees available from Moorhead State College include the Bachelor of Arts and the Bachelor of Science. Each requires the completion of 192 quarter credits of satisfactory college courses, including 60 credits in general studies, from 48 to 96 credits in a major concentration, and the remainder in electives. No minor is required, although students may choose from more than 60 possible minor programs. Information about the general studies requirement may be found in the Academic Information Section and requirements for the various majors and minors are listed under their respective headings in the section of the catalogue titled "Departments of Study."

Liberal Arts Majors. An increasing number of students at Moorhead State College are enrolling in liberal arts major programs. Following is a list of baccalaureate majors available in the liberal arts and sciences:

Accounting	Industrial Technology
Anthropology	Latin American Studies
American Studies	Management Science
Art-Ceramics	Manual Arts Therapy
Art-Graphic & Applied Design	Marketing
Art-Printmaking	Mass Communications
Art-Sculpture	Mathematics
Biology	Medical Technology
Business Administration	Music-Piano
Chemistry	Music-String Instruments
Computer Science	Music-Theory
Economics	Music-Vocal
English	Music-Wind Instruments
Finance	Philosophy
French	Physical Education
Geography	Physics
German	Political Science
Health Education	Psychology
History	Social Services
Hotel Management	Sociology
Individualized Major	Spanish
Industrial Education	Speech Pathology-Audiology
Industrial Illustration	Speech-Rhetoric and Public Address
	Speech-Theatre

Education Degrees. Bachelor of Science degrees with teaching majors are offered as preparation for teaching at the elementary and secondary levels. Students in Elementary

Academic Programs

Education will select a minor area of concentration or specialization, while Secondary Education majors will be in specific academic areas as follows:

Teaching Majors

Anthropology (Social Studies)	Latin American Studies
Art Education	Mathematics
Biology	Music-Broad
Business Education	Music-String Instruments
Chemistry	Music-Vocal
Distributive Education	Music-Wind Instruments
Earth Science	Physical Education
Economics (Social Studies)	Physics
Elementary Education	Political Science (Social Studies)
English	Psychology
English-Speech	Sociology (Social Studies)
French	Spanish
Geography (Social Studies)	Special Education
German	Speech-Pathology and Audiology
Health Education	Speech-Rhetoric, Address, and Theatre
History (Social Studies)	Vocational-Technical Education
German	
Health Education	
History (Social Studies)	
Industrial Education	

Pre-Professional Studies. Many Students find it convenient to complete the first few years of professional study at Moorhead State College before transferring to other institutions for advanced specialization. They are assigned to faculty advisors with knowledge of such fields who work closely with both the students and those schools where training will continue after transfer. The following specific programs have been developed which will assure students of adequate preparation for continued study:

*Agriculture	Medicine
*Architecture	Meteorology
Chiropractory	Mortuary Science
Dentistry	Nursing
*Engineering	Optometry
Foreign Service	*Pharmacy
Forestry	Veterinary Medicine
*Geology	Wild Life Management
Government Service	
*Home Economics	
Law	

***Coopeartive Degree Programs.** In cooperation with North Dakota State University, Minnestoa residents can take the first

three years of the six starred programs (two years in Pharmacy) at Moorhead State College before transferring to NDSU to complete their degree. The major advantages of this arrangement are that Minnesota residents can pay instate tuition while pursuing degrees in these special areas, and that students can begin their professional work immediately, rather than wait until the third year.

Two-Year Associate in Arts. Moorhead State College offers several terminal programs of study leading to the two-year Associate in Arts (A. A.) Degree. Each requires 96 credits for completion, but the programs are so designed that the student may continue to study for a baccalaureate degree if his educational plans change. The curriculum will usually include a combination of general studies courses with one area of specialization. Required courses are listed under their respective Departments of Study for the following A. A. programs:

Accounting	Marketing
Business Management	Secretarial Services
Early Childhood Education	Industrial Technology (Technical Aid)
Home Economics	Vocational-Technical Education
Liberal Arts	

Graduate Studies. Graduate students at Moorhead State College may earn the Master of Science with a major in Biology or Chemistry, or the Master of Science in Education with majors in Counseling and Guidance, Elementary Administration, Elementary Teaching, School Psychology, Remedial Reading, or Secondary Teaching. The Secondary Teaching major requires specialization in one of the following areas:

Art	Industrial Education
Biology	Mathematics
Business Education	Music
Chemistry	Social Studies
English	Speech-Pathology-Audiology
Health-Physical Education-Recreation	Speech-Theatre

Applicants should begin the admission process at least two months before enrolling for graduate studies. College graduates may be admitted to a degree program if they have an undergraduate grade point average of 2.75 (on a 4-point scale) or better and a score of at least 500 on the Verbal portion of the Graduate Record Examination (GRE). Conditional admission may be permitted if at least one of these requirements has been met.

Complete information on graduate programs is provided in a

separate Graduate Bulletin, available from the Moorhead State College Office of Graduate Studies, which will also answer any inquiries.

Fifth Year Programs. The Fifth Year Program in teacher education provides opportunity for individualized studies beyond the baccalaureate degree without meeting all requirements for a master's degree candidacy. The program is designed to serve the following purposes:

1. To strengthen the teacher's preparation in his major field or area of concentration.
2. To broaden the teacher's liberal arts background.
3. To provide opportunity for new or additional specialization.
4. To enable the teacher to pursue at least part of his studies at the graduate level.

Policies and requirements are given in the Graduate Bulletin, and candidates should confer with the Director of Fifth Year Studies. Admission requires (A) a bachelor's degree in education from an accredited institution, and (B) a teacher's certificate valid in the state where the applicant teaches.

Certification Programs. Many persons who have previously earned degrees enroll at Moorhead State College in programs that will provide professional certification in various fields of education. Upon completing one of these programs, the student should apply for certification through the Office of the Registrar. If the certification 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 certification may earn a Bachelor of Science degree from Moorhead State College or qualify for certification by following the procedures given in the section on Education programs.

Certification in Special Fields. Certificates for several specialties in education can be earned by persons who hold valid teaching certificates. Such certification is made by the State of Minnesota on recommendation by the College after completion of a program specified by the State Department of Education. Study for certification 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 certification programs are offered at Moorhead State College:

Coordinator of Audio Visual Education

Director of Audio Visual Education
 Elementary Remedial Reading Teacher
 Kindergarten Teacher
 Media Generalist
 Nursery School-Day Care
 Public School Athletic Coach — Men
 Public School Athletic Coach — Women
 Public School Librarian
 Reading Consultant and Supervisor
 School Psychologist I
 Secondary Remedial Reading Teacher
 Secondary Developmental Reading Teacher
 Special Learning and Behavior Problems Teacher
 Teacher of Driver Education
 Teacher of Emotionally Disturbed
 Teacher of Educable Mentally Retarded
 Teacher of Speech Correction
 Teacher of Trainable Mentally Retarded

Because of variations in specific requirements for each certificate, candidates should first contact the Education Department for information and continue to work closely with an advisor.

Common Market. Moorhead State College cooperates with the six other state colleges in a state-wide exchange program called the Common Market. Under this program students from any of the state colleges may enroll at any other state college and receive full academic resident credit at their home college. Further information about this program can be obtained from the Office of Academic Affairs or the Office of the Registrar.

Tri-College University. Moorhead State College belongs to a cooperative arrangement with Concorida College (Moorhead) and North Dakota State University (Fargo), through which students from one college may take courses at the other colleges without paying any additional tuition or fees. TCU also sponsors the Humanities Forum under a \$500,000 grant from the National Endowment for the Humanities. The Forum offers students from the three colleges, as well as members of the community, a unique program of full-time study in the Humanities. A central theme is selected for each quarter. Students may also work on individual projects.

MSC-NDSU Exchange. An expanded range of opportunities is available to Moorhead State College students under an exchange agreement between NDSU and MSC. In this agreement, students pursuing majors in "Covered Programs" (degree program available on but one of two campuses) may register at the home

institution for the first three years of the program, enjoying unlimited exchange privileges, transferring for the last year to the degree-granting institution. This agreement allows MSC students to complete the first three years of programs in Engineering, Architecture, Agriculture, Home Economics, and Geology, and the first two years of a Pharmacy program while registered at Moorhead State College.

SPECIAL PROGRAMS

Common Market Quarter-In-Washington. Moorhead State College, 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 capitol. Students may spend a quarter in Washington during either their junior or senior year, while maintaining their enrollment here. For further information contact the Political Science Department.

Individualized Major. A student who wishes to develop his own multi-disciplinary major built around a theme of his choice may do so with the help of his advisor and the Office of Academic Affairs. An Individualized Major consists of at least 70 credits of which at least 30 must be in a single department. The plan for such a major must be approved by the Vice President of Academic Affairs five quarters previous to graduation. The student must have completed at least 70 upper division (300 or 400 level) courses, but these need not be all in his individualized major. An Individualized Major is particularly appropriate for a student whose interests and time do not fit one of the traditional majors and whose occupational plans do not require one.

Examples of Individualized Majors in Criminal Justice and Humanities are given under Individualized Majors in the *Departments, Curricula, and Courses* section of this catalogue.

The New Center for Multidisciplinary Studies — A "College Within the College". The New Center, which opened in September, 1972, offers two year career-oriented programs designed especially for students who wish to attend Moorhead State College and who seek career preparation opportunities which do not necessarily require a four-year preparation. Special features of the New Center include admission based primarily on the student's interests in the Center's program rather than on his or her academic rank or test scores, special multidisciplinary courses based on student needs, non-competitive grading system, and especially chosen multidisciplinary faculty. See also Multidisciplinary Studies in the section on *Departments, Curricula, and Courses*.

External Studies. Moorhead State College now has an alternative route in its bachelor's degree program especially designed for people in the community or region who are at least 25 years of age and whose commitments preclude regular attendance on college campuses. This program, offered through External Studies, joins the college to the community by making educational opportunities available to many more community people through individualized instruction, independent study, and off-campus teaching. And it joins the community to the college by bringing into academic studies people who can share new perspectives gained through career or community service experiences.

The college 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 can be a traditional major or can be individualized to meet personal needs and goals.

Details are listed in the Academic Information Section of this Bulletin. Further information may be obtained by writing to the Learning Consultant in care of the External Degree Program.

SOC — Four-Year Servicemen's Opportunity College. In recognition of the unique educational problems confronting many active-duty service men and women in obtaining their educational goals, M.S.C. has adjusted its policies to be responsive to the needs of service people before, during, and after their enlistment. Further information is available from the Admissions Office.

National Student Exchange. Moorhead State College holds membership in the National Student Exchange, a cooperative relationship between some twenty schools from Maine to Hawaii, Minnesota to Florida. Through the NSE students may spend either their sophomore or junior year (or one or two quarters of either year) in residence at a participating college as an exchange student. The largest single benefit to the student is the privilege of paying tuition at the in-state rather than out-of-state rate. Normal application deadline to accomplish exchanges for the year following is March 1. Inquiries should be made at the Academic Affairs office.

FOREIGN STUDY OPPORTUNITIES

Internship Abroad Program. This unique program permits students to broaden their cultural backgrounds and to test their skills by working with professionals on the world's major social, cultural, educational and economic problems. Students have an unusual opportunity to examine career choices in such

international areas as U.S. government agencies, American businesses abroad and foreign business concerns.

Student Teaching Abroad Program. Arrangements have been made for a number of American student teachers to be assigned to schools in foreign countries. Schools located in Africa, Asia, Europe, South America, and Australia are participating in the program.

Common Market Mankato International Center in London. In cooperation with Mankato State, Moorhead State students may enroll in British studies classes in London for a single quarter or an entire school year. In addition to the normal course work, individual travel is encouraged with additional credit for this experience available. Further information is available from the Registrar's Office.

Independent Study Programs. There are foreign study opportunities at colleges and universities throughout the world. These opportunities are open to students who want the experience of living and learning in another culture. Students should contact the Registrar's Office before beginning their foreign study to determine possible credit arrangements.

Glee Club 1906-07

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Facilities and Services

Campus Visits. Prospective students or any other interested persons are invited to visit the Moorhead State College campus at any time. Campus tours and interviews may be scheduled with the Office of Admissions, which is open Monday through Friday.

Residence Halls. Moorhead State College has a residence hall capacity of approximately 2125 students. Each of the nine halls is designed in floor units of 25 to 40 students under the direction of a student resident assistant.

Room furnishings include draperies, mattress pads, pillows, lamps, and all necessary furniture, including telephone. Students provide only linen, blankets, towels, 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 approximate student capacity:

Ballard Hall (1950) 175

Dahl Hall (1958) 300

Snarr Hall (1963—19) 500

Grantham Hall (1965) 200

Nelson Hall (1966) 400

Holmquist Hall (1969) 200

Neumaier Hall (1971) 350

No campus housing is provided for married students.

All residence hall accommodations must include both housing and meals. Uniform rates for Minnesota State Colleges are established by the Minnesota State College Board. Information about housing reservations and policies is given under *Financial Information* and *Student Information*.

Dining Facilities. The College offers complete cafeteria service to students and faculty in Kise Commons, opened in 1963 and expanded in 1967. All meals are provided to students living in campus residence halls. Off-campus students, faculty members, college visitors, and guests are invited to use the dining facilities, also, and meal contracts are available to off-campus students. Kise Commons includes a main dining room seating 750 and two small conference dining rooms.

College Union. The initial phase I of Comstock Memorial Union was completed in 1967 with a major phase II addition completed in 1972 at a total investment of two and a half million dollars.

Comstock Memorial Union is the community center of the college

and is an integral part of the educational purpose of the college, sharing goals of academic and personal development and providing cultural, social, and recreational programming. It has the following facilities: six lounges, ten meeting conference rooms, the campus recreation center, a multipurpose ballroom, snack bar, coffee house, gift and school supply store, organization activities space, art gallery and special offices for the campus radio station, student newspaper, student senate, and student union programming board.

Audiovisual Center and Television Studio. The Audiovisual Center, located on the main floor of Livingston Lord Library, provides services such as ordering instructional films, providing audiovisual equipment for instructional use and the repair and maintenance of this equipment, production of instructional materials such as two-by-two slides and transparencies for overhead projectors, taking and processing photographs, production and duplication of recordings on magnetic tape, and the production of video tapes. Equipment to project 16mm sound film is stored throughout the campus and, in general, there is one projector on each floor of each classroom building.

In 1968, Moorhead State College obtained a grant from the State of Minnesota to equip a Regional Television Production Center located in Weld Hall. This Center is used not only by the faculty of this college, but also by the faculties of other Minnesota colleges and post-high school educational institutions.

College Bookstore. The Moorhead State College Bookstore, expanded and remodeled in 1973, is located on the first floor of MacLean Hall's east wing. Operated by a faculty-student board, the bookstore sells textbooks and supplies for all college classes as well as a wide range of scholarly and popular books, magazines, novelties, student supplies, and miscellaneous items.

Veterans' Office. The Veterans' Office, located in Owens 107, provides veterans' counseling, GI Bill certifications, tutorial assistance, and is concerned with recruiting veterans and veterans' dependents.

Athletic, Health, and Physical Education Facilities. Alex Nemzek Hall and athletic fields were dedicated in 1960. A major addition doubling the size of the original building was completed in 1971. The total Nemzek Complex is valued at three and one half million dollars and houses facilities for athletics, men's and women's physical education, health education, recreation, and other related activities. Some of the major components of the building are a 4,500-seat fieldhouse with indoor track, a six-lane olympic style swimming pool, five gymnasiums, a dance studio,

handball courts, classrooms, laboratories, offices, and supporting rooms. Outdoor facilities include a stadium and lighted football field, baseball fields, a track, tennis courts and space for educational and recreational activities.

Science Facilities. Rapid expansion of the sciences at Moorhead State College prompted the construction of Hagen Hall, completed in 1962, and a new biology building, finished in 1970. Hagen is the home for chemistry, physics, and industrial arts and technology, with complete laboratory, classroom, office, and research facilities. The new biology building features the most modern concepts for study and research, including greenhouses, animal rooms, culture room, herbarium, study-museum, and laboratories.

Counseling and Personal Growth Center. The Counseling and Personal Growth Center provides a setting in which a student may discuss with a counselor any concern which may be important. 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 to students include individual counseling, interaction groups, vocational exploration groups, vocational and personality testing, and a comprehensive career library containing occupational and educational materials. The Center staff also provides services to faculty and the college community. For further information or appointments, visit or call the Counseling and Personal Growth Center (236-2227).

Livingston Lord Library. Dedicated in 1961 with a major addition that doubled its size in 1970, Livingston Lord Library now shelves approximately 200,000 volumes with a maximum future capacity of 250,000 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 seating 210 for large classes, public lectures, and film showings. Other facilities include microform collections and reading equipment, government document collection, copying equipment, listening and viewing equipment with collections of audio-visual materials, typing room, and small conference rooms. Interlibrary cooperation (the Tri-College University and MINITEX are the major examples) makes the collections of other libraries readily available to students.

Computer Services. The college maintains a Computer Services Department in which a Honeywell tape/disk computer system is available on-site for academic, research, and administrative applications. By using the on-site computer system as a terminal, the college also has access to either of two Univac 1106 systems

through telephone lines and communications equipment. Faculty, staff, and students also have access via teletype terminals to a large timesharing computer system located in Minneapolis.

The President's Club. Membership in The President's Club, an integral part of the Moorhead State College Foundation, is by invitation upon election by the Board of Directors of the MSC Foundation. The President's Club is the President's "right arm" in many of the programs, plans, and goals in the development of Moorhead State and has been organized for the purpose of encouraging and fostering support of the College in areas not covered by State funds. Members have given or pledged at least \$2500 for the scholarship program or other needs of the college.

Alumni Association. The purpose of the Alumni Association is twofold: to promote the welfare of the college and to provide services for alumni.

All graduates of Moorhead State College and all former students who have attended Moorhead State College for at least one year may be members of the association. The association is governed by an elected board of 20 directors and five officers.

Activities of the association include providing scholarships to MSC students, helping promote the college in general, organizing reunions and other alumni events such as homecoming, and publishing and distributing the quarterly *Alumnews*. There are no membership dues in the MSC Alumni Association; continuing contributions are solicited.

The alumni Office also maintains a list of all alumni on record and an active mailing list of those who keep their addresses current. Former students are urged to send notices of any changes of address, and to provide information concerning other former students. All inquiries and contributions should be addressed to MSC Alumni Association, Moorhead State College, Moorhead, Minnesota 56560.

Moorhead State College Foundation, Inc. Incorporated in January, 1970, the Foundation serves as the "umbrella" for all development, fund raising, and alumni and parents programs of the College. Headed by a board of 24 officers and directors (business and professional leaders, faculty, administration, alumni and parents) the Foundation coordinates all MSC fund raising and acknowledgment of gifts and grants. Principal goal is scholarship contributions secured through the annual Alumni Fund, the Parents Support Program, and direct solicitation of all other friends of the College — individuals, companies, foundations, etc.

Achievement Center and Reading Clinic. Moorhead State

College maintains an achievement center as a service to the community. 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, ability, aptitude, and learning disabilities testing is available.

Speech and Hearing Clinic. The Speech and Hearing Clinic provides services to students, faculty and staff members and their families, and children and adults from the local community and surrounding area. These services include detailed diagnostic evaluations, consultation and therapy, and referral to other agencies as individual needs are indicated. The Speech and Hearing Clinic is located in Grier Hall. Inquiries concerning the Clinic and its services should be addressed to: Director, Speech Pathology and Audiology, Moorhead State College.

Center for the Arts. The Departments of Art, Music and Speech-Theatre occupy the Center for the Arts, which was dedicated in 1967. The building includes a 900-seat auditorium, a seven-story stage area, an 80-foot art gallery, 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, and graphics. 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 College Theatre, the Straw Hat Players summer season, and the College Opera Workshop.

Placement Bureau. The Moorhead State College Placement Bureau assists students in locating appropriate positions in education, business, industry and government service. It offers a convenient and efficient means of providing employers and prospective employees an opportunity to meet and discuss various job positions and also provides prospective employers with the credentials of applicants. This service is available to current graduates and alumni.

A registration fee of \$10 per year is required for Placement Bureau service. An individual is entitled to recommendation service, forwarding of credentials to prospective employers, and other services, for one calendar year after the receipt of this \$10 fee. This fee must be paid prior to the sending of the first set of credentials to a prospective employer. Upon the expiration of this period, no service is provided until the payment of another \$10 fee, which will again cover service for a period of one year dating from the receipt of the payment.

Every current graduate is advised to have a permanent confidential file on record in the Placement Bureau. Students who expect to graduate in December, March, June, or August are requested to activate their files by the preceding October. Successful experience improves the possibilities of advancement, and the Bureau's many contacts enable a graduate to learn of opportunities he might not otherwise encounter. Graduates are therefore strongly advised to bring their records up-to-date each year.

EOMS (Educational Opportunities for Minority Students). EOMS is a program of financial and academic assistance to Afro-American, American Indian, and Mexican-American students. The program makes use of available federal financial

aids and grants from the local "EOMS Fund". Tutoring, advising, and counseling are provided. Inquiries should be made to the Director of EOMS, Moorhead State College.

Planetarium. The new Planetarium, located in Bridges Hall, is a classroom which contains a Spitz Space System 512. This system projects thousands of stars, the sun, the moon, the planets, and several other celestial objects on the domed ceiling. Various auxiliary projectors and other equipment are used to produce a variety of additional effects which lend realism and atmosphere to the program.

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



Old Main & Addition-1907

Admission to College

ADMISSION PROCEDURES

Freshman Applicants

1. Complete the Minnesota College Admission Form, available from the high school or from the Moorhead State College Office of Admissions.
2. Bring the admission form and the \$10 application fee to your high school principal or counselor, who will complete the application and submit it to the college. (Applicants for the New Center see information under Programs and Curricula)
3. Take **one** of the following examinations: American College Test (ACT), Scholastic Aptitude Test (SAT), Preliminary Scholastic Aptitude Test (PSAT).

Transfer Applicants

1. Secure a transfer application from the Office of Admissions and submit the completed form along with the \$10 application fee.
2. Request the registrar of **each** previous college to forward an official transcript of credit **directly** to the Office of Admissions.

FRESHMAN ADMISSION GUIDELINES

For Minnesota and North Dakota (the two states have a reciprocal admissions policy):

1. **Either** rank in the upper half of your high school graduating class OR
2. Achieve a composite standard score of 20 or better on the American College Test (ACT), OR equivalent scores on the Scholastic Aptitude Test (SAT), OR the Preliminary Scholastic Aptitude Test (PSAT). Meeting one of the guidelines, 1 or 2, is sufficient for admission.
3. Students who do not meet either standard may apply and will receive individual consideration if they can provide other evidence of college ability.
4. High school seniors should apply before March 1 if they plan to seek financial aid. Application may be made any time in the senior year.
5. Following admission, each student will receive a health history form and application for housing and food services.

From other States

1. Minimum admission guidelines: (A) ranking in upper 40 percent of the high school graduating class OR (B) achieving a

composite standard score of 22 or better on the American College Test, OR equivalent scores on the Scholastic Aptitude Test (SAT), OR the Preliminary Scholastic Test (PSAT).

2. Students who do not meet either standard may apply and will receive individual consideration if they can provide other evidence of college ability.
3. All other requirements and procedures are the same as for Minnesota and North Dakota residents.

Transfer Student Admissions

1. Students transferring from another college must have a cumulative grade point average of "C" or better in all previous college studies (2.0 or above when "A" is assigned a 4.0 value).
2. Students who have completed fewer than 32 quarter credits must follow requirements and procedures for freshman applicants in addition to submitting college transcripts and meeting transfer requirements.
3. A transfer student who applies with less than "C" average will receive instructions for submitting an appeal to the Committee on Admission and Retention. If accepted on probation, he must earn at least 12 credits and maintain a "C" average in the first quarter of enrollment.
4. Applications for transfer admission with advanced standing are available from the Office of Admissions.
5. For additional information about transfer of credits, see **Academic Information**.

Foreign Students

1. Prospective undergraduate students should address their inquiries to the Foreign Student Advisor, Moorhead State College.
2. Students from nations where English is not the native language will be required to produce evidence of their English proficiency.
3. Each foreign student's credentials will be evaluated to determine his academic eligibility for enrollment at Moorhead State College.

Special Students

1. Persons who do not plan to seek degrees from Moorhead State College may enroll by meeting appropriate entrance requirements as listed above. Students enrolled at other colleges may be admitted as special students by submitting a waiver of transcript form, available from the Office of Admissions.
2. If such students decide later to enter a baccalaureate program

at Moorhead State College, they may do so by completing any remaining requirements.

Special Advanced Standing (High School)

1. Students of extraordinary ability who have not finished high school may enroll in college courses by (A) submitting a completed Minnesota College Admissions Form, (B) enclosing a statement from their high school principal granting permission to attend college courses, and (C) paying the application fee.
2. Any credits so earned must be in addition to studies required by the high school for graduation.
3. Official credit by the College will be deferred until after high school graduation.

Special Circumstances

1. Adults, including veterans, who did not finish 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.
2. Other special arrangements may be made in exceptional circumstances by the Director of Admissions.

Summer Only Admissions

1. High school graduates or students from other colleges may be admitted to Summer Sessions only by submitting a special application form available from the Office of Admissions and paying the application fee. No transcripts will be required.
2. If such persons decide later to enroll as full time students, they must complete the usual admission process without paying an additional application fee.

Application Deadlines

1. Deadlines for admission are: Fall, August 15; Winter, November 8; Spring, February 15.
2. Applications may be accepted past these deadlines at the option of the College.

Readmission

1. Former students of Moorhead State College, including those who have enrolled for off campus courses, are not required to submit another application when they return to the College.
2. Those who began off campus study in 1965 or later must pay the \$10 application fee if they have not already done so.
3. Returning students are requested to notify the Office of the Registrar of their intent to enroll. A Readmission Statement must be obtained from the Registrar's Office and be filed in the student's record before the readmission process is complete.

Non-Discrimination Policy

1. The admission policies at Moorhead State College forbid discrimination on the basis of race, color, creed, sex, or national origin.
2. The College actively solicits the enrollment of students from minority cultures.



First Football Team - 1900



Maclean Hall - 1930's

Student Information

Student Personnel Services

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

Council on Student Affairs

The Council on Student Affairs, composed of students and faculty members is advisory to the President of the College regarding student policies and activities.

Student Adviser Program

The Student Adviser Program supplements the faculty advising program. About 30 upper-division students, nominated by their major departments, are appointed to assist students, particularly freshmen, take advantage of all the opportunities at Moorhead State College. Student advisers work through their departments and also sponsor a Student Information Center, located in Flora Frick Hall. Students interested in applying for student adviser positions should contact the chairman of their major department or the Office of Academic Affairs.

Student Activities

1. In addition to numerous activities related to academic study, various campus agencies provide opportunity for extra-curricular participation by the students at Moorhead State College.

2. *Intercollegiate Athletics* provides competition in the following sports through membership in the Northern Intercollegiate Conference and the National Collegiate Athletic Association:

Football	Gymnastics
Basketball	Wrestling
Track	Golf
Baseball	Tennis
Cross Country	

3. *Women's Intercollegiate Athletics*, by cooperation of WRA and the Women's Physical Education Department, provides competition with other area colleges in the following sports:

Field Hockey	Tennis
Volleyball	Basketball
Golf	Gymnastics
Track and Field	Badminton

Student Information

4. *Speech-Theatre* activities include the following:

Debate	MSC Theatre
KMSC Radio	Straw Hat Players
Forensics	Readers Theatre

5. *Music Organizations*, providing campus concerts and off-campus tours, include:

Concert Band	Opera Workshop
Orchestra	Concert Choir
Stage Band	Varsity Choir
Vocal Ensembles	Women's Chorus
Instrumental Ensembles	Sonics Workshop
Symphonic Wind Ensemble	Collegium Musicum

6. *Comstock Memorial Student Union* conducts a regular program of weekly events:

Film-Lecture Series	Art Exhibits
Movie Series	International Film Series
Bowling	Billiards
Ice Skating	Concert Dances

7. *Center For The Arts* is the site of photographic and art exhibits, music recitals and programs, the annual Series for the Performing Arts with nationally known artists, and the summer Challenge of Ideas lecture series.

8. *Women's Recreation Association* sponsors intramural athletic activities for all women on campus, including the following sports:

Golf	Tennis
Badminton	Softball
Bowling	Volleyball
Basketball	Archery
Modern Dance	Field Hockey
Gymnastics	Track and Field
Swimming	

9. *Intramural Athletics* for men include competition in the following sports:

Flash Football	Golf
Volleyball	Wrestling
Softball	Basketball
Paddle Ball	Indoor Track
Tennis	Outdoor Track
Bowling	Badminton

Student Organizations

1. *Residence Hall Student Government Associations*:

Ballard Hall	Nelson Hall
Dahl Hall	Neumaier-Holmquist Complex
Grantham Hall	Snarr Hall

2. *Social Fraternities*:

Interfraternity Council	Old Order of Owls
Sigma Tau Gamma	Phi Sigma Epsilon
Tau Kappa Epsilon	

3. *Social Sororities*:

Panhellenic Council	Delta Zeta
Alpha Delta Pi	Gamma Phi Beta
Alpha Phi	

4. *Department and Service Clubs*:

Administrative Management Society	American Chemical Society
Alpha Phi Omega	Social Services Club
Blackfriars (Dramatics)	Orchesis (Modern Dance)
Circle K (Kiwanis)	Psychology Club
Academy of Science	Sociology Club
German Club	SPURS (Service)
Le Cercle Francais	Student National Education Association
Club Hispanico	Student Wives Club
Geography Club	Veterans Club
Norwegian Club	MSC Student Chapter for Exceptional Children
Business Student Association	Women's Health and Physical Education Club
Mathematics Club	Anthropology Club
Association for Computing Machinery	

5. *Honorary Societies*:

Alpha Lambda Delta	Phi Eta Sigma
Delta Mu Delta	Pi Omega Pi

6. *Professional Fraternities*:

Iota Alpha (Industrial Arts)	Phi Mu Alpha Sinfonia (Music-Men)
Gamma Theta Upsilon (Geography)	Sigma Alpha Eta (Speech and Hearing)
Kappa Delta Pi (Education)	Sigma Alpha Iota (Music-Women)
Mu Sigma Beta (Broadcasting)	Delta Pi Delta (Continuing Education for Women)
Pi Kappa Delta (Forensic-Debate)	

7. *Religious Organizations*:

Baha'i Ideals Group	Inter-Varsity Christian Fellowship
Campus Crusade for Christ	Lutheran Student Foundation
Canterbury Club (Episcopal)	Newman Foundation (Roman Catholic)
Christian Science	United Campus Ministry
Gamma Delta (Missouri Synod)	New Age Pioneer

8. Special Interest Organizations:

American Indian Association	International Meditation Society
Chess Club	Ski Club
International Students Club	Women's Recreation Association
"M" Club (Athletic Lettermer	Young Democratic-
	Farmer-Labor
Young Republicans	United Black Students
Minnesota Association of the	Women's Liberation Organization
Distributive Education Clubs	MSC-Square Dance Club
of America	New American Movement
Raisin Flake Club	Minority Student Coalition

Parking and Traffic Regulations. All motor vehicles driven or parked on the campus must be operated in conformity with the official published Parking and Traffic Regulations of the College. Authority to regulate traffic on campus is granted under Minnesota State Statute 1969, 169.966.

All vehicles must be registered and bear a current parking permit which may be purchased in the Office of Administrative Affairs, Room 206, Owens Hall. Parking rates are \$9.00 for students and \$12.00 for faculty and staff for the year. Rates are subject to change.

Housing Policies

1. Except by permission of the Vice President of Student Affairs, all freshmen are expected to live in the college residence halls.
2. General exceptions to the residence hall requirements are made for (A) students whose homes are within commuting distance, (B) students who arrange to live with responsible local relatives, and (C) married students.
3. Housing reservation forms are mailed to all students following their admission to the College and are also available from the Housing Office.
4. Off-campus students are required to give notification of any change of address or telephone number to the Office of Student Personnel Services.

Housing and Dining Contract

Following is the Moorhead State College Housing and Dining Contract for 1974-75.

1. The College agrees to assign and lease accommodations in one of the residence halls and provide room and board (21 meals per week) for the academic year. Students who make arrangements for living in the residence halls obligate themselves for the full year (three quarters or the remainder thereof), except for official withdrawal from college or if they have completed the equivalent of three academic quarters. Students who have

completed three academic quarters will have a quarter contract for room and board. This contract is automatically renewed upon occupancy the succeeding quarter of the academic year. The College reserves the right to make and alter room assignments. The College cannot guarantee a room assignment if not claimed on the day classes begin. The Residence Halls and Dining Services are officially closed during Thanksgiving, Christmas, and Spring vacations, and rental payments do not cover these periods. The College reserves the right to use student rooms during vacation periods.

2. The board and room rate is \$331 per Quarter for double occupancy or \$366 per Quarter, for single occupancy, subject to change without notice by the State College Board. Room without board (juniors and seniors only) is \$161 per quarter for double occupancy or \$206 per quarter for single occupancy. This is not applicable to summer sessions. The board and room charges are due and payable in advance at registration time. Students may make contractual arrangements with the Business Office for deferred payments. Failure to meet these obligations will result in suspension from classes.

3. A \$25.00 check or money order payable to Moorhead State College must accompany application. The reservation may be cancelled with refund of the deposit if the cancellation is received by the College no later than August 15 for the fall quarter or not later than two weeks before the registration day for the winter or spring quarter. The \$25.00 deposit will be retained as a damage deposit throughout the student's residence at the College and refunded only if the student has fulfilled the terms of his contract.

4. The College cannot accept responsibility for the damage or theft of personal effects or for the loss of monies. The student agrees to assume responsibility for all property assigned to the use of the student and agrees to pay for its loss or damage. The College reserves the right to inspect student rooms at any time.

Health Service and Insurance. The College Health Service, located in Dahl Hall, provides the services of medical doctors for all students. Students are requested to report any accident or illness to the Health Service, extension 2211.

A group plan of accident and health insurance is available through the college. Information concerning the student group policy is provided at the time of registration, or may be secured upon request addressed to the college's Business Office. It is urged that all students have some form of insurance protection against the cost of accidents and illness.

All students are required to pay the Health Service fee except those attending evening classes only.

Financial Information

College Expenses. Because the State of Minnesota provides support for the costs of education at Moorhead State College, students are able to complete their studies with less expense than at most other colleges and universities.

These costs usually fall into three categories: tuition and fees, housing and meals, and incidental and personal expense. Students with no unusual financial obligations can expect that their total annual costs at MSC will range from \$2,000 to \$2,400 if they live on campus.

Following is a table of fixed costs for the 1974-75 school year for students carrying a normal class load of 16 credits per quarter:

	<i>Resident</i>	<i>Non-Resident</i>
Tuition and Fees	\$ 492.00	\$ 888.00
Housing and Meals	993.00	993.00
<i>Total Fixed Costs</i>	<u>\$1485.00</u>	<u>\$1881.00</u>

Incidental and personal expenses (books, supplies, clothing, laundry, recreation, travel, etc.) will normally range from \$450 to \$750.

Tuition

1. Tuition charges are based upon the quarter credit unit and vary according to the status of the student and the type of course:

<i>Type of Course</i>	<i>Resident</i>	<i>Non-Resident</i>
Undergraduate	\$ 8.00	\$16.25
Graduate	10.25	20.25

2. Tuition rates are subject to change without advance notice by the Minnesota State College Board, which establishes uniform rates for all Minnesota State Colleges.

Resident or Non-Resident Status

1. Specific criteria have been adopted by the Minnesota State College Board to define those students eligible for the benefits of Minnesota resident tuition rates.

2. A student is entitled to resident status by meeting any one of the following qualifications:

(A) Graduation from a Minnesota high school within two calendar years of applying for admission to college at MSC.

(B) Graduation from a Minnesota high school followed by substantially continuous residence in Minnesota.

(C) Service in the U.S. Armed Forces for at least 190 days other than for training purposes only.

(D) 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 college student.

(E) 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.

(F) Establishment as being of Indian heritage under the definition of Minnesota Statute 124.48.

(G) Legal dependent or spouse of any person who qualifies as a Minnesota resident under one of the criteria above. It is further stipulated that the student must be living with his or her spouse at a place of residence within the State of Minnesota in order to be qualified.

3. Resident tuition will be charged on a temporary basis for students appointed to graduate assistantships.

4. Resident tuition will be charged for teachers in school districts under student teaching contracts with Moorhead State College in special workshops arranged by cooperation between the college and the school districts.

Comprehensive Student Fee

1. All students enrolling for regular instruction (resident credit) courses are assessed a comprehensive fee at the following rates:

Full-time students (9 or more credits)	\$36.00
Part-time students (8 or less credits)	18.00
Part-time evening classes only	14.00

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

3. Comprehensive fees are required of all students enrolled for credit applicable to resident degree requirements, including student teaching, internships, and other instruction which may not be located on the college campus.

4. Students enrolled only in off-campus Continuing Education classes (not applicable to resident credit requirements) are exempted from comprehensive student fees.

5. Fees during summer sessions are prorated on a per-credit basis up to a maximum of \$36.00 for the entire summer quarter.

Housing and Food Service Costs

1. Residence hall and food service rates are established by the Minnesota State College Board for all Minnesota State Colleges and are subject to change without notice.

2. Combined housing and food service costs (21 meals weekly) are \$331 per quarter for double rooms and \$366 for single rooms.

3. Juniors and seniors may elect to contract for residence hall accommodations without food service at the rates of \$161 per quarter for double rooms and \$206 for single rooms.

4. Students who do not live on campus may contract for meals only (21 per week) at \$ _____ per quarter.

Payment of Tuition, Fees, and Charges

1. All tuition and fees are payable in full each quarter, on or before the last day of registration designated in the academic calendar.

2. Students who have any financial obligation to the College, with the exception of loans scheduled to mature at a future date, may be prevented from registering for classes until their obligation is met.

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

Refund of Payments

1. Students who withdraw from college may apply for a refund of a portion of their tuition and fees.

2. No refund is paid if the amount is less than \$1.00.

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

During Regular School Year:

On or before the 5th class day	80%
6th through 10th 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

4. Room and board refunds are based on the number of weeks of residency.

Transcript Fees

1. Three transcripts of a student's record are issued without charge at his request.

2. A charge of \$1 is made for each additional transcript, except

that when more than one transcript is requested at one time the charge is \$1 for the first copy and 25 cents for each additional copy.

3. No transcript will be issued unless all admission requirements have been met and all financial obligations have been paid, except for loans scheduled to mature at a future date.

FINANCIAL AID

1. Students seeking help for financing their educational plans should seek help from all possible sources including the college. As explained below, students applying to the college for aid will be also expected to apply to the Minnesota State Scholarship and Grant-in-Aid Programs and the federal Basic Grant (BEOG) Program.

2. Assistance in meeting the costs of education at Moorhead State College is available to qualified students through the Financial Aid Office, which reserves the responsibility for determining the student's qualification for aid.

3. Information about the financial aid program is provided in a leaflet that can be requested from the Financial Aid Office or the Office of Admissions.

4. Financial aid may be in either of two categories — that which depends on the student's financial need and that which requires no evidence of such need. Almost all assistance through the college requires evidence of financial need.

5. 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 that the student and his family can be expected to contribute.

Financial Aid Application

1. College action on aid can be taken for students who are admitted to the College or are currently enrolled at the College.

2. Entering freshmen and transfer students desiring consideration for financial aid should complete the American College Testing Program (ACT) Family Financial Statement (FFS) designating Moorhead State College to receive a copy of the report. A completed ACT Institutional Data Sheet (IDS) should be sent to the College Aid Office. No other application forms are required for National Direct Student Loan, Supplemental Educational Opportunity Grant or federal college Work-Study Program aid from the College.

3. The FFS forms are available from school counselors, by writing the American College Testing Program, Iowa City, Iowa 52240, or from the Aid Office.

4. Students enrolled at the College may obtain the FFS from the Aid Office.

5. Admissions and aid applications should be completed and mailed before February 15 to assure fullest consideration of aid applications for the following school year. Later applications will be processed and awards made to the extent that funds remain.

Aid Awards and Renewals

1. Financial aid awards are made for a one-year period only with the annual period ending at the conclusion of the spring term.

2. Any change in the student's financial resources, including the receipt of grants, educational loans, or scholarships from non-college sources, and any on-campus employment, should be reported to the Financial Aid Office for possible adjustments in the amount of distribution of the financial aid "package." Failure to report such changes may result in cancellation of awards.

3. Students who receive awards will be notified of the times when loan, grant, and scholarship funds will be made available to help meet college expenses. Work-Study and other employment wages will be paid at regular intervals.

4. Application for renewal of awards must be made each year, and all applications will be reviewed by the Financial Aid Office.

5. It is suggested that college aid applications be received by the Financial Aid Office by March 15 for the following school year. Students should observe the different application schedules of the Minnesota State student aid programs, federal Basic Grant program or other non-college aid sources.

Types of Financial Aid

1. The one application, the ACT Family Financial Statement with Institutional Data Sheet, is a student's request, on the basis of his financial need, for aid from college through the National Direct Student Loan (NDSL), Supplemental Educational Opportunity Grant (SEOG), and Federal College Work-Study student employment (Work-Study) Programs. The College determines who will receive each form of aid and the amounts.

NDSL. An undergraduate may borrow up to \$2,500 during the first two academic years, up to \$5,000 total undergraduate loan to be repaid at low interest starting nine months after leaving school with a maximum repayment period of 10 years. This program provides for a portion of the principal and interest to be cancelled for certain public services. Payments may be deferred for service in the Peace Corps, VISTA, or Armed Forces. Minimum repayment is \$30 per month.

SEOG. This grant is for undergraduate students of *exceptional financial need* who without the grant would be unable to continue their education. An SEOG is from \$200 to \$1500 a year (but not more than one-half of all aid). An SEOG may be continued up to four years but not to a total greater than \$4,000. To receive an SEOG a student must accept additional financial assistance at least equal to the amount of the grant.

Work-Study. Students who have great financial need have an opportunity to earn part of their educational expenses through part-time employment (full-time may be available during vacations) on campus or off-campus during summers with public agencies in the student's home area. Students may earn from \$400 to \$1000 for working part-time jobs an average of 15 hours per week.

2. **Basic Grant.** The federal Basic Educational Opportunity Grant Program provides grants up to a possible \$1400 for eligible undergraduate students. Need for a Basic Grant is NOT determined by the College. To apply for a Basic Grant, a student must complete a form called "Application for Determination of Basic Grant Eligibility" available from the College Financial Aid Office, high school counselors Talent Search and Upward Bound Projects, and public libraries or by writing to P.O. Box 84, Washington, D.C. 20044.

Applicants will receive a notification of eligibility which should be sent to the Aid Office for calculation of award from a payment schedule provided to the College by the U.S. Office of Education. Receipt of a Basic Grant in no way limits a student's chances to obtain other financial assistance as long as that student needs it.

Students who first enrolled in any post-secondary education course for credit after April 1, 1973, may apply for Basic Grants. Students eligible for Basic Grant application are urged to do so and will be expected to do so if they also apply to the College for aid.

3. **Scholarships.** The College awards scholarships from \$50 to \$500 to freshmen, transfer students, and upperclassmen with outstanding qualifications and promise. See separate section on scholarships, below.

4. **Federally Insured Student Loans.** Up to \$2,500 annually with low interest; interest may be paid on behalf of students qualifying under federal regulations; application is made directly to the lending institution and *not* to the College; repayment begins nine months after leaving school. Minimum repayment is \$30 per month.

It is suggested that students apply to the college for aid (NDSL, SEOG, or Work-Study) *prior* to applying for an insured loan. Insured loan applicants are usually presumed to arrange all supplemental educational financing from that source. Indebtedness to the college under NDSL and to a bank under an insured loan requires two monthly payments of at least \$30 each.

It is the practice of the college that renewal applicants for NDSL funds are directed to non-college loan sources if the applicant's debt history shows a combination of college and non-college 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, the college.

5. **College Employment.** Part-time job opportunities not dependent on financial need with such campus agencies as residence halls and food services; information available from the student operated Job Shop, which also has partial listing of off-campus employment positions.

6. **Short-Term Loans (Available to full-time students).** Loans up to \$50 for up to 60 days do not require a co-signer; loans up to \$100 for up to 90 days require a co-signer.

Law Enforcement Education Program (L.E.E.P.) The Law Enforcement Education Program (L.E.E.P.) is a federally funded financial aid program. Two basic awards are made to eligible students: in-service grants and pre-service loans.

In-Service Grants: L.E.E.P. will grant funds to any eligible full-time employee of any eligible publicly funded criminal justice agency to pay the expenses for any college course. This grant is to cover the costs of tuition, fees and books, and is not to exceed \$200 per quarter. In-service grants may be totally forgiven if the student remains with a single criminal justice agency for at least two years.

Pre-Service Loans: L.E.E.P. will loan funds to a full-time student who has an expressed desire to pursue a career in criminal justice upon completion of his course of studies. The loan may be cancelled at the rate of 25 percent per year of service in law enforcement if the student becomes a certified full-time employee of a public law enforcement agency. Otherwise, loans carry 7 percent interest and must be paid within 10 years or at the rate of \$50 a month.

For further information about L.E.E.P. contact the Financial Aid Office.

Minnesota State Scholarship, Grant-in-Aid and Loan Programs. Minnesota residents planning to enroll as freshmen at Moorhead State College may qualify for aid under the Minnesota State Scholarship or Grant-in-Aid Programs; students transferring to Moorhead State from Minnesota Junior Colleges may qualify for assistance under the Minnesota Grant-in-Aid Program. Students should contact school or college counselors for application information, forms, and schedules. Qualified Minnesota residents applying for aid through Moorhead State College are also expected to have applied for aid through these programs.

Under the Minnesota State Student Loan Program, administered by the Minnesota Higher Education Coordinating Commission, a Moorhead State College student may obtain a Federally Insured Loan directly from the State of Minnesota. Any student enrolled or accepted for enrollment is eligible to apply by completing the brief Minnesota State Student Loan Program application form in addition to the Federally Insured Student Loan application.

The Minnesota Higher Education Coordinating Commission (MHECC) administers these programs and provides recipients with information, instructions, and renewal application forms. Qualified students receive \$100 to \$1000 per year for four years.

Assistance for Minority Students. American Indian, Black, and Chicano students are eligible for minority student grants from the College in addition to all other forms of aid. Grants range from \$50 to \$450 to 25 to 35 students each year. The amount available varies each year. Specific funds are available under the College's short-term loan program for exclusive use by minority students.

Assistance for Foreign Students. Foreign students must plan to provide their own finances for the costs of education at Moorhead State College. Foreign students in the United States on student visas are *not eligible* for NDSL, SEOG, Work-Study, the Minnesota State Scholarship, Grant-in-Aid or Loan Programs, or the Federally Insured Student Loan Program. Immigrant visa status may qualify a student to apply for these programs. Foreign students may contact the Foreign Student Advisor for financial planning information.

SCHOLARSHIP FUNDS

Freshman Scholarship Program. Through the President's Club, "The Promise of '76," and the "Dollars for Scholars" faculty scholarship program more than 125 Foundation Scholarships are awarded annually to freshmen.

Freshman scholarships are awarded in two categories. Cum Laude Scholarships are based on academic promise as indicated by high school performance and college admission test scores. Students awarded scholarships have usually ranked in the upper 10 percent in class rank and test scores.

Presidential scholarships recognize special talent as well as academic promise. Awards range from \$150 to \$300 for both Cum Laude and Presidential Scholarships.

In many instances these scholarships are further designated by the source of funds.

Charles & Ellora Alliss Educational Foundation. Awards are based on need and require the completion of a financial aids application in addition to the Scholarship application.

Cupler Foundation Scholarships. Awarded annually to Freshmen from the College's service area who plan to pursue the ministry or a teaching career. Selection of recipients is based upon scholarship, character and need. Selections must be approved by the Foundation Board.

Janet Cupler Memorial Scholarships. Awarded to undergraduate students majoring in Education on the basis of scholarship and need.

Perham Rotary Scholarships. An annual \$200 award to a graduate of Perham High School enrolling at Moorhead State College.

Solem Scholarships. Former students of the College's Campus School are selected to receive these awards honoring Lyl R. Solem, late long-time teacher at the School.

Ina Aker Pittack. Freshman scholarships are awarded each year in memory of Ina Aker Pittack, an alumna of the College.

Colonel Julien M. Burkness Scholarship. Annual awards to graduates of Moorhead High School with preference given to students from districts served by the former Campus School.

Catherine Haukebo Memorial Scholarship. Awarded annually to an outstanding Freshman music major.

Application: Special application forms (separate from the ACT Family Financial Statement as required for other college-administered aids) are distributed by the Scholarship and Financial Aid Committee to high school counselors. Highly qualified candidates not able to obtain application forms from their high school counselors may write to the Committee in care of the College.

Upperclass and Transfer Student Scholarships. The College, through the cooperation of the Moorhead State College Foundation, the Charles & Ellora Alliss Foundation and various other donors now provides a significant number of upperclass awards. Applications are available during February and March at the Aid Office. Special awards include the following:

Virginia Fitzmaurice Grantham Scholarship. Awarded in alternate years to a woman in continuing education and to a foreign language major. Recipient must demonstrate need for financial assistance.

Jean R. Stephenson Scholarships. Awarded annually on the basis of scholarship, leadership, and participation in college activities.

Marie A. Sorknes Scholarships. Awarded to a mature woman continuing her education preferably in education after a period of interruption.

Time for Peace Memorial Scholarship. Awarded annually to an upperclassman with a minimum GPA of 3.0 who demonstrates financial need.

Comstock Memorial Scholarships. Awarded to students from the College's service area who have demonstrated outstanding academic achievement and a need for financial assistance.

Delta Pi Delta Scholarships. Awarded to students in Continuing Education to provide help to women who continue their education after a period of interruption.

Promise of '76. Annual awards through the Moorhead State College Foundation to students with outstanding records of academic and leadership performance.

The Louise Stern Memorial Scholarship Fund has been established by Edward Stern in memory of his first wife Louise, a member of the Fargo-Moorhead Symphony Orchestra for over 30 years. This memorial fund provides a \$100 scholarship annually to a deserving student from Moorhead State College who is a member of the Fargo-Moorhead Symphony.

Moorhead Central Lions Club Scholarships. Special honors awards to men and women in each class in recognition of highest cumulative academic average.

Departmental Scholarships. A limited number of scholarships are available in certain areas of study at Moorhead State College. Students should check with their major department to see if such assistance is offered in that particular area.

Individuals and organizations desiring to support the College's scholarship program are invited to contact the College Development Office.



Graduation - 1936

Academic Information

Change of Requirements

1. Within practicable limits, academic policies and requirements at Moorhead State College are not retroactive, and a student entering a degree program can expect to complete that program under the requirements specified at the time he actively enrolled in the program.
2. 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.

Academic Year

1. The academic year at Moorhead State College 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.
2. Students may enter the College at the beginning of any term, although the academic year begins officially with the Fall Quarter.

Units of Credit

1. The unit of credit at Moorhead State College is the quarter hour, representing one period (50 minutes) of study per week for 12 weeks or a suitable equivalent.
2. 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.

Full-Time and Part-Time Status

1. An undergraduate student enrolled for 9 credits or more (5 credits or more during a summer session) is considered a full-time student.
2. A graduate student enrolled for 7 credits or more (4 credits or more during a summer session) is considered a full-time student.

Graduation Requirements (*Bachelor's Degree*)

1. At least 192 credits are required for the degree of Bachelor of Arts or Bachelor of Science.
2. 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 credits attempted at Moorhead State College.
3. The candidate must complete a General Studies program with a GPA of at least 2.0 for all courses applied to General Studies and, in the case of a transfer student, a GPA of at least 2.0 for all MSC courses applied to General Studies.
4. The degree program must include at least one major with a GPA of 2.0 or above.

5. No minor is required, but a GPA of at least 2.0 must be attained in any minor presented for graduation.
6. 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.
7. No more than 15 correspondence credits may be applied.
8. A candidate who has attended a junior college must complete at least 96 credits in addition to his junior college study.
9. 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 his graduation requirements. The student must secure the approval of each major and minor advisor before submitting his application.
10. A candidate for graduation with a teaching major shall fulfill all Teacher Education requirements listed below.
11. Specific exceptions to these graduation requirements are listed under such programs as Vocational-Technical Education or External Studies.

General Studies

1. The candidate for a bachelor's degree must complete a General Studies program of at least 64 credits.
2. It is intended that this program will build on, extend, and enlarge the general education previously attained. It involves the expectation that collegiate studies will complement but not duplicate high school studies. It is assumed that existing interests will be developed further, and it is expected that most students will acquire new ones. It is hoped that students will attain the mental disciplines that will lead to a lifetime of self-education.
3. The program is characterized by certain minimum requirements in several areas, such as composition and literature, the natural sciences, the social sciences, the humanities, and communication, language, and symbolic systems.
4. Because the program is not static, its requirements may vary for students in different entering classes. Each student should consult the applicable General Studies Information Bulletin and his advisors regarding his particular General Studies program.
5. Courses in the student's major discipline may not be applied to General Studies. If the student has more than one major, this limitation applies to one major only.
6. Courses in a minor or in "related requirements" specified by a major may be applied to General Studies.

7. Courses may not be applied to the General Studies program if taken for Pass/No Credit grading unless specifically approved for this purpose by the General Studies Committee.

8. An overall GPA of at least 2.0 must be attained in General Studies.

9. The General Studies Committee has the responsibility of determining the applicability of particular courses to the General Studies program and of making changes in the program, subject to the veto of its superior bodies.

Multiple Majors and Degrees

1. A student completing two or more majors with different degree designations will be awarded the more appropriate degree, except that the BS degree shall be given if one major is in a field of professional teaching.

2. 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.

3. A student who holds a previous baccalaureate degree from another accredited institution may earn an additional degree from Moorhead State College by (A) completing at least 45 resident credits at Moorhead State College; (B) meeting all MSC 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 Moorhead State College.

4. A student with a previous Moorhead State College degree may add another major or minor to his record 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.

Teacher Education Requirements

1. To be eligible for graduation and/or certification 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 for certification, (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 MSC course Health 110), (F) student teaching as approved by the MSC Education Department.

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

3. The applicant for certification should secure the proper forms from the state in which certification is sought and submit completed forms and state fee payments to the Office of Admissions and Records, where they will be processed and forwarded after verification. State of Minnesota forms are available from the Office of Admissions and Records.

Teaching Majors and Minors

1. Requirements for the major programs in fields of secondary education are listed under the respective departments in this catalogue.

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

3. Completion of secondary education curricula will fulfill certification requirements for grades 7–12, except that students with teaching majors in art, foreign languages, industrial arts, 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 methods courses.

4. Students who complete the elementary education curriculum may also qualify for junior high school endorsement by (A) completing at least one minor but preferably two minors from the areas of English, mathematics, science, or social studies and (B) student teaching at the junior high school level.

5. No minor is required for secondary teaching, but certain minors will qualify a candidate for limited teaching opportunities in addition to the major.

6. All teaching majors and minors must include at least one course in the special methods and materials for teaching.

Teacher Education Admission and Retention*

1. Formal application for admission to teacher education is made when the student takes his first education course, normally Education 210 or 211, Orientation to Education.

*Note: These regulations are in effect for entering freshmen as of Fall 1972. Students admitted to college previous to this date are subject to regulations stated in catalogues effective at the time of their admission.

2. A Mantoux test and a speech-hearing test must be taken by all candidates for teacher education. These are administered respectively by the College Health Service and the Department of Speech.

3. Admission to and retention in teacher education requires a cumulative grade point average of 2.25* for all courses from Moorhead State College.

4. A student whose GPA is above 2.0 but below 2.25 may be admitted or retained on probation by action of the Teacher Education Admissions Committee.

5. Teacher education admission or dismissal must be approved by the Teacher Education Admission Committee, which may require any of the following conditions: screening interview, appropriate proficiency examinations, endorsement by the student's advisor or major department, or recommendations from school personnel responsible for supervision of student teaching.

6. A cumulative GPA of 2.5* for all Moorhead State College courses is a prerequisite for student teaching. Therefore, the Teacher Education Admissions Committee may dismiss a student whose GPA is below 2.5 and who does not demonstrate consistent academic improvement.

7. The decision of the Teacher Education Admission Committee may be appealed to the Teacher Education Committee.

Dismissal from Teacher Education

1. A faculty member, supervising teacher, or administrator of a school to which a student teacher is assigned may request the Teacher Education Admissions Committee to review the fitness of any student enrolled in a teacher education curriculum.

2. The decision of the Teacher Education Admissions Committee may be appealed to the Teacher Education Committee, and the student may appeal that decision to the President of the College.

Professional Education Sequence

1. Any curriculum leading to graduation and/or certification with a teaching major shall include such courses in the professional preparation of teachers as are designated by the MSC Education Department to comply with requirements of the Minnesota State Board of Education.

2. Such requirements for teaching in the public elementary schools are included in the elementary education curriculum. (See Education Department under Elementary Education.)

3. Professional education courses for all secondary teaching curricula are:

Education 210 or 211 Orientation to Teaching (3 credits)

Education 213 Adolescent Growth and Development (3 credits)
 Education 305 Educational Psychology (3 credits)
 Education 307 Measurement and Evaluation (3 credits)
 Education 490 Foundations of Education (3 credits)

4. Substitutions for these courses must be approved by the Director of Secondary Education in a written memorandum filed with the Registrar.

Human Relations Component for Certification

1. All applicants for teaching certificates in Minnesota to be issued or renewed on or after July 1, 1973, are required by Minnesota regulation EDU 521 to have completed a training program to develop competency in human relations.

2. The 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 College subject to approval by the Minnesota State Department of Education.

3. The non-certified teaching candidate has several options to satisfy the human relations requirement. A brochure detailing the various MSC programs is available from faculty advisors or from the Human Relations Office, 107 Owens Hall.

4. Forms to be used for certifying completion of the human relations component are also available at the Human Relations Office.

Student Teaching

1. Student teaching is usually completed during the 9th, 10th, or 11th quarter of college in order to provide time for placement interviews during the final quarter.

2. Students are requested to apply for admission to student teaching at least two full quarters in advance of their assignment.

3. Application forms for admission to student teaching are available from the Department of Education.

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

5. Students should not plan to enroll for additional courses during full-time student teaching (16 credits).

6. Other courses may not be substituted for student teaching.

7. The student teaching assignment begins on the first day of

school during the appropriate term of the institution where the student will serve.

8. The number of days of student teaching will equal the number of class days in the college quarter during which he will receive credit, although the student may not begin and end his assignment at the same time as for the equivalent quarter.

9. Elementary education majors in the Professional Fourth Year (PFY) curriculum will complete student teaching as an integral part of the entire program.

Associate Degrees

1. Moorhead State College offers two-year associate degrees as follows:

(A) Associate in Arts in Liberal Arts.

(B) Associate in Science in Vocational-Technical Education.

(C) Associate in Arts in Business and Technology.

2. Each program requires completion of at least 96 quarter credits, including at least 32 credits in courses from MSC and at least 16 resident MSC credits.

3. The candidate for an AA or AS degree must have a GPA of at least 2.0 for all courses applied to the curriculum and for all courses taken from Moorhead State College.

4. 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.

5. General Studies requirements for each degree program must be fulfilled with courses applicable to General Studies in the baccalaureate curricula.

A.A. in Liberal Arts

1. The candidate for the Associate in Arts in Liberal Arts will complete one of the approved General Studies programs for the bachelor's degree with a GPA of at least 2.0.

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

A.A. in Business and Technology

1. Specific requirements for the following associate curricula are listed under the respective departmental sections of this catalogue:

A.A. in Accounting (Business Department)

A.A. in Business Administration (Business Department)

A.A. in Home Economics

A.A. in Marketing (Business Department)

A.A. in Secretarial (Business Department)

A.A. in Technical Aid (Industrial Education Department)

2. In addition to specialized requirements, the candidate for each of these associate degrees must complete a General Studies program of at least 42 credits, including one year of freshman English and at least six credits in each of the distributional areas.

A.S. in Vocational-Technical Education

1. Candidates for the Associate in Science in Vocational-Technical Education will be required to present evidence from the Vocational Division of the Minnesota State Department of Education that they meet minimum requirements in technical training or experience for certification as vocational-technical school teachers.

2. Certification as a vocational-technical school teacher will serve as the student's major concentration and will be equivalent to 32 quarter credits. However, any transfer or MSC credits applied to meet certification requirements will be deducted from the 32-credit block reserved for training and experience. (Note: This exclusion does not apply to courses in teacher preparation.)

3. The remaining 64 credits will include (A) at least 32 credits in General Studies courses, (B) at least one course in each of the General Studies distributional areas, (C) at least 16 credits in courses for the professional preparation of vocational-technical school teachers, and (D) no more than 16 credits of teaching internship.

4. The complete program will consist of at least 96 credits including up to 32 credits for training or experience as described in No. 2 above.

Bachelor of Science in Vocational-Technical Education

1. Candidates for the Bachelor of Science in Vocational-Technical Education will meet all graduation requirements for the baccalaureate degree at Moorhead State College except as specified below.

2. Each candidate will be required to present evidence from the Vocational-Technical Education Division of the Minnesota State Department of Education that he meets all technical training or experience requirements for certification as a vocational-technical school teacher.

3. Certification as a vocational-technical school teacher will fulfill the student's major in Vocational-Technical Education and will be equivalent to 72 quarter credits to be held in trust until the time of graduation. However, any transfer or MSC credits used to meet certification requirements for the Vocational-Technical Education Division will be deducted from the 72 credits held in trust.

4. An appropriate program of vocational-technical teacher

education courses will be required of each degree candidate, including at least 16 credits in courses for the professional preparation of vocational-technical teachers and no more than 16 credits in teaching internships.

5. The degree curriculum will include one of the approved General Studies programs of at least 60 credits.

6. The candidate will be assigned to a faculty advisor in the department most appropriate to his specialized field of preparation.

7. Specific courses included in the major in vocational-technical education are listed under the Department of Industrial Education in this catalogue.

External Studies Degree Programs

1. A student may earn the Bachelor of Arts or Bachelor of Science degree from Moorhead State College by fulfilling all requirements specified below. Further information is available from the MSC Center for Non-Traditional Studies.

2. Admission to External Studies is contingent upon (A) minimum age of 25 years, (B) enrollment in MDS 300 Educational Planning (2 credits) on a class or individual basis, (C) submission of application forms and credentials as requested, (D) approval by the Committee on External Studies.

3. The degree candidate must complete at least 45 credits as an enrolled student at Moorhead State College, although no minimum number of on-campus (resident) credits is stipulated.

4. With the endorsement of his advisor, the student will submit and complete a General Education (Step 1) plan approved by the Committee on External Studies and designed to prove, or significantly improve, the student's competency in each of seven areas of the liberal arts.

5. After fulfilling the General Education requirement, the student will complete an Area Study, equivalent to at least 16 credits, in one of the seven General Education areas under the supervision of a faculty team of at least three members. (Step 2).

6. The student will also fulfill a Specialization (Step 3) requirement equivalent to a traditional or individualized major under the supervision of a faculty advisor.

7. 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 MSC courses attempted and in courses applied to each of the three steps.

8. Credit in Steps 1 and 3 or elective credit to fulfill the total

degree may be earned by regular courses, independent study, internship, examination, transfer credit, or evaluation of non-collegiate or non-institutional study or experience.

Resident Credits

1. Resident credits are those earned while attending courses offered on the Moorhead State College campus, in Tri-College or Minnesota State College Common Market courses, in workshops or field trips originating from the campus, and in evening courses on campus.

2. 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.

3. Minnesota State Colleges 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

1. 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 College.

2. Credit may be given for attending regular armed service schools. The student should discuss the possibility of such credit with the Registrar.

Provisional Credits

1. Transfer students from colleges which are not fully accredited may receive provisional credit, subject to official acceptance following satisfactory study at Moorhead State College.

2. 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

1: 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 College.

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

3. 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.

4. Courses similar to those required for General Studies at Moorhead State College will usually be considered equivalent for the purpose of meeting course requirements. However, the student must complete a total of 60 credits in General Studies courses.

5. 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 General Studies requirement at Moorhead State. However, the program must include at least 60 credits in courses comparable to General Studies at Moorhead State.

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

7. 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 College.

Vocational-Technical School Credit

1. A student who has successfully completed a program of at least nine months at a Minnesota Area Vocational-Technical School will receive transfer credit as follows: (A) No credit will be given for partially completed programs. (B) A maximum of 48 undergraduate credits will be recorded at the time of admission on the basis of 3 credits per month for the completed program. (C) No specific course evaluations will be made, and credit will be recorded as a block unit for the entire program.

2. Specific requirements in the student's major field of study at Moorhead State College 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.

3. 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.

4. 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

1. Moorhead State College 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.

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

3. All records must be forwarded from the College Entrance Examination Board, and the College reserves the right to evaluate such records and determine the credit to be assigned.

Normal Training Credits

1. A student who has completed the Normal High School Teacher Training after graduation from a Minnesota high school will receive 48 credits for one year and 96 credits for two years of such training.

2. Such credits will be evaluated by the College and applied to the student's program, unless those credits were used to complete a curriculum at the college before May 12, 1952.

Credit by Departmental Examination (*Challenge of MSC Courses*)

1. A student may challenge a course at Moorhead State College through an examination for credit by arrangement with the appropriate department of study.

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

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

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

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

6. 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 chairman and forwarded to the Faculty Dean for approval.

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

8. No student may repeat any examination for credit.

Credit by CLEP Examination

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

2. Procedures will be the same as for Credit by Departmental Examination except that the Registrar will administer the examinations. The cost for each examination is \$15.

3. Credit will be awarded for successful performance on the CLEP Subject Examinations according to standard scores recommended by the Council on College-Level Examinations.

4. Following are the approved Subject Examinations and corresponding credit:

American Government (4)	History of American Education (4)
American History (9)	Human Growth and Development (4)
Analysis and Interpretation of Literature (9)	Introduction to Business Management (4)
Biology (9)	Introductory Accounting (9)
College Algebra(4)	Introductory Business Law (4)
College Algebra-Trigonometry (4)	Introductory Calculus (9)
Computers and Data Processing (4)	Introductory Economics (9)
Educational Psychology (4)	Introductory Marketing (4)
English Composition (9)	Introductory Sociology (9)
English Literature (9)	Morley and Banking (4)
General Chemistry (9)	Statistics (4)
General Psychology (4)	Tests and Measurements (4)
Geology (9)	Trigonometry (4)
	Western Civilization (9)

5. Credit earned by examination may be applied to General Studies requirements but may not be applied to a major curriculum except with departmental approval.

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

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

8. Credit is not given for the CLEP General Examinations.

Pass-No Credit Grades

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

2. No course with Pass-No Credit grades may be applied to General Studies.

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

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

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

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

7. 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.

8. A Pass-No Credit agreement form, available from the Office of Admissions and Records, must be signed by the student and his advisor and returned to the Office of Admissions and Records on or before the tenth class day of the quarter.

Pass-Fail Courses

1. Certain courses which offer insufficient opportunity for graded evaluation may be offered with only the grading options of pass ("S") or fail ("F").

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

3. Other courses require the specific permission of the Vice-President for Academic Affairs in order to be graded pass-fail.

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

Auditing Courses

1. A student who wishes to audit a course without seeking credit may attend classes if he has been admitted to the college and if he has registered for the course and paid full tuition.

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

3. A student must follow the regular change of program procedure if he wishes to change from credit to audit status in a course.

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

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

Grades and Grade Points

1. All study for College credit is recorded with the following grade designations:

<i>Grade Entry</i>	<i>Meaning</i>	<i>Grade Points Per Credit</i>
A	Excellent	4
B	Above Average	3
C	Average	2
D	Passing	1
F	Failing	0
I	Incomplete	0
S	Satisfactory	—
X	In Progress	—
V	Audit (Visitor)	—
W	Withdrawal	—

2. "S" grades will not be included in computing the grade point average.

Incomplete Credits

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

2. In computing GPA, an Incomplete is considered an "F" until it is changed by the instructor.

3. 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.

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

Repeating Courses

1. A student may repeat any course once only.

Academic Information

2. A student may not repeat a course to improve his grade if he has already earned a grade of "C" or better in that course.

Grade Point Average

1. 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.

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

3. Credits with grades of "F" or "I" are included in computing the grade point average. However, "I" credits from the preceding quarter are not included when determining the grade point average for recognition at the time of the Honors Convocation or Commencement.

4. Only those credits and grades earned at Moorhead State College will be used to compute the GPA for (A) awarding scholarships, (B) recognizing honor students, or (C) determining scholastic qualifications for graduation.

5. When courses have been repeated, only the higher grade earned will be used to compute any grade point average. *Until Fall 1974, all course attempts were included in computing the cumulative GPA.*

Academic Standing

1. The student's cumulative grade point average for all courses attempted at Moorhead State College is the basis for determining his academic standing.

2. 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 GPA is less than 2.0 will be placed on academic probation.

2. A transfer student whose previous GPA was below 2.0 and who is admitted on probation by appeal to the Committee on Admission and Retention must earn at least 12 credits with a GPA of at least 2.0 in the first quarter of enrollment or he will be suspended.

3. A student on probation will remain on probation until his cumulative GPA at Moorhead State College becomes 2.0 or better.

4. During any quarter when he is on probation, a student will be suspended if he fails more than half of the credits he attempts during that quarter.

5. A student will be suspended if his cumulative GPA is less than 1.6 after three quarters of full-time college study or its equivalent.

6. A student whose cumulative GPA is below 1.9 after six or more quarters of full-time college study will be suspended unless he has earned a GPA of at least 2.15 in his most recent quarter.

7. A first suspension will be for a period of three quarters.

8. A second suspension will be permanent.

9. During any period of suspension, a student may file a written appeal for reinstatement with the Committee on Admission and Retention. If that appeal is denied, he may request a personal appearance before the committee.

10. No reinstatement may take effect until after the expiration of at least one quarter of suspension.

11. A special student whose cumulative GPA at Moorhead State College falls below 2.0 may be declared ineligible for further enrollment.

Academic Honors

1. 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 MSC including full-time enrollment during the fall or winter quarter of the current year.

2. 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.

3. Students who complete at least 96 credits at Moorhead State College 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 College.

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

Exemption from Courses or Requirements

1. At intervals announced by the respective department chairmen, examinations in several subjects of the General Studies are given to enable students with proven ability to be exempted

from certain required courses. These examinations are usually offered during the orientation period preceding the freshman year.

2. Students who pass such exemption examinations will not receive credit unless they have followed procedures for Credit by Examination.

3. In extraordinary cases, students may petition for exemption from specific academic requirements. Such arrangements should be made through the Office of Academic Affairs.

Classification of Students

1. Students at Moorhead State College are divided into classes as follows: (A) Freshman 0-45 credits; (B) Sophomore, 46-90 credits; (C) Junior, 91-135 credits; (D) Senior, 136 or more credits.

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

Advisor Assignments and Changes

1. Each student will be assigned to an advisor at or before the time of his first registration.

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

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

Registration Procedures

1. Prior to registration, the student will plan a program with an advisor, who will sign the registration form when required.

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

3. 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.

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

Evening Course Registration

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

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

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

Off-Campus Registration

1. Moorhead State College offers off-campus evening courses at several community centers within an approximate radius of 100 miles.

2. 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.

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

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

Late Registration

1. 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.

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

Course Load

1. To enroll for more than 18 credits during any quarter (9 credits during a summer session) a student must have a grade point average of 3.0 or better and file a petition for excess load at the Office of the Registrar.

2. A petition for excess load must be approved by both the student's advisor and the Faculty Dean or Director.

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

Tri-College University Registration

1. Students who are enrolled at Moorhead State College, 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.

2. A freshman or sophomore may enroll in no more than one course, and a junior or senior in no more than two courses, per quarter at another college.

3. No enrollment limitations are placed on those students with majors in "covered programs" by agreement between MSC and NDSU. See *Academic Programs* section of this catalogue.

4. To register for regular daytime classes, the student reports to the registration clerk to clear arrangements at his home college for admittance to a class at another college.
5. 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 his home college.
6. 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.
7. Credits earned in Tri-College courses at another college are considered as resident credits at Moorhead State College.
8. Registration for evening courses under the Tri-College agreement will 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.

Change of Program (*Adding Or Dropping Courses*)

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1. Program changes include (A) adding courses, (B) withdrawing from courses, and (C) changing from credit to audit or from audit to credit status after the student has made his first class reservations.
 2. 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.
 3. 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.
 4. 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).
 5. 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.

6. 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.
 7. The date of a program change will be the day when the final step of the process above is completed.
 8. 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.
 9. The instructor will submit a grade of "F" or "I" if the student does not complete the course and does not follow the formal procedure for withdrawal.
 10. 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.
 11. If a change results in a decrease of credits, no refund will be made unless the change is made for the convenience of the college.
 12. If a student withdraws from an off-campus 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.
- ### Withdrawal From College
1. To withdraw from college, a student must complete the Student Withdrawal form available from the Counseling Center.
 2. A student who withdraws without following this procedure will receive a grade of "F" for each course in which he is enrolled.
 3. Any refund of tuition or fees will be according to the schedule given under *FINANCIAL INFORMATION*.
 4. A student who is called into the armed forces during any term of enrollment must submit to the Registrar in advance a copy of his military orders, including notification of his date of departure.
 5. A student who withdraws from College because he is called into military service will (A) receive full credit with grades earned at the time of withdrawal if he has satisfactorily completed more than three-fourths of the class days of the term OR (B) receive a full refund of tuition and fees without credit or grades if fewer than three-fourths of the class days of the quarter have elapsed.



Hall Hall - 1936

Departments, Curricula and Courses

ACCOUNTING DEPARTMENT

Dorian Olson, *Chairperson*

Areas of Study: Accounting, Business Law

See also Business for Faculty and Curricula

ACCOUNTING COURSES

Acct 229-230-231 Elementary Accounting I-II-III (3-3-4)
229: Recording, posting, adjusting, and summarizing business transactions of a single proprietorship. 230: Application of accounting procedures and principles to partnerships and corporate enterprises. 231: Recording, summarizing, and analyzing transactions common in a manufacturing business; departmental and branch accounting; financial statement analysis.

Acct 242-243-244 Work Experience in Accounting I-II-III (1 credit each) (Maximum 3)
Supervised on-the-job experience in accounting. The student obtains his employment with a cooperating firm. A minimum of thirty hours of satisfactory work is necessary for each course. For majors only.

Acct 310-311-312 Business Law I-II-III (4 each)
310: General principles of business law and their application, contracts and agency. 311: Sales, negotiable instruments. 312: Business organization, real and personal property. Must be taken in sequence.

Acct 320 Administrative Accounting (4)
An examination of techniques used in establishing standards and flexible budgets for control, an overview of product costing and overhead application, and creation and development of financial reports, the application of fundamental accounting principles to actual case studies. Prerequisites: Acct 231 or consent of instructor.

Acct 330-331-332(G) Intermediate Accounting I-II-III (3 each)
330: Nature and content of Balance Sheet, Income Statement, and Retained Earnings Statement. Reviewing of accounting process. Analysis and methods of valuation and statement presentation of the working capital accounts. 331: Analysis and methods of valuation and statement presentation of noncurrent accounts. 332: Analysis and methods of valuation and statement presentation of corporate capital. Preparation of statements from incomplete records, errors, and their correction, financial statement analysis, and statement of application of funds. Prerequisite: Acct 231. Must be taken in sequence.

Acct 350-351-352 Cost Accounting I-II-III (3 each)

350: Introduction to cost accounting, job order costing, cost and profit analysis, budgetary control of costs, standard costing; 351: Direct costing, capital budgeting, accounting for inventory, joint and by-product costing, process costing; 352: Accounting for labor, internal control, decentralization, statistical methods, sales mix, production mix and yield variances. Prerequisite: Acct 231. Must be taken in sequence.

Acct 335(G) Governmental Accounting (3)

Basic principles underlying governmental and institutional accounting. Prerequisite: Acct 231.

Acct 430-431-432(G) Advanced Accounting I-II-III (3 each)

430: Partnership, joint ventures, installment and consignment sales, branch accounting. 431: Mergers and consolidations of corporations. 432: Receiverships, liquidations, estates and trusts, actuarial science. Prerequisite: Acct 332 or consent of instructor.

Acct 450-451-452(G) Federal and State Tax I-II-III (3 each)

Federal and state income tax laws. 450: as applied to individuals. 451: as applied to partnerships and corporations. 452: other special federal and state taxes applied to individuals, partnerships and corporations. Prerequisite: Acct 332 or consent of instructor.

Acct 460, 461(G) Auditing (3 each)

460: Orientation to the study of auditing and audit working papers. 461: Audit case study and report writing. Must be taken in sequence. Prerequisite: Acct 332.

Acct 469 Student Internship (4-16)**Acct 470(G) Accounting Systems (4)**

Developing, organizing and using accounting data; analyzing and improving accounting systems; and automated data processing systems. Prerequisite: Acct 332 and 352.

Acct 480(G) CPA Review (4)

A review of accounting theory, accounting practice, auditing, business law and taxation to assist the C.P.A. candidate in preparation for the Uniform C.P.A. examination. Prerequisite: Acct 460.

AMERICAN STUDIES

Joyce Flint, *Coordinator* (Humanities); cooperating faculty: Dennis Flood (English), Eleanor Ritchie (Geography), Arnold Johanson (Philosophy), Marjorie Brunton (Anthropology), Nelson Whyatt (History), Edward Estes, (Political Science), Daniel Knighton (Economics), Nancy Parlin (Sociology).

The American Studies Program provides an opportunity to study the American culture from an interdisciplinary perspective. Students explore the impact, through time, of myths, images, and ideas on the American culture, including the growing impact of technology and mass communication.

Students who may be interested in this program include:

1. Those who desire a liberal arts education with a focus on the American culture.
2. Those seeking preparation for graduate work in American Studies or in related disciplines.
3. Those who desire to pursue a double major in order to study a specific interest within the context of the American culture.
4. Those who plan to engage in professions such as public relations, editing and publishing, library and museum work, teaching, government service, journalism, or social service where a broad knowledge of American culture is desirable. The major is also appropriate for pre-law and pre-theological students.

Major in American Studies (B.A. Degree) 36-44 credits

AmSt 217 Introduction to the American Culture (4)

AmSt 317 Topics in American Culture (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 credits.

In addition to the major course requirements, the student will choose electives from a wide selection of approved courses in American subjects, offered by cooperating departments. In cooperation with the coordinator, each student designs a program to satisfy individual interests and professional goals.

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 317 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)

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

AmSt 420 Directed Readings in American Studies (2-4)

Tutorial in American culture. Prerequisites: senior standing and consent of instructor. Credit arranged.

ANTHROPOLOGY COURSES

See *Sociology-Anthropology for Curricula*

Anth 110-111 Human Culture I, II (4)

110: Cultural Anthropology and linguistics; the study of culture and society with emphasis on the integrative nature of a culture; language and its role in the development and transmission of culture. 111: Physical anthropology and archeology; human evolution; the biological background of culture; the development of cultures through space and time.

Anth 215 Indians of South America (4)

Ethnography of South American Indians; effects on later Spanish and Portuguese cultures. Prerequisites: Anth 110 or consent of instructor.

Anth 220 Indians of Middle America (4)

Ethnography of Middle American Indians; effects on later Spanish and Portuguese cultures. Prerequisites: Anth 110 or consent of instructor.

Anth 225 Indians of North America (4)

History and distribution of North American Indian cultures. Prerequisite: Anth 110 or consent of instructor.

Anth 230 Cultures of Africa (4)

Ethnography of African cultures with special attention to Sub-Saharan societies; culture history. Afro-European contacts and reciprocal influences. Prerequisite: Anth 110 or consent of instructor.

Anth 235 Ethnology of Selected Areas (Topical Studies) (4)

An ethnographic survey of a selected area, such as Africa, India, S.E. Asia, Oceania, at varying levels of sociocultural integration, with special reference to their economic social, political, and religious institutions. Prerequisite: Anth 110 or consent of instructor.

Anth 305 Primate Evolution (4)

Principles and history of primitive evolution as background to detailed analysis of the origins and early evolution of man. Special attention to pre-pleistocene man-types and development of modern primates. Prerequisites: Anth 111 or consent of instructor.

Anth 310 The Evolution of Man (4)

Evolutionary theory applied to the development of man and to racial differentiation. Environment, biology, and culture considered as interrelated phenomena. Prerequisite: Anth 110-111-112 or consent of instructor.

Anth 315 North American Archeology (4)

An introduction to North American prehistory from the first occupation of North America through the Historic Period. Prerequisites: Anth 110, 111 or consent of instructor.

Anth 316 Latin American Archeology (4)

An introduction to the Prehistory of South America from the earliest inhabitants to the Spanish conquest. Particular emphasis is placed upon the development of the civilizations of MesoAmerica and Peru. Prerequisites: Anth 110,111 or consent of instructor.

Anth 320 Old World Archeology (4)

An introduction to the prehistoric archeology of the Old World, from the earliest times to the development of urban, literate civilizations in the Near East. Prerequisite: Anth 111 or consent of instructor.

Anth 325 Technology and Material Culture (4)

An introduction to the technologies and material cultures of preliterate and prehistoric societies. The course includes a practicum. Prerequisite: Anth 110, 111 or consent of instructor.

Anth 330 Social and Cultural Anthropology (4)

Introduction to the scientific and comparative study of society, emphasizing the analysis of societies as holistic systems, and the comparative study of institutions. Prerequisite: Anth 110-111 or consent of instructor.

Anth 335 Man, Culture and Environment (4)

Principles of Ecology and Demography as a basis for discussion of

culture as Man's adaptive medium. Prerequisite: Anth 110, 111 or consent of instructor.

Anth 340 Social and Cultural Change (4)
Major theories of social and cultural change, including unilineal multilineal evolution and acculturation. Prerequisite: Anth 110-111 or consent of instructor.

Anth 350 Culture and Personality (4)
The relationship of culture, social structure, and personality. Prerequisite: Anth 110 or consent of instructor.

Anth 360 Economic Anthropology (4)
An examination of how economic organization and technology relate to the rest of social organization and culture and the causes and consequences of economic, technological, social, and cultural change in the communities of the underdeveloped world. Prerequisite: Anth 110 and Econ 110 or 100.

Anth 370 Introduction to Descriptive Linguistics (4)
Introduction to analysis of phonology, morphology, syntax, and grammar of the preliterate speech families. Prerequisite: Anth 110 or consent of instructor.

Anth 375 Language in Culture (4)
The relationships of language and culture and reciprocal influences, with emphasis on languages outside the Indo-European speech family. Prerequisite: Anth 110-111 or consent of instructor.

Anth 400 Development of Anthropological Theory (4)
General survey of major theoretical movement in all areas of anthropology, including both historical and contemporary schools and movements. Prerequisite: Upper division status and consent of instructor.

Anth 420 Method and Theory in Archeology (4)
A survey of the major theoretical schools in archaeology with an emphasis on field techniques and analysis. Field work may be arranged. Prerequisites: Anth 110, 111, 400 or consent of instructor.

Anth 421, 422, 423 Senior Project in Anthropology (3 each)
Student initiated research project, conducted under the close supervision of the members of the faculty in Anthropology to allow the student to do original, creative work, demonstrating fully

the depth and extent of the student's knowledge of Anthropology. Prerequisite: Senior status with an Anthropology major.

Anth 425 Method and Theory of Physical Anthropology (4)
Theory and practice of the techniques used in measuring and describing human variations, includes evolutionary theory relevant to human evolution; includes morphological, behavioral and genetical aspects: Prerequisites: Anth 110, 111, or consent of instructor.

Anth 430 Method and Theory in Cultural Anthropology (4)
Growth of ethnology; differentiation of leading points of view regarding problems and subject matter. Relationship of theory, methods, and data. Major methods employed in ethnographic research. Formulation of research problems. Prerequisite: Anth 110, 111, 400 or consent of instructor.

Anth 435 Method and Theory in Linguistics (4)
A survey of the major theoretical schools of linguistics with an emphasis on data collection and analysis. Prerequisite: Anth 400 and either 370 or 375, or consent of instructor.

Anth 440 Applied Anthropology (4)
An exposition of current issues and problems in developing cultures as they relate to anthropology. 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. May be repeated for credit.

Anth 450 Field Work in Anthropology (1 to 8)
Field work in some field of anthropology, carried on 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 to 8)
Selected reading in anthropology under the close supervision of the members of the department. May be repeated to a maximum of 8 hours. Prerequisite: Upper division status and permission of the instructor.

Anth 469 Internship in Anthropology (3-16)
Junior or Senior standing with major in Anthropology.

ART DEPARTMENT

P. Richard Szeitz, *Chairperson*; Dale Amundson, Joan Ballou, Roy Boe, John Holland, Lyle Laske, Donald McRaven, Sharon Mendola, Phillip Mousseau, Timothy Ray, Marcel Stratton, John Youngquist

Areas of Study: Ceramics, Graphic and Applied Design, Painting, Photography and Film, Printmaking, Sculpture, Art Education

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. The student may select a combination of the following as a specialization: illustration, package design, symbol design, typographic design, photographic design, exhibition systems design, design for television and film, publication and poster design, and many others. Internships are also available within the field.

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

Areas of specialization, independent of media and techniques, include but are not limited to, any, or 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 and Film. Studio in creative approach to photography, developing, printing, toning, solarization, posterization, photoscreen process and other experimental extensions beyond basic photography. Creative emphasis on art film making, computer graphics, animation, video tape, cinema, slide presentation and multi-media. Internships available.

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 philosophy. Modeling, carving, moldmaking and welding. Casting media include plaster, hydrostone, dripped lead, bronze, aluminum, concrete, polyester resins and polyurethane foam. Carving media are wood and stone. Internships available.

Art Education. The required method courses dealing with the problems of applying the principles of aesthetics and the elements of visual art to the progressive development level of various age groups. The student may undertake additional field experiments and research dealing with a selected group of children identified according to age, special interest and ability or handicap.

Levels of Study

100 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 previous 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. professional preparation for presentation and evaluation of works with emphasis on exhibition and career planning in areas or personal development, commissioned works, education or public visual communications. May be taken after corresponding introductory course and 60 art credits.

Year-End Evaluation Juries. In order to help students evaluate their progress and their prospects of success as artists or art educators the Art Department requires all art majors to submit representative pieces yearly for jury evaluation. These evaluation committees will meet yearly toward the end of the spring quarter. Prerequisite for 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 area of concentration, consult with major advisor.

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

Foundation Studies in Art (16)
 Introductory Studio Courses (6-8)
 Art Survey and History (20)
 Seminars in Art (6)
 Art Concentration (18)
 Art Electives or Internships (12-14)
 Senior Exhibition

Major in Art Education 80 credits

Foundation Studies in Art (16)
 Introductory Studio Courses (9-12)
 Art Survey and History (20)
 Art Education Method Courses (7)
 Seminars in Art (6)
 Art Concentration (9)
 Art Electives or Internships (10-13)
 Senior Exhibition

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.

Minor in Art 40 credits

Art 100 Elements of Art (3)
 Art 101 Basic Drawing I (4)
 Introductory Studio Courses (12)
 Art Survey or Art Appreciation (6-8)
 Art Concentration (8)
 Art Electives (5-7)

Minor in Art Education 40 credits

Art 100 Elements of Art (3)
 Art 101 Basic Drawing I (4)
 Art 150 Introduction to Ceramics (3)
 Art 158 Introduction to Printmaking (4)
 Art 162 Introduction to Watercolor (4)
 Art Survey or Art Appreciation (6-8)
 Art 442 Studies in Elementary School Art (3)
 Art Electives (12-14)

(This minor can be awarded only in combination with at least one teaching major.)

ART COURSES**Art 100 Elements of Art (3)**

Introduction to the basic principles of creative design, study in the experimental use of various media, and the introduction of drawing and painting. For non-majors.

Art 101 Basic Drawing I (4)

Introduction to the elementary techniques of drawing with fine and broad media, emphasizing characteristics, creative selectivity and interpretation. Through analytical drawing of the world of nature and man, the student develops a new conscious perceptivity through his visual experiences. For non-majors.

Art 102 Basic Drawing II (2-4)

A visual inquiry into creative expression, using imaginative and representational skills with various drawing media. Goes beyond the elementary stages of representation, with projects in the microscopic and macroscopic exploration of perceptual experience, and problems of interpreting geometric and organic phenomena. Prerequisite: Foundation I-II or Basic Drawing I or consent of instructor.

Art 114 Design (3)

Study of textures, shapes, lines, space, and colors in their visual relationships. Investigation of visual and psychological effects of static and dynamic compositions. Study of principles of grouping, closure, proportion, and expressive potentials of materials. Includes lecture-discussions and creative projects. For non-majors.

Art 116 Three-dimensional Design (3)

Investigation of the elements of three-dimensional design. Areas of study include visual organization, volume, plane, line, light and shadow, texture, reflection, soft sculpture and kinetic art. No prerequisite.

Art Theory 120-121 Art Foundation I-II (7)

Lecture and discussion sessions direct the student toward becoming sensitive to, and discovering the visual arts. Art as a humanizing element in various cultural contexts, especially with understanding 20th century and contemporary art. Survey of formal problems, various media, esthetic theories, and vocational aspects of art today. STUDIO PRACTICUM: Sessions developing fundamental sensitivity, skills, vision and curiosity for creating in the visual arts through work with simple media in 2 and 3 dimensional problems in design and drawing. Further introductory experience in individual projects in two studios per quarter. Required of all Art Majors. Must be taken in sequence.

Art 122 Art Foundation III (2)

Continuation of lecture-discussions of Art Foundation Theory I-II. Studio practicums no longer required. Concludes Art Foundation sequence.

Art 150 Introduction to Ceramics (3)

Historical, technical and esthetic aspects of the materials and methods of ceramics — both functional and non-functional.

Pinchpot, coil, slab, drape and press mold construction concluding with potters wheel. Basic orientation to decoration in clay, engobes and glazes; familiarization with electric as well as natural-gas kilns. Prerequisite: Art Foundation I-II or consent of instructor.

Art 154 Introduction to Graphic Design (4)
Directed studio investigation of selected graphic processes, i.e., handgraphics, lightgraphics, typographics and dimensional graphics; relating to the various forms of information systems emphasizing technical preparation, career implications, and historical development. Prerequisite: Art Foundation I-II or consent of instructor.

Art 156 Introduction to Painting (2-4)
Contemporary and historical approaches to painting, emphasizing materials use, techniques, and theoretical bases of Twentieth Century art. Prerequisite: Art Foundation I-II or consent of instructor.

Art 157 Introduction to Printmaking (1-4)
Historic development of art, basic techniques and characteristic forms of relief printing, intaglio, lithography and serigraphy. Prerequisite: Art Foundation I-II or consent of instructor.

Art 160 Introduction to Sculpture (3)
Historical and contemporary survey of the materials, methods, and techniques of sculpture. Modeling, moldmaking, carving, and welding. Casting media include plaster, hydrastone, concrete, dripped lead, polyester resins and polyurethane foam. Carving media of wood and stone. Prerequisite: Art Foundation I-II or consent of instructor.

Art 162 Introduction to Watercolor (2-4)
Creative expression in transparent watercolor, tempera, gouache, and other aqueous media. Prerequisite: Art Foundation I-II or consent of instructor.

Art 175 Introduction to Jewelry Making (4)
Historical and contemporary approaches to creative jewelry making processes, emphasizing materials use, techniques and other skills whereby the student acquires a knowledge of design, soldering, wire forming, casting and other methods pertaining to contemporary jewelry making. Prerequisite: Art Foundation I-II or consent of instructor.

Art 200 Individual Studio (1-15)
Creative work in one or more varied combinations of studio fields of Ceramics, Drawing, Graphic Design, Painting, Printmaking, Sculpture, Watercolor or selected topics in visual or conceptual

art. Investigation of specialized areas of interest chosen and explored within the introductory series with emphasis on media and concept. Student, with advisor and concurring faculty specialists, prepares one or more contracts outlining proposals and agreement for completion of various projects. Weekly conferences with studio faculty are required. Grading and credit distribution determined by concurring faculty on basis of final review at end of term. Prerequisites: Minimum of 20 credits in Art including : Art Foundation I-II and consent of specialist faculty.

Art 230 MC230 Basic Photography (3)
See Mass Communications 230

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

Historical survey of architecture, painting and sculpture in its cultural context from the prehistoric period to the present day. 233: Prehistory through Early Christian and Byzantine Art. 234: Early Medieval period through the High Renaissance in Venice. 235: Baroque through beginnings of Modern Art and its contemporary aspects. Prerequisite: Sophomore standing. Recommended to be taken in sequence.

Art 252-253 Life Drawing I-II (3 each)
Study of human figure as a vehicle for personal expression. Studio sessions with live model analyze the body volumetrically and two-dimensionally in a variety of media, exploring conventional and contemporary interpretations. Prerequisite: Acceptance of competency portfolio (at level of Basic Drawing II). May be repeated up to 16 credits.

Art 262 Watercolor (2-12)
Directed program of creative painting in transparent and opaque watercolor. Various painting problems discussed and solutions explored. Prerequisite: Art 162, Introduction to Watercolor or consent of instructor.

Art 270 Art Appreciation: Art and Ideas (3)
Directed at discovery and understanding in the visual arts. The complex aspects and dimensions of art as a civilizing and humanizing element in the life of man are considered in various cultural contexts. Recommended for non-majors.

Art 271 Art Appreciation: The Great Masters (3)
Artistic personality and works of a selected group of great masters from ancient to modern times in the exposition of the stylistic epochs that generated them. Relationship of the artist to others of his period, his debt to tradition and his contribution to his own and subsequent eras will be considered. Recommended for non-majors.

Art 272 Art Appreciation: Art Today (3)

Consideration of current trends and movements in art from 1960 to the present. After introductory survey of assemblage, happenings, pop art and "the new realism," course is directed toward primary structures, minimal art, motion and light, optical and colorfield painting, various forms of abstract pictography, erotic, psychedelic and voyeur art. Recommended 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 will also be part of the program. Prerequisites: Sophomore standing or consent of instructor.

Art 300 Individual Studio (1-15)

Creative work on one or more varied combinations of studio fields of Ceramics, Drawing, Graphic Design, Painting, Printmaking, Sculpture, Watercolor or selected topics and experimentation in the Art 200 level — now with increased conceptual emphasis. Prerequisite: Minimum of 40 credits and consent of specialist faculty.

Art 329 Photographic Silk-Screen Process (3)

Course programmed to acquaint the individual with basic methods involved in photographic silk screen reproduction of finished art, creative applied visual communications and various other diversified screen printing processes. Prerequisite: Art 154 or consent of instructor.

Art 331 Creative Photography (4)

The development of an aesthetic and creative facility following professional photographic procedures. Exploration and experimentation with various photographic materials, both in the darkroom and on assignment with the camera. Prerequisite: Art 154, or MC 230 and consent of instructor.

Art 340 Art in the Elementary School (3)

Exploratory course in theory and techniques applicable to the relationship of art to the elementary curriculum. Prerequisite: Art 100 for non-majors or consent of instructor.

Art 352 Life Drawing Anatomy (4)

Study of human and muscle structure relative to surface manifestations according to movement, age, and posture. Studio sessions concentrate on anatomically accurate interpretation of life models in drawing; further work in interpretation and personal expression. May be repeated for up to 12 credits. Prerequisite: Acceptance of competency portfolio at level of Art 253, Life Drawing.

Art 353 Selected Drawing Techniques of Old Masters (2-4)

Historical review of major drawing techniques of old masters combined with experimentation. Application of the various historical methods and materials to contemporary concepts and content interpretation. Prerequisite: Consent of instructor.

Art 357 Selected Painting Techniques of the Old Masters (2-4)

Historical review of major painting techniques of old masters combined with experimentation. Application of the various historical methods and materials to contemporary concepts and content interpretation. Prerequisite: Consent of instructor.

Art 391 Junior Seminar: Theory of Art (3)

Dealing with the theoretical concerns in the visual arts from 1850 to the present. Theories of Realism, Impressionism, Cezanne, Neo-Impressionism, Symbolism, Fauves, Cubist, etc., considered as material for study and part of history of ideas having bearing on relativism of today. Prerequisite: Junior standing in Art.

Art 400 Individual Studio (1-15)

Creative work in one or more varied combinations of studio fields of Ceramics, drawing, Graphic Design, Painting, Printmaking, Sculpture, Watercolor or selected topics in visual or conceptual art. Professional preparation for presentation and evaluation of works, with emphasis on exhibition and career planning in areas of personal development, commissioned works, education or public visual communications. Prerequisite: Minimum of 60 credits in Art and consent of specialist faculty.

Art 430-431-432 Modern Art I-II-III (4 each)

Painting, sculpture and related arts in Europe from the latter part of the eighteenth century to the present.

430 (g): Neoclassicism to the emergence of Impressionism

431 (g): Impressionism to WW I — "isms" and movements through Expressionism.

432 (g): Art in Europe after WW I: Abstractionism, Fantastic and experimental trends. Prerequisite: Junior standing or consent of instructor. (Offered alternate years).

Art 434-435-436(g) Art in the United States I-II-III (4 each)

Survey of architecture, painting and sculpture in America from the Colonial period to the present.

434 (g) Colonial beginnings to 1850.

435 (g) Mid-nineteenth century to World War I.

436 (g) The Twentieth Century.

Prerequisite: Junior standing or consent of instructor. Offered alternate years.

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 444(g) Special Studies in Elementary School Art (2)

A practical delineation of creative art activities, materials, and guidance applicable to the elementary curriculum. Prerequisite: Art 442 or consent of instructor.

Art 445(g) Special Studies in Secondary School Art (2)

A practical delineation of creative art activities, materials, and guidance applicable to the secondary curriculum. Prerequisite: Art 440 or consent of instructor.

Art 455-456-457(g) Renaissance and Baroque Art I-II-III (4 each)

A study of European painting, architecture and sculpture in the period 1300–1700.

455(g) Early Renaissance Art. Emergence of modern ideas and methods studied in the works of major painters, sculptors and architects of fourteenth and fifteenth century Italy.

456(g) High Renaissance Art. Later phases with particular emphasis on the works of Leonardo, Michelangelo, Raphael and Venetian masters. Mannerism.

457(g) Baroque Art. The artistic achievements of the seventeenth century in the Romance countries and the Netherlands. Emphasis on Caravaggio, Bernini, and Borromini in Italy; Poussin in France; Velasquez in Spain; Rubens, Rembrandt and Vermeer in the Low Countries.

Prerequisite: Junior standing or consent of instructor. Offered alternate years.

Art 465 (g) The Art of Norway (4)

Survey of Norwegian art from the Viking period to the present. Key works and monuments presented in their cultural context. Prerequisite: Junior standing or consent of instructor. Offered alternate years.

Art 467 (g) Modern Architecture (4)

Architecture of the late nineteenth and twentieth centuries. Pioneers of modern design the materials, techniques, and forms of the architectural conceptions. Prerequisite: Junior standing or consent of instructor. Offered alternate years.

Art 469 Student Internship in Art (3–16)

A (one term) study arranged by student with advice and counsel of advisor, specialist faculty and artist sponsor of the student's choice. A professional experience with an artist, Art museums, or a self-directed exploration of a chosen medium in a private studio situation. Prerequisite: Senior standing in Art and consent of advisor.

Art 477 Topics in Art (2–9)

Studies selected from Art History, theory and/or studio fields of Ceramics, Drawing, Graphic Design, Painting, Printmaking, Sculpture, Watercolor or other selected topics in visual or conceptual art. Continuing direction and execution at the 400 level on Individual Studio. Prerequisite: All previous levels of study in the selected medium.

Art 484 (g) The Art of Primitive Peoples (4)

A survey of the art of peoples living apart from the "historic" civilizations in village and tribal units: Prehistoric beginnings, African art, the art of Oceania, Australia and New Zealand, as well as the primitive arts of the North America will be considered in their cultural contexts. Prerequisite: Junior standing or consent of instructor. Offered alternate years.

Art 491 Senior Seminar: Theory and Criticism in the Plastic Arts (3)

An advanced course dealing with the relationship of art theory and practice to philosophy and aesthetics. Varied and diverse topics and questions to include the role of art in the life of our time. The nature and structure of art, the evaluation and the criticism of art. Problems concerning the economics and psychology of art, style, and form and the esthetic attitude will also be considered. Prerequisite: Senior standing in Art and consent of instructor.

Art 499 Art and Culture of the Afro-American (4)

Survey of Art & Culture of the Afro-American. A survey of Black artists and their work from slavery to the present with emphasis on the cultural and political influences of Black & White society. Same as MGS 499.

Art 532 Studies in Art History (3–18)

Individual directed study in particular problems in the history of Art. Selected subject treated on the basis of its iconographical and iconological background. 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 agreed upon by the instructor and student. Painting may involve any media. Prerequisite: Consent of Art Studio faculty on presentation of a portfolio.

Art 554 Studies in Sculpture (3-18)
Individual study in sculpture places importance on the elaboration of personal expression of form into a cohesive body of sculpture for the graduate thesis exhibition. 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 and contracted by the student with advice, consent and counsel 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 procedures. 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 599 Thesis (1-16)
Registration only after consultation with major advisor.

ASTRONOMY COURSES

See PHYSICS-ASTRONOMY CURRICULA

Ast 100 Introduction to Astronomy and Space Sciences (4)

A summary of current concepts of the structure of the universe, from the Solar System to distant galaxies. Brief discussions of space travel, the theory of relativity, and the origin and evolution of the universe. Prerequisite: A knowledge of elementary algebra and geometry.

Ast 101 Observational Astronomy (3)

Non-technical introduction to naked-eye astronomy and observing with small telescopes. The MSC planetarium will be used to study stars and constellations of all seasons in both hemispheres, celestial coordinate systems, and motions of celestial objects. An observing deck and several telescopes will be used for observations of the sun, moon, planets, and "deep sky" objects with emphasis on observing a wide variety of objects and developing good observing techniques. Evening labs will meet on the observing platform or in the planetarium, depending on the subject and weather. Prerequisites: Ast 100.

Ast 110 Introduction to Rocketry and Space Travel (3)

Non-technical summary of the basic principles of rocketry and space exploration — including discussion of chemical, nuclear, and ion drives; theory of spacecraft and planetary orbits; and elementary spacecraft design. The past, present, and future American and Soviet space programs will be discussed as well as limitation and potential for future space exploration. The course will end with a discussion of inter-stellar travel and communications and the social impact of space exploration. Prerequisites: None.

Ast 200 Cosmology (3)

Theoretical principles and observational evidence lead to a consideration of a variety of possible models for the origin and evolution of the universe. Discussions of the evolution of galaxies, stars, and planetary systems include consideration of the origin of elements and life in other worlds. Current questions and philosophical considerations will end the course. Prerequisites: Ast 100, or any college level physics course, or consent of the instructor.

Ast 210 The Evolution of Stars (3)

This course deals with the birth, evolution, and death of stars. The emphasis is on a non-mathematical understanding of the principles involved. Prerequisite: One quarter of any college physics or astronomy or permission of instructor.



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Ast 300 Topics in Modern Astronomy (1-4)
 Non-technical consideration of topics of current interest in astronomy and topics beyond those ordinarily considered in Astronomy 100. If other than general topics course, area and credit to be specified in transcript. Prerequisite: Ast 100 or Ast 110, or consent of instructor. (Consent of the instructor required if the course is to be repeated for credit.)

Ast 410 Astrophysics (3)
 Mathematical consideration of various topics introductory astrophysics. May include Solar System Astrophysics, Celestial Mechanics, Stellar and Galactic Astronomy. Topics may vary slightly depending on interests of instructor and participants. Prerequisites: Math 232 and Phys. 119 or Phys. 114.

Ast 499 Topics in Advanced Astronomy (1-5)
 May be used either for consideration of special problems or for the study of introductory topics at a more advanced level. Area and credit to be specified in transcript. Prerequisites: Consent of instructor. May be repeated for credit with consent of the instructor for no more than 3 times or 10 credits.

AUDIOVISUAL EDUCATION
 See MEDIA EDUCATION

BIOLOGY DEPARTMENT

Robert Tolbert, *Chairperson*; Monroe Bartel, Thomas Collins, Yvonne Condell, Phyllis Harber, Oscar Johnson, Jesse Parsons, Richard Pemble, Mary Shimabukuro, Kenneth Skjegstad, Robert Weibust

Areas of Study: Biology, Medical Technology, Botany, Zoology

BIOLOGY CURRICULA

Majors in Biology

The requirements for the major in biology are set forth in detail below.

The non-teaching and teaching programs are identical except in the choice of electives and certain study required for certification as a teacher. 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. Most biology majors are advised to complete a chemistry minor. Students with either of the biology majors are well prepared to pursue graduate work or career opportunities in a wide variety of industrial and governmental areas.

Major in Biology

Major requirements in Biology 50 credits

- Biol 111 Cell Biology (4)
- Biol 112 General Zoology: Invertebrate (4)
- Biol 113 General Zoology: Vertebrate (4)
- Biol 122-123 General Botany I-II (8)
- Biol 345 Principles of Ecology (4)
- Biol 341 Genetics (4)
- Biol 348 Organic Evolution (4)
- Biol 350 Microbiology (4)

One of the following (4):

- Biol 306 Animal Physiology
- Biol 424 Plant Physiology

Any two of the following (2):

- Biol 481, 482, 483 Biology Seminar I, II, III

Additional Electives in Biology (8)

Requirements in Related Fields 51 credits

- Chem 111-112-113 General Chemistry (11)

Chem 111L-112L-113L General Chemistry Laboratory (4)
Phys 111-112-113 Elementary Physics I-II-III (12)

Mathematics (At least 12 credits to be determined by previous math preparation and including no more than one course in Computer Science).

Additional Approved Electives in Chemistry, Physics, or Mathematics (At least 12 credits)

Major in Biology (Teaching)

Major Requirements in Biology 53 credits

B.S. Major Requirements (50)

Biol 440 Biology Methods for Secondary Schools (3)

Requirements in Related Fields (See B.S. Major) 51 credits

Also required for teacher certification: A minor of at least 27 credits in another area of science or 27 credits of mathematics.

New requirements for certification for teaching are being formulated by the State Board of Education. These will be effective for the class starting college in the fall of 1975.

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Major in Medical Technology

It is essential that the student works closely with the Medical Technology advisor to establish a well coordinated program and to meet the prerequisites and properly file an application for the hospital year of internship in clinical education. Certification is granted upon completion of the National Registry Examination taken after the year of internship.

Major Requirements in Biology 36 credits

Biol 111 Cell Biology (4)

Biol 112 General Zoology: Invertebrate (4)

Biol 113 General Zoology: Vertebrate (4)

Biol 302 Histology (4)

Biol 306 Animal Physiology (4)

Biol 343 Microtechnique (4)

Biol 350 Microbiology (4)

Biol 410 Parasitology (4)

Biol 470 Immunology (4)

Requirements in Related Fields 39 credits

Chem 111-112-113 General Chemistry I-II-III (11)

Chem 111L-112L-113L General Chemistry Laboratory (4)

Chem 237-238-239 General Organic Chemistry I-II-III (9)

Chem 237L-238L-239L General Organic Chemistry Laboratory (3)

Chem 461, 464 and 462, 465 Biochemistry I-II (8)

Mathematics (At least 4 credits to be determined by previous preparation; may include ComS or Statistics listed below)

Recommended Electives in Related Fields

ComS 150; Math 274; Physics 111, 112, 113; Chem 222, 463, 466.

Internship in Clinical Education 52 credits

This requirement is fulfilled when the student completes the year of internship in Clinical Education at an accredited hospital. The hospitals with which Moorhead State College is affiliated are listed below. This affiliation does not automatically grant student admission to the hospital's internship program.

Midway Hospital, St. Paul, Minnesota: Benjamin Lyne, M.D., Director, Program of Medical Technology; (Mrs.) Helen Vulu, MT (ASCP), Education Coordinator.

Bethesda Lutheran Hospital, St. Paul, Minnesota; A. W. Waters, M.D., Director, Program of Medical Technology; (Mrs.) Bernadine Goyette, MT (ASCP), Education Coordinator.

Penrose Hospital, Colorado Springs, Colorado, Morgan Berthrong, M.D., Director, Program of Medical Technology; Sister Rose Virginia Brown, MT (ASCP), Education Coordinator.

United Hospitals, Inc., Miller Division, St. Paul, Minnesota; J. E. Edwards, M.D., Director, Program of Medical Technology; (Miss) Barbara Jones, MT (ASCP), Education Coordinator.

St. Luke's Hospital, Fargo, North Dakota; J. H. Coffey, M.D., Director, Program of Medical Technology; Mr. George Ulmer, MT (ASCP), Education Coordinator.

St. Alexius Hospital, Bismarck, North Dakota, P. E. Tamasky, M.D., Director, Program of Medical Technology; (Mrs.) Monica Swanberg, MT (ASCP), Education Coordinator.

Minors in Biology, Botany, and Zoology

The complete program in any of these minors must be approved by the chairman of the Department of Biology. The student is urged to arrange for consultation with an advisor in the department early in his collegiate career. Transfer students must complete at least 8 credits in the Department of Biology at Moorhead State College regardless of the number of transfer credits accepted toward completion of the minor.

Requirements for the Minor in Biology 32 credits

Biol 111 Cell Biology (4)

Biol 112 General Zoology: Invertebrate (4)

Biol 113 General Zoology: Vertebrate (4)

Biol 122-123 General Botany I-II (8)

Plus 12 credits in biology to be selected from those required for the major.

Requirements for the Minor in Zoology 28 credits

Biol 111 Cell Biology (4)

Biol 122-123 General Botany I-II (8)

Approved Electives in Botany (16)

Requirements for the Minor in Zoology 28 credits

Biol 111 Cell Biology (4)

Biol 112 General Zoology: Invertebrate (4)

Biol 113 General Zoology: Vertebrate (4)

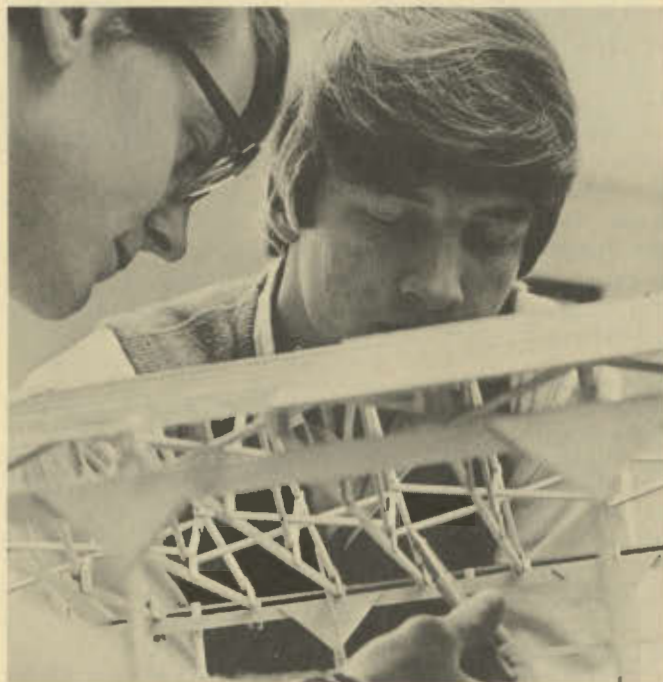
Minor in Biology (Teaching) 35 credits

Requirements for the non-teaching Minor in Biology (32)

Biol 440 Biology Methods for Secondary Schools (3)

Approved electives in Zoology (16)

(This minor can be awarded only in combination with at least one teaching major.)



BIOLOGY COURSES

Biol 102 Matter and Life (4)

General biology for the non-science major. A survey of the fundamental concepts of cell biology, genetics, and ecology. Any person intending to major or minor in any area of biology should take Biol 111 instead.

Biol 103 Man and the Ecosystem (4)

A survey of the general elements of ecology for the non-biology major emphasizing man's impact on the environment; population, pollution, etc.

Biol 104 Human Biology (4)

Basic biology of humans for the non-science major. A survey of the structure and function of the human body with special reference to reproduction, development, genetics, diseases and defects. No prerequisites.

Biol 111 Cell Biology (4)

Basic concepts in cell structure, physiology, and reproduction. 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)

Comparative structural and functional features of the major vertebrate groups, emphasizing basic anatomy and physiology of the organ systems. With lab. Prerequisite: Biol 111 or consent of instructor.

Biol 122-123 General Botany I-II (4 each)

Study of basic principles of plant life from organizational levels to natural history of representative groups. With lab. Prerequisite: Biol 111 or consent of instructor.

Biol 226 Field Biology of Plants (4)

A study of the habitats of plants, with emphasis on conservation. With lab.

Biol 241 Principles of Human Genetics (3)

An introduction to human genetics for the non-biology major. Prerequisites: none (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 description of 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 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)

A taxonomic and ecological survey of the common regional invertebrates (excluding insects) and vertebrates (excluding birds). With lab and field work. Prerequisite: Biol 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)

Insecta, including morphology, taxonomy, and their economic importance with minor emphasis on other arthropods. With lab and field work. Prerequisite: Biol 113; 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)

Mendelian principles and modern theory underlying plant and animal inheritance. With lab. Prerequisite: Biol 113 or Biol 123.

Biol 343(G) Microtechnique (4)

Basic procedures in tissue preparations for histological study and preservation, including photomicrography, micrometry, plastic embedding, etc. 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)

Study of various products and processes of organic evolution, including fundamental genetic mechanisms. 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 or corequisite: Chem 113.

Biol 355(G) Wildlife Ecology (4)

The application of ecological principles to the management of wildlife populations. The dynamic nature of the population is stressed, and important field techniques for measuring population phenomena are discussed and demonstrated. With lab and field work. Prerequisite: Biol 345.

Biol 356(G) Plant Ecology (4)

The relation of plants to their physical environment, their influences on each other, and their relationship to other organisms. Laboratory and field investigation will emphasize local species and habitats. Prerequisite: Biol 345; Biol 325 recommended.

Biol 401(G) Endocrinology (4)

Influences of hormones on the whole animal, specific tissues, and biochemical phenomena. With lab. Prerequisites: Biol 306 and Chem 113; Chem 239 or 361 recommended.

Biol 410(G) Parasitology (4)

Principles and importance of parasitism as exemplified by selected parasitic protozoa, helminths, and arthropods. With lab. Prerequisite: Biol 113.

Biol 414(G) Protozoology (4)

Protozoa, including the nonparasitic forms, their taxonomy, reproduction, physiology, growth and significance to man and animal. With lab. Prerequisite: Biol 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 I (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 425(G) Plant Physiology II (4)

Selected topics in plant physiology. With lab. Prerequisite: Biol 424.

Biol 433(G) Plant Morphology: The Lower Forms (4)
The structure, development, life cycles, and relationships of the algae, fungi, and bryophytes. With lab. Prerequisite: Biol 123 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 123 or consent of instructor.

Biol 440 Biology Methods for Secondary Schools (3)
For secondary education students majoring in biology. Consisting of materials and methods typical to high school biology and those unique to the BSCS curricula. Prerequisite: Senior status in biology major or minor.

Biol 443 Techniques in Biological Preparations (4)
Field and lab techniques and procedures in plant and animal preparations for display, study and research. These may include plastic embedding, equipment and its usage, study skins, slide mounts, herbarium preparations, maintenance, care and use of vertebrate and invertebrate lab animals. Course suitable for teaching majors and inservice teachers. Prerequisite: Consent of instructor or 20 credits of biology laboratory courses.

Biol 445(G) Limnology (4)
Selected topics in population and environmental biology. With lab and field work. Prerequisite: Biol 345.

Biol 449(G) Cytology (4)
The structure of cells and their components in relation to cell function, reproduction, cytogenetics, and cytochemistry. With lab. Prerequisite: Biol 341 or consent of instructor.

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 469 Internship (8-16)

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 DIVISION

Robert Cox, James Dillard, Wilbert Fischer, Evelyn Grove, Donald Kohns, Evelyn Larson, Ralph Lee, Howard Lysne, Wesley Monson, Jay Myster, David Nelson, James Noehl, Dorian Olson, Jeffrey Pitzenbarger, Robert Roel, James Swenson, Jerry Wegenast, Donald Wirries

Departments: Accounting, Business Administration, Business Education

Areas of Study: Accounting, Business Administration, Business Education, Distributive Education, Finance, Hotel-Motel-Resort Management, Management Science, Marketing, Secretarial Science.

BUSINESS CURRICULA**Majors in Business**

Core Requirements in Business 34 credits

Acct 229-230-231 Elementary Accounting I-II-III (10)

Acct 310-311-312 Business Law I-II-III (12)

Finc 340 Corporate Finance I (4)

MgmS 360 Elements of Business Management (4)

Mktg 310 Principles of Marketing (4)

Core Requirements in Related Fields 24 credits

ComS 150 Introduction to Digital Computers (4)

Econ 110-111-112 Principles of Economics I-II-III (12)

Math 273 Mathematics for Behavioral and Social Sciences (4)

Math 274 Introduction to Statistics (4)

Courses may not be counted toward more than one business major except to meet core requirements in business and related fields as listed above.

No more than 19 hours of a combination of work experience, hotel-motel practicum, student teaching or internship can be counted toward the Baccalaureate Degree.

Major in Accounting (B.A.)

Core Requirements in Business 34 credits

(Substitute Finc 341, Corporate Finance II, for Finc 340 in core requirements)

Accounting Courses 40 credits

Requirements in Related Fields 24 credits

Major in Business Administration (B.A.)

Core Requirements in Business 34 credits

Business Administration Courses 32 credits

Work shall consist of 32 credits in two fields, with a minimum of

12 credits in each field. Eligible fields are: accounting, finance, management science, and marketing.

Requirements in Related Fields 24 credits

Major in Finance (B.A.)

Core Requirements in Business 34 credits

Requirements in Finance 40 credits

Finc 341 Corporate Finance II (4)

Finc 342 Decision Making in Corporate Financial Management (4)

Finc 358 Principles of Investment (4)

Finc 457 Security Analysis (4)

Finc 458 Portfolio Management (4)

Econ 320 Money and Banking (4)

Electives in Economics and Finance (16)

Requirements in Related Fields 24 credits

Major in Management Science (B.A.)

Core Requirements in Business 34 credits

Requirements in Management Science 42 credits

MgmS 420 Analysis of Formal Organizations (4)

MgmS 421 Executive Decision Making (4)

MgmS 430 Managerial Economics (4)

MgmS 440 Personnel Management (4)

MgmS 450 Production and Industrial Management (4) or MgmS

451 Personnel Relations (4)

MgmS 460 Case Studies in Business Management (4)

MgmS 498 Problems in Business Management (4)

*Soc 305 Social Psychology (3)

*Soc 415 Social Organization (3)

*Substitution may be made with consent of advisor

One of the following Areas of Specialization (At least 12 credits):

(A) Behavioral Orientation —

12 credits in Psychology or Sociology

Approved by Advisor

(B) Quantitative Orientation —

ComS 151, 152, 450

Math 231, 232, 233, 234, 327, 427, 450, 474

Economic Orientation

Econ 225, 250, 315, 325, 415, 416

(C) Functional Orientation — To be developed in cooperation with such related fields as Accounting, Business Administration, and Public Administration

Requirements in Related Fields 24 credits

Major in Marketing (B.A.)

Core Requirements in Business 34 credits
Requirements in Marketing 40 credits
 Mktg 311 Marketing Management (4)
 Mktg 442 Marketing Seminar (4)
 Electives in Marketing Courses (At least 32 credits)

Major in Business Education

Major Requirements in Business Education 56-59 credits
 Acct 229-230-231 Elementary Accounting I-II-III (10)
 Acct 310 Business Law I (4)
 BEd 90 Basic Typewriting (Non-credit) or equivalent proficiency
 BEd 207 Business Communications and Report Writing (4)
 BEd 210-211 Typewriting I-II (4)
 BEd 440 Methods of Teaching Bookkeeping and Typewriting (2)
 MgmS 360 Elements of Business Management (4)
 Mktg 310 Principles of Marketing (4)

One of the following Areas of Specialization:

(A) Accounting and Data Processing —
 Acct 330-331-332 Intermediate Accounting I (9)
 Acct 450 Federal and State Tax I (3)
 ComS 151 Computer Programming I (4)
 ComS 155 Data Processing (4)
 ComS 311 Computer Application to Business & Econ (3)
 or ComS 152 Computer Programming II (4)

(B) Secretarial —

BEd 212 Typewriting III (2)
 BEd 220-221-222 Shorthand I-II-III (12)
 BEd 321 Communications Machines (1)
 BEd 322 Office Machines (2)
 BEd 323 Secretarial Administration (3)
 BEd 330 Office Management (4)
 BEd 441 Methods of Teaching Shorthand (1)

(C) Clerical —

BEd 212 Typewriting III (2)
 BEd 321 Communications Machines (1)
 BEd 322 Office Machines (2)
 BEd 323 Secretarial Administration (3)
 BEd 330 Office Management (4)
 Electives in Business or Economics (At least 13 credits)

(D) Basic Business or Economics —

BEd 315 Consumer Economics (4)
 BEd 442 Methods of Teaching Basic Business and Economics (1)
 Econ 320 Money and Banking (4)
 Econ 250 Intermediate Micro-Economic Theory (4)

One of the following courses (4):
 Econ 315, 350, 415, 416, 420, 430, 440
 Econ 350, 415, 416, 420, 430, or 440
 Electives in Business or Economics (At least 10 credits)

(E) Comprehensive Program —

BEd 212 Typewriting III (2)
 BEd 220-221-222 Shorthand I-II-III (12)
 BEd 315 Consumer Economics (4)
 BEd 321 Communications Machines (1)
 BEd 322 Office Machines (2)
 BEd 330 Office Management (4)
 BEd 441 Methods of Teaching Shorthand (1)
 BEd 441 Methods of Teaching Basic Business and Economics (1)

Requirements in Related Fields 16 credits

ComS 150 Introduction to Digital Computers (4)
 Econ 110-111-112 Principles of Economics I-II-III (12)

Recommended Courses for Office Education Certification

DEd 420 Coordination Techniques (3)
 DEd 440 Org & Admin of Dist. Ed. (3)
 DEd 498 (Philosophy of Vocational Educ) (3)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Major in Distributive Education

Requirements in Business and Distributive Education
 58 credits

Acct 229-230 Elementary Accounting I-II (6)
 Acct 310-311 Business Law I-II (8)
 MgmS 360 Elements of Business Management (4)
 DEd 401-402-403 Methods of Distributive Education (7)
 DEd 420 Coordination Techniques (3)
 EDd 430 Vocational Educational Curriculum (3)
 DEd 440 Organization and Administration of Vocational Programs (3)
 DEd 498 Problems in Business and Distributive Education (1-4)
 Mktg 310 Principles of Marketing (4)
 Mktg 311 Marketing Management (4)
 Mktg 322 Marketing Intelligence (4)
 Mktg 323 Marketing Communications (4)
 Mktg 421 Retail Management (4)
 Mktg 430 Sales Management (4)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Major in Hotel-Motel-Resort Management — B.S. Degree*Major Course Requirements* 79 credits

Acct 229-230-231 Elementary Accounting I-II-III (10)

Acct 310-311-312 Business Law I-II-III (12)

BEd 322 Office Machines (2)

BEd 330 Office Management (4)

Finc 351 Principles of Insurance (4)

MgmS 360 Elements of Business Management (4)

MgmS 405 Small Business Management (4)

MgmS 440 Personnel Management (4)

Mktg 310 Principles of Marketing (4)

Mktg 323 Marketing Communications (4)

Professional Hotel-Motel-Resort Courses:

MgmS 342 Food and Beverage Management (4)

MgmS 343 Hotel-Motel-Resort Management (4)

MgmS 346 Hotel-Motel-Resort Accounting (3)

Hotel-Motel Practicum Courses (16 credits)

MgmS 340-341-344-345 Hotel Administration Practicum
I-II-III-IV*Requirements in Related Fields* 17 credits

Econ 110-111-112 Principles of Economics I-II-III (12)

HE 122 Textiles (3)

IA 316 Blueprint Reading (2)

Minor in Business Administration 42 credits

Acct 229-230-231 Elementary Accounting I-II-III (10)

Acct 310-311-312 Business Law I-II-III (12)

Econ 110-111-112 Principles of Economics I-II-III (12)

MgmS 360 Elements of Business Management (4)

Mktg 310 Principles of Marketing (4)

Minor in Business Education 32 credits

Acct 229-230-231- Elementary Accounting I-II-III (10)

Acct 310 Business Law I (4)

BEd 207 Business Communications and Report Writing (4)

BEd 210-211 Typewriting I-II (4)

ComS 150 Introduction to Digital Computers (4)

Econ 110 Principles of Economics I (4)

BEd 440 Methods of Teaching Bookkeeping and Typewriting (2)

(This minor can be awarded only in combination with at least one teaching major.)

Minor in Marketing 24 Credits

Electives in Marketing (At least 24 credits)

Minor in Accounting 24 credits

The following minor is open to business majors only and requirements are in addition to accounting courses in the major.

Acct 330-331-332 Intermediate Accounting I-II-III (9)

Approved electives in accounting selected from the following areas (15):

Federal and State Income Taxes

Advanced Accounting

Cost Accounting

Auditing

Minor in Business Accounting 32-34 credits

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 Elementary Accounting I-II-III (10) Acct 310 or 312 Business Law I or III (4)

Acct 330-331-332 Intermediate Accounting I-II-III (9)

Approved electives in accounting (At least 9)

BEd 440 Methods of Teaching Bookkeeping and Typing

(2— required for the B.S. Teaching degree)

Associate in Arts in Business 96 credits

Requirements for the two-year Associate in Arts diploma, including at least 42 credits in General Studies and a total of 96 credits, are described in the Academic Information section of this catalogue. Following are the area of specialization requirements for A.A. programs offered by the Division of Business Courses listed under "Related Requirements" may also be used for General Studies if they are applicable.

A.A. in Accounting

Requirements in Business and Accounting (32 credits):

Acct 310 Business Law I (4)

Additional Courses in Accounting (At least 24 credits)

BEd 207 Business Communications and Report Writing (4)

Related Requirements in Other Fields (8 credits):

Econ 110 Principles of Economics I (4)

Math 121 College Algebra (4)

A.A. in Marketing

Requirements in Business and Marketing (38 credits):

Acct 229-230 Elementary Accounting I-II (6)

BEd 207 Business Communications and Report Writing (4)

Marketing Courses (At least 28 credits)

Related Requirements in Other Fields (16 credits):

Econ 110-111-112 Principles of Economics I-II-III (12)

Math 121 College Algebra (4)

A.A. in Business Administration

Requirements in Business (38 credits):
Acct 229-230 Elementary Accounting I-II (6)
BEd 207 Business Communications and Report Writing (4)
Business Administration Courses (At least 28 credits)
Related Requirements in Other Fields (16 credits):
Econ 110-111-112 Principles of Economics I-II-III (12)
Math 121 College Algebra (4)

A.A. in Secretarial

Requirements in Accounting and Business Education (38 credits):
Acct 229-230-231 Elementary Accounting I-II-III (10)
Acct 310 Business Law I (4)
Business Education Courses (At least 24 credits)

BUSINESS COURSES

See ACCOUNTING, BUSINESS EDUCATION, DISTRIBUTIVE EDUCATION FINANCE, MANAGEMENT SCIENCE, and MARKETING Courses.

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BUSINESS ADMINISTRATION DEPARTMENT

David Nelson, *Chairperson*

Areas of Study: Business Administration, Finance, Hotel-Motel-Resort Management, Management Science, Marketing
See also BUSINESS for Faculty and Curricula

BUSINESS EDUCATION DEPARTMENT

Howard Lysne, *Chairperson*

Areas of Study: Business Education, Distributive Education, Secretarial
See also BUSINESS for Faculty and Curricula

BUSINESS EDUCATION COURSES

BEd 90 Basic Typewriting (2)
Correct keyboard techniques. (This is an audit only course for students without typewriting experience and for students who wish to regain their former typewriting skill.)

BEd 207 Business Communications and Report Writing (4)

A business approach to the writing of business letters, memoranda, and reports; psychology of sales promotion and collection letters. Prerequisite: Ability to type.

BEd 210-211 Typewriting I-II (2 each)

210: Practice in typing letters and typing from rough draft. 211: Arrangement and typing of business papers; tabulation problems; typing of manuscripts.

BEd 212 Advanced Typewriting (2)

Speed and production skills; statistical typewriting, special reports, legal, medical and business papers. Prerequisite: BEd 211.

BEd 220-221-222 Shorthand I-II-III (4 each)

Gregg shorthand, dictation and transcription. Typewriting must either precede or accompany all shorthand courses. 220 and 221 open only to students who have not earned credit in high school shorthand. Prerequisite: BEd 210 or equivalent. Must be taken in sequence.

BEd 242-243-244 Work Experience I-II-III (1 credit each, maximum 3)

Supervised office experience to acquaint the student with office procedures; involves record keeping. Typing, shorthand, and office machine operation required. Student secures his employment with a cooperating firm. A minimum of thirty hours of satisfactory work is necessary for each course. For majors only.

BEd 315 Consumer Economics (4)

Problems confronting the consumer in selecting goods and services, the aid given by government and private agencies, the effect of consumer selection on the total national economy.

BEd 321 Communication Machines (1)

A practical course on the preparation of materials for machine duplication and the actual operation of various machines including ditto, mimeograph, etc. for students in business education and secretarial science. Prerequisite: BEd 211.

BEd 322 Office Machines (2)

Development of skills and an understanding of the business application of various office machines used in mathematical computations. No Prerequisites.

BEd 323 Secretarial Administration (3)
 Secretarial and office administration procedures. Includes instruction in filing and records management.

BEd 324 Dictation and Transcription (3)
 Emphasis on total development of typewriting, shorthand, and technical English skills for efficient transcription for business, medical, legal or technical offices. Prerequisite: BEd 221 or consent of the instructor.

BEd 330 Office Management (4)
 Organization of offices, layout, furniture and equipment, machines, selection and training of personnel.

BEd 440 Methods of Teaching Bookkeeping and Typing (2)
 Emphasis is placed on creativity in teaching, objectives of the

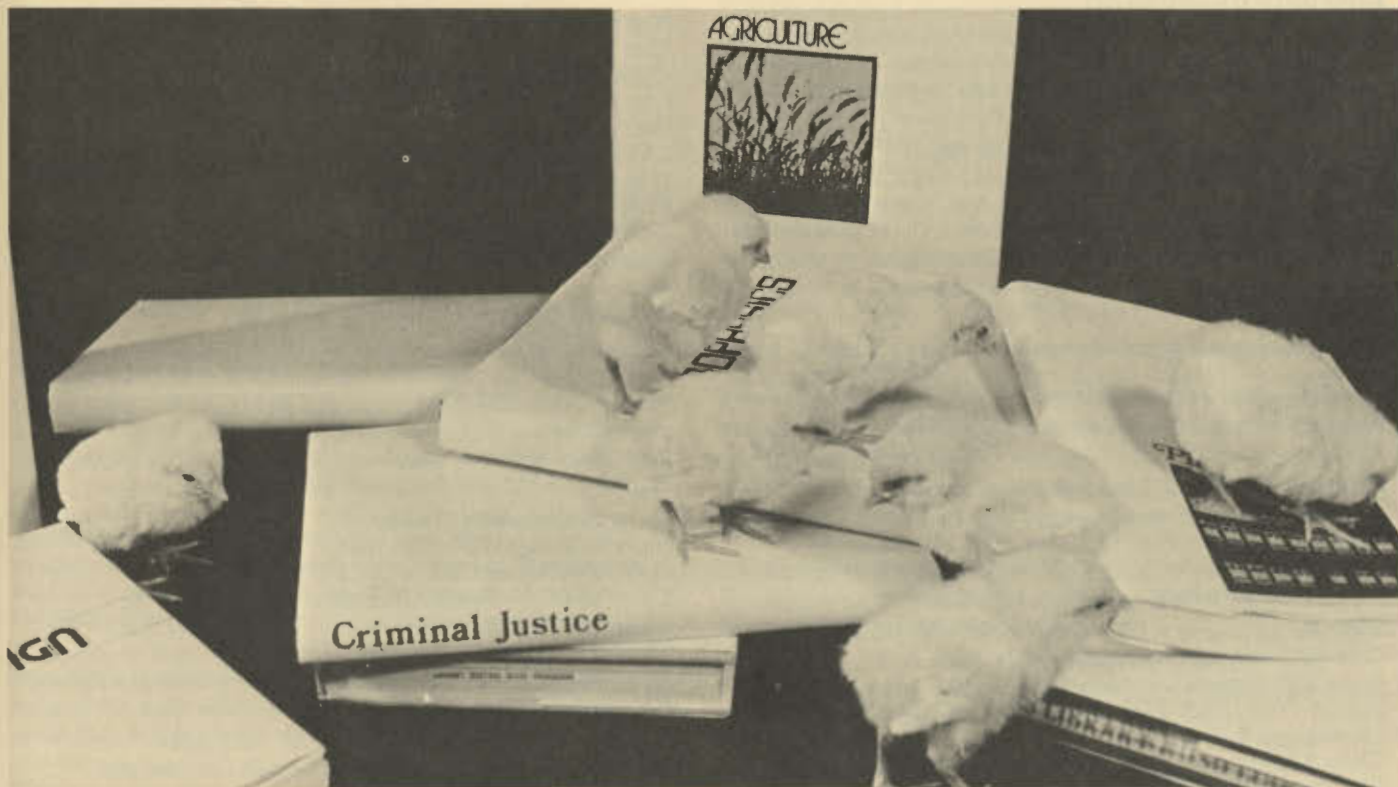
courses, and some micro-teaching experience. Prerequisites: BEd 212, Acct 231.

BEd 441 Methods of Teaching Shorthand (1)
 Teaching techniques for developing shorthand skill. Prerequisite: BEd 222, or consent of instructor.

BEd 442 Methods of Teaching Basic Business and Economics (1)
 Particularly aimed at teaching general business, economics and business law in the high school. Prerequisites: Area of Specialization IV, or consent of instructor.

BEd 469 Student Internship (4-16)

BEd 599 Thesis in Business Education (1-6)
 Registration only after consultation with major advisor.



CHEMISTRY DEPARTMENT

B. Spencer Meeks, *Chairperson*; Dewey Brummond, Nicholas Kowanko, Dennis Krzyzaniak, Dennis Mathiason, Janet Paulsen, James Shaw, Judith Strong, William Treumann

Scholarships for outstanding students are available from the Department of Chemistry through the generosity of various members of the professional and business community.

Contributors include Simon's Home Furnishings, Twin City Construction, Worum Chemical Company of St. Paul, and the Chemistry Club of Moorhead State College.

The Department of Chemistry at Moorhead State College is on the Approved List of the American Chemical Society.

CHEMISTRY CURRICULA

Three undergraduate majors in chemistry are offered leading to the B.A. degree, the B.S. (non-teaching) degree, or the B.S. (teaching) degree. Teaching and non-teaching minors in chemistry are also offered.

62 Core Requirements in Chemistry for All Majors 32 credits

Chem 111-112-113 General Chemistry I-II-III (11)
Chem 111L-112L-113L General Chemistry Laboratory I-II-III (4)
Chem 231-232 Organic Chemistry I-II (6)
Chem 341-342 Physical Chemistry I-II (6)
Chem 345 Physical Chemistry Laboratory I (2)
Chem 452 Inorganic Chemistry (3)

Related Requirements for All Chemistry Majors 16-28 credits

Mathematics (At least 4 credits, including Math 232, Calculus II, and any prerequisites, depending on previous study)
Phys 118-119-220 General Physics I-II-III (12)
(OR) Phys 111-112-113 Elementary Physics I-II-III (12)

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 50-52 credits

Core Requirements in Chemistry (32)
Chem 233 Organic Chemistry III (3)
(Either) Chem 237L-238L-239L General Organic Chemistry Laboratory I-II-III (3)
Chem 222 Introduction to Instrumental Analysis (4)
(Or) Chem 234-235-236 Organic Chemistry Laboratory I-II-III (6)

Chem 346 Physical Chemistry Laboratory II (2)
(Either) Chem 361 Introduction to Biochemistry (4)
Chem 421 Instrumental Analysis I (3)
(Or) Chem 461-462 General Biochemistry I-II (6)
Chem 464-465 General Biochemistry Laboratory I-II (2)

Requirements in Related Fields 28-40 credits
Mathematics and Physics courses (normally Phys 111-112-113) required of all majors (16-28)
Additional Approved electives in science (At least 12 credits)

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 66-72 credits

Core Requirements in Chemistry (32)
Chem 233 Organic Chemistry III (3)
Chem 234-235-236 Organic Chemistry Laboratory I-II-III (6)
Chem 343 Physical Chemistry III (3)
Chem 346 Physical Chemistry Laboratory II (2)
Chem 421 Instrumental Analysis I (3)
Chem 422 Instrumental Analysis II (3)
Chem 453 Inorganic Chemistry II (3)
Chem 480 Chemistry Seminar (3 — three quarters, 1 credit each)
Approved Electives in Chemistry (10-16)

Requirements in Related Fields 32-55 credits

Ger 101-102-103 Beginning German I-II-III (15) or equivalent
Math 231-232-233-234 Calculus I-II-III-IV (16) and any prerequisites
Math 331 Differential Equations (4)
Physics 118-119-220 General Physics I-II-III (12)

Major in Chemistry (Teaching)

Major Requirements in Chemistry 57 credits
Core Requirements in Chemistry (32)
Chem 234-235 Organic Chemistry Laboratory I-II (4)
Chem 380 Teaching Chemistry in the Secondary School (3)
Chem 453 Inorganic Chemistry II (3)
Chem 480 Chemistry Seminar (3 — three quarters, 1 credit each)
Approved Electives in Science (12)

Requirements in Related Fields 28-36 credits

Math 231-232-233-234 Calculus I-II-III-IV (16) and any prerequisites

Phys 118-119-220 General Physics I-II-III (12)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minors in Chemistry

A transfer student must earn at least seven credits above the 100-level in chemistry in this department before his minor can be certified and/or before he can be recommended for student teaching.

Minor in Chemistry 34 credits

Chem 111-112-113 General Chemistry I-II-III (11)

Chem 111L-112L-113L General Chemistry Laboratory I-II-III (4)

Electives in Chemistry (19)

(Must include *either* Chem 237, 237L, 238, and 238L or Chem 341 and 342).

Minor in Chemistry (Teaching) 36 credits

Chem 111-112-113 General Chemistry I-II-III (11)

Chem 111L-112L-113L General Chemistry Laboratory I-II-III (4)

Chem 237-238 General Organic Chemistry I-II (6)

Chem 237L-238L General Organic Chemistry Laboratory I-II (2)

Chem 340 Introduction to Physical Chemistry (4) or Chem 341-342 (6)

Chem 361 Introduction to Biochemistry (4) or Chem 461-462 (6)

Chem 380 Teaching Chemistry in the Secondary School (3)

(This minor can be awarded only in combination with at least one teaching major.)

CHEMISTRY COURSES

Chem 102 Topics in Introductory Chemistry (2-4)

A study of some of the elementary aspects of chemistry and chemical thought. Various topics are dealt with in an array of topics; courses designed to meet the needs and interests of the modern student who is not majoring in a science. Broadly speaking, those topics may deal with such diverse areas as the structure and properties of matter, the impact of chemistry on modern society, and the historical development of modern chemical concepts. Two examples of topic courses are:

1. *Survey of Basic Principles of Chemistry.* — An elementary study of the fundamental facts, laws and theories of chemistry and some of the applications of these in modern society. This course is particularly suitable for students who have had no high school chemistry.
and

2. *Environmental Chemistry.* — A study of chemicals and chemical processes in the environment both normal and abnormal (pollution). The study may include, but is not confined to, some of the chemical aspects of photosynthesis and ecology, energy production, plant nutrients (including chemical fertilizers), air and water pollution, sewage treatment, synergistic relationships between chemical species, etc. The study in any particular quarter tends to emphasize problems of current interest.

Chem 106-107-108 Chemistry for Health Professions I-II-III (5 each)

These courses are designed as a preparation for nursing, physical therapy, home economics and vocational-technical programs in medicine and dentistry; also suitable for general studies credit. Credit may not be applied toward a chemistry major or minor. *Chem 106:* An introduction to basic chemical properties and theories including atomic structure, bonding, stoichiometry, acids and bases. *Chem 107:* An introduction to aliphatic and aromatic compounds and study of the chemical behavior of functional groups. Prerequisite: Chem 106 or Chem 112. *Chem 108:* An introduction to the structure and metabolism of carbohydrates, lipids, and proteins. Prerequisite: Chem 107.

Chem 111-112-113 General Chemistry I-II-III. (4,4,3)

Elementary principles and theories including bonding, stoichiometry, solution chemistry, energetics, equilibria, periodicity of elements, and reaction chemistry. Concurrent registration in Chem 111L-112L-113L required. Prerequisite: High school algebra or equivalent.

Chem 111L-112L-113L General Chemistry Laboratory I-II-III (1,1,3)

Laboratory techniques of general chemistry including qualitative and quantitative analysis. Must be taken concurrently with Chem 111-112-113.

Chem 114-115 (5,6) and Chem 114L-115L (2 each)
Compressed sequences equivalent to Chem 111-112-113 and 111L-112L-113L.

Chem 202 Scientific Glass Fabrication (2)

Techniques of construction of specialized glass apparatus. Prerequisite: Instructor's approval.

Chem 222 Introduction to Instrumental Analysis (4)

Introduction to quantitative and qualitative instrumental analytical techniques, such as infra-red and ultraviolet-visible spectrophotometry, atomic absorption and flame emission analysis, and various branches of chromatography, including analytical liquid, thin layer, gel permeation, and gas

chromatography. These techniques are specifically pertinent to applications in the fields of biology and medical technology. Prerequisites: Chem 232 or 238 and 235 or 238L.

Chem 231-232-233 Organic Chemistry I-II-III (3 each)
Fundamentals of organic chemistry; the structure, synthesis, and physical and chemical properties of aliphatic, aromatic, and heterocyclic compounds; underlying theory of covalent molecular structures and reaction mechanisms. Prerequisites: Chem 113 and 113L.

Chem 234-235-236 Organic Chemistry Laboratory I-II-III (2 each)
Experimental organic chemistry. Prerequisite: Chem 231-232-233 or concurrent registration.

Chem 237-238-239 General Organic Chemistry I-II-III (3 each)
A study of the important classes of aliphatic, aromatic, and heterocyclic compounds, fats, carbohydrates, and proteins. Meets the requirements for biology and certain pre-professional students. Credit will not be given for both this course and Chem 231-232-233. Prerequisite: Chem 113 or instructor's approval.

Chem 237L-238L-239L General Organic Chemistry Laboratory (1 each)
Experimental general organic chemistry. Prerequisite: Chem 237-238-239 or concurrent registration.

Chem 281-282 (5,4) and 281L-282L (1,2)
Compressed sequence equivalent to Chem 237-238-239 and 237L-238L-239L.

Chem 314 Aquatic Chemistry (3)
The fundamentals of solution theory as applicable to natural water systems. Study of the various facets of solution chemistry, e.g., solubility products, equilibria, electrolytes present in natural waters, should present the student with an opportunity to more fully appreciate the complex problems and relationships that exist between substances in natural waters. This information is essential for an understanding of interactions in waste and natural water treatment systems and their potential impact on land and human resources. Prerequisites: Chem 113 and 113L and consent of instructor.

Chem 321 Quantitative Analysis (4)
The theoretical principles and laboratory techniques involved in modern quantitative analysis including methods of separation: gravimetric, volumetric, potentiometric, and colorimetric methods of measurement. Prerequisite: Chemistry 113 and 113L.

Chem 340 Introduction to Physical Chemistry (4)
A non-calculus introduction to physical chemistry. Consideration of energy changes in chemical reactions, equilibrium in solutions, chemical reaction rates, and topics in atomic and molecular structure. Credit not applicable towards major in chemistry. Prerequisites: Chem 113, Math 121 or equivalent; Phys 113 recommended.

Chem 341-342-343 Physical Chemistry I-II-III (3 each)
Application of the laws of physics to chemical phenomena. Prerequisites: Chem 113, Math 234, Phys 220 or consent of instructor.

Chem 345-346 Physical Chemistry Laboratory I-II (2 each)
Experimental physical chemistry. Prerequisite: Chem 341-342-343 or concurrent registration.

Chem 361(G) Introduction to Biochemistry (4)
A brief survey of the chemistry of carbohydrates, lipids, proteins, nucleic acids, vitamins, enzymes, coenzymes, and intermediary metabolism. Not open for graduate credit to chemistry majors. Prerequisites: Biol 111 and Chem 238 or 232.

Chem 380 Teaching Chemistry in the Secondary School (3)
Curricula, methods, and materials in teaching chemistry in high school. Emphasis on CHEMS and CBA approaches. For students majoring in secondary education (chemistry). Prerequisite: Senior standing and departmental approval.

Chem 405(G) Chemical Literature (1)
Introduction to chemical literature in journals, handbooks, abstracts, monographs, and patents; instruction in the use of these sources. Prerequisite: Senior standing or consent of instructor.

Chem 421 Instrumental Analysis I (3)
The theory, principles, and laboratory techniques of electrochemical analyses such as potentiometry, electrogravimetry, coulometry, polarography. Prerequisite: Chem 343, 346 and either Chem 236 or Chem 222, or consent of instructor.

Chem 422 Instrumental Analysis II (3)
The theory, principles, and laboratory techniques of various aspects of ultraviolet and infra-red spectrophotometry, X-ray analysis, nuclear magnetic resonance, mass, atomic absorption, and emission spectroscopy, etc. Prerequisites: Chem 343 and 346.

Chem 424(G) Analysis of Chemical Pollutants (3)
The detection, surveillance, and analysis of biocides and other chemical species in air, water, and soil. Prerequisites: Chem 113 and Chem 232 or 238.

Chem 427(G) Topics in Analytical Chemistry (1-3)
Selected topics in analytical chemistry such as chromatographic, electro-chemical, kinetic, optical, radiochemical, and thermal methods of analysis and the associated instrumentation. Prerequisites: Chem 222 and consent of instructor. May be repeated when topic is changed.

Chem 432(G) Advanced Organic Chemistry (3)
Consideration of organic reactions and mechanisms. Prerequisite: Chem 233 or 239.

Chem 434 Advanced Organic Chemistry Laboratory (1-3)
Specialized laboratory techniques; more difficult organic synthesis. Prerequisite: Chem 236 or consent of instructor.

Chem 437(G) Topics in Organic Chemistry (1-3)
Special topics in organic chemistry. Advanced courses dealing with subjects not ordinarily covered in depth by regularly scheduled courses, such as natural products, organic photochemistry, stereo-chemistry, chemistry of special families of organic compounds, etc. Prerequisite: Chem 233 or 239 or consent of instructor.

Chem 438(G) Chemical Pollutants (4)
A study of the nature, distribution, and chemical breakdown of pollutants in the environment. Agricultural chemicals and pesticides, household chemicals and wastes, industrial wastes, combustion products, food additives, etc., will be considered. Prerequisite: Chem 233 or 239 or consent of instructor.

Chem 444 Advanced Physical Chemistry Laboratory (1-3)
Special techniques in experimental physical chemistry. Prerequisite: Chem 346 or consent of instructor. May be repeated for credit.

Chem 447(G) Topics in Physical Chemistry (1-3)
Selected topics in physical chemistry such as mathematical methods, kinetics, statistical thermodynamics, quantum chemistry. Prerequisite: Chem 343 or consent of instructor. May be repeated when topic is changed.

Chem 452 Inorganic Chemistry I (3)
Aspects of bond theory, such as hybridization, bond lengths and strengths, electronegativities, dipole moments, structure, etc., and

chemistry of elements other than transition series. Prerequisite: Chem 342.

Chem 453 Inorganic Chemistry II (3)
Transition metal chemistry. Valence bond, molecular orbital, crystal field, and ligand field theory. Prerequisite: Chem 452.

Chem 455 Experimental Inorganic Chemistry (1)
A laboratory study of modern inorganic chemistry. Prerequisites: Chem 452 and 453 or concurrent registration.

Chem 457(G) Topics in Inorganic Chemistry (1-3)
Selected topics in inorganic chemistry such as: coordination chemistry, bonding, group theory applications to structural chemistry, acid-base and non-aqueous solvent theory, organometallic chemistry, and chemistry of biochemical model systems. Prerequisite: Consent of instructor. May be repeated when topic is changed.

Chem 461-462-463(G) General Biochemistry I-II-III (3 each)
A survey of the chemistry of carbohydrates, lipids, proteins, nucleic acids, vitamins, enzymes, coenzymes and intermediary metabolism. Prerequisite: Chem 233 or Chem 239. Concurrent registration in Chem 464-465-466 is strongly recommended.

Chem 464-465-466(G) General Biochemistry Laboratory I-II-III (1 each)
Some 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 topics in biochemistry dealing with metabolism or natural products. Prerequisite: Chem 463 or consent of instructor. May be repeated when topic is changed.

Chem 469 Student Internship (3-16)
Supervised work experience in a public or private agency. Nature of the work is established beforehand by student, departmental advisor, and a representative of the agency. For majors only. Prerequisite: Junior or senior standing and consent of department.

Chem 475 Radioisotope Techniques (3)
Elementary theory of nuclear reactions; the safe handling of radioactive materials. General techniques and uses of radioisotopes in the sciences. Prerequisites: Chem 113 and consent of instructor.

Chem 480(G) Seminar (1)
Prerequisite: Junior or senior standing or consent of instructor. May be repeated for a maximum of three credits.

Chem 490 Undergraduate Research (1-5)
Undergraduate research in chemistry. Prerequisite: Consent of instructor. Credit arranged. Maximum of 9 credits allowed for graduation.

CLASSICS

See also *Greek and Latin*

Rufus Bellamy, Allan Hanna

Two years of college Latin are offered when feasible, with the first year being scheduled more frequently than the second. Courses in Greek are offered on a tutorial basis only, by arrangement with the instructor.

Besides work in the Greek and Latin languages, 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 Greek may be taken by Moorhead State College students at Concordia College, under the Tri-College University.

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CRIMINAL JUSTICE

See INDIVIDUALIZED MAJORS.



COMPUTER SCIENCE DEPARTMENT

Martin Holoien, *Chairperson*; Ali Behforooz, Curtis Bring, John Britt, Benjamin Lin

COMPUTER SCIENCE CURRICULA

Major in Computer Science — B.A. Degree

Major Requirements in Computer Science 53 credits

ComS 150 Introduction to Digital Computers (4)
ComS 151 Computer Programming I (4)
ComS 152 Computer Programming II (4)
ComS 220 Computer and Programming Systems (4)
ComS 250 Numerical Methods (4)
ComS 280 Statistical Analysis (4)
ComS 305 Logical Design of Computers I (3)
ComS 345 Practicum I (2)
ComS 370 Information Structures (3)
ComS 380 Systems Programming (3)
ComS 405 Logical Design of Computers II (3)
ComS 410 Theory of Language Translation (3)
ComS 410 Compiler Construction (3)
ComS 445 Practicum II (2)
Approved Electives in Computer Science (10)

Requirements in Related Fields

Mathematics proficiency at the level of Math 232 or above and proficiency in statistics at the level of Math 375 or above.

Minor in Computer Science 30 credits

ComS 150 Introduction to Digital Computers (4)
ComS 151-152 Computer Programming I-II (8)
ComS 155 Data Processing (4)
ComS 220 Computer and Programming Systems (4)
ComS 345 Practicum I (2)
Approved Electives in Computer Science (8)
Mathematics proficiency at the level of Math 133, Trigonometry, or above is also required.

COMPUTER SCIENCE COURSES

ComS 150 Introduction to Digital Computers (4)

Description of the digital computer and its logical structure, functions of the parts of a computer. Survey of programming languages and algorithms applied to computers and their relationship to the hardware.

ComS 151 Computer Programming I (4)

An introduction to computers and computer programming with major emphasis on Fortran programming. Prerequisites: Math 133 or equivalent, ComS 150.

ComS 152 Computer Programming II (4)

Assembly-language programming. Introduction to Cobol language.

ComS 155 Data Processing (4)

An introduction to programming languages designed primarily for data processing applications with major emphasis being given to one such language. Prerequisite: ComS 151.

ComS 220 Computer and Programming Systems (4)

An introduction to data structures, machine organization, and programming systems. Prerequisite: ComS 152.

ComS 250 Numerical Methods (4)

An algorithmic approach to numerical methods of solving equations and fitting polynomials to given data. Prerequisite: ComS 152, Math 231.

ComS 255 Advanced Data Processing (3)

Programming techniques related to processing of large data files. Structured programming and other refinements of good programming techniques. Prerequisites: ComS 151, 155.

ComS 280 Statistical Analysis of Data (4)

A survey of library computer programs available to solve elementary statistical problems as well as an introduction to the writing of programs to aid in the statistical analysis of research data. Prerequisites: ComS 151, minimum of 3 credits of statistics.

ComS 285 Simulation Models (4)

An introduction to simulation models and the application of a computer to such models. Prerequisite: ComS 151, Math 274 or equivalent.

ComS 305 Logical Design of Computers I (3)

Number systems and codes, Boolean Algebra, switching devices, and combinational circuit analysis and synthesis. Prerequisites: ComS 220. Phil 110 recommended.

ComS 310 Computer Applications to Mathematics and Science Education (3)

Methods of using computer terminals in the teaching of secondary mathematics and science courses. Prerequisites: ComS 150, Ed 305 or consent of instructor.

ComS 325 Analysis of Science Data (2)

Individual project whereby research data from one of the scientific disciplines is analyzed and a report properly written. Student must obtain the approval of a faculty member in an appropriate scientific discipline as well as that of one of the members of the Department of Computer Science in order to register. Prerequisites: ComS 250 or ComS 280.

ComS 345 Practicum I (2)

Work experience in a computer center. Prerequisite: ComS 220.

ComS 370 Information Structures (3)

Basic concepts of information representations and techniques of processing them. Concepts of lists, strings, trees, records, and files. Methods of referencing stored information. Prerequisite: ComS 220.

ComS 380 Systems Programming (3)

Analysis and design of programming systems including assembly, input-output, diagnostics, monitor, teleprocessing, and multi-programming systems. Prerequisite: ComS 220.

ComS 405 Logical Design of Computers II (3)

Continuation of ComS 305. Sequential circuit analysis and synthesis, realization of special functions, and reliability and fault diagnosis. Prerequisite: ComS 305.

ComS 410 Theory of Language Translation (3)

Formal description of algorithmic languages. Study of syntax, semantics, procedures, iteration, recursion, and techniques used in compiling. Prerequisite: ComS 370.

ComS 411 Compiler Construction (3)

Compiler development for a subset of a current problem-oriented language. Topics include semantics, code generation and optimization, diagnostics, and run-time storage management. Prerequisite: ComS 410.

ComS 415 Conversational Compilers (3)

Techniques of designing compilers intended to permit human interaction with computers. Prerequisites: ComS 410, Psyc 340 recommended.

ComS 425 Computer Architecture (3)

Operating and design principles of arithmetic unit, memory, control, and channel organizations. System design at the register-transfer level and by means of microprogramming. Prerequisite: ComS 405.

ComS 440 System Simulation (3)

Discrete simulation models, discrete-change simulation languages, design of simulation experiments for optimization, analysis of data generated by simulation models, and validation of simulation models. Prerequisites: ComS 285, ComS 380.

ComS 445 Practicum II (2)

Work-experience in a computer center. Prerequisites: ComS 345, ComS 380.

ComS 450 Numerical Analysis I (4)

Numerical solutions to equations. Finite differences, interpolation formulas, numerical calculus. Prerequisites: ComS 250, Math 331.

ComS 451 Numerical Analysis II (3)

Continuation of comS 450, introduction to the theory of numerical analysis as related to the solution of systems of equations. Prerequisites: ComS 450.

ComS 469 Internship (8-16)

Provides opportunities for students to supplement classroom learning with on-the-job experiences. Prerequisite: Junior standing and consent of Department.

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

Independent study of advanced topics under the guidance of a member of the Computer Science faculty. May be repeated to a maximum of 6 credits. Prerequisite: Consent of instructor.

CRIMINAL JUSTICE see INDIVIDUALIZED MAJORS

DISTRIBUTIVE EDUCATION COURSES

See BUSINESS for Curricula.

DE 100 Business Careers-Exploration/Analysis (4)

Business Careers Exploration and Analysis is a study of career opportunities and requirements in various business careers. Opportunities are provided to enable students to analyze their interests and abilities in relation to specific careers. The course is offered to all students who have an interest in pursuing a business career. The course is especially recommended for students who seek additional career information prior to deciding upon a major field of study. No prerequisite. Open to all undergraduate students.

DEd 340-341-342 Distributive Education Work Experience I-II-III (1 each, maximum of 3)

Supervised on-the-job experience and related assigned reports or projects in marketing and distributive occupations. Required for certification as a teacher-coordinator in distributive education if the student has less than the specified number of hours of work experience. A minimum of one hundred hours of satisfactory work is necessary for each course. For majors only.

DEd 401 Planning Instruction for Distributive Ed. Classes (2)

This course will include the Distributive Education teacher and his job, what should be taught, organizing what is to be taught, resources for teaching materials, making instructional units, teaching work attitudes, and choosing learning activities.

DEd 402 Using Learning Activities (2)

This course is concerned with occupational contact, active problem-solving demonstration, and practice, audio-visual, auditory-verbal, reading and writing, measuring and evaluating, and combination activities.

DEd 403(G) Methods of Teaching Distributive Education (3)

This course is concerned with teaching merchandise information and merchandising orientation to retailing, retail arithmetic, salesmanship, store system and cash register, show card writing, advertising display, occupational relations, the technical learnings, specific job learnings-individual instruction, and introductory units, and also with Teacher-Student planning.

DEd 420(G) Coordination Techniques (3)

Counseling students about entering the cooperative program, placing student trainees, improving the trainee's learning at his training station.



DEd 430(G) Vocational Education Curriculum (3)
The history of education for work, work experience and education, objectives of cooperative programs, administrative organization of cooperative programs, cooperative program curricula, equipment and layout, co-curricular activities and public relations.

DEd 440(G) Organization & Administration of Vocational Programs (3)
Distribution and distributive occupations, meaning of distributive education, administration of distributive education programs under state and federal legislation, planning and organizing local programs, the total program of education for distribution, secondary school distributive education, post secondary distributive education, and adult distributive education.

DEd 498(G) Problems in Business and Distributive Education (1-4)
A study of current issues, trends, and problems in Business and Distributive Education. Specific emphasis will be placed on new and innovative curriculum developments, career education guidance, and emerging instructional content. Students may register for this course more than once since content will vary.
Prerequisite: Consent of instructor.

ECONOMICS DEPARTMENT

Daniel Knighton, *Chairperson*; John Cooper, Eugene Philipps, John Trainor, Clarence Zuvekas

ECONOMICS CURRICULA

Major in Economics — B.A. Degree

Major Requirements in Economics 50 credits
Econ 110-111-112 Principles of Economics (12)
Econ 225 Intermediate Macroeconomic Theory (4)
Econ 250 Intermediate Microeconomic Theory (4)
Econ 290 Introduction to Economic Literature and Methodology (2)
Econ 370 Quantitative Economic Analysis (4)
Two Areas of Concentration in Economics (16)

At least 8 credits in each of two sub-areas of economics to be selected in consultation with a faculty advisor. Examples of such areas are: Economic History, Economic Theory, Labor Economics, Monetary Economics, International Economics, Industrial Organization, Economic Development and Comparative Systems. Related work in Econ 450, Independent Study, and Econ 499, Seminar, may be applied to this requirement. Other sub-areas may also be developed with the advisor's approval. Students are encouraged to undertake course work in other disciplines related to the two areas of concentration. The student should work closely with a faculty advisor to ensure compatibility with the areas of concentration in economics.

Additional Electives in Economics (8)

Requirements in Related Fields 16-19 credits
Math 273 Mathematics for Behavioral and Social Sciences (4)
Math 274 Introduction to Statistics (4)
Acct 229 Elementary Accounting I (3)

At least two courses from the following (5-8):
Acct 230-231 Elementary Accounting II-III
ComS 150 Introduction to Digital Computers
ComS 151 Computer Programming I
ComS 280 Statistical Analysis of Data
ComS 325 Analysis of Science Data

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

Major Requirements in Economics 36 credits
 Econ 110-111-112 Principles of Economics I-II-III (12)
 Econ 250 Intermediate Micro-Economic Theory (4)
 Econ 320 Money and Banking (4)
 Approved Electives in Economics (At least 16 credits)

Requirements in Related Fields 46-49 credits

Acct 229-230-231 Elementary Accounting I-II-III (10)
 Math 273 Mathematics for Behavioral and Social Sciences (4)
 Math 274 Introduction to Statistics (4)
 Hist 101-102-103 Western Civilization I-II-III (12)
 Hist 365 (Econ 412) Economic History of the United States (4)
 SST 440 Social Studies in the Secondary School (3)
 At least one course in each of the following (9-12):

Anthropology or Sociology
 Political Science
 Geography

Recommended Electives

Hist 121-122-123 History of the United States I-II-III (9)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Economics B.A. Degree 26 credits

Economics 110-111-112 Principles I-II-III (12)
 Economics 225, Intermediate Macro-Economic Theory (4)
 or 250, Intermediate Micro-Economic Theory
 Economics 290, Introduction to Economic Literature and
 Methodology (2)

An additional eight (8) quarter credits of approved electives in economics (8)

Total 26

Minor in Economics (Social Studies) (Teaching) 9-43 credits

Econ 110-111-112 Principles of Economics I-II-III (12)
 Electives in Economics (At least 12 credits)
 SSt 440 Social Studies in the Secondary School (3)

At least one course in each of the following areas (12-16):

Anthropology or Sociology
 History
 Geography
 Political Science

(This minor can be awarded only in combination with at least one teaching major.)

ECONOMICS COURSES

Econ 100 The American Economy (4)

An introduction to the development, structure and performance of the American economy. Emphasis is on problems such as inflation, unemployment, poverty, government policies, international trade, and environmental pollution. Designed for students in whose programs only one course in economics is required. This course is not a substitute for Economics 110, 111, or 112. Prerequisite: None.

Econ 110-111-112 Principles of Economics I-II-III (4 each)

An introductory study of the economic behavior of individuals and society. 110: Principles of macroeconomics: Emphasis on national income, monetary theory and policy, taxation and public expenditure, and national economic policy. 111: Principles of microeconomics: Emphasis on the price system, resource allocation, and income distribution. 112: Emphasis on regional and international economics, economic growth, underdeveloped countries, different economic systems, and economic policy. Must be taken in sequence.

Econ 210 Topics in Economics (2-4)

The application of economic analysis to a topic of current interest or national importance not covered elsewhere in the curriculum. Prerequisite: Economics 111 or consent of instructor. May be repeated for credit.

Econ 225 Intermediate Macro-Economic Theory (4)

An examination of national income accounting, income determination, employment, growth theory, and economic policy. Prerequisite: Econ 112.

Econ 250 Intermediate Micro-Economic Theory (4)

The theory of the firm, price determination and market behavior under different market structures; production and distribution. Prerequisite: Econ 112.

Econ 290 Introduction to Economic Literature and Methodology (2)

The research materials available to the economist are examined and discussed. Methods of organization, presentation and interpretation of economic findings are studied. Emphasis is placed on the methodology of the economist in his investigative role. Prerequisite: Econ 112.

Econ 315 Government and Business (4)

Survey of the field of industrial organization and public policy, including the enforcement of competition, the regulation of public utilities, and the government as an entrepreneur. Prerequisite: Econ 112.

Econ 316 Labor History (4)

An investigation and analysis of the philosophical and institutional antecedents of the labor movement in the United States with emphasis on the economic variables which have influenced its development and characteristics. Prerequisite: Econ 111 or equivalent.

Econ 317 History of Economic Thought (4)

A historical investigation of the development of economic ideas as found in the doctrines of individuals and different schools of thought. Prerequisites: Econ 112 and consent of instructor.

Econ 320 Money and Banking (4)

Analysis of the roles of money and financial institutions in the termination of national income and prices. Prerequisite: Econ 112.

Econ 325 Economic Fluctuations (4)

Business cycles and other economic fluctuations, theory and experience. Prerequisite: Econ 225.

Econ 330 Economic Development (4)

An examination of the various theories explaining inequalities in levels and rates of economic development among nations and a policy-oriented survey of major development problems confronting today's less developed countries. Stress is on the interrelationships among economic, political, social, cultural, and psychological factors. Prerequisite: Econ 113 or consent of the instructor.

Econ 335 Economic Development of Latin America (4)

An examination of problems of economic development in Latin America (population growth, industrialization, agrarian reform, international trade and finance, etc.) viewed against the background of economic, social, and political institutions peculiar to the region. Prerequisite: Econ 112 or consent of the instructor.

Econ 340 Comparative Economic Systems (4)

The comparison of alternative solutions to fundamental economic problems as manifested in capitalism, socialism, communism, and fascism, and the modifications of these ideologies practiced in existing systems. Prerequisite: Econ 112.

Econ 350 Public Finance (4)

A study of the taxes and expenditures of federal, state and local governments and their effects upon economic activity. Prerequisite: Econ 112.

Econ 360 (Same as Anth 360) Economic Anthropology (4)

An examination of how economic organization and technology relate to the rest of social organization and culture and the causes

and consequences of economic, technological, social, and cultural change in the communities of the underdeveloped world. Prerequisites: Anth 110 and Econ 110 or Econ 100.

Econ 370 Quantitative Economic Analysis (4)

Study of statistical procedures employed in economic analysis. Prerequisites: Math 274 and Econ 112 or consent of instructor.

Econ 380 Economic and Social Security (4)

An investigation of the institutional arrangements and theoretical framework involved in society's provision of material needs of groups unable to provide for these needs through usual market channels. Prerequisite: Econ 100 or 110.

Econ 410(G) Advanced Micro-Economic Theory (4)

A rigorous analysis of the theories of price, resource allocation, income distribution, general equilibrium and welfare economics. Prerequisites: Econ 250 and consent of instructor.

Econ 411-412(G) (Same as History 364-365(G) Economic History of the United States I-II (4 each)

Analysis of economic forces and their effects upon American life. 411: From the colonial period to the eve of the industrial age. 412: The age of industry. Prerequisite: one year of college U.S. history or consent of the instructor. Must be taken in sequence.

Econ 415(G) Industrial Organization and Public Policy (4)

Relations among market structure, market conduct, and economic performance. Purposes and effectiveness of antitrust laws and other legislation regulating business practices. 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. Prerequisite: Econ 112.

Econ 420(G) Comparative Economic Systems (4)

The comparison of alternative solutions to fundamental economic problems as manifested in capitalism, socialism, communism, and fascism, and the modifications of these ideologies practiced in existing systems. Prerequisite: Econ 112.

Econ 425(G) International Trade and Finance (4)

Trade and finance are studied in historical, theoretical and institutional contexts. Emphasis is on contemporary world trade and monetary arrangements, trade blocs and the activities of multinational firms. Prerequisite: Econ. 225 or 320.

Econ 430(G) Managerial Economics (4) (See Mgm. Sci. 430(G))

Prerequisites: Mgm. Sci. 360, Econ. 112. May be taken for Econ. credit.

Econ 450(G) Individual Study in Economics (1-4)
An individual inquiry into an aspect of the economic problem not dealt with in the regular curriculum. Prerequisite: Econ 112. Credit to be arranged. May be repeated for credit.

Econ 460(G) Advanced Macro-Economic Theory (4)
The contemporary theories of money, capital, and interest are studied and their implications for economic stability and employment are examined. Prerequisites: Econ 225, 320 and consent of instructor.

Econ 499(G) Economics Seminar (3-4)
An intensive investigation of some particular aspect of economics. The specific subject matter will depend upon the current research interests of the instructor. Prerequisite: Consent of instructor. May be repeated for credit.



EDUCATION DEPARTMENT

Leslie W. Crawford, *Chairperson*, Beth Anderson, Lawrence Anderson, Leonard Bergquist, Werner Brand, Arlo Brown, Carole Buck, Joseph DiCola, Dorothy Dodds, Monica DuCharme, Howard Freeberg, Virginia Gassner, Carol Haag, Wilva Hanson, Jane Johnston, Larry Jones, Bella Kranz, Ronald Litherland, Jack Neufeld, Deane Nelson, George Smith, Max Spriggs, Linda Svobodny, Julie Swanson, Almose Thompson, Joseph Thorman, Martin Tonn, Vance Vannote, Barbara Wasson, John Wasson, Tom Williams

Areas of Study: Education, Elementary Education, Graduate Education, Special Education, Secondary Education

EDUCATION CURRICULA

Students seeking to become either elementary or secondary teachers follow a Bachelor of Science curriculum. Teacher education programs offer preparation for Day Care, Nursery School, Kindergarten, elementary education, special education, audiovisual education, media education, developmental and corrective reading, speech correction, early childhood education and secondary education in a number of subject areas. Special preparation is possible for teaching different combinations of elementary, junior high, and senior high school levels.

The Department of Education offers undergraduate majors in Elementary Education and Special Education, minors in Audiovisual Education, Early Childhood Education, and Special Education, professional education courses, student teaching, and graduate programs in a variety of fields which are described in the Graduate Bulletin.

Teachers who seek certification or certificate renewal in Minnesota on or after July 1, 1973, must complete the human relations requirement described under ACADEMIC INFORMATION (see Human Relations Component).

The following course will be required for certification or renewal on or after July 1, 1974:

Hlth 110 Personal and Community Hlth (4)

Information about degree requirements, teacher education, and student teaching can be found in the Academic Information section of this catalogue. Major programs for the B.S. (teaching) degree in secondary fields are described in their respective department sections.

Secondary School Teaching

Professional education requirements for the B.S. (teaching) degree in any secondary education curriculum are as follows:

- Ed 211 Orientation to Secondary Teaching (3)
- Ed 213 Adolescent Growth and Development (3)
- Ed 305 Educational Psychology (3)
- Ed 307 Measurement and Evaluation — Secondary (3)
- Ed 490 Foundations of Education (3)
- Ed 450-451S Student Teaching — Secondary (16)

Kindergarten Education

A student with an Elementary Education major may earn a teaching certificate valid also for the kindergarten level by (A) completing Education 471, Kindergarten Education, and (B) student teaching at the kindergarten level.

Remedial Reading and Developmental Reading

In addition to the minor in Developmental and corrective reading at Moorhead State College, graduate programs are available leading to certification as elementary or secondary remedial or developmental reading teachers. Information is available from the Education Department.

Early Childhood Education 36 credits

The Early Childhood offerings consist of a paraprofessional program leading to an Associate of Arts Degree and certification by the state for paraprofessional work in nursery and day care centers and a minor program leading to state certification for elementary education majors in licensed nursery schools and/or day-care centers. The minor is also available to majors in Social Services and Psychology. The A.A. Degree is available either through the regular college route of one year of approved General Studies and the year-long paraprofessional program or through entry into the program from the first year program in the New Center. In conjunction with the ECE program the college operates two early childhood programs accepting children from 6 months to 5 years of age, where observation and practicum experiences are provided. Interested students should contact the Director of the Program and Center or the Coordinator of Teacher Development.

For Audio-Visual and Library Science courses, see Media Education.

Major in Elementary Education — Professional Fourth Year

Prospective elementary teachers will follow the Professional Fourth Year Curriculum. Those students needing a more traditional elementary teaching preparation and who will not require full time course work program must seek departmental

approval to proceed in elementary education. A traditional program is available only on a limited basis over a period of years including summer sessions or approved equivalent.

Students in this program will spend their first three years completing General Studies, a minor or approved equivalent. Additional academic requirements, and electives. During the sophomore or junior year, they will enroll in ED 210, Orientation to Elementary Teaching, to familiarize themselves with the elementary teaching profession. In the senior year, they will complete a three-quarter 48-credit sequence combining professional education, student teaching, and materials and methods. Prerequisites: Math 100, Math 203.

Major Requirements in Education 50 credits

- Ed 210 Orientation to Elementary teaching (3)
- Ed 420 Professional Elementary Teacher Education I (16)
- Ed 421 Professional Elementary Teacher Education II (16)
- Ed 422 Professional Elementary Teacher Education III (16)

I. Choice of approved minor or specialization 36-44 credits

Consult Director of Teacher Development Center

or

II. Generalization

Approved courses in Art, Music, Children's Literature, Speech, Science, Social Sciences and Area of Concentration of Choice.

Requirements in Related Fields 6 credits

- Hlth 110, Personal and Community Health (4)
- Math 203 Foundations of Number Systems (4) and prerequisites

Major in Elementary Education (Traditional Program)

This program is open only to those students who have started on the traditional program or were so assigned by the Director of Teacher Development Center. Students pursuing this curriculum must work closely with their advisors.

Major Requirements in Education 30 credits

- Ed 210 Orientation to Elementary Teaching (3)
- Ed 212 Child Growth and Development (3) or Ed 213
- Ed 305 Educational Psychology (3)
- Ed 306 Measurement and Evaluation — Elementary (3) or Ed 307
- Ed 450-451E Student Teaching — Elementary (16)
- Ed 490 Foundations of Education (3)

Requirements in Materials and Methods Courses 23 credits

- Art 442 Elementary School Art K-6 (3)
- Ed 340 Social Studies in the Elementary School (2)
- Ed 341 Literature in the Elementary School (4)

- Ed 342 Reading and Language Arts in the Elementary School (5)
- Math 340 Mathematics in the Elementary School (3)
- Mus 340 Music in the Elementary School (2)
- PE 240 Physical Education in the Elementary School (2)
- Sci 340 Science in the Elementary School (2)

Approved Minor, Specialization, or Generalization 36-44 credits

Consult Director of Elementary Education or Advisor

Requirements in Related Fields 6 credits

- Hlth 110 Personal and Community Health (4)
- Human Relations
- Math 203 Foundations of Number Systems (4)

Major in Special Education — EMR

The major in Special Education is undergoing revision. All students should obtain a descriptive bulletin from the Special Education office.

Major Requirements in Special Education 46-48 credits

- SpEd 345 Orientation to Teaching Reading (3)
- SpEd 416 Mental Retardation (3)
- SpEd 420 Education of the Handicapped Child (3)
- SpEd 435 Seminar in Mental Retardation (3)
- SpEd 436 Problems in Special Education (1-3)
- SpEd 440 Methods in Teaching the Mentally Retarded (3)
- SpEd 441 Language Development for the Mentally Retarded (3)
- SpEd 450 Student Teaching of the Mentally Retarded (16)
- SpEd 465 Special Education Reading (3)
- SpEd 466 Special Education Reading Clinic (2)
- SpEd 470 Guidance of the Handicapped (3)
- SpEd 471 Behavioral and Environmental Management (3)

Requirements in Related Fields 6 credits

- Math 344 Mathematics for Special Education (3)
- Spch 468 Speech and Hearing Problems in the Classroom (3)

Electives in Special Education and Related Fields At least 9 credits

Minor in Special Education

Students may take a non-certification minor in special education. This will consist of 36-40 hours in special education courses and courses in related fields to be arranged by the department. This will not include student teaching and will not result in teacher certification in special education. However, a student may complete the requirements later for a major in special education and then be certified.

Minor in Learning Disabilities 41 credits

The minor in learning disabilities does not yield certification in Special Learning and Behavior Problems (Learning Disabled) but courses completed for the minor can be applied toward the certification program. For further information contact Special Education Office.

- Ed 212 Child Growth and Development (3)
- Ed 345 Orientation to the Teaching of Reading (3)
- Ed 445 Remedial and Corrective Reading (3)
- Ed 446 Remedial and Corrective Reading Clinic (2)
- Math 344 Mathematics for Special Educaiton (3)
- SpEd 420 Education of the Exceptional Child (3)
- SpEd 441 Language Development for the Mentally Retarded (3)
- SpEd 460 Education of the Emotionally Disturbed Child (3)
- SpEd 461 Education of Children with Specific Learning Disabilities (3)
- SpEd 463 Measurement and Assessment in Special Education (3)
- SpEd 467 Practicum: Diagnosis and Treatment of Learning Disorders I (6)
- SpEd 471 Behavioral and Environmental Management (3)
- SpEd 472 Psychoeducational Diagnosis and Programming (3)

Minor in Reading 36-37 credits

- Ed 445 Problems in Teaching Reading (3)
- Ed 446 Reading Clinic (2)
- Ed 448 reading in the Secondary School (3)
- Ed 449 Seminar in Techniques and Materials in Teaching reading (3)
- Ed 461 Phonics and Structural Analysis in Reading (3)

One of the following (Special Education majors should select alternate):

- SpEd 461 Educating Children with Specific Learning Disabilities (3)
- SpEd 464 Education of the Learning Disabled High School Student (3)

One of the following:

- Ed 341 Children's Literature (4)
- Engl 392 Adolescent Literature (3)
- Electives Approved by reading Minor Advisor (At least 16)



EDUCATION COURSES

Ed 100 Personal Career Planning (1)

This course is designed for the student to seek and define his career goals. Various career positions are explored by class visits to local businesses and institutions. No papers or tests. Taught each quarter on a pass/fail basis.

Ed 210 Orientation to Elementary Teaching (3)

An introduction to elementary education. Includes an assignment as a teacher aide to an elementary school and one class session per week to discuss the role of an elementary school teacher. For sophomores or juniors considering elementary school teaching.

Ed 211 Orientation to Secondary Teaching (3)

The role of the secondary teacher; the purposes and principles of the secondary school. Classroom observation and participation required, in weekly four-hour time block.

Ed 212 Child Growth and Development (3)

Growth and development of elementary age pupils with some extension into adolescent stages. Each quarter.

Ed 213 Adolescent Growth and Development (3)

Growth and development of secondary school age pupils with some extension into childhood stages. Each quarter. Prerequisite: Ed 211 or concurrent with Ed 211.

Ed 270 Orientation and Child Development (4)

An introduction to the field, and an overview of the physical, mental, emotional and social development of a child from conception to age six. Includes observation and participation in a child center.

Ed 271 Creative Arts for the Young Child (2)

Use of materials, activities and experiences that encourage children to explore the areas of art, music, dance and drama.

Ed 272 Early Childhood Curriculum (3)

Will include methods, materials and techniques of working in the areas of mathematics, social sciences, physical science and physical education for the child from babyhood to kindergarten.

Ed 273 Language Development of the Young Child

Communication skills needed by young children, both verbal and written. Language comprehension, verbal and pre-reading skills needed by young children will be included.

Ed 274 Internship in Early Childhood Education (4-8-16)

The student, with supervision, will work with children ages six weeks to five years, in a variety of settings: nursery schools, day care centers, kindergartens, Headstart programs and informal play

groups. He will use the skills and knowledge that he has learned in his academic classwork. (Can be repeated to 24 hours.)

Ed 305 Educational Psychology (3)

Human development viewpoints; learning, guidance, readiness, individual differences, pupil-teacher relationships. Prerequisite: Ed 211 and Ed 213 or concurrent with Ed 213.

Ed 307 Measurement and Evaluation — Secondary (3)

Construction and use of all types of measurement and evaluation with particular emphasis upon those used in secondary schools. Prerequisites (effective 9/71): Ed 211, Ed 213, and Ed 305 or concurrent with Ed 305.

Ed 330 Social Studies in the Elementary School (2)

Objectives, methods, materials and evaluation. Prerequisite: Ed 212.

Ed 331(G) Special Methods in Social Studies in the Elementary School (3)

Adapted to the special needs and experiences of those enrolled. On request.

Ed 341 Survey of Children's Literature (4)

Extensive reading and critical analysis of examples from selected types of children's literature. Prerequisites: Ed 220 and Junior Level.

Ed 342 Reading and the Language Arts in the Elementary School (5)

Objectives, methods, and materials in teaching reading, oral, and written expression, correct usage, spelling, and handwriting in grades K-6. Prerequisite: Ed 212 and Ed 305.

Ed 343 Teaching Language Arts in Early Childhood (3)

A study of the perception skills and language fluencies essential for the acquisition of reading skills so that a total communication process can be utilized by each child at an early age. Survey of programs and techniques for early reading instruction.

Ed 345 Orientation to the Teaching of Reading (3)

An introduction to the reading-learning process with basic considerations on readiness, objectives, theory, and philosophy of reading instruction.

Ed 390(G) Improvement of instruction in Reading and Language Arts (3)

Specifically designed to meet the needs of a particular group of reading teachers. Phases of the reading process or evaluations of student reading performance can be covered. Remediation techniques are the logical outcomes from teacher concerns.

Ed 400 Independent Study in Education (1-4)
Independent study in education for the purpose of pursuing academic excellence in topic areas that extend beyond regular course work in the student's field of study. This course substitutes for others in the student's education major with consent of his advisor, instructor of that course, and chairman of the Department. (May be repeated up to 8 credits).

Ed 405(G) Philosophy of Education (4)
Same as Philosophy 405(G).

Ed 411(G) Introduction to Guidance (3)
Basic concepts and principles of guidance and counseling are introduced and related to the particular services of guidance.

Ed 412(G) Group Counseling (3)
A study of group dynamics in theory and practice. Prerequisites: Ed 411, Psys 476.

Ed 413(G) Interpersonal Communications (3)
A participatory experience in interpersonal communication based upon a do-look-learn model. An examination of contemporary practices of interpersonal communications within educational settings. Possible topics include: communication skills (paraphrase, behavior description, description of feeling, perception check), constructive use of feelings, conflict resolution, trust relationship processes of interpersonal influence, interpersonal gap. Prerequisites: Junior standing; completed 210 or 211, 213, 305 and registration in PFY; Junior status non-teaching degree major.

Ed 414, 415, 416 Foundations of Student Personnel Administration I, II, III (2 credits each)
Examination of Student Personnel programs and services including new student orientation, financial aids, housing management and programs, union management and programs, counseling services, placement activities, health services, student activities and theory of student discipline. Special attention is given to staff development and also the process of developing student leadership. Designed so a student may enter the sequence either fall, winter, or spring. Prerequisite: approved program.

Ed 420 Professional Elementary Teacher Education I (16)
The student will participate in a school during the first few weeks of the school year full-time. When the college year commences approximately one-half time will be spent in class sessions in the areas of educational psychology, child growth and development, measurement and evaluation, foundations of education, and methods and materials of elementary teaching. The student will spend one-half time applying concepts in an elementary classroom. Prerequisites: Ed 220 and junior or senior status.

Ed 421 Professional Elementary Teacher Education II (16)
The student will spend one-half time in classes on campus and one-half time in the elementary classroom studying and applying concepts and constructs in the area of: educational psychology, child growth and development, measurement and evaluation, foundations of education, and methods of materials of elementary teaching. Prerequisites: Ed 220 and 420.

Ed 422 Professional Elementary Teacher Education III (3-16)
The student will spend approximately one-third of the quarter in practicum sessions in preparation for full-time classroom teaching. Two-thirds of the quarter will be spent in full-time teaching and seminars. Prerequisites: Ed 210, 420, 421.

Ed 425(G) Workshop in Educational Development (1)
This series of seminars by nationally recognized educators is explicitly designed to provide teachers, administrators, students, and the general public with first hand exposure to those ideas currently receiving widespread attention throughout the educational community.

Ed 430(G) Human Relations Through Children's Literature (1-3)
Survey of juvenile books that could help a child gain insight into human motivation. Books dealing with problems of the human condition and ethnic and sexist stereotyping will be analyzed in detail. Criteria for evaluating such literature will be developed. Prerequisite: Ed 341 or a Children's Literature course. May be repeated for a total of 6 credits or at the discretion of the instructor.

Ed 442(G) Curriculum Foundations (4)
Foundations for curriculum development in Elementary and Secondary schools: learning theories, curriculum designs, recent trends, and learning assessments are studied and analyzed as components for curriculum development. Prerequisites: Ed 305, 306, or 307 and/or teaching experience. Ed 490 or 405 is recommended.

Ed 445(G) Remedial and Corrective Reading (3)
Presentation of special methods and materials found useful in teaching reading to disabled readers at the primary, intermediate, and secondary level. Prerequisites: SpEd 345 or teaching experience.

Ed 446(G) Remedial and Corrective Reading Clinic (2)
Supervised practice in remediating reading disabled children at the primary, intermediate, and secondary level. Prerequisites: SpEd 345, SpEd 463 or consent of instructor, Ed 445.

Ed 447(G) Corrective Reading and Phonics Workshop (2)
This workshop is designed for all reading teachers who wish to bring themselves up to date on theories and practices in teaching reading. Emphasis is upon the teaching of phonics, new materials, learning disabilities, and the rural disadvantaged.

Ed 448(G) Reading Study Skills in the Content Areas (3)
Survey of the development of functional reading ability in the intermediate and middle school secondary year. Emphasis is placed on word attack skills, vocabulary, comprehension, study skills and reading interests. Materials, methods and provisions for individual differences in the content reading areas are considered. No prerequisite required.

Ed 449(G) Developmental Reading (4)
Traces the development of reading skills (readiness, word recognition, comprehension and study skills) from K-12 levels. Surveys the various grouping possibilities, individual needs, and instructional planning strategies in teaching reading. Supervised practicum. Prerequisite: Ed 345.

Ed 450-451E Student Teaching and Seminar (4-16)
Required of students in the B.S. degree elementary teaching curriculum. Full quarter in off-campus cooperating schools. Prerequisites: Admission to teacher education curriculum; Ed 210, 212, 305 and Lang Arts 342. Applications for student teaching must be submitted two quarters prior to the quarter in which student teaching is to be scheduled.

Ed 450-451S Student Teaching and Seminar (4-16)
Required of students in the B.S. degree secondary teaching curriculum. Full quarter in off-campus cooperating schools. Prerequisites: Admission to teacher education curriculum; Ed 211, 213, 305 and special methods courses in major and minor fields. Applications for student teaching must be submitted two quarters prior to the quarter in which student teaching is to be scheduled.

Ed 455E, 455S Student Teaching (1-16)
For students desiring to qualify for certification outside their regular fields. By special arrangement with advisor and Director of Student Teaching.

Ed 456(G) Seminar in Supervision of Student Teaching (3)
Methods and procedures for effective supervision of student teachers. Prerequisites: Teaching experience and consent of instructor.

Ed 461(G) Phonics & Structural Analysis in Reading (3)
Specific instructions in the various ways of teaching phonics at all grade levels with particular emphasis on the best methods to use

with disabled readers. There will be demonstrations, video tapes, and exhibits of materials.

Ed 469 Student Internship Program (3-16)
The Education Department participates in the College Internship Program which provides opportunities for eligible juniors and seniors to receive 3-16 credits for on-the-job experience to supplement their classroom work. In the Education Department, internships are appropriate for students with individualized majors in which the area of concentration is in education. The internship does not replace student teaching but is a comparable experience for those not seeking certification.

Ed 470(G) Development of Young Children (3)
The study of growth and development of young children with emphasis on children to age nine.

Ed 471(G) Early Childhood Education (4)
Guidance in the learning process and curriculum materials used in nursery schools and Day Care programs.

Ed 472(G) Curriculum and Instruction for Early Childhood Education (3)
An overview of Early Childhood Education with emphasis on Kindergarten. Class is required for Kindergarten certification. Prerequisites: Ed 470, 471, or concurrent registration.

Ed 473(G) Practicum in Early Childhood Education (3-6)
Supervised practicum experience in working with young children (pre-kindergarten). Study, analysis, and evaluation of classroom procedures and development of young children. Prerequisites: Ed 470, 471, 472, or concurrent registration.

Ed 476(G) Early Childhood Education Workshop (1-3)
Workshop for experienced nursery school and kindergarten teachers to undertake by group and individual work to improve teaching skills, understanding of child growth and development, and appropriate curriculum patterns for young children.

Ed 477 Seminar in Early Childhood Education (1)
Special topics for study will be chosen each quarter to fill the expressed needs of the students in the program. Three seminar hours will be required for an Early Childhood Education Minor. Up to three hours may be elected. Prerequisite: Minor in Early Childhood Education or consent of instructor.

Ed 480(G) Learning Theory Workshop (1-3)

A special workshop designed to review recent learning theory research and to develop new instructional programs incorporating findings. Offered by extension, the workshop will be limited to teachers employed in a requesting school district.

Ed 481(G) Curriculum Development Workshop (1-3)

A special workshop designed to review recent programs in curriculum development and to plan new curriculum programs incorporating findings. Offered only by extension, the workshop will be limited to teachers employed in a requesting school district.

Ed 488(G) Education for the Culturally Different (3)

Study of the social and economic background and life-style of culturally different students in elementary and high school and what appropriate teaching strategies should be used to alter their learning disabilities in a classroom.

Ed 490 Foundations of Education (3)

The concluding course in the required sequence of education courses; historical, philosophical, social and professional foundations of American education. Prerequisites: Ed 210 or 211, 212 or 213, 306 or 307, and student teaching recommended. Each quarter.

Ed 491(G) Topics in the Socio-Cultural Foundations of Education (1-5)

In-depth examinations of significant topics in historical, philosophical, and cultural aspects of educational theory and practice. Will be offered only when a qualified instructor is available. Junior or senior status and consent of instructor.

Ed 492(G) The Impact of the Educational System on Women (3)

An examination of the traditional roles assigned to women through the acculturation process in the school and society. Despite a prognosis of success, many girls end up in the lower paying and lower status jobs later in life. The course will evaluate the special role of teachers, other students and administrators play in this process. Attention will also be given to the curriculum and books which engender stereo-typed thinking about women's role in society. Implications for the self-concepts of males will also be explored.

Ed 493(G) Education for International Understanding (3)

Objectives, techniques, and materials suitable for use in education designed to develop and extend intercultural empathy. Educational ideas and practices from other countries will be studied. Among the themes stressed will be "enriching teaching

about other cultures" and "Teaching about the aims and problems of world co-operation." Students will be expected to develop ideas, methods, and materials for use in their schools. Prerequisites: Teacher certification, or senior status in professional education.

Ed 495(G) Comparative Education (3)

A study of foreign education systems to promote international understanding and cooperation by relating problems to the professional interests of the students and to introduce them to other systems and the work of the UN agencies in the field of education.

Ed 496(G) Study Tour in Comparative and International Education (6)

Field study of education in several countries. Participants will attend lectures; confer with educators; visit schools, universities, ministries of education, educational research centers, UNESCO; and will attend international conferences on education.

Ed 497(G) Readings in Education (2)

Readings and supervised independent study covering topics or areas in education not covered in depth in other courses. On request. May be repeated to a maximum of six credits.

Ed 499(G) Inservice Education Workshop (1-3)

A course designed to serve a specific inservice education program. Enrollment limited to teachers from a school system which has requested the workshop.

Ed 501 Psychological Foundations of Education (3)

Schools and systems of psychology; principles of underlying learning and instruction.

Ed 502 Statistics in Research (3)

Basic statistical theory, techniques, and application in educational research.

Ed 503 Introduction to Research (3)

Methodology of design of research studies; preparation of effective technical reports.

Ed 504 The School and Society (3)

History and development of social structures in America; relationship between social structures and the school.

Ed 505-510 Junior College-Community College Institute I-VI (2 each)

For administrators, teachers, and graduate students already employed in junior college positions, or preparing for employment in junior or community colleges. Summer only.

- Ed 512 Study of the Individual (3)*
Case study methods, practical application, laboratory experience.
- Ed 520 Principles of Administration (3)*
The theory and principles of administration as a social process.
- Ed 521 Administration of the Elementary School (3)*
Administrative responsibilities, procedures, and problems.
- Ed 522 Supervision in the Elementary School (3)*
For elementary school principals. Principles and practices in democratic educational leadership. Prerequisite: Consent of instructor.
- Ed 525 Occupational and Educational Information (3)*
Selection and utilization of informational materials and experiences in an effective school-wide program of vocational guidance.
- Ed 526 Principles and Techniques of Counseling (3)*
An examination of counseling theories currently in practice with the purpose to have each student formulate his own personal theory of counseling. Opportunities to try out this theory and receive feedback to its effectiveness will be provided through the extensive use of simulated counseling with classmates. Specific techniques of counseling will be examined.
- Ed 540 Studies Affecting Elementary Education (3)*
Survey of published research.
- Ed 541 Seminar in Elementary School Teaching Problems (3)*
Individual problems; problems common to the group. Admission upon approval of instructor.
- Ed 542 Elementary School Curriculum (3)*
History, development, evaluation, and revision of the curriculum.
- Ed 545 Diagnosis and Correction of Reading Difficulties (3)*
Advanced study of reading difficulties.
- Ed 546 Reading Clinic: Diagnosis (2)*
Individual case studies. Prerequisites: Ed 545 and consent of instructor.
- Ed 550 School Law (3)*
Legal relationships of the schools to state and federal government are examined. The following major topics are included: school and church; school district organization and control; authority, procedure, and liability of school officers; laws related to school finance; legal relationships of the school to teacher and pupil.

- Ed 560 Secondary School Curriculum (3)*
History, development, evaluation and revision of the secondary school curriculum.
- Ed 574 Appraisal Techniques (3)*
A study of various types of standardized tests and testing programs along with other techniques and tools for appraising individuals.
- Ed 579 Organization and Administration of Guidance Service (3)*
An examination of various problems and principles of organization and administration of a school guidance program. Through extensive use of role playing, the student will outline in detail a complete guidance program and deal with typical problems in its administration.
- Ed 590 Seminar in School Administration and Supervision (1-6)*
This course provides the opportunity for both practicing administrators and those preparing themselves for positions of educational leadership to enroll in special topics seminars. These topical seminars will be offered on a demand basis and will be scheduled to meet the needs of an individual school district and for general enrollment. This course has special relevance for practicing administrators because of the State Department of Education continuing education requirement. Prerequisite: Consent of instructor. *May be repeated.*
- Ed 591 Practicum in Counseling and Guidance (3 credits each of 2 quarters or 6 credits in 1 quarter)*
A practical and real experience in counseling and guidance activities for the graduate student majoring in this field. The program is individualized for each student. Prerequisite: Sufficient background in counseling and guidance coursework, consent of instructor.
- Ed 592 Administration and Supervision of Remedial Reading (3)*
The administration and supervision of remedial reading programs in elementary and secondary schools and in colleges. Course conducted as a seminar. Prerequisites: Six credits of remedial reading courses.
- Ed 598 Special Research Problems in Education (1-3)*
For advanced graduate students on independent problems. May be repeated to a maximum of 6 credits. Prerequisites: Consent of instructor and advisor.
- Ed 599 The Independent Study in Education (1-6)*
Major study in chosen problem area. Open only to candidates for the master's degree. Project must be approved by the student's advisory committee.

ENGINEERINGCharles Martin, *Head*

Moorhead State College 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 MSC-NDSU "Covered Programs", thereby transferring to North Dakota State University and paying out-of-state fees for only the last 45 credits.

Adjustments in the curriculum also can be made to conform to requirements of those schools where the students will eventually complete their degrees. Pre-engineering students should work closely with their advisor in planning courses of study.

Recommended Pre-Engineering Curriculum 96-108 credits
Engl 101-102-103 Freshman Composition and Literature I-II-III (12)

Math 231-232-233-234 Calculus I-II-III-IV (16)

Math 331 Differential Equations (4)

Chem 111-112 General Chemistry I-II (10)

Phys 218-219-220 General Physics I-II-III (15)

Phys 242 Modern Physics (3)

Eng 130 Engineering Orientation and Computation (3)

Eng 210 Engineering Design

Eng 243 Engineering Mechanics I — Statics (4)

Eng 244 Engineering Mechanics II — Dynamics (4)

Eng 245 Engineering Mechanics III — Materials (5)

Approved Electives (17-29)

ENGINEERING COURSES

Eng 113 Technical Drafting I (4)

A basic course in drafting including free hand and instrumental practices in sketching, lettering, geometric constructions, multi-view drawing, pictorial projections, dimensioning, specifications, and considerations pertaining to conceptual design, production, and the reproduction processes.

Eng 114 Descriptive Geometry (4)

Fundamental principles of projections, orthogonal projection. Length of line distance between lines, angle between lines, development of surfaces, intersections of solids, map projections, spherical triangles, and vector quantities.

Eng 116 Technical Drafting II (4)

Drafting as applied to industrial production processing including detail and assembly drawings, sets of drawings, precision and limit dimensioning, design and use of jigs, fixtures, gears and cams. Prerequisite: Basic Drafting.

Eng 117 Technical Drafting III (4)

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

Eng 130 Engineering Orientation and Computation (3)

Lectures and problems designed to acquaint students with fields of engineering, with introduction to the tools and methods for numerical computation in engineering with special emphasis on accuracy and presentation. Prerequisite: Consent of instructor.

Eng 200 Surveying I (5)

Use and adjustment of surveying instruments; measurements by tape, electronic, and stadia methods; topographic surveying; coordinate systems, basic astronomy with emphasis on mathematical concepts, precise methods and theories. Three lectures and three 3-hour laboratories weekly.

Eng 210 Engineering Design (3)

An introduction to the design process emphasizing creativity, cooperation, and understanding of an orderly approach to all design problems. Engineering design problems will encompass conception, analysis, and solution with evaluation in the form of technical sketches and working drawings supported by written and oral presentation.

Eng 213 Manufacturing Processes I (2)

Joining methods for industrial fabrication. Welding processes, joint design, distortion control, testing, analysis, and identification of metals. Study of welder specifications, power requirements, and controls.

Eng 214 Manufacturing Processes II (2)

Metal machining processes for production manufacturing. Analysis of methods to achieve specific tolerance and finish. Practical experience in the lab involving operation of machines, blue print reading, measurement, and all related operations used to manufacture a product.

Eng 215 Manufacturing Processes III (2)

Metal fabrication operations including forming, machining, and joining processes.



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Eng 243 *Engineering Mechanics I—Statics* (4)
 Vector algebra. Application of the 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)
 Applications of mechanics and physical concepts to engineering problems. Use of kinematics, principles of particle motion, conservation principles, dynamics of particle systems and plane rigid bodies, and vector calculus in solving problems in engineering. Prerequisite: Eng 243.

Eng 245 *Engineering Mechanics III—Materials* (5)
 Applications of mechanics, physical concepts and properties of engineering materials to problems which are of engineering importance. Includes 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.

ENGLISH DEPARTMENT

Forrest Ingram, *Chairperson*; Rufus Bellamy, Robert Brown, Marjorie Corner, V. Dennis Flood, Patricia Hansen, Clarence Glasrud, Sheila Gullickson, Allan Hanna, Bernard Heringman, Gary Litt, John McCune, Thomas McGrath, Fair Meeks, Joseph Miller, Robert Pender, Mary Pryor, John Sherman, Donald Short, Rosemary Smith, Barbara Steinberg, Mark Vinz, William Woolwine

ENGLISH CURRICULA

Majors in English

The requirements for the major in English are set forth in detail below. The B.A. and B.S. (teaching) programs are identical except in the matter of electives and certain work prescribed by the State Board of Education for a teaching major in English on the secondary level. Students in the B.S. program must take English 399 (American English) or 401 (Transformational Grammar), and in place of certain electives they must take English 389 (Advanced Composition) and 391 (Teaching English in the Secondary School). These courses meet the official standards of the Board. Beyond the actual requirements of the program, however, B.S. majors are encouraged to take electives in English and related disciplines.

For majors and minors the Survey of English Literature is prerequisite to the more advanced offerings of the department and as a general rule should be taken during the sophomore year. Major advisors will make reasonable exceptions — especially in the case of late majors, transfer students, and honors students — when the circumstances warrant. Students who intend to pursue graduate study are advised to take English 303 (Chaucer II), 323 (Milton), and 404 (Advanced Shakespeare I) as undergraduates.

Conditions for the Major in English

1. Students who choose a period sequence in literature are strongly encouraged to take at least 12 elective credits in literature outside the period in question.
2. In choosing a period sequence in literature, a student may, with his advisor's permission, combine in a suitably chronological way the appropriate quarters of two different sequences.
3. Students who choose History of the English Language or Literary Criticism must take at least 12 of their elective credits in courses in literature.
4. Apart from the surveys of English and American literature and the basic course in Shakespeare, students must take at least 8 credits in literature before 1800, whether these credits are among their electives or not.

Major in English — B.A. Degree*Major Requirements in English 64 credits*

- (1) Engl 211-212-213 Survey of English Literature I-II-III (12)
 (2) At least two consecutive quarters of one of the following sequences (8):
 Engl 301-302-303 Early English Literature
 Engl 311-312-313 English Literature of the 16th Century
 Engl 321-322-323 English Literature of the 17th Century
 Engl 331-332-333 English Literature of the Restoration and 18th Century
 Engl 341-342-343 English Literature of the Romantic Movement
 Engl 351-352-353 English Literature of the Victorian Period
 Engl 361-362-363 English and American Literature of the 20th Century
 Engl 397-398-399 History of the English Language
 Engl 471-472-473 Literary Criticism
 (3) Engl 371-372-373 Survey of American Literature I-II-III (12)
 (4) At least one of the following (4):
 Engl 374 Shakespeare I
 Engl 375 Shakespeare II
 (5) At least one course from the following sequence (4):
 Engl 397-398-399 History of the English Language I-II-III
 (6) Electives in English intended for majors (At least 24 credits)

Major in English (Teaching)*Major Requirements in English 64 credits*

- Requirements (1) through (4) for the BA Major (36)
 (5) Engl 389 Advanced Composition (3)
 (6) Engl 391 Teaching English in the Secondary School (4)
 (7) One of the following (4):
 Engl 399 American English
 Engl 401 Transformational Grammar
 (8) Electives in English intended for majors (17)

Requirements in Related Fields 8 credits

- Spch 100 Fundamentals of Speech (4)
 At least one of the following (4 credits):
 Spch 205 Beginning Oral Interpretation
 Spch 224 Technical Production
 Spch 344 Principles of Play Direction

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Dual Major in English and Rhetoric/Public Address-Theatre (Teaching)*Major Requirements in English 54 credits*

- (1) Engl 211-212-213 Survey of English Literature I-II-III (12)

(2) At least two consecutive quarters of one of the following sequences (8):

- Engl 301-302-303 through Engl 361-362-363
 (3) Engl 371-372-373 Survey of American Literature I-II-III (12)
 (4) At least one of the following (4):
 Engl 374 Shakespeare I
 Engl 375 Shakespeare II
 (5) Engl 389 Advanced Composition (3)
 (6) Engl 391 Teaching English in the Secondary School (4)
 (7) At least one of the following (4):
 Engl 399 American English
 Engl 401 Transformational Grammar
 (8) Electives in English intended for majors (7)

Major Requirements in Speech 52 credits

- Spch 100 Fundamentals of Speech (4)
 Spch 101 Voice and Diction (4)
 Spch 202 Introduction to Rhetoric (4)
 Spch 204 Principles of Debate (4)
 Spch 205 Beginning Oral Interpretation (4)
 Spch 220 Theatre Form and Appreciation (3)
 Spch 221 Film Form and Appreciation (3)
 Spch 222 Principles of Acting (4)
 Spch 224 Technical Production (4)
 Spch 312 Principles of Persuasion (3)
 Spch 340 The Teaching of Speech (4)
 Spch 344 Principles of Play Direction (4)
 Spch 468 Speech and Hearing Problems in the Classroom (3)
 Electives in rhetoric/public address and theatre (4)

(To satisfy the requirements of the State Board of Education for secondary certification with a major in rhetoric/public address and theatre, 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 ACADEMIC INFORMATION.)

Minor in English*35 credits*

- Engl 211-212-213 Survey of English Literature I-II-III (12)
 Engl 372-373 Survey of American Literature II-III (8)
 One of the following (4 credits):
 Engl 374 Shakespeare I
 Engl 375 Shakespeare II
 One of the following (4 credits):
 Engl 397-398-399 History of the English Language I-II-III
 Electives in English intended for majors (At least 7 credits)

Minor in English (Teaching)*Requirements in English 35 credits*

Engl 211-212-213 Survey of English Literature I-II-III (12)

Engl 372-373 Survey of American Literature II-III (8)

One of the following (4 credits):

Engl 374 Shakespeare I

Engl 375 Shakespeare II

Engl 389 Advanced Composition (3)

Engl 391 Teaching English in the Secondary School (4)

One of the following (4 credits):

Engl 399 American English

Engl 401 Transformational Grammar

Requirements in Related Fields 8 credits

Spch 100 Fundamentals of Speech (4)

At least one of the following (4 credits):

Spch 205 Beginning Oral Interpretation

Spch 224 Technical Production

Spch 344 Principles of Play Direction

(This minor can be awarded only in combination with at least one teaching major.)

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Courses Recommended for Non-Majors

211-212-213 Survey of English Literature I-II-III

234 Mythology

236 Masterpieces of Drama

238 Introduction to Shakespeare

240 Masterpieces of Fiction I

242 Masterpieces of Fiction II

351-352-353 English Literature of the Victorian Period I-II-III

361-362-363 English and American Literature of the 20th Century I-II-III

372-373 Survey of American Literature II-III

374 Shakespeare I

375 Shakespeare II

376-377-378 Development of the Drama I-II-III

381 World Literature I

389 Advanced Composition

394 Modern American Literature

399 History of the English Language III (American English)

401 Transformational Grammar

481 through 483 Comparative Literature I through III

The Honors Program in English. For students who show evidence of exceptional promise in English studies, several opportunities are available for independent and advanced work.

An entering freshman may take the undergraduate qualifying examination in English offered at the beginning of the year, on the basis of which he can be exempted entirely from Freshman English, or allowed to substitute the more advanced freshman course, *English 191-192-193, Topics in Literature and Critical Writing*. Admission to the latter may also be obtained during the year by application.

In the sophomore year, a qualified student may enroll in *English 291-292-293, Honors Seminar*, a one-credit tutorial conducted in sections of no more than eight students. Admission is by application to the Honors Committee or one "A" (or exemption) in a previous English course.

The junior course, *English 367-368-369, Junior Tutorial and Essay*, requires the submission of a substantial essay, written under the direction of a specialist, on a subject studied in an upper-division course or devised by the student. This essay is incidentally intended to prepare the student for the more extended work he or she may undertake during the senior year. The student will be assigned a faculty advisor who, beginning in the first quarter, will aid and guide the student in reading and preparation. Admission is by application or a 3.5 grade-point in previous English courses.

The special distinction of "Honors in English" is awarded in the senior year to English majors who successfully complete *English 493, The Senior Essay*, a distinction acknowledged on the commencement program and transcripts of the college's permanent records. The Senior Essay is a substantial critical study usually 12,000 words long, though on occasion, with special permission, it may consist of original fiction or poetry. Prerequisite for English 493 are at least four hours of Independent Study (English 491-492) and a 3.5 grade-point in previous English courses.

Honors courses are open to non-majors as well as majors, and participation in one Honors course does not commit a student to taking others. Students who intend to pursue graduate studies are advised to take English 303 (Chaucer II), English 323 (Milton), and English 404 (Advanced Shakespeare) as undergraduates. Most graduate schools also require a reading knowledge of French, German or Latin for admission, though other languages may occasionally be substituted. All honors students, however, are encouraged to study a classical or modern language and its literature, as well as to elect courses in history, philosophy and the fine arts.

Honors Program Course Schedule (67 credits)*Freshman Year*

Engl 191-192-193 Topics in Literature and Critical Writing I-II-III (12)

Sophomore Year

Engl 211-212-213 Survey of English Literature I-II-III (12)

Engl 371-372-373 Survey of American Literature I-II-III (12)

Engl 291-292-293 Honors Seminar (3)

Junior Year

Engl 301-302-303 through 361-362-363: two quarters (8)

Engl 374 or 375 Shakespeare I or II (4)

Engl 397 or 398 History of the English Language I or II (4)

Engl 367-368-369 Junior Tutorial and Essay (3)

Senior Year

Engl 491-492-493 Independent Study and the Honors Essay (9)

ENGLISH COURSES

Engl 101-102-103 *Freshman Composition and Literature I-II-III (4 each)*

The writing of various kinds of prose, chiefly expository, and the study of important examples of literature. The literary emphasis in 101 is on the short story and the essay, in 102 on the novel and the drama, and in 103 on poetry. The three quarters must be taken in sequence.

Engl 111-112-113 *Composition and Literature for Non-Native Speakers I-II-III (4 each)*

The writing and reading of expository prose; introduction to American culture through fiction, poetry and drama; a review of English Grammatical structures; the vocabulary system of the English language. Restricted to non-native speakers, who must take the course unless exempted from the requirement by the department upon the recommendation of the instructor, in which case they may enter English 101-102-103.

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

Close reading of literary masterpieces of several forms and from several cultures. Training in research and critical analysis. In each quarter there may be assigned reading in criticism and literary history and in other forms of literature, but the main emphasis will be as follows: 191: the short story and the novel; 192: the epic and the drama; 193: the lyric. Enrollment in the course is restricted to freshmen exempted from English 101-102-103 and to the occasional sophomore or transfer student who is specially

advised to take it by a faculty member in the Department of English.

Engl 211-212-213 *Survey of English Literature I-II-III (4 each)*

211: From the beginnings through the 17th century (Beowulf to 1660). 212: The Restoration and 18th century (1660 to 1798) and the Romantic movement (1798 to 1832). 213: The 19th and 20th centuries (1832 to the present).

Engl 230 *Individual Authors (4)*

Individual study of one or two writers, or a small group of writers, whose work is important in itself or has had a significant influence on the development of literature.

Engl 232 *Special Topics in English (4)*

Study of some particular literary topic or genre; of consideration of special approaches or procedures related to the study of language or literature.

Engl 234 *Mythology (4)*

An introduction to the great myths of antiquity and their influence upon later literature, especially as a source of subject matter, religious and psychological ideas, and such literary conventions as allusion and symbolism.

Engl 236 *Masterpieces of Drama (4)*

Readings in the dramatic literature of various countries and literary periods, from 5th-century Athens to the present. Primarily for non-majors.

Engl 238 *Introduction to Shakespeare (4)*

A study of representative works: comedies, tragedies, histories, and Roman plays. There may be some consideration of Shakespeare's non-dramatic poetry when feasible. Primarily for non-majors.

Engl 240 *Masterpieces of Fiction I (4)*

Extensive reading and analysis of seven to ten novels such as *Madame Bovary* and *Crime and Punishment* (reading lists available on application). Primarily for non-majors.

Engl 242 *Masterpieces of Fiction II (4)*

Further reading in such authors as Cervantes, Stendhal, and Tolstoy (reading lists available on application). Primarily for non-majors.

Engl 251 *Film Writing (3)*

A study of the techniques of writing for film with special emphasis on the documentary. Admission by consent of instructor.

Engl 260 Practical Writing (3)

Study and practice in writing business and personal letters, reports, summaries, essay examinations, and other kinds of non-literary material. Primarily for non-majors.

Engl 291-292-293 Honors Seminar (1 each)

Discussion of literary matters in tutorials of not more than 8 students; occasional short papers; some reading of criticism and consideration of the premises and validity of the many possible approaches to literature. The seminar is intended to encourage responsible discussion of important topics, in a very small forum, among students of superior talent. The grade ordinarily awarded for satisfactory participation in the seminar is S.

Engl 301-302-303(G) Early English Literature I-II-III (4 each)

301: The Anglo-Saxon period and the beginnings of Middle English literature: the Venerable Bede, King Alfred, *Beowulf*, and other Anglo-Saxon documents in modern English translation, with a glance at selected passages in the original; the *Ancrene Riwele* and *Piers Plowman*; medieval romance generally and Arthurian romance: *Sir Gawain and the Green Knight* and Malory's *Le Morte d'Arthur*; specimens of lyric and alliterative verse in Middle English. 302: Chaucer I: *Troilus and Criseyde* and the other more important poems apart from *The Canterbury Tales*. 303: Chaucer II: *The Canterbury Tales*. The first two quarters are offered occasionally, the third quarter regularly.

Engl 311-312-313(G) English Literature of the 16th Century I-II-III (4 each)

311: More and Elyot; the drama through Kyd; Skelton, Wyatt, and Surrey; the Elizabethan translators. 312: Prose narrative through Deloney; the University Wits; later Elizabethan poetry: Sidney and the sonneteers, Marlowe and Ovidian romance, and the pastoral. 313: Spenser.

Engl 321-322-323(G) English Literature of the 17th Century I-II-III (4 each)

321: Prose, drama, and poetry of Jonson and his contemporaries, principally the King James translators of the Bible, Bacon, Donne, and Herbert. 322: Later Caroline writers: Herrick, Marvell, Crashaw, Vaughan, and Sir Thomas Browne; Cowley and Hobbes. 323: Milton.

Engl 331-332-333(G) English Literature of the Restoration and 18th Century I-II-III (4 each)

311: Restoration comedy and heroic tragedy; Dryden and his lesser contemporaries; Bunyan. 332: Early 18th-century literature, especially Pope, Swift, Addison and Steele, and Defoe. 333: Boswell and Dr. Johnson; mid-century and later poets: Collins,

Gray, and Cowper; Fielding and the rise of the novel; Goldsmith and Sheridan.

Engl 341-342-343(G) English Literature of the Romantic Movement I-II-III (4 each)

341: Crabbe, Burns, and Blake; Jane Austen; the Gothic novel; Scott. 342: Southey, Landor, Wordsworth and Coleridge, Hazlitt, De Quincey, and Lamb. 343: Byron, Shelley, and Keats.

Engl 351-352-353(G) English Literature of the Victorian Period I-II-III (4 each)

351: Cobbett and the literature of social reform; Carlyle and Macaulay; Tennyson and Browning; the Brontës and Dickens. 352: Newman, Mill, and Huxley; Arnold Clough and FitzGerald; Thackeray, George Eliot, and Trollope. 353: Ruskin and Pater; the Pre-Raphaelites, Swinburne, and Morris; Meredith and Hardy.

Engl 361-362-363(G) English and American Literature of the 20th Century I-II-III (4 each)

361: From the Nineties to World War I; the Aesthetic Movement, the Rhymers, Wilde, and Gissing; Shaw; the naturalistic novel; Robinson and Frost; Edwardian and Georgian poetry; James, Conrad, Forster, and Joyce. 362: The literature of World War I and the 1920s: the Imagists; Lawrence and Woolf; Eliot and the modernist poets; Huxley, Fitzgerald, and Hemingway; the later Yeats. 363: From the Thirties to mid-century; the Auden group, Waugh and Orwell, Faulkner and Steinbeck, Dylan Thomas and poets of the Forties, Mailer and Cozzens, and Greene.

Engl 367-368-369 Colloquia and Junior Essay (1 each)

Attendance at two or three colloquia per quarter and, in the third quarter, the submission of an essay, somewhat longer than the usual critical paper, which has been written under the direction of a faculty member on a subject studied in an upper-division course or devised by the student himself. The colloquia are intended to acquaint the student with literary or scholarly work currently being done by members of the Department; and the junior essay is intended to prepare him for the kind of work he will be expected to undertake in the senior year of Honors. The grade S is awarded at the end of the third quarter for satisfactory participation in the whole course.

Engl 371-372-373 Survey of American Literature I-II-III (4 each)

371: From the beginnings to 1830: narratives of discovery and settlement; Puritan prose and poetry; Franklin and Edwards; literature of the Revolution; cultural and literary nationalism; Irving and Cooper. 372: From 1830 to the Civil War: literature of the South; the New England "renaissance": Walden, *The Scarlet*

Letter, Moby Dick, and Leaves of Grass. 373: From the Civil War to the present: folklore, humor, and local color; literary realism and naturalism; tradition and revolt in poetry; the revolt from the village; the Lost Generation; myth and symbol.

Engl 374 Shakespeare I (4)

Representative plays from each of the genres: comedy, tragedy, history, Roman plays; the historical background of the theatre and the times; introduction to major Shakespearean critics.

Engl 375 Shakespeare II (4)

More plays representing the genres; introduction to the linguistic and poetic problems involved in the plays.

Engl 376-377-378(G) Development of the Drama I-II-III (4 each)

Representative readings in dramatic literature from the Greek theatre to the present day. 376: From Aeschylus to Shakespeare. 377: From Shakespeare to Ibsen. 378: From Ibsen to the present. Same as Speech 322-324-326(G).

Engl 381(G) World Literature I: Greece (4)

Greek literature: the study, in translation, of the beginnings and models of Western literature — especially of Homer and the Greek tragedians — with some consideration of other modes in writers such as Pindar, Aristophanes, Thucydides, and Plato.

Engl 387 Technical Report Writing (3)

Expository writing dealing with scientific subjects and planned for a specialized audience: documentation procedures, the writing of abstracts, and preparation of reports of original investigations.

Engl 388 Creative Writing (3)

The writing of poetry, short fiction, and plays. The course may be elected for a total of three quarters with the permission of the instructor. Offered on request when feasible.

Engl 389 Advanced Composition (3)

For future teachers of English: the principles of clear and effective writing; teaching and evaluating composition.

Engl 391(G) Teaching English in the Secondary School (4)

An examination of current practices in teaching high school English; observation of high school English classes; discussion of curriculum and materials in language and literature; analysis of typical approaches, and preparation of materials for use in student teaching. To be taken immediately before student teaching in English. Fall and Spring.

Engl 392(G) Adolescent Literature (3)

The teaching of literature in junior and senior high schools; literature written for adolescents; organization of school literature programs; teaching the various genres; the relation of literature to other aspects of the English program.

Engl 393(G) Language and Composition in the Secondary School (3)

Special study of the teaching of the English language and composition in junior and senior high schools; comparison of traditional and recent descriptions of the language; implications of recent language study for the teaching of English; organization of English language study in high schools; the role of language study in the teaching of writing; organization of school composition programs.

Engl 394 Modern American Literature (4)

American writing since 1900 in relation to changing cultural patterns: the decline of the Genteel Tradition; World War I, disillusion, and expatriation; the economic impact of Boom and Depression; World War II and its aftermath. Extensive reading in the fiction of Dreiser, Lewis, Dos Passos, and others. Primarily for non-majors.

Engl 397-398-399(G) History of the English Language I-II-III (4 each)

A historical and linguistic approach to the phonological and morphological development of the English language. 397: The language from Primitive Germanic to 1100, with occasional readings in Old English. 398: The language from 1100 to the Modern period, with occasional readings in Middle English. 399: The development and present status of American English.

Engl 400(G) Introduction to Descriptive Linguistics (4)

A broad survey of the field of descriptive linguistics.

Engl 401(G) Transformational Grammar (4)

An introduction to the theory of generative grammar and its applications, with emphasis on a pedagogical approach to the teaching of grammar and literature.

Engl 402(G) Practical Criticism (4)

Analysis, evaluation, and interpretation of literary works of several kinds and practice in the writing of critical essays. Recommended for juniors, seniors and graduate students majoring in English.

Engl 404(G) Advanced Shakespeare (4)

Critical approaches to Shakespeare; structure and style in the plays and the nondramatic poetry; Shakespeare's development in various genres (e.g. comedy, tragedy, dramatic chronicle). Prerequisite: Engl 374 or 375 or consent of the instructor.

- Engl 408(G) *The 18th Century Novel* (4)
The development of the English novel from Defoe to Sterne, with some consideration of earlier prose narrative.
- Engl 412(G) *The 19th Century Novel* (4)
The work of major English novelists from Jane Austen to Thomas Hardy.
- Engl 416(G) *Individual Authors* (4)
Intensive study of one or two writers, or a small group of writers, whose work is important in itself or has had a significant influence on the development of English or American literature. The course may be elected more than once when the authors considered are different.
- Engl 424(G) *Restoration and 18th Century Drama* (4)
The chief dramatists from Wycherley to Sheridan, with emphasis on the comedy of manners and heroic tragedy.
- Engl 430(G) *Significant Books in American Culture* (4)
The history of ideas in the study of books articulating major traditions in American culture.
- Engl 432(G) *Hawthorne, Melville, and Poe* (4)
Extensive reading in major American authors: Hawthorne's *Twice-Told Tales*, *Mosses from an Old Manse*, and *The House of Seven Gables*; Melville's tales and *Typee*, *Mardi*, and *Billy Budd*; Poe's poetry, tales, and criticism.
- Engl 434(G) *Emerson, Thoreau, and Whitman* (4)
Extensive reading in major American authors: Emerson's essays and poetry; Thoreau's poetry and *A Week on the Concord and Merrimack Rivers*; Whitman's *Leaves of Grass*, *Democratic Vistas*, and *Specimen Days*.
- Engl 436(G) *Twain, Howells, and James* (4)
Extensive reading in major American authors: Twain's *Connecticut Yankee* and *The Mysterious Stranger*; Howells' *Criticism and Fiction* and *The Rise of Silas Lapham*; James's critical prefaces, *Daisy Miller*, and *The Portrait of a Lady*.
- Engl 438(G) *Special Topics in English* (4)
Intensive study of some particular issue or literary genre; or consideration of significant intellectual approaches or pedagogical procedures related to the study of language or literature. The course may be elected more than once when the topics considered are different.
- Engl 442(G) *Contemporary Fiction* (4)
The novel and short story since World War II: from Cozzens and Warren to such younger writers as Kingsley Amis and Iris

Murdoch. The course may be elected twice when the reading lists are substantially different.

- Engl 446(G) *Contemporary Drama* (4)
A consideration of individual British and continental playwrights. The course may be elected twice when the reading lists are substantially different. Same as Speech 438(G).
- Engl 448(G) *The Short Story* (4)
Representative readings, chiefly in the work of English, American, and European writers, with some attention to critical theory. Recommended for all juniors, seniors, and graduate students having some background in literature.
- Engl 471-472-473(G) *Literary Criticism I-II-III* (4)
A study of the major critical essays in English from Sir Philip Sidney to the present, with consideration of the pertinent philosophical and cultural background and intensive reading of literary works that reflect or illustrate basic ideas and various critical theories. 471: Plato, Aristotle, and the Renaissance tradition of criticism; 472: neo-classical criticism; 473: Romantic and modern criticism. Recommended only for qualified students. English majors, with their advisor's approval, may substitute this sequence for a period sequence in literature.
- Engl 481(G) *Comparative Literature I: The Older Literature of Scandinavia* (4)
Selections from the prose Edda and the poetic Edda, selected tales and ballads, with special attention to the question: art vs. oral tradition. In English translation. Open also to juniors. Same as Scandinavian Studies 381(G).
- Engl 482(G) *Comparative Literature II: Ibsen and Strindberg* (4)
Major and representative plays of Ibsen and Strindberg, including Ibsen's *Peer Gynt*, *Brand*, *Ghosts*, *The Wild Duck*, *The Pillars of Society*, *The Enemy of the People*, *The Lady from the Sea*, *When We Dead Awaken*, *Hedda Gabler*, *The Master Builder*, *A Doll's House*, *Jon Gabriel Bjorkman*, and *Rosmersholm*; and Strindberg's *Miss Julie*, *The Father*, *A Dream Play*, *Easter*, *The Stranger*, and *The Ghost Sonata*. Same as Scandinavian Studies 392(G).
- Engl 483(G) *Comparative Literature III: The Modern Scandinavian Novel* (4)
Masterpieces by the major Scandinavian novelists of the 20th century, the Dane Martin Andersen Nexø, the Icelander Halldor Laxness, the Norwegians Knut Hamsun and Sigrid Undset, the Swedes Selma Lagerlof and Par Lagerkvist, and others. In English translation. Open also to Juniors. Same as Scandinavian Studies 393(G).

Engl 490(G) 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 methods and styles of illustration. Same as Library Science 490(G) and History 348(G).

Engl 491-492-493 Independent Study and the Honors Essay (3)

491-492: Intensive study in an area chosen by the student under the direction of a specialist. 493: The writing of a fairly long critical paper, of sound substance and originality, usually based on work undertaken in English. 491-492. Required of all honors students in English and elected ordinarily in the spring quarter of the senior year.

Engl 498 Tutorial in English (1 to 3)

The consideration of various problems in literature or language that have been agreed upon by the instructor and the student. The tutorial, which is not a part of the Honors Program in English, is designed to allow qualified students to undertake a kind of study that does not usually find an important place in other courses. A student may, with permission, register for the tutorial three times (but no more than three times, regardless of the number of credits granted). Prerequisite: Junior standing or higher and consent of the department and the instructor.

Engl 500 Literary Scholarship (3)

Problems and techniques of literary scholarship.

Engl 502 Studies in Shakespeare (3)

A survey of the classical, medieval, and contemporary sources of Shakespeare; study of the bibliographical and critical problems of the plays. Prerequisite: Consent of the instructor.

Engl 504 Studies in 16th-Century Literature (3)

Engl 506 Studies in 17th-Century Literature (3)

Engl 508 Studies in 18th-Century Literature (3)

Engl 510 Studies in 19th-Century Literature (3)

Engl 512 Studies in 20th-Century Literature (3)

Engl 514 Studies in American Literature (3)

Engl 516 Studies in Modern Literary Theory (3)

The major modes in contemporary criticism: formal analysis, historical and biographical interests, and various psychological, ideological, cultural, and mythic approaches as related to the practice of contemporary schools and movements.

Engl 540 Problems in Secondary School English (3)

Individual and class problems.

Engl 598 Directed Readings in English (3)

Engl 599 Thesis in English (1-6)

Research and the writings of the master's thesis. Registration only after consultation with major advisor.

ENVIRONMENTAL STUDIES COURSES

The following interdisciplinary courses are offered through the Tri-College University.

EnvS 103 Man in the Ecosystem (4)

The consideration of man's role in the ecosystem, emphasizing man's environmental problems, as illustrated by the study of the relevance of basic ecological principles. Coordinator: Dr. Donald Scoby, Biology, NDSU

EnvS 104 Resources of the World (4)

The study of the physical and biological resources of the world in relation to their supply, demand, and wise-use. Prerequisite: EnvS 103 or equivalent. Coordinator: Dr. Mary Bromel, Bacteriology, NDSU

EnvS 203 Technology and the Environment (4)

The consideration of the growth of technology and its effect on society now and in the future as illustrated by study of how technology relates to energy, water usage, food production, transportation, waste disposal, construction, manufacturing, mining and recreation. Prerequisites: EnvS 103, 104 or equivalent. Coordinator: Dr. Dennis Mathiason, Chemistry, MSC

EnvS 204 Environmental Ethics (4)

The consideration of the factors that influence how man relates to nature through beliefs, values, intentions, and options available to him. Prerequisites: EnvS 103, 104 or equivalent. Coordinator: Dr. Eleanor Haney, Religion, CC

EnvS 303 Socioeconomics of the Environment (4)

Analysis of the impact of economic growth on man and the environment. Integrates economic and sociological concepts that relate to modernization, communication, human spacing, and the market system. Prerequisites: EnvS 103, 104 or equivalent. Coordinator: Dr. Del Helgeson, Agricultural Economics, NDSU

EnvS 304 Environmental Decision Making (4)

Law, economics and institutional variables will be molded together to provide the public and private decision maker with a rational framework for considering environmental effects in the decision making process. Emphasis will be placed on citizen involvement in the decision making process. Prerequisites: EnvS 103, 104 or equivalent. Coordinator: Dr. Dale Anderson, NDSU

EnvS 403 *Applied Environmental Analysis* (1-4)
Interdisciplinary group study of selected environmental problems.
Prerequisites: EnvS 103, 104 and junior or senior standing.

FINANCE COURSES

See BUSINESS for Curricula

Finc 242-243-244 *Work Experience in Finance I-II-III*
(1 credit each, maximum 3).

Open only to students majoring in Finance.

Finc 320 *Money and Banking* (See Econ 320)

Finc 321 *Case Studies in Banking* (4)

Application of theory to selected cases; inter-bank relationships; banking developments. Prerequisite: Econ 320 or consent of instructor.

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 of a business.
Prerequisite: Accounting 231. Not open to accounting majors.

Finc 341(G) *Corporate Finance II* (4)

Organization of corporations, and the legal and financial requirements involved. Prerequisite: Accounting 352 or Finance 340.

Finc 342(G) *Decision Making in Corporate Financial Management* (4)

The course deals with both long and short term aspects of finance with emphasis placed upon analysis and decision making.
Prerequisite: Finc 341 or consent of instructor.

Finc 350 *Public Finance* (See Econ 350)

Finc 351 *Principles of Insurance* (4)

A survey of basic insurances and risk principles, property, liability and performance insurance coverage, and insurance regulations.
Prerequisite: Acct 311.

Finc 352 *Life Insurance* (4)

A study of life insurance policies, rating procedures, and personal and business applications.

Finc 353 *Health and Social Insurance* (4)

A study of systems to provide compensation in cases of medical expenses or disability. Consideration will be given to the national problem of medical cost and minimum income guarantees.

Finc 354 *Principles of Real Estate* (4)

Fundamental principles in the purchasing, developing, management, and financing of real estate.

Finc 358(G) *Principles of Investments* (4)

The different types of investments, and the policies and practices of the different types of investors.

Finc 425 *International Trade and Finance* (See Econ 425)

Finc 430(G) *Problems in Credit and Collection* (4)

This course follows the recommendations of the National Institute of Credit. Prerequisite: Finc 330.

Finc 457(G) *Security Analysis* (4)

A detailed examination of the various classes of securities available for investors, and the development of techniques used to reach conclusions as to the safety and attractiveness of a given security at the current market price. Prerequisite: Finc 358 or consent of instructor.

Finc 458(G) *Portfolio Management* (4)

The art of combining a portfolio of securities, those investments which appear most likely to meet a proper balance of the various changing and frequently conflicting requirements of the investor.
Prerequisite: Finc 457.

Finc 469 *Student Internship* (4-16)

Finc 498(G) *Problems in Finance* (1 to 4)

An individual inquiry into some aspect of finance not dealt with in the regular curriculum.

FRENCH LANGUAGE AND LITERATURE COURSES

See LANGUAGE for Curricula.

Fren 101-102-103 *Beginning French I-II-III* (4 each)

An introductory course. Strong emphasis on the spoken language; pronunciation; aural-oral drill. Reading and inductive study of grammar. Language laboratory. Regular periods as required by the instructor.

Fren 105 *Rapid Review of French Fundamentals* (4)

This course is open to students with previous exposure to the French language. Grammar review through oral and written exercised. Pronunciation practice and vocabulary build-up will be featured.

Fren 201-202-203 *Intermediate French I-II-III* (4 each)

Continued emphasis on spoken language. Rapid and intensive review of grammar; selected prose readings of progressive difficulty. Language Laboratory: Regular periods as required by

the instructor. Prerequisite: French 101-102-103 or two years of high school French.

Fren 226-227-228 Intermediate Conversational French I-II-III (3 each)

A totally oral course designed to facilitate conversational fluency. Recommended as a supplement to Intermediate French 201-202-203. Prerequisite: Fren 101, 102, 103 or two years of high school French.

Fren 264-265-266 French Life and Literature I-II-III (4 each)

A three course sequence of selected masterpieces of French literature within the framework of cultural history, designed for students with little or no competence in reading French. The works selected span the middle ages to the twentieth century. Not intended for French majors. Same as Humanities 264-265-266.

Fren 301-302-303 French Conversation and Composition I-II-III (3 each)

Achievement of oral fluency and practical experience in writing French based on topics pertaining to French culture and civilization as well as current issues. Recommended for future teachers. Prerequisites: Fren 201-202-203 or equivalent.

Fren 311-312-313 French Literature I-II-III (3 each)

311: Introduction to literature. Readings in various genres and periods. Abundant exercises in criticism to develop in the student a sound method of analysis. 312: Survey of 19th century literature. 313: Survey of 20th century literature. Prerequisites: Fren 201-202-203.

Fren 321-322 French Culture and Civilization I-II (3 each)

Lectures, discussions, and films on French culture and civilization. Emphasis on art, history, architecture, geography, and institutions. Prerequisites: Fren 201-202-203.

Fren 351-352-353 French Practicum I-II-III (3 each)

An educational experience in which elementary education French minors, elementary school students, and a master teacher explore the problems and opportunities of a FLES program.

Fren 397 Independent Study in French — Junior Level (1)

Selected project as agreed by student and instructor. Prerequisites: Completion of French 201-202-203. Consent of instructor; approval by department chairman upon presentation of proposal. May be repeated up to a total of 3 credits.

Fren 401-402 Advanced French Composition I-II (3 each)

Achievement of a high level of oral and written fluency. Emphasis

on phonetics, syntax, and stylistics. Prerequisites: completion of Fren 303 or consent of instructor.

Fren 411-412-413 French Literature IV-V-VI (3 each)

411: Survey of medieval and 16th century literature. 412: Survey of 17th century literature. 413: Survey of 18th century literature. Course conducted in French. Lectures, readings, and discussions on representative authors of the periods. Prerequisites: Fren 311, 312, 313 (May be taken concurrently).

Fren 480(G) Special Topics in French Literature and Culture (2-4)

In-depth study of a selected topic in French. The topic may focus on historical development, a theme, motif, genre, movement, period, or a single major author, or it may be comparative in nature, e.g. literature and politics, the arts, or science of a given period. May be repeated for credit. Prerequisite: Fren 311, 312, 313 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, historical grammar, dialectology, or any other subject fitting under the heading of "language." May be repeated for credit. Prerequisites: Fren 411, 412, 413.

Fren 497 Independent Study in French — Senior level (1)

Selected project as agreed by student and instructor. Prerequisites: Completion of Fren 201-202-203. Consent of instructor; approval by department chairman upon presentation of proposal. May be repeated up to a total of 3 credits.

GEOGRAPHY-GEOLOGY DEPARTMENT

Eleanor Ritchie, *Chairperson*; James Hamburg, Jane Harrison,
W. Douglas Harrison, Roger Richman

Areas of Study: Geography, Geology, Earth Science,
Photogrammetry

GEOGRAPHY CURRICULA

Major in Geography

Major Requirements in Geography 54-57 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)

Geog 322 Cartography (4)

Geog 370 Political Geography (3)

Geog 444 Seminar in Geographic Thought (2)

Courses in Regional Geography (At least 6 credits):

Geog 312, 313, 315, 316, 318, 319, 320, 321

Courses in Systematic Geography (At least 8 credits):

Geog 112, 222, 241, 242, 300, 323, 324, 325, 411, 420, 422,
423, 424, 495, 496. The physical portion of Geog 330-350 can
be applied to this group.

Electives in Geography (7-10 credits):

Electives may include 8 credits of summer field trip, Geog
330-350 or Geog 496. No more than 8 hours in Geology can be
used in this group.

Requirements in Related Fields 16 credits

(To be selected in consultation with the Geography advisor)

One of the following (4):

Math 273 Mathematics for Behavioral and Social Sciences

Math 274 Introduction to Statistics

Electives in Social Science courses (At least 12 credits)

Major in Geography (Social Studies) (Teaching)

Major Course Requirements 57-60 credits

B.A. Major Requirements (54-57)

Ed 440 Social Studies in the Secondary School (3)

Requirements in Related Areas 25-28 credits

Hist 101-102-103 Western Civilization I-II-III (12)

At least one course in each of the following areas (9-12):

Anthropology or Sociology

Economics

Political Science

One of the following in consultation with advisor (4)

Math 273 Mathematics for Behavioral and Social Sciences

Math 274 Introduction to Statistics

(All Teacher Education Requirements shall be fulfilled to complete
this major. See ACADEMIC INFORMATION.)

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 Geography (Teaching)

Required Courses in Geography 27-28 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)

One advanced course in either regional or systematic Geography
(3-4)

Requirements in Related Areas 15-19 credits

At least one course from each of the following subjects related to
a selected region or system of geography (12-16):

History

Economics

Political Science

Sociology or Anthropology

Ed 440 Social Studies in the Secondary School (3)

(This minor can be awarded only in combination with at least one
teaching major.)

GEOLOGY CURRICULA

Major in Geology

A major or minor in Geology can be earned through the
Moorhead State College-North Dakota State University exchange
program.

EARTH SCIENCE**Major in Earth Science (Teaching) 90-92 credits***Major Course Requirements*

- Geog 110 Introductory Physical Geography (4)
 Geog 225 Conservation (4)
 Geog 230 Map Intelligence (4)
 Geog 241 Elementary Meteorology (4)
 Geog 242 Climatology (4)
 Geog 300 Geomorphology (4)
 Geog 323 Aerial Photo Interpretation (4)
 Geol 115 Physical Geology (4)
 Geol 116 Historical Geology (4)
 Geol 221 Geology of Mineral Resources (4)
 Ast 100 Introduction to Astronomy and Space Science (4)
 Ast 101 Observation and Descriptive Astronomy (3), or Ast 110 Rocketry and Space Travel (3)
 Geog 440 Teaching Methods in Earth Science (3)
 Biol, Physics, Chemistry (24)
 (24 hours to be taken in 2 of the 3 areas listed.)

Electives in Earth Science (10-12 credits)

- Geog 496 Summer Field Studies (highly recommended)
 Biol 226 Field Biology of Plants
 Biol 345 Principles of Ecology
 Biol 355(G) Wildlife Ecology
 Biol 356(G) Plant Ecology
 Ast 110 Rocketry and Space Travel
 Ast 200 Cosmology
 Ast 210 Stellar Evolution
 Phys 210 Topics in Modern Physics
 Chem 231, 232, 233 Organic Chemistry
 The following courses can be taken at NDSU:
 Geol 303 Paleontology
 Geol 304 Mineralogy I
 Geol 305 Mineralogy II
 Geol 350 Glacial Geology

Requirements in Related Areas 6 credits

- Math 121 College Algebra (4)
 Math 133 Trigonometry (2)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Earth Science (Teaching) 45 credits*Required Courses in Earth Science*

- Geog 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 Geomorphology (4)
 Geog 323 Aerial Photo Interpretation (4)
 Geol 115 Physical Geology (4)
 Geol 116 Historical Geology (4)
 Ast 100 Introduction to Astronomy and Space Science (4)
 Education (Methods)
 Geography 440 Teaching Methods in Earth Science (3)

Electives in Earth Science 6 credits

- Geog 241 Meteorology
 Geol 221 Geology of Mineral Resources
 Geog 496 Summer Field Studies
 Ast 101 Observation and Descriptive Astronomy
 Ast 110 Rocketry and Space Travel
 Ast 200 Cosmology
 Ast 210 Stellar Evolution
 Biol 345 Principles of Ecology

*****It is recommended that students taking an Earth Science Minor fulfill their General Studies requirements with courses in Biology, Chemistry, Physics, Mathematics and Geography.**

(This minor can be awarded only in combination with at least one teaching major.)

Photogrammetry: study in photogrammetry is available through the Department of Geography-Geology. Further information can be obtained from the chairperson of the department.

GEOGRAPHY COURSES

Geog 110 Introductory Physical Geography (4)
 An introduction to the basic elements of geography including weather and climate, natural vegetation, soils, and landforms with emphasis on physical patterns and interrelationships. Recommended as a foundation for most other geography courses.

Geog 111 World Regional Geography (4)
 A geographical study of world regions with emphasis on the problems of man's relation to the land and the interrelation of regions. Prerequisites: Geog 110

Geog 112 Cultural Geography (4)
 A focus on cultural diversity based on an examination of people in different parts of the world and what they have done in relation to their environmental limitations and the diffusion of innovation.

Geog 220 Economic Geography (4)

The geography of man's economic activities, including agriculture, mining, manufacturing, and trade.

Geog 222 Introduction to Spatial Organization and Techniques (4)

A survey of the ways in which man organizes space in order to accommodate various economic and cultural activities, with some attention given to basic techniques of spatial analysis.

Geog 225 Conservation (4)

A study of environmental problems such as scarcity of the world's food supplies and natural resources, air and water pollution, and other problems related to an expanding world population.

Geog 230 Map Intelligence (4)

A comprehensive study of maps, including their functions, uses, and limitations with a brief history of cartographic development.

Geog 235 Geography of Minnesota and North Dakota (3)

A survey and analysis of the physical and cultural environments of Minnesota and North Dakota.

Geog 241 Elementary Meteorology (4)

An introduction to the basic elements of weather: temperature, pressure, condensation and precipitation, air masses and fronts, vorticity and jet streams, and storms. Treatment of topics is non-mathematical. Prerequisites: Geog 110 or consent of instructor.

Geog 242 General Climatology (4)

A survey of climatic regions (Koppen classification), with emphasis on climatic controls, seasonal variations, and climatic anomalies. Prerequisites: Geog 110 or Geog 115 or consent of instructor.

Geog 300 Geomorphology (4)

A regional survey of landforms of the United States, with attention given to classic problems in geomorphic interpretation. Course includes required field trips: Two minor, half-day trips: one major camping trip of four or five days. Prerequisites: Geog 110 or consent of instructor.

Geog 310 United States and Canada (4)

A regional survey of the United States and Canada with emphasis on regional contrasts and interrelationships. Prerequisites: Geog 110 or 111, or consent of instructor.

Geog 312 Asia (4)

A survey of Asian nations, emphasizing cultural and natural environments with resulting economic and regional differences. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 313 Australia and Pacific Islands (2)

A physical and cultural geography of Australia, New Zealand, Melanesia, Micronesia, and Polynesia. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 315 Europe and North Africa (4)

A study of regions of Europe and North Africa emphasizing the people and their great productivity within a unique geographic framework.

Geog 316 Subsaharan Africa (3)

A survey of Africa south of the Sahara; consideration of physical environment, resources, cultures, nations, and prospects. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 318 Middle America (3)

A survey of Mexico, Central America and West Indies stressing physical and cultural environments, problems and prospects. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 319 South America (3)

A regional survey of the continent; consideration of physical environment, resources, cultures, nations and prospects. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 320 Soviet Union (3)

A geographical survey and analysis of the people and the physical environment of the U.S.S.R. The focus is on limitations and potential of the largest country on earth. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 321 Geography of Scandinavia (2)

A detailed geographical focus on the Scandinavian countries to understand the great influence of the physical environment on the development of these countries.

Geog 322 Cartography (4)

Compilation and construction of planimetric maps, utilizing basic drawing instruments and media, with emphasis on factors of efficient cartographic design. Prerequisites: Geog 230 or consent of instructor.

Geog 323 Aerial Photo Interpretation (4)

Use of aerial photographs for geographic information and map construction with particular reference to identification of cultural features of the landscape, image identification, stereoscopy and photomeasurements. Prerequisites: Geog 110 or 230, or consent of instructor.

Geog 324 Photogrammetry (4)

A study of the production and utilization of aerial photography for planimetric and topographic maps, including camera systems,

film, stereoplotting instruments, flight planning, and cost analysis. Prerequisites: Geog 230 or consent of instructor.

Geog 325 Urban Geography (4)

The study of urban development and its spatial aspects such as location, land-use patterns, patterns of circulation, and patterns of natural environment. In addition, the historical development of urban areas is traced to explain the present patterns and problems.

Geog 330-350 Summer Field Trips (4 each)

Credit is granted for field trips taken during the summer under the guidance of a member of the Department of Geography. Sequentially numbered courses entitled "The Physical Geography of . . ." and "The Human or Historical Geography of . . ." each four hours, are offered every summer. Only eight hours of summer field trip credit may be counted toward graduation requirements and toward the geography major. In the summer of 1972, Alaska and Western United States and Canada were visited and studied in Geog 336 and 337. During the summer of 1973, the Bahamas and Southeastern United States were toured and studied in Geog 334 and 335. Graduate credit is also available in conjunction with Geog 420(G) when a field trip is conducted within the United States, and Geog 410(G).

Geog 370 Political Geography (3)

A study of the geographic influences in the growth and development of political units with a brief examination of various politico-geographical theories. Prerequisites: Geog 110 and 111, or consent of instructor.

Geog 410(G) Regional Geography Seminar (4)

An intensive geographic study of a selected country or area. May be repeated as country or area are changed. See schedule of courses for region to be considered in a given quarter. Prerequisites: Geog 110 or 111, or consent of instructor.

Geog 411(G) Geographic Factors in Cultural Development (3)

An analysis of the role of geography in the development of cultures. Prerequisites: Geog 110, 111 and 112, or consent of instructor.

Geog 420(G) Historical Geography of the United States (3)

A study of the past geography of the United States and Canada from 1500 to 1940. Prerequisites: Geog 110, and 310 or consent of instructor.

Geog 422 Advanced Cartography (2)

A course designed to give students practical experience with

commercial cartographic techniques, with emphasis on scribing. Prerequisites: Geog 322.

Geog 423, 424 Stereoplotting I-II (2 hours each)

Courses designed to give students practical experience in stereoplotting with Balplex, Multiplex, and Kelsh systems, with exercises on clearing, leveling, and scaling, planimetric detail, contouring, error analysis, bridging, and model compilation. Prerequisites: Geog 324 or consent of instructor.

Geog 440 Teaching Methods in Earth Science (3)

A course consisting of objectives, methods, materials and evaluation methods to assist the teacher in the Earth Science classroom.

Geog 444(G) Seminar in Geographic Thought (2)

A critical examination of geographic thought from ancient times to the present, with emphasis on (a) the Classical School of Kant, Humbolt, and Ritter, (b) the Environmentalist School of Ratzel, Semple, and Huntington, (c) Possibilism and Probablism, (d) the physical geographers, (e) the Regional School, (f) the idiographic vs nomothetic approach; quantitative revolution, and (g) neo-Classical approach. Prerequisites: consent of instructor.

Geog 480(G) Seminar in Conservation (3)

Intensive investigation of selected conservation topics and supervised student research. Some field work is involved. Prerequisites: Geog 110, 111 and 225 or consent of instructor.

Geog 490(G) Special Problems in Geography (1-4)

An individual conference course for advanced students involving selected readings in geography and special writing projects utilizing the geographic approach. Prerequisites: consent of the department chairman.

Geog 495(G) Field Techniques in Geography (4)

A survey of techniques designed to gather field data concerning bed-rock and soils, land capability, rural and urban land use, and resource potential. Course involves one meeting per week for field work, with results presented in a written report. Prerequisites: Geog 300 or Geol 115 or consent of instructor.

Geog 496 Summer Field Studies (8)

A five-week summer course designed to provide an intimate contact with the physical and cultural environment, including three weeks of travel by automobile in various areas of North America. The Student must be physically and mentally capable of working in the field under a variety of conditions; he/she is required to provide basic camping equipment and personal expenses. The college provides limited transportation facilities at a nominal cost; arrangements for private transportation are subject

to approval by the instructor. Departure dates of the trip vary from about June 1 to June 15, depending on the section of North America visited. Credit hours may be applied toward requirement in systematic geography; course may be repeated for elective credit.

GEOLOGY COURSES

Geol 115 Physical Geology (4)

A survey of the physical nature and properties composing the earth, the distribution of materials throughout the globe, and the processes by which they are formed, altered, transported, and distorted throughout geologic time.

Geol 116 Historical Geology (4)

A general survey of earth history, emphasizing the development and evolution of landforms, plant and animal life, and natural resources.

Geol 221 Mineral Resources (4)

A survey of important mineral resources with respect to geologic occurrence, methods of exploitation, and basic factors of allocation and consumption. Course includes required field trip to Mesabi Range. Prerequisites: Geog 110 or Geol 115, or consent of instructor.

GERMAN LANGUAGE AND LITERATURE COURSES

See LANGUAGE for Curricula

Ger 101-102-103 Beginning German I-II-III (5 each)

An introductory course for students with no previous knowledge of German or less than two years of high school German. Strong emphasis on the spoken language, pronunciation, aural-oral drill, fundamentals of grammar, reading.

Ger 105 Beginning German in Review (5)

A first-year course for students with two or more years of German in high school or sufficiently high score on a placement examination. In condensed form this course has the same objectives as Beginning German 101-102-103. Prerequisites: Two or more years of high school German or satisfactory score on a placement examination.

Ger 201-202-203 Intermediate German I-II-III (4 each)

Continued emphasis on the active use of the language. Review and expansion of grammar study coupled with increasing stress on reading and writing skills. Reading selections will be taken

from shorter modern literary works. Prerequisites: Either Ger 101-102-103 or Ger 105 or satisfactory score on a placement examination.

Ger 297 Independent Reading in German — Sophomore Level (1-3)

Selected project as agreed by student and instructor.

Prerequisites: Completion of, or concurrent enrollment in, German 201-202-203. Consent of instructor. Approval by department chairman upon presentation of proposal. May be repeated up to a total of 6 credits.

Ger 311-312-313 Masterpieces of German Literature I-II-III (4 each)

Critical reading and literary analysis through discussion and short papers on representative works. Conducted in German. 311: Twentieth century, 312: Realism and naturalism, 313: Rationalism and idealism. Prerequisites: Ger 201, 202, 203 or satisfactory score on a placement examination.

Ger 331 German Culture and Civilization (4)

Lectures, readings, and discussions on German Culture and Civilization: Art, architecture, education, history, music, philosophy, religion, science. Prerequisite: Completion of Ger 201-202-203.

Ger 351-352-353 German Practicum I-II-III (3 each)

An educational experience in which elementary education German minors, elementary school students, and a master teacher explore the problems and opportunities of a FLES program.

Ger 361-362-363 German Literature in Translation I-II-III (3 each)

Lectures and discussion on selected major works of prominent authors since the Age of Enlightenment. Prerequisites: Successful completion of Freshman English.

Ger 371-372-373 German Composition and Conversation I-II-III (3 each)

Achievement of oral fluency and practical experience in writing German based on topics pertaining to German culture and civilization as well as current issues. Recommended for future teachers. Prerequisites: Completion of second year German or a satisfactory score on a placement examination.

Ger 397 Independent Reading in German — Junior Level (1-3)

Selected project as agreed by student and advisor. Prerequisite: Ger 201-202-203. Consent of instructor and approval of the

department chairman upon presentation of proposal. May be repeated up to total of 6 credits.

Ger 411(G) Survey of German Literature (4)

Lectures, readings in literary history, and discussions of selected major works representative of each period from the Middle Ages to the present. Prerequisites: Ger 311-312-313.

Ger 440(G) Advanced Seminar in German Literature, Culture, and Language (3)

Discussion of, and practice in, the presentation of selected topics, teaching aids, and materials pertaining to the teaching of German literature, culture, and language. This course supplements Language 340. Intended primarily for future teachers.

Prerequisites: Lang 340, completion of third year course sequence, or consent of instructor. This course is identical with Lang 440(G).

Ger 471-472-473 Advanced German Composition and Conservation (3 each)

Advanced composition with emphasis on syntax and stylistics. Achievement of a high level of fluency. Prerequisites: Completion of Ger 371, 372, 373 or consent of instructor.

Ger 480(G) Special Topics in German Literature and Culture (2-4)

In-depth study of a selected topic in German. The topic may focus on historical development, a theme motif, genre, movement, period, or a single major author. Or it may be comparative in nature; e.g. literature and politics, the arts, or science of a given period. May be repeated for credit. Prerequisite: Ger 311, 312, 313 or consent of instructor.

Ger 497 Independent Reading in German — Senior Level (1-3)

Selected readings as agreed by student and advisor. Prerequisite: Ger 201-202-203. Consent of instructor and the approval of the department chairman upon presentation of proposal. May be repeated up to total of 3 credits.

HEALTH-PHYSICAL EDUCATION-RECREATION DEPARTMENT

William Thomas, *Chairperson*; Dennis Anderson, Donald Anderson, Kenneth Bladow, Judy Bowers, Robert Bromme, D. Ellen Cromwell, Ross Fortier, Loel Frederickson, Bill Garland, Dwaine Hoberg, Laurence MacLeod, Ronald Masanz, Mary Montgomery, Margaret Moore, Orlow Nokken, Donella Palmer, Viola Powell, T. Edison Smith.

HEALTH-PHYSICAL EDUCATION-RECREATION CURRICULA

Major in Health Education (Teaching)

Major Requirements in Health Education 36-40 credits

Hlth 110 Personal and Community Health (4)
 Hlth 125 Red Cross Standard First Aid (2)
 Hlth 325 Instructors Course in First Aid (2)
 Hlth 327 Principles of Safety Education (4)
 Hlth 340 Health in the Elementary and Secondary Schools (4)
 Hlth 412 Marriage and Family Life Education (4)
 Hlth 465 Organization and Administration of School Health Education (3)
 Hlth 476 Seminar in Health Problems 2-6)
 PE 220 Human Anatomy (4)
 PE 321 Human Physiology (4)
 PE 452 Adapted Physical Education (3)

Requirements in Related Areas 37 credits

HE 110 Introduction to Nutrition (3 — or equivalent)
 At least 24 credits in the following areas: Biology 102-103-104 (12)
 Chemistry 106-107-108 (15)
 Psychology 101-115-117 (12)
 Sociology 110-111-112 (12)
 At least 10 credits in the following:
 MeEd 345 Preparation of Instructional Materials (3)
 Biol 350 Microbiology (4)
 Ed 411 Introduction to Guidance (3)
 Hlth 469 Internship (B.S. Students) (3)
 Hlth 474 Workshop in Health (2)
 Spch 100 Fundamentals of Speech (4)
 Spch 308 Group Discussion and Conference Methods (3)
 SSer 220 Introduction to the Field of Social Welfare (4)
 SSer 259 An introduction to Social Work Practice (4)
 SpEd 416 Mental Retardation (3)
 SpEd 420 Education of the Handicapped Child (3)
 SpEd 460 Education of the Emotionally Disturbed Child (3)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Major in Health Education — B.A. Degree

Completion of this major may lead to positions in public health departments, voluntary health agencies, and some industrial or commercial companies. Teaching candidates should refer to the Major in Health Education (Teaching).

Requirements for the Teaching Major 73-77 credits

In addition, the B.A. major candidate must complete at least 6 credits of human growth and development or the equivalent and at least 3 credits in internship (Hlth 469).

Major in Physical Education (Teaching)

Students should be aware that this major does not qualify them to teach health education in the State of Minnesota, although it does enable them to coach and to teach physical education. It is suggested that courses leading to the Water Safety Instructor's certificate be included as well as coaching theory classes in sports of interest.

Major Course Requirements 75 credits

- 98 Hlth 110 Personal and Community Health (4)
Hlth 125 Red Cross Standard 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 250-251 Sports Officiating (4)
PE 305 Principles of Physical Education (3)
PE 321 Human Physiology (4)
PE 345 Techniques for Teaching Dance and Individual Sports (3)
PE 380 Supervision of P.E. in the Elementary School (4)
PE 422 Kinesiology (4)
PE 452 Adapted Physical Education (3)
PE 474 Tests and Measurements in Physical Education (3)
PE 495 Administration of Physical Education (3)
Rec 140 Camping and Outdoor Education (3) or
Rec 210 Leadership in Recreation (3)
PE Activity Courses (15)
(May include up to six credits in Recreation activity courses)
Approved Electives (At least 6 credits from the following):
Hlth 220 Prevention and Care of Athletic Injuries (2)
Hlth 325 Instructors course in First Aid (2)
Hlth 327 Principles of Safety Education (4)

- Hlth 340 Health in the Elementary and Secondary Schools (3)
Hlth 469 Internship (3)
Hlth 412 Marriage and Family Life Education (4)
Hlth 465 Organization and Administration of School Health Education (3)
PE 421 Physiology of Exercise (3)
PE 453 Physical Education for the Mentally Retarded (3)
PE 460 Principles of Coaching (2)
Rec 141 Camping and Outdoor Education II (3)
Rec 110 Introduction to Recreation (2)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

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 27 credits

- Hlth 110 Personal and Community Health (4)
Hlth 125 Red Cross Standard First Aid (2)
Hlth 325 Instructor's Course in First Aid (2)
Hlth 412 Marriage and Family Life Education (4)
Hlth 465 Organization and Administration of School Health Education (3)
PE 220 Human Anatomy (4)
PE 321 Human Physiology (4)
One of the following (4):
Biol 350 Microbiology
Hlth 476 Seminar in Health Problems

Minor in Health (Teaching) 30 credits

- B.A. Minor Requirements (27)
Hlth 340 Health in the Elementary and Secondary Schools (3)

(This minor can be awarded only in combination with at least one teaching major.)

Minor in Physical Education (Teaching) 34 credits

This minor would normally be selected by a student majoring in another field who would like part time teaching in physical education and/or coaching. 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.

- Hlth 110 Personal and Community Health (4)
Hlth 125 Red Cross Standard 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 244 Techniques for Teaching Gymnastics (3)
 PE 345 Techniques for Teaching Dance and Individual Sports (3)
 PE Activity Courses in Aquatic (1), Dance (2), Individual (3), Team (2), Gymnastics (2)

Minor in Recreation 32–36 credits

This minor will help the student to qualify for a part time position in recreation. It is not a teaching minor.

- Art 100 Elements of Art (3)
 Hlth 125 Red Cross Standard First Aid (2)
 IE 133 A through F Industrial Education Activities Two courses (2)
 Mus 220-235 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 Principles of Sociology (4)
 Spch 30 Stagecraft (and/or)
 Spch 224 Technical Production (and/or)
 Spch 344 Principles of Play Direction (1–4)
 PE Activity Courses in Aquatic (1), Dance (1), Individual (3), Team (1)

Minor in Coaching for Men (Teaching) 34 credits

This minor should be selected by students planning to teach in an academic area who *definitely do not* want to teach Physical Education. The program qualifies students to be recommended for certification in coaching only.

- Hlth 125 Red Cross Standard and Advanced First Aid (2)
 Hlth 220 Prevention and Care of Athletic Injuries (2)
 PE 220 Human Anatomy (4)
 PE 250M or 251M Sports Officiating (2)
 PE 305 Principles of Physical Education (3)
 PE 321 Human Physiology (4)
 PE 422 Kinesiology (4)
 PE 460 Principles of Coaching (2)
 PE 475 Administration of Athletics (3)
 Rec 110 Introduction to Recreation (2) or
 Rec 210 Leadership in Recreation (2)
 Three courses (2 credits each) in Coaching (6):
 PE 371 Coaching Football
 PE 372 Coaching Basketball

- PE 373 Coaching Baseball
 PE 374 Coaching Track and Field
 PE 375 Coaching Wrestling
 PE 376 Coaching Golf and Tennis

(This minor can be awarded only in combination with at least one teaching major.)

Certification in Coaching for Women

This certificate allows any instructor with a Minnesota teaching certificate to coach girls interscholastic sports in the public schools of Minnesota. The program must also include an arranged practicum in coaching, and applicants must have teaching degrees.

Requirements for Physical Educations Majors

- Hlth 220 Prevention and Care of Athletic Injuries (2)
 PE 460W Principles of Coaching (2)
 Practicum

Requirements for Non-Majors in Physical Education

- PE 110 Introduction to Physical Education (2)
 PE 460W Principles of Coaching (2)
 PE 475 W Administration of Athletics (3)
 PE 422 Kinesiology (4)
 PE 250W-251W Sports Officiating I-II (4)
 Hlth 220 Prevention and Care of Athletic Injuries (2)
 Practicum

Certification in Driver Education 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)
 Hlth 489-490 Driver Education I-II (8)

HEALTH COURSES

Hlth 110 Personal and Community Health (4)

The application of information from the behavioral, natural, and medical sciences, presented through various learning experiences which will favorably influence understandings, attitudes, and practices in order to make possible intelligent self-direction of health behavior. (Required for certification for teachers in Minnesota.)

Hlth 125 Red Cross Standard First Aid (2)

The regular course as outlined by the American Red Cross. Students earn the standard certificate.

Hlth 220 Prevention and Care of Athletic Injuries (2)
Principles governing the conditioning of athletes for various sports. Prevention, cause, and care of common athletic injuries; includes instruction in taping. Prerequisite: Hlth 125, and PE 220.

Hlth 325 Instructor's Course in First Aid (2)
Students must hold a valid certificate for Standard First Aid. Those who complete the course are certified to teach Junior, Basic and Standard First Aid and Personal Safety.

Hlth 327 Principles of Safety Education (4)
Designed to present facts regarding the number as well as the cost in money and human suffering of accidents in home, industry, school, traffic, farm, and recreational activity. It will cover the psychological considerations in accident prevention, attitude formation, emotional factors, and motivation for individual development of safety awareness. Prerequisite: Hlth 125.

Hlth 340 Health in the Elementary and Secondary Schools (3)
A study of methods and materials recommended for teaching health in the elementary and secondary schools; examination of the curriculum. Prerequisite: Hlth 110. For physical education majors and health majors and minors.

Hlth 390 Health in the Elementary Schools (3)
Methods, procedures, and evaluation. For students in the elementary teaching curriculum.

Hlth 412(G) Marriage and Family Life Education (4)
An in-depth study and discussion of courtship, love, sexuality, marriage, problem solving and family relationships. Human relations and value clarification are emphasized through group processes.

Hlth 465(G) Organization and Administration of School Health Education (3)
Program in grades 1-12 with emphasis on the policies, procedures, and responsibilities of the school staff and administration.

Hlth 469(G) Internship (3-16)
An opportunity for students to work with state and/or local health agencies. The program will assist students in developing a better understanding of school-community relations, aid them in determining career opportunities, and provide cooperating agencies contact with potential community health educators. Prerequisites: Recommendation of HPER advisor.

Hlth 474(G) Workshop in Health Education (2)
A course designed to meet the needs of teachers who are directly or indirectly responsible for health in the schools. Emphasis on practical solution of problems. Summer.

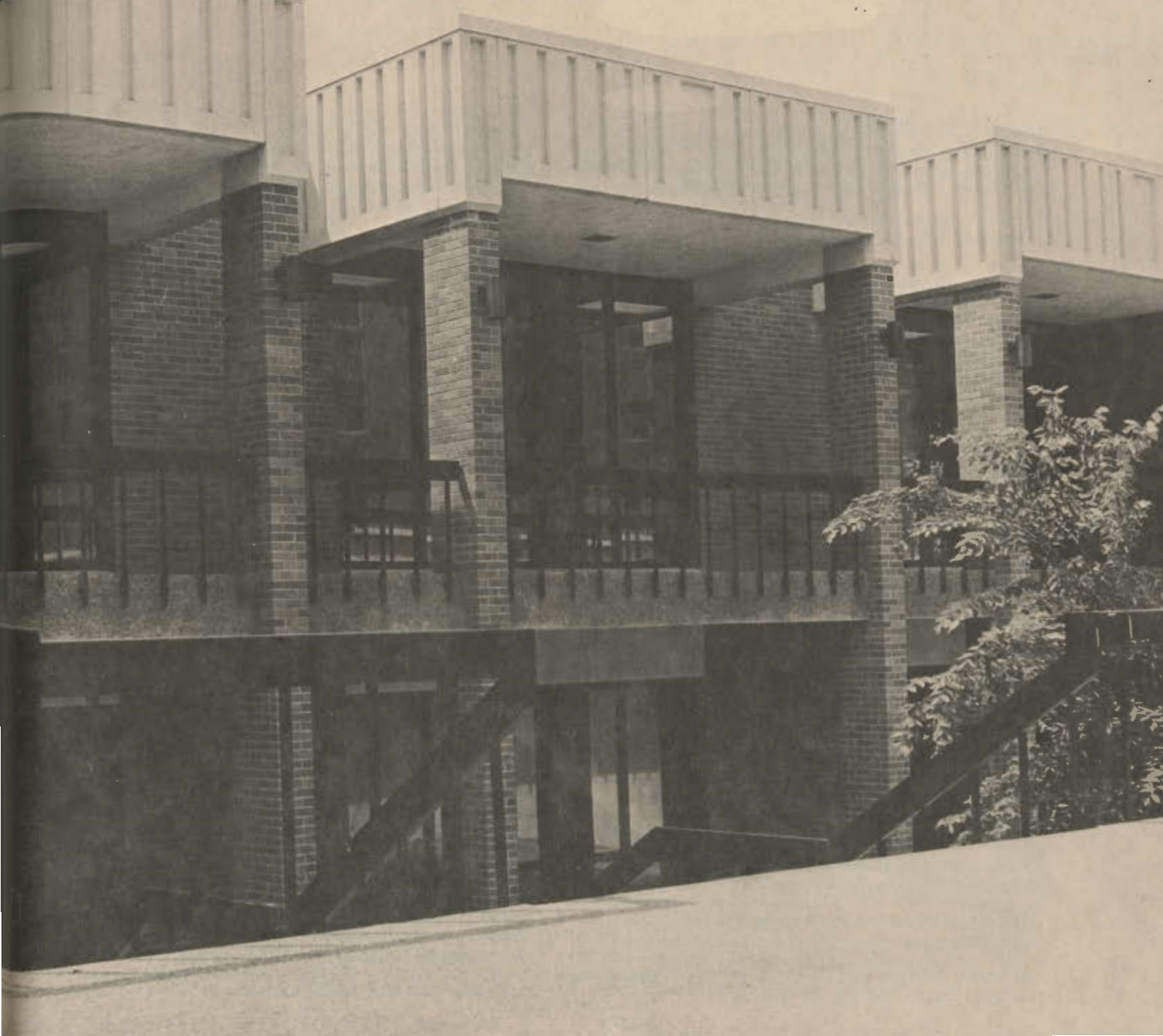
Hlth 476(G) Seminar in Health Problems (2-6)
Issues of major concern in the field of health. Topics of special interest. This course may be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

Hlth 489-490 Driver Education I-II (4 each)
489: Critical analysis of traffic accidents, attitude factors, essential knowledge of automobile operations, traffic laws and regulations. Includes laboratory experience for developing driving skills. Prerequisites: Valid Driver's license, two years of driving experience, senior standing, and Hlth 327. 490: This course is devoted to methods of teaching and the administration of high school driver and traffic safety. Prerequisite: Hlth 489 and satisfactory driving record as revealed by State Highway Department Records.

Hlth 540 Problems in Health Education (3)
Study of individual problems and problems common to groups.

Hlth 565 Coordination of School Health Education (3)
Coordination of the school health education program in grades 1-12. Emphasis on health guidance coordination, administration, and evaluation. Prerequisite: Hlth 465 or equivalent.

Hlth 599 Thesis in Health (6)
Registration only after consultation with major advisor.



History

HISTORY DEPARTMENT

Robert Davies, *Chairperson*; Dieter Berninger, William Eagan, Lee Grugel, Christopher Hong, M. Murray Kranz, Lysle Meyer, Victor Peters, I. Kenneth Smemo, Nelson Whyatt

HISTORY CURRICULA

Major in History — B.A. Degree

Major Course Requirements 62 credits

Hist 101-102-103 History of Western Civilization I-II-III (12)

Hist 121, 122, 123 History of United States I-II-III (9)

Electives in the following areas (At least 6 credits):

Africa

Asia

Latin America

At least one Seminar in History (3): Hist 401, 402, 403, 404, or 405

Electives in History (At least 32 credits)

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 (Social Studies) (Teaching) 65 credits

Requirements for Major in History /B.A. Degree (62)

Ed 440 Social Studies in the Secondary School (3)

Certification Requirements in Related Fields (not a part of the Major)

At least one course in each of the following areas:

Anthropology or Sociology

Economics

Geography

Political Science

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in History — B.A. Degree 39 credits

Hist 101-102-103 History of Western Civilization I-II-III (12)

Hist 121-122-123 History of the United States I-II-III (9)

Electives in North American and European History at the 200 level or above (At least 12 credits):

United States

Canada

Europe

Electives in Non-Western World History at the 200 level or above (At least 6 credits);

Africa

Asia

Latin America

Minor in History (Teaching) 42 credits

Requirements for the Non-Teaching Minor (39)

Ed 440 Social Studies in the Secondary School (3)

Certification Requirements in Related Fields (not a part on the Minor):

At least one course in each of the following areas:

Anthropology or Sociology

Economics

Geography

Political Science

(This minor can be awarded only in combination with at least one teaching major.)

HISTORY COURSES

Hist 100 Studies in History (3-4)

Selected topics and regions in historical perspective. Designed especially for the general studies student, the course may be repeated for credit under a different subtitle as the subject matter changes. Course offerings will include studies of non-Western regions, reoccurring historical problems, and the historical development of topics of current significance. Only 4 credits may be applied toward the 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 121-122-123 History of the United States I-II-III (3 each)

121: Colonial America: growth of a new society in the 17th and 18th centuries. 122: The 19th century: America as a new nation. 123: The 20th century: America as a world power.

Hist 141 Evolution of Social Services (4)

A study of major social problems of Western Civilization with special emphasis upon the Anglo-American 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. Offered cooperatively by several members of the history faculty, the course will have no examinations, but will have required attendance. Offered on a Pass-Fail basis only. May be repeated once for a maximum of 4 credits.

Hist 210 Race and Nationality in American Life (4)

A study of the origins of racial and cultural diversity in the United States and the historical interaction between majority and minority groups in the development of modern American society.

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, Anglo-Saxon, and Norman England to Wars of the Roses. Emphasis on Medieval life and institutions. 222: Tudor, Stuart, and early Hanoverian periods. Topics include English Reformation, Puritan revolt, glorious revolution, and empire. 223: Industrialization, the Victorian period, Britain, and Ireland in the 20th century.

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: The European intrusion and the era of the slave trade; black state building. 263: The 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: A summary of the Iberian heritage, the pre-Columbian Indian cultures, the era of conquest, the colonial period, and the Wars of Independence. 272: A survey of major trends in Latin American history in the 19th and 20th centuries.

Hist 300 Historiography and Historical Criticism (3)

The philosophical and methodological problems of historical writing and research.

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 (3 each)

312: Ancient Near East. The political, social, and cultural history of the Ancient Near East, from the dawn of civilization through the formation of the great empires. 313: Ancient Greece. The social, political, economic, and cultural development of the ancient Greeks. 314: Ancient Rome: the political, social, economic, and cultural history of Roman Republic and Empire.

Hist 315(G) Medieval Europe (3)

A study of 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 317(G) The Reformation (3)

Sixteenth century Europe during the Protestant and Catholic Reformation period. The development of the modern state system; political, social, and economic environment.

Hist 318-319-320(G) History of Germany I-II-III (3 each)

318: Survey of the political, social, and economic development of Germany from earliest times to 1815. 319: The evolution of Germany from 1815 through the First World War; an introduction to German contributions in the arts, science, and philosophy. 320: Political, social, and economic developments from 1918 to the present.

History

Hist 331-332-333(G) Russian History I-II-III (3 each)

331: A study of the development of Russia from earliest times to the 18th century. 332: A study of the development of Russia from the 19th century to the March Revolution, 1917; an introduction to Russian achievements in literature, art, music, architecture, and science. 333: A study of the Soviet Union: its history, government, domestic, and foreign policies, from 1917 to 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 354: The origins of science. Hist 355: The origin of modern science, 1300–1800. Hist 356: Modern science.

Hist 357-358(G) United States Foreign Relations I-II (3 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, a focus upon the various forces that affected American foreign relations in the twentieth century.

Hist 359(G) National Histories (2–4)
Short histories of various nations.

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) Social and Intellectual History of the United States I-II (4 each)

The social and intellectual evolution of the American nation. 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 381-382(G) History of Canada I-II (3 each)

381: Pre-Confederation Canada: the period of exploration and French settlement through the conquest, the period of British rule, achievement of responsible government, and the developing feeling of Canadian nationality. 382: Post-Confederation Canada: the consolidation and expansion of Canada from Confederation to the present, with 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. Topics for analysis chosen to fit the capabilities of the class.

Hist 403(G) Seminar in Latin American History (3–4)

Problems in Latin American history for advanced students. Topics for analysis chosen to fit the capabilities of the class.

Hist 404(G) Seminar in European History (3–4)

Problems in European history for advanced students. Topics for analysis chosen to fit the capabilities of the class.

Hist 405(G) Seminar in North American History (3–4)

Problems in North American history for advanced students. Topics for analysis chosen to fit the capabilities of the class.

Hist 410 Tutorial in History: Undergraduate (1–3)

Directed readings and discussion on problems in history 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 problems in history agreed upon by the instructor and pupil. Prerequisite: Bachelor's degree in history and consent of both instructor and department chairman.

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

Ragna Holen, *Chairperson.*

The Department of Home Economics offers both a terminal two-year Associate in Arts and a pre-professional curriculum.

The Associate in Arts is offered (A) to provide a broad education emphasizing home and family living; (B) to aid in preparing for non-professional employment in such areas as business, family and social homemaking services, and food services; and (C) to provide various electives in introductory courses for those who will be pursuing professional training in home economics.

The pre-professional program is provided for students who plan to major in home economics at another institution. The student should plan a program of courses with the department chairman on the basis of the requirements at the school where advanced training will be pursued.

Cooperative Home Economics Program with NDSU.

By special arrangement a Minnesota resident may enroll for the first 3 years of a Home Economics degree program (at resident tuition rates) at Moorhead State College and transfer to NDSU for the last 45 credits. Such a student would take some courses and receive advisement at NDSU during the first three years. The arrangement results in considerable savings in tuition costs.

Associate in Arts — Home Economics

General Studies Requirement 42 credits

See Academic Information— Associate in Arts

Requirements in Home Economics 34 credits

HE 100 Social Manners and Customs (1)

HE 110 Introduction to Nutrition (3)

HE 120 Clothing Selection (3)

HE 122 Textiles (3)

HE 124 Clothing Construction (4)

HE 216 Foods (3)

HE 218 Meal Management (4)

HE 226 Advanced Clothing Construction (3)

HE 230 Home Management (3)

HE 232 Home Furnishings (4)

HE 234 Household Equipment (3)

Requirements in Related Fields 29 credits

Spch 100 Fundamentals of Speech (4)

Psy 101 General Psychology (4)

Econ 110 Principles of Economics I (4)

Art 100 Elements of Art (3)

Art 270 Art Appreciation (3)

BEd 315 Consumer Economics (4)

Ed 212 Child Growth and Development (3)

One of the following (4):

Soc 110 Man in Society I

Anth 110 Human Culture I

HOME ECONOMICS COURSES

HE 100 *Social Manners and Customs* (1)

HE 110 *Introduction to Nutrition* (3)

Fundamentals of nutrition and their application to food selection.

HE 120 *Clothing Selection* (3)

Application of the principles of art to the selection of clothing, and consideration of problems of buying and caring for garments.

HE 122 *Textiles* (3)

Study of fibers, and finishes, with application to selection of textiles for clothing and household uses.

HE 124 *Clothing Construction* (4)

Fundamental techniques for sewing processes; the construction of garments. Offered for those who have had little or no experience in sewing.

HE 216 *Foods* (3)

Development of techniques in food preparation, and application of scientific principles to cookery processes.

HE 218 *Meal Management* (4)

Principles of cookery; meal planning and table service; time and money management related to family meals. Prerequisite: HE 216 or equivalent.

HE 226 *Advanced Clothing Construction* (3)

Garment construction involving style selection, handling of special fabrics and the use of techniques for more advanced dressmaking skills. Prerequisite: Consent of instructor.

HE 230 *Home Management* (3)

Consideration of fundamental concepts of managing a home. Use of family resources effectively to achieve goals.

HE 232 *Home Furnishings* (4)

Selection of furniture, textiles, and accessories for the home in relation to family needs, art principles and effective purchasing techniques.

HE 234 *Household Equipment* (3)

Study of the selection, use, and maintenance of household equipment with emphasis on kitchen appliances and related kitchen planning for efficiency of their use.

HUMANITIES DEPARTMENT

Glenn Ringstad, *Chairperson*; Joyce Flint, John Gibbs, Sylvia Kruger, Ronald Matthies, James Stevens

The Department of Humanities offers a series of interdisciplinary courses emphasizing art, literature, music and philosophy. These may be taken for general studies credit or as electives. The department has no established major; students interested in majoring in the Humanities should see the section on the Individualized Major. This department also serves as the base for American Studies, which offers a degree program. A Women's Studies minor, with its core course in the Humanities Department, is also available. For further information on this minor, see Women's Studies.

HUMANITIES COURSES

Hum 211-212-213 Perspectives on Society. Perspectives on Ultimate Reality. Perspectives on the Self. (4 each)

A thematic approach to the basic ideas and art forms of western civilization. Humanities 211 deals with the current and persistent problems of society; 212 with views on the larger forces that shape men's lives; 213 with approaches to the problems of individuality and selfhood.

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.

Hum 221-222-223 Twentieth Century Humanities I-II-III (4 each)

A study of representative works of art, literature, and music as they reflect central issues of the twentieth century. Humanities 221 will consider the period from 1900-1920; 222 will consider the period from 1920-1940; 223, from 1940 to the present.

Hum 231 Special Topics in the Humanities (4)

An intensive study of a particular topic in the humanities, developed around the special interests of students and instructors. May be repeated when topic is changed. Typical offerings have included Man and the Modern Imagination, Future in America, The Occult, and Contemporary Theology.

Hum 310 Women's Studies (4 credits)

An inter-disciplinary course in which students examine perspectives on women from such areas of study as literature, history, philosophy, theology, psychology, sociology, biology, anthropology, law, economics, art, and music.

Hum 321 Independent Study (1-8 credits)

Directed readings and discussion on problems or projects in humanities agreed on by instructor and student. This study is designed to permit the qualified student either to pursue studies which normally are not included in other courses, or to delve more deeply into some specific problem than is practicable in normal course work. Prerequisite: fulfillment of Humanities General Studies requirement, and consent of instructor. (With permission, a student may register for independent study as many as 3 times, for as many as 8 credits.)

Hum 499(G) Topical workshop (1-4)

INDIVIDUALIZED MAJORS Academic Programs.
For requirements see **ACADEMIC PROGRAMS**

The following are examples of individualized majors:

Individualized Major in Criminal Justice 70 credits

Mark Hansel, *Coordinator*

(1) 30 credits in one of the following departments: political science, psychology, social services, or sociology.

(2) 40 credits selected, by the student and his advisor, from the departments listed above.

Students may select an area of focus within criminal justice (law enforcement, courts, or corrections) or they may select a general overview of the criminal justice system. This choice will determine the courses selected for both (1) and (2) above.

A 16-credit internship with a criminal justice agency is strongly recommended and may be applied to (2) above.

Individualized Major in Humanities 70 credits

Glenn Ringstad, *Coordinator*

(1) 30 credits in one of the following areas: Humanities, Art Theory and Appreciation, Literature, Music Theory and Appreciation, Philosophy or American Studies.

(2) 40 credits selected from the areas listed above. One quarter in the Tri-College Humanities Forum is recommended.

The above are minimum requirements; more courses in the areas listed above are recommended, especially for single major students.

INDUSTRIAL EDUCATION DEPARTMENT

Marlowe Wegner, *Chairperson*; Albert Mudgett, Milo Sulentic, Wade Swenson, Otto Ursin, Ronald Walker, Leland White

Areas of Study: Industrial Education, Industrial Illustration, Industrial Technology, Manual Arts Therapy, Technical Aid, Engineering, Vocational Education.

INDUSTRIAL EDUCATION CURRICULA**Major in Industrial Education**

Core Requirements in Industrial Education 44 credits
(The core requirements include 8 credits each in the areas of construction, graphic communications, manufacturing, and power.)

- IE 110 Orientation to Industrial Education (1)
- IE 113 Technical Drafting (4)
- IE 120 Basic Wood (4)
- IE 130 Metal Manufacturing Processes (4)
- IE 135 Man and Industry (4)
- IE 270 General Electricity (4)
- IE 280 Power Technology (4)
- IE 355 General Graphic Arts (4)
- IE 360 Synthetics I (4)
- IE 445 Planning and Administration (4)
- IE 486 Construction Processes (4)
- IE 495 Philosophy of Vocational Education (3)

Electives in Industrial Education 20 credits
(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 requirement):

Construction	Manufacturing
Graphic Communications	Power

Teaching Methods in Industrial Education 4 credits

- IE 440 Teaching the Vocational Subjects (4)

Requirement in Industrial Experience

Secondary teaching candidates (grades 9–12) shall complete a minimum of 1500 hours of industrial wage earning experience approved by the department or a minimum of 750 hours of supervised Industrial Education internship (IE 469). Middle school candidates (grades 5–9) shall complete 1000 hours of wage earning experience or 500 hours of supervised internship.

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Major in Manual Arts Therapy — B.S. Degree

Requirements in Industrial Education 58 credits

- IE 113 Technical Drafting I (4)
- IE 120 Basic Wood (4)
- IE 131 Gas Welding (3)
- IE 132 Electric Welding (3)
- IE 220 Wood II (4)
- IE 236 Metal Machining I (3)
- IE 270 General Electricity (4)
- IE 351 Offset Photography (4)
- IE 352 Offset Lithography Presswork (4)
- IE 360 Synthetics I (4)
- IE 440 Teaching the Vocational Subjects (4)
- IE 445 Planning and Administration (4)
- IE 451 Clinical Experience (8)
- Electives in Industrial Education (17 credits)

Requirements in Psychology 27 credits

- Psy 101 General Psychology (4)
- Psy 115 Developmental Psychology (4)
- Psy 117 Personality (4)
- Psy 320 Social Psychology (4)
- Psy 351 Individual Differences (3)
- Psy 460 Abnormal Psychology (4)
- Psy 465 Clinical Psychology (4)

Requirements in Professional Education 23 credits

- Ed 211 Orientation to Secondary Teaching (3)
- Ed 213 Adolescent Growth and Development (3)
- Ed 305 Educational Psychology (3)
- Ed 307 Measurement and Evaluation (3)
- Ed 450 Student Teaching (8)
- Ed 490 Foundations of Education (3)

Major in Manual Arts Therapy

In addition to the requirements for the B.S. major in Manual Arts Therapy, the candidate for a teaching major shall fulfill all Teacher Education Requirements (see ACADEMIC INFORMATION) including an additional 8 credits of student teaching.

Major in Vocational-Technical Education — B.S. Degree

The vocational-technical education degree is designed to prepare teachers of occupational subjects for Minnesota high school and post-high school programs. The degree requirements also meet the requirements of the Minnesota State Plan for Vocational Education. A description of the complete degree program can be found in this catalog under ACADEMIC INFORMATION.

Professional Vocational-Technical Education 32 credits

- IE 440 Methods of Teaching Vocational Subjects (4)
- IE 445 Planning and Administration (4)
- IE 491 Tests and Evaluation in Vocational Education (3)
- IE 495 Philosophy of Vocational Education (3)
- IE 496 Literature of Vocational Education (3)
- IE 497 Curriculum Planning in Vocational Education (3)
- IE 498 Coordination of Vocational Education (3)
- Ed 305 Educational Psychology (3)
- MeEd 356 Audio-Visual Materials and Methods (3)
- MeEd 445 Preparation of Audio-Visual Materials (3)

Occupational Concentration 60-72 credits

The occupational concentration is subject to the approval of the department. Candidates for the major will receive 72 credits for such vocational-technical training in non-college fields as will qualify them for certification as vocational teachers through the Vocational-Technical Education Division of the Minnesota State Department of Education.

Teaching Internship 16 credits

- IE 469 Internship (16)



INDUSTRIAL TECHNOLOGY

Otto Ursin, Coordinator

The following interdisciplinary programs are available to students who seek engineering-related careers in industry.

Major in Industrial Illustration — B.S. Degree

Major Requirements in Industrial Illustration 74 credits

- Art 101 Basic Drawing I (3)
- Art 114-115 Design I-II (6)
- Eng 113 Technical Drafting I (4)
- Eng 114 Descriptive Geometry (4)
- Engl 387 Technical Report Writing (3)
- IE 212 Sheet Metal Drafting (2)
- IE 215 Architectural Planning and Design (4)
- IE 226 Pattern Making (2)
- IE 317 Technical Illustration (4)
- IE 351 Offset Photography (4)
- IE 355 General Graphic Arts (4)
- IE 442 Industrial Technology Seminar (1)
- IE 444 Industrial Design (4)
- MC 215 Visual Communications (3)
- MC 230 Basic Photography (3)
- Approved Industrial Technology Electives (24)

Major in Industrial Technology — B.S. Degree

Major Requirements in Engineering and Industrial Education 57 credits

- Eng 114 Descriptive Geometry (4)
- Eng 116 Technical Drafting II (4)
- IE 360 Synthetics I (4)
- IE 372-373 Applied Electronics I-II (8)
- IE 435 Welding Technology (4)
- IE 436 Metal Machining Technology (4)
- IE 442 Industrial Technology Seminar (1)
- IE 490 Fluid Power Technology (4)
- Approved Industrial Technology Electives (24)

Requirements in Related Fields 32 credits

- Econ 110-111-112 Principles of Economics I-II-III (12)
- Engl 387 Technical Report Writing (4)
- Phys 111-112 Elementary Physics I-II (8)
- At least 8 credits in Mathematics — Math 121 or above (8)

Associate in Arts — Technical Aid

The following two-year program should be carefully scheduled with an advisor in Industrial Technology and all elective courses should have the advisor's approval in advance. General Studies requirements for the Associate in Arts are set forth in the

Academic Information section. General studies requirements may also be fulfilled through the curriculum of the New Center for Multidisciplinary Studies.

General Studies 42 credits

Requirements in Engineering and Industrial Education
54 credits

Eng 113 Technical Drafting I (4)

Eng 114 Descriptive Geometry (4)

Eng 116 Technical Drafting II (4)

IE 131 Gas Welding (3)

IE 132 Electric Welding (3)

IE 270 Electricity (4)

IE 236-237 Metal Machining I-II (6)

IE 372 Applied Electronics (4)

Engl 387 Technical Report Writing (4)

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

INDUSTRIAL EDUCATION COURSES

See also ENGINEERING COURSES.

IE 110 Orientation to Industrial Education (1)

Introduction to the industrial education programs and major areas of industrial education.

IE 113 Technical Drafting I (4)

A basic course in drafting including free hand and instrumental practices in sketching, lettering, geometric constructions, multi-view drawing, pictorial projections, dimensioning, and specifications, and considerations pertaining to conceptual design, production, and the reproduction processes.

IE 114 Descriptive Geometry (4)

Fundamental principles of projections, orthogonal projection. Length of line distance between lines, angle between lines, development of surfaces, intersections of solids, map projections, spherical triangles, and vector quantities.

IE 116 Technical Drafting II (4)

Drafting as applied to industrial production processing including detail and assembly drawings, sets of drawings, precision and limit dimensioning, design and use of jigs, fixtures, gears and cams. Prerequisite: Basic drafting.

IE 117 Technical Drafting III (4)

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

IE 120 Basic Wood (4)

Basic production tools and machines, product designs, finishes, material technology and construction.

IE 121 Wood Finishing (2)

Application and experimentation in finishes for wood products.

IE 125 Wood Fabrication I (2)

Industrial processes and procedures for fabrication of prototype wood products, pattern-making, and restoration of wood products.

IE 130 Metal Manufacturing Processes (4)

Introduction to machining, welding, casting, and fabricating. Instruction in manufacturing organization, product research and development, sales organization, production and cost analysis.

IE 131 Gas Welding (3)

Beginning welding for the novice. Instruction in safety, operation of gas welding equipment, purchasing and maintenance, preparation of weld joints, fusion welding of steel, brazing of steel and cast iron. A series of weld practice exercises required, project optional for extra credit. Introduction to cutting and electric welding. 3 credits.

IE 132 Electric Welding (3)

Electric welding for the beginner. Instruction in safety, machine operation, electrodes, joint preparation, testing and oxy-acetylene cutting with manual and automatic flame cutter. Introduction to tungsten inert gas (TIG) and automatic wire feed (MIG).

IE 133(A) Industrial Education Activity: Leather (1)

IE 133(B) Industrial Arts Activity: Topical (1)

IE 133(C) Industrial Education Activity: Metal (1)

IE 133(D) Industrial Education Activity: Plastics (1)

IE 133(E) Industrial Education Activity: Wood (1)

IE 133(F) Industrial Education Activity: Lapidary (1)

IE 135 Man and Industry (4)

An investigation of the many facets of industry which affect each individual. The course will require the extensive use of the library, panel presentations, group and individual research projects, resource personnel, and films.

IE 150 Beginning Letterpress Printing (4)

Composition, stonework, and platen press work; projects in straight composition, involving basic operation in job printing and proofreading. Fall.

IE 212 Sheet Metal Drafting, Technical Drawing (2)
Problems in sheet metal drafting and pattern development.
Prerequisite: Basic drafting — IE 113.

IE 215 Architectural Planning and Design (4)
Planning of residential requirements based on family need. A study of architectural design concepts. Free hand sketching of floor plans, elevations, and perspectives.

IE 220 Wood II (4)
Industrial production techniques for wood industries. Operation and maintenance of production equipment. Use of jig and fixtures.

IE 225 Wood Fabrication II (2)
Industrial processes and procedures for fabrication of prototype wood products, pattern-making, and restoration of wood products.

IE 226 Patternmaking (3)
Advanced woodworking techniques and skills; construction of patterns to be used for foundry work.

IE 230 Metal Manufacturing Research and Development (3)
Basic instruction in tools and machines used in sheet metal fabrication. Materials, joining processes, product research, and development of prototypes.

IE 234 Metal Casting (3)
Sand casting, melting, equipment, supplies, sand analysis and control.

IE 236 Metal Machining I (3)
Beginning metal machining and fabricating involving instruction and use of saws, shears, lathes, drill press, grinders, and other machine tools. Aluminum and steel machining by drilling, reaming, threading, boring, grinding, and balancing. Assembly and spray finishing of a product. No experience necessary.

IE 237 Metal Machining II (3)
Instruction for novice metal machining students on basic operations involved in machining with vertical and horizontal milling machines, shaper, surface grinder, turret lathe, tracer lathe, tapping attachment, and drill press. Includes metallurgy and heat treatment of carbon and alloy steels.

IE 241 Basic Home Maintenance (4)
Basic instruction and use of hand tools and selected power equipment as it would apply to home, hobby and recreational activities. No previous experience nor course work required.

IE 250 Advanced Letterpress Printing (4)
Problems in display composition, stonework, and platen press work; introduction to commercial problems and jobs through projects; typographical design and its applications. Prerequisite: IE 150.

IE 270 General Electricity (4)
Exploration of industrial and consumer uses of electricity and electrical devices. Basic principles of magnetism and electricity applied.

IE 280 Power Technology (4)
Introduction to general theory of heat engines and mechanics with emphasis on principles of operation of small two and four stroke cycle engines. Emphasis on adjustment, repair, trouble-shooting, and disassembly and assembly.

IE 295 Automechanics I (4)
The theory and operation of the modern automobile. Introduction to shop equipment and testers, with emphasis on engine tune-up and repair, and carburation.

IE 296 Automechanics II (4)
Continuation of Automechanics with emphasis on chassis and major mechanical components. Competency in use of major engine analyzers is assumed. Prerequisite: Automechanics I.

IE 315 Architectural Drafting (4)
The development of a complete set of house plans with specifications. Experimentation with strength of building materials.

IE 316 Blueprint Reading (2)
Interpretation of symbols and lines found on blueprints. The reading of architectural, structural heating, machine, plumbing and aircraft blueprints.

IE 317 Technical Illustration (4)
The development of the facility to illustrate technical material and processes through use of the air brush, photography, free hand pencil and ink, shading, patterned films, and colors. Special emphasis is placed on pictorial projections and pseudo representations.

IE 320 Wood III (4)
Furniture design, construction, and upholstery. Use of specialized upholstery equipment. Prerequisite IE 120 and 220.

IE 330 Metal Manufacturing Production (3)
Organization of materials, personnel, and equipment for mass producing a product. Cost estimating, development of jigs, purchasing materials, quality control, inspection and sales.

Training sessions for specialized jobs. Each class will organize and produce one or more products in quantity as a manufacturing experience.

IE 335 Creative Metals (3)

Expression of beauty and creativity by working with metals. Special instruction given for all novices. Welded sculpture, brass and copper projects, spinning, scroll forming and metal twisting, ornamental iron, copper enameling and beginning welding. Many project plans furnished for those who do not wish to design. No previous experience necessary.

IE 340 Industrial Education for Elementary Teachers (4)

First hand experience with basic tools and common materials of industry such as leather, art metals, plastics, wood and finishes: Activities suitable for elementary grades.

IE 350 Layout and Design for Printing (4)

Principles of layout and design are stressed. Various methods of type composition are used in experiments in both letterpress and offset printing.

IE 351 Offset Photography (4)

An introductory study of materials, methods, and equipment used in the production of photographic negatives and positives for offset lithography. Fundamentals of line, halftone, and color photography. Prerequisite: 4 hours of printing or consent of the instructor.

IE 352 Offset Lithography Presswork (4)

Principles and methods of offset presswork; theory and functions of the press; operation, care, and maintenance of sheet fed presses. Experience in printing jobs is provided. Prerequisite: 4 hours of printing.

IE 355 General Graphic Arts (4)

Basic graphic arts reproduction processes; correlation between fine and practical arts; lectures, demonstrations, and production units in letterpress, stereotype, wood, and resilient block cutting, lithography, etching, silk screen, stencil, offset, ditto, engraving, aquatints, embossing, paper making, book binding, photoengraving, and steps in the production of a book.

IE 360 Synthetics I (4)

Plastic materials, industrial processes, and equipment.

IE 361 Synthetics II (4)

Experimentation and product design in industrial fabrication of synthetic products. Prerequisite: IE 360.

IE 372 Applied Electronics I (4)

Introduction to vacuum tube and transistor circuits. Basic

principles of radio transmission and reception. Construction, testing, and repair of amplifiers rectifiers, detectors, oscillators, mixers, and modulators.

IE 373 Applied Electronics II (4)

Advanced work with vacuum and transistor circuits. Advanced practice with test equipment. Prerequisite: IE 372.

IE 420(G) Wood Technology (3)

Advanced study in woods: wood products, mechanical properties and factors affecting mechanical properties of wood, working stresses of lumber, destructive agencies of wood and preservative measures, effects of natural elements on wood. Experimentation, including effects of heat and water on wood adhesives. Prerequisite: 8 hours of wood.

IE 425-426 Problems of Shop Maintenance I and II (2 each)

Practical work in maintenance, repair, and improvement of school equipment. On request.

IE 435 Welding Technology (4)

A study of commercial welding practices, MIG, TIG, and submerged arc; testing by destructive and non-destructive methods, applications of automatic equipment, and operation of automatic flame cutting-equipment.

IE 436 Metal Machining Technology (4)

A study of commercial metal machining practices including shearing, lathe, punch press and press brake operation. Material specifications and purchasing, products sales and shipping.

IE 437 Industrial Design and Fabrication (5)

Design of products for MIG, TIG, submerged arc, and regular electrode welding processes. Design considerations for shear and automatic flame cutting of materials. Prerequisite: IE 132, 236, 237, 435.

IE 440 Teaching Vocational Subjects (4)

A survey of development and growth of this phase of education. Examination of courses of study, and study of technical information for various subjects.

IE 441(G) Measurement in Vocational Education (3)

Study and application of principles of evaluation of shop and drawing subjects for the purpose of improving the instructional program. For industrial education graduates or with consent of the instructor.

IE 442 Industrial Technology Seminar (1)

Industrial Education

IE 444(G) *Industrial Design* (3)

Drawing room practices and their relationship and use in designing or redesigning projects and in planning preparatory to the actual construction of products. Prerequisite: Basic drawing and senior or graduate standing.

IE 445 *Planning and Administration of Industrial Education Facilities* (4)

Planning, organizing, equipping, and maintaining school industrial education facilities.

IE 446 *Visual Materials for Vocational Education* (2)

Sources and use of nonprojected aids; care and use of projection equipment; films and supplies; construction of visual aids to be used in class work. On request.

IE 450(G) *Graphic Arts Technology* (4)

Advanced study in the Graphic Arts, historical backgrounds, the organization of the industry, production methods and techniques, new research and experimentation, and the future of the field. Prerequisite: 4 hours of printing or consent of instructor.

IE 451 *Clinical Experience* (8)

Clinical experience in manual arts therapy at Veteran's Hospital in St. Cloud, Minn. Six weeks.

IE 460(G) *The General Shop* (4)

Special problems in organizing and teaching industrial education in the general shop. Current practices in equipment, selection of educational areas, objectives, layout of shop, organization of subject matter, and personnel organization.

IE 461(G) *Career Education* (3)

The course is designed to expose teachers or administrators to theories of career choice, methods and materials, and the vocational aspects of business and industry. Career education units appropriate to various levels of instruction will be developed in the course.

IE 469 *Student Internship* (3-16)

IE 470 *Theory of Semi-Conductors I* (4)

The study of the inception, historical progression, and operation of diodes and transistors. Laboratory experimentation and analysis of applications will be conducted by the student. Prerequisite: Physics I-II, Math 131 and Math 132.

IE 471 *Theory of Semi-Conductors II* (4)

A continued study of semi-conductor principles incorporating advanced circuits such as Field Effect Transistors (FET), Integrated Circuits (IC), Silicon Controlled Rectifiers (SCR),

Unijunction, transistors, and the like. Laboratory experimentation and analysis of applications will be conducted by the student.

IE 480(G) *Special Problems in Vocational Education* (1-6)

Individual study of some phase of Industrial Education not offered in depth in the regular curriculum but of special interest to the student. Prerequisite: senior status, consent of the instructor and Department Chairman. May be repeated for a total of 6 credit hours.

IE 485(G) *Construction Processes*

IE 486(G) *World of Manufacturing*

IE 490 *Fluid Power Technology* (4)

Applications of fundamental gas laws and principles to hydraulics and pneumatics. Design maintenance and repair of fluid power circuits.

IE 491(G) *Materials Inspection and Testing* (4)

A study of methods, materials, and techniques of inspection and testing of industrial materials and products.

IE 493(G) *School Shop Equipment Repair and Maintenance* (1)

Care and maintenance of major machines in wood and metal areas; lectures, slides, cutaway models, drawings. Disassembly and reassembly of machines. Maintenance adjustments and repairs. Summer only.

IE 494(G) *Trends and Developments in Industrial Education* (3)

A course to develop knowledge and appreciation of the changing concepts and achievements.

IE 495 *Philosophy of Vocational Education* (3)

A study of various points of view necessary to form a workable philosophy of industrial education. New and innovative programs are examined and evaluated in light of the established objectives.

IE 496(G) *Literature of Vocational Education* (3)

Survey of periodicals, various types of books, bulletins, and special Federal and State material from the field of Vocational Industrial Education. Some emphasis on developing skills in locating materials through bibliographies, library services, etc.

IE 497(G) *Curriculum Planning in Vocational Education* (3)

Courses of study and broad general curriculums. Techniques for scientific analysis of industry, the community, and the nation as a basis for courses of study and the curriculum for one-shop schools, multi-shop schools, and community programs.

IE 498(G) Coordination of Vocational Education (3)
 Development of coordination techniques through the study of objectives, programs, practices, laws, standards, and certification requirements of vocational education. Coordination practices relating to recruitment, selection, training, counseling, placement, and follow-up will be included.

IE 505 History of Industrial Education (3)
 A historical and technical approach to the development of the

field of industrial education. Primitive forms of industrial education are identified and their impact on modern education is discussed.

IE 510 Current Issues of Industry (3)
 Current issues of industry and the impact or effect these issues have on industrial education.

IE 599 Thesis in Industrial Education (1-6)
 Registration only after consultation with major advisor.



LANGUAGE DEPARTMENT

G. Theodore Schaum, *Chairperson*; Jack Baratto, Delray Dvoracek, Edward Clark, Sheila Green, Hi-Sook Hwang, M. Virginia Jones, Johanna Neuer, Gisela Nobel, Kenneth Smemo, Edith Stevens, James Stevens, Kathleen Stokker

Areas of Study: French, German, Greek *, Latin *, Norwegian, Russian *, Spanish

LANGUAGE CURRICULA

See also CLASSICS, LATIN AMERICAN STUDIES, 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. Instruction in Classical Greek, Latin, and Russian is available only by special arrangement. The department also participates in the Latin American Studies and Scandinavian Studies programs described elsewhere in this section of the catalogue.

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Students will find it advisable to begin the study of a foreign language or to continue with a language they have studied previously by commencing in the fall quarter of their freshman year.

Several departments — including 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 for teaching a foreign language should consult the chairman 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 his undergraduate curriculum with a minor in a second language or with a double major.

*Courses in these languages are offered only whenever demand warrants.

Previous Instruction

1. Students who have had no previous instruction in a foreign language should enroll in the beginning course sequence (101-102-103).
2. Those with less than two years of high school language instruction should enroll in the first year review course in that language (105).
3. Students with two or three years of high school language should enroll in an intermediate course. Without written permission by the department chairman, they cannot enroll in first-year courses for credit.
4. Those who have successfully completed four or more years in a high school language should register for 300 level courses.

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.

Major in French — B.A. Degree

- Major Course Requirements 51 credits*
- Fren 201-202-203 Intermediate French I-II-III (12)
 - Fren 301-302-303 French Conversation and Composition I-II-III (9)
 - Fren 311-312-313 French Literature I-II-III (9)
 - Fren 321-322 French Culture and Civilization I-II (6)
 - Fren 401-402 Advanced French Composition and Conversation I-II (6)
 - Fren 411-412-413 French Literature IV-V-VI (9)
- Recommended Electives in Related Fields*
- Art 233-234-235 Survey of Art I-II-III
 - Art 430-431-432 Modern Art I-II-III
 - Engl 384-385-386 World Literature IV-V-VI
 - Eng 471-472-473 Literary Criticism I-II-III
 - Hist 326-327-328 Medieval Europe, Renaissance, Reformation
 - Hist 354 National Histories (when applicable)
 - Hist 427-428 Intellectual History of Western Civilization I-II
 - Hum 265-266-267 French Life and Literature I-II-III
 - Pol 250 Comparative Government of Western Europe
 - Pol 410 Western Political Thought
 - Spch 324, 326 Development of the Drama, II, III

Major in French (Teaching)

- Major Course Requirements 54 credits*
- B.A. Major Requirements (51)
 - Lang 340 Methods and Materials in Teaching Foreign Languages (3)
- (See B.A. major for recommended electives in related fields)
 (All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in French 36 credits

Fren 201-202-203 Intermediate French I-II-III (12)
 Fren 301-302-303 French Conversation and Composition I-II-III (9)
 Fren 311-312-313 French Literature I-II-III (9)
 Electives in French Culture-Civilization and/or Advanced French
 Composition-Conversation (6)
 (See B.A. major for recommended electives in related fields)

Minor in French — (Teaching) 36 credits

Fren 201-202-203 Intermediate French I-II-III (12)
 Fren 301-302-303 French Conversation & Composition I-II-III (9)
 Fren 311-312-313 French Literature I-II-III (9)
 Lang 340 Methods and Materials in Teaching Foreign Languages
 (3)
 Electives in French Culture-Civilization and/or Advanced French
 Composition-Conversation (3)
 (This minor can be awarded only in combination with at least one
 teaching major.)

Major in German B.A. Degree

Major Course Requirements 56 credits
 Ger 201-202-203 Intermediate German I-II-III (12)
 Ger 311-312-313 Masterpieces of German Literature I-II-III (12)
 Ger 331 German Culture and Civilization (4)
 Ger 371-372-373 German Conversation and Composition I-II-III (9)
 Ger 411 Survey of German Literature (4)
 Ger 471-472-473 Advanced German Composition and
 Conversation I-II-III (9)
 Electives in German Literature (6)

Recommended Electives in Related Fields

Hist 341-342-343 History of Germany I-II-III
 Engl 385-386 World Literature V-VI
 Phil 252 Modern Philosophy
 Phil 410 Nineteenth Century Philosophy
 Art 233-234-235 Survey of Art I-II-III

Major in German (Teaching)

Major Course Requirements 55 credits
 Ger 201-202-203 Intermediate German I-II-III (12)
 Ger 311-312-313 Masterpieces of German Literature I-II-III (12)
 Ger 331 German Culture and Civilization (4)
 Ger 371-372-373 German Conversation and Composition I-II-III (9)
 Ger 440 Advanced Seminar in German Language, Culture,
 Literature (3)
 Any two of the following (At least 6 credits):
 Ger 471-472-473 Advanced Composition and Conversation
 I-II-III

Electives in German Literature (6)
 Lang 340 Methods and Materials in Teaching Foreign Languages (3)
 (All Teacher Education Requirements shall be fulfilled to
 complete this major. See ACADEMIC INFORMATION.)

Minor in German 37 credits

Ger 201-202-203 Intermediate German I-II-III (12)
 Ger 311-312-313 Masterpieces of German Literature I-II-III (12)
 Ger 331 German Culture and Civilization (4)
 Ger 371-372-373 German Conversation and Composition I-II-III
 (9)
 (See B.A. major for recommended electives in related fields)

Minor in German (Teaching) 37 credits

Ger 201-202-203 Intermediate German I-II-III (12)
 Ger 331 German Culture and Civilization (4)
 Ger 371-372-373 German Conversation and Composition I-II-III (9)
 Ger 440 Advanced Seminar in German Language, Culture,
 Literature (3)
 Any two of the following (at least 6 credits):
 Ger 471-472-473 Advanced Composition and Conversation
 I-II-III
 Lang 340 Methods and Materials in Teaching Foreign Languages (3)
 (Recommended electives include those listed under the B.A.
 major and the following sequence:
 Ger 311-312-313 Masterpieces of German Literature I-II-III)
 (This minor can be awarded only in combination with at least one
 teaching major.)

Major in Spanish B.A. Degree

Major Course Requirements 54 credits
 Span 211-212-213 Intermediate Spanish I-II-III (12)
 Span 321-322-323 Spanish Conversation and Composition I-II-III (9)
 Span 341-342-343 Introduction to Hispanic Literature I-II-III (12)
 Any two of the following (At least 6 credits):
 Span 425-426-427 Advanced Spanish
 Composition-Conversation I-II-III
 Electives in Spanish Literature (At least 15 credits)

Recommended Electives in Related Fields

Study in another Foreign Language
 Anthropology
 Art History
 European and Latin American History
 Humanities and Literature (especially Classical)
 Psychology

Major in Spanish (Teaching)

Major Course Requirements 54 credits

B.A. Major Requirements except Electives in Spanish Literature (39)

Electives in Spanish Literature (12)

Lang 340 Methods and Materials in Teaching Foreign Languages (3)

(See B.A. major for recommended electives in related fields)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Spanish 36 credits

Span 211-212-213 Intermediate Spanish I-II-III (12)

Span 321-322-323 Spanish Conversation and Composition I-II-III (9)

Span 341-342-343 Introduction to Hispanic Literature I-II-III (12)

Electives in Spanish Literature (3)

(See B.A. major for recommended electives in related fields.)

Minor in Spanish (Teaching) 36 credits

All requirements for the non-teaching minor in Spanish except that the following should be substituted for 3 credits of electives in Spanish literature:

Lang 340 Methods and Materials in Teaching Foreign Languages (3)

116 (This minor can be awarded only in combination with at least one teaching major.)

LANGUAGE COURSES

See also FRENCH, GERMAN, RUSSIAN, SCANDINAVIAN, and SPANISH COURSES and CLASSICS

Lang 100 Selected Emphasis in Language (2-4)

Emphasis on special interests, applications, or methods in foreign languages. It may include a variety of material. E.g. - French for reading knowledge, scientific German, Spanish for business, Norwegian for travelers, an intensive course in the basics of a particular language. No prerequisites. Credits and hours will vary according to the specific course offered. May be repeated for credit whenever specific course objectives are different.

Lang 300 Special Topics in Foreign Literature(s) and Culture (2-4)

Readings and discussions of specialized materials from one or more national literatures. It may also include a cooperative effort with another department. Examples: Literature of French Black Africa; Social Conflict in Modern Spanish American Literature; Realism in Spain, Germany, and France. Credits and hours will vary according to the specific course offered. The language of the literature being studied will normally be employed. English will be

employed in cooperative efforts with other sections or other departments. May be repeated for credit whenever specific course objectives are different.

Lang 340 Methods and Materials in Teaching Foreign Languages (3)

Analysis of objective and current techniques. Prerequisite: completion of an intermediate course in any foreign language.

LATIN COURSES

*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.

*Lat 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.

See CLASSICS.

LATIN AMERICAN STUDIES

The participating members of the program represent several disciplines and come from several departments of the campus: Clarence Zuvekas, Jr., Coordinator (Economics and Political Science); Jack Baratto (Spanish), Dieter Beminger (History), Marjorie Brunton (Anthropology), Edward Clark (Spanish), Jane Harrison (Geography), Edith Stevens (Spanish).

The Latin American Studies program at Moorhead State College, as conceived by the present participating faculty, is an interdepartmental offering involving the Departments of Anthropology, Economics, Foreign Languages, Geography, History, and Political Science.

There are several reasons for the existence of a Latin American Studies program. The relations of the United States with the nations of Latin America in the fields of diplomacy, commerce, transportation, industry, hemisphere defense, education, journalism, cultural exchange, and the administration of a variety of aid and mutual assistance programs between the countries of the Americas, all create attractive career opportunities for students

*This course may be offered only if demand warrants it

who acquire the specialized competence this program is designed to provide. The purpose of the program is one of attempting to meet the needs of at least four types of students:

- (1) Those seeking careers in either business or the foreign service (i.e., positions related to international affairs in any of the fields referred to above).
- (2) Those who wish to enter into college teaching, research, or Ibero-American Studies programs at major graduate schools where the emphasis will be upon Latin America.
- (3) Those who wish to combine a concentration in Latin American Studies with their regular departmental major, including teaching majors at the secondary level.
- (4) Those who wish to broaden their education and acquire a better understanding of people and problems of Latin America.

Major in Latin American Studies — B.A. Degree or B.S. Degree (Teaching)

The following major may be applied to a Bachelor of Arts curriculum, or it may be combined with a secondary teaching major for the Bachelor of Science degree. In the latter case, the student should complete a teaching methods course or courses in the other major and meet all appropriate professional education requirements. If possible, a portion of the student teaching assignment may be in Latin American Studies.

Major Requirements 42 credits

- Anth 215 South American Indians (4)
- Anth 220 Middle American Indians (4)
- Geog 318 Geography of Middle America (3)
- Geog 319 Geography of South America (3)
- Econ 335 Economic Development of Latin America
- Econ 422 Economics of Latin America (4)
- Hist 334-335 Latin America I-II (8)
- Pol 353 Latin American Politics (4)
- Span 341-342-343 Introduction to Hispanic Literature I-II-III (12)
- Electives — At least 14 credits — No more than 6 credits in foreign language
- Anthro 316 Latin American Archaeology
- Econ 450 Tutorial in Latin American Economic Problems (1-4)
- Econ 499 Seminar in Latin American Economics (3-4)
- Hist 347 Studies in Latin American History (3-4)
- Hist 354 National Histories (when concerned with Latin America)
- LAS 401 Seminar in Latin American Problems (4)

Language Requirement

Students must complete beginning and intermediate level study in

the Spanish language in high school or college. Equivalent skill in Spanish or Portuguese may be demonstrated to the satisfaction of the Latin American Studies Committee.

Minor in Latin American Studies 32-35 credits

- Anth 215 South American Indians
- or Anth 220 Middle American Indians (4)
- Geog 318 Geography of Middle America
- or Geog 319 Geography of South America (3)
- Hist 334-335 Latin America I-II (8)
- Pol 353 Latin American Politics (3)
- Span 341-342-343 Introduction to Hispanic Literature (12)
- One of the following Economics courses (1-4):
- Econ 335 Economic Development of Latin America (4)
- Econ 450 Tutorial in Latin American Economic Problems
- Econ 499 Seminar in Latin American Economics

LATIN AMERICAN STUDIES COURSES

LAS 100 Introduction to Latin America (2)
An interdisciplinary introduction to Latin America. Emphasis on contemporary problems and prospects.

LAS 401 *Seminar in Latin American Problems Areas* (4)
Interdisciplinary approach to selected problems in the Latin American area. Each year topics are chosen in terms of the interests and competency of the faculty and students involved. (Prerequisite: Majors with Senior standing or consent of chairman of Latin American studies). May be repeated for credit.

LIBRARY SCIENCE

See MEDIA EDUCATION

MANAGEMENT SCIENCE COURSES

See BUSINESS for curricula

MgmS 242-243-244 *Work Experience in Management Science I-II-III* (1 credit each, maximum 3)

Open only to students majoring in Management Science.

MgmS 315 *Government and Business* (see Econ 315) (4)

MgmS 340-341 *Hotel Administration Practicum I-II* (4—8 each)

340: Supervised on-the-job experience in food service administration. 341: Supervised on-the-job experience in beverage administration.

MgmS 342 Food and Beverage Management (4)
Deals closely with each step in the controls of production of food and beverage merchandising with special emphasis on planning, forecasting, budgeting, and sales analysis. Prerequisite: consent of instructor.

MgmS 343 Hotel-Motel-Resort Management (4)
Covers principles of management, organization, and practices in common use in hotels, motels, and resorts today. Prerequisite: consent of instructor.

MgmS 344-345 Hotel Administration Practicum III-IV (4-8 each)
344: Supervised on-the-job experience in motel administration.
345: Supervised on-the-job experience in hotel administration.

MgmS 346 Hotel-Motel-Resort Accounting (3)
General accounting techniques and procedures pertaining to hotels, motels, and resorts. Prerequisite: Acct. 231. For Hotel-Motel majors only. Formerly Acct 341.

MgmS 360 Principles of Business Management (4)
An analysis of the world of business management and the forces that shape and define the manager's role.

MgmS 405(G) Small Business Management (4)
Analysis of management problems confronting owners in the operation of a small retail, wholesale, or manufacturing enterprise. Prerequisite: MgmS 360.

MgmS 415(G) Industrial Organization and Public Policy (4)
See Econ 415(G)

MgmS 416(G) Labor Economics (4)
See Econ 416(G)

MgmS 420(G) Analysis of Formal Organizations (4)
Models of analysis of formal organizations. Organizational growth and development. The effective organization. The role of the individual in organizations is emphasized. Primary model of analysis is taken from psychoanalytic psychology. The course will be presented through lectures, case studies, readings and discussions. Prerequisite: MgmS 360.

MgmS 421(G) Executive Decision Making (4)
The function of the executive and organizational goals. Models of decision making. The economic theory approach, the quantitative approach, and the behavioral approach. Issues of Leadership. Communication and Planning are explored. Special emphasis is given to problems of implementing decisions. Prerequisite: MgmS 360 or equivalent.

MgmS 430(G) Managerial Economics (4)
Case studies in management problem solving, applying tools of economic analysis and business math. Prerequisites: MgmS 360, Econ 112.

MgmS 440(G) Personnel Management (4)
Human Relations in industry; mechanisms and practices of manpower management policy determination; development and use of personnel records and reports. Prerequisite: MgmS 360.

MgmS 450(G) Production and Industrial Management (4)
Industrial management is occupied primarily with the problems faced by the industrial manager and techniques he uses in solving them. Prerequisite: MgmS 360.

MgmS 451(G) Personnel Relations (4)
Study of the use of behavioral knowledge in promoting efficiency and effectiveness of management.

MgmS 460(G) Case Studies in Business Management (4)
Problem solving in business situations. Analytic framework for solving complex problems is presented. Prerequisite: MgmS 360.

MgmS 469 Student Internship (3-16)

MgmS 490(G) Research Methodology in Management (3)
Management Science: concepts, methods, and approaches. The research process; research strategies; experimental vs. correlational studies. Research settings: exploratory, field, laboratory, and simulation settings; measurements and statistical inference. Prerequisite: consent of instructor.

MgmS 498(G) Problems in Business Administration (1 to 4)
An inquiry into some aspect of business administration and management which is not dealt with in the regular curriculum. Students may register for this course more than once since content will vary. Prerequisite: consent of instructor.

MgmS 550 Business and Public Policy (4)
Social and political implication of business decisions and the impact of society and government on the business firm.

MgmS 594 Seminar in Business Management (4)
A capstone course in business management requiring the student to demonstrate analytical approaches to business problems.

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

MANUAL ARTS THERAPY

See INDUSTRIAL EDUCATION CURRICULA.

MARKETING COURSES

See BUSINESS for Curricula.

Mktg 310 Principles of Marketing (4)

An analytical study of the environmental factors facing the firm. Marketing responses in the areas of price, promotion, product and place. Prerequisites: Econ 112.

Mktg 311 Marketing Management (4)

Cases illustrating various marketing problems and policies will be analyzed. Prerequisite: Mktg 310.

Mktg 321 Consumer Behavior (4)

A study of consumer motives and actions, drawing especially upon the social sciences including research cases. Prerequisites: Mktg 310.

Mktg 322 Marketing Intelligence (4)

The role of marketing information for management with emphasis on obtaining and analyzing internal and external marketing information.

Mktg 323 Marketing Communications (4)

A study of sales, advertising, sales promotion, public relations. Emphasis will be placed on the underlying communication process. Prerequisite: Mktg 310.

Mktg 342, 343, 344 Work Experience I-II-III (1 each, maximum of 3)

Supervised work experience of at least 30 hours. Report of a case study nature is written. Prerequisite: Mktg 310.

Mktg 410(G) Marketing Logistics (4)

An examination of policies and strategy in the physical distribution of raw materials, parts, and finished products. Prerequisite: Mktg 310.

Mktg 420(G) Marketing Channels and Institutions (4)

A study of wholesaling and retailing and their interrelationships. Prerequisite: Mktg 310.

Mktg 421(G) Retail Management (4)

Principles and concepts underlying the managerial functions of the retailer with particular emphasis on the decision-making process. Prerequisites: Mktg 310, 420(G).

Mktg 430(G) Sales and Sales Management (4)

The role of the sales manager in modern marketing with emphasis of the line and staff responsibilities. Organization and control of the field sales force with emphasis of basic sales psychology, selection, supervision, compensation and motivational responsibilities. Prerequisites: Mktg 310, 323.

Mktg 441(G) Social Issues in Marketing (4)

An analytical study of the role of marketing within the American economic system and society. Prerequisite: Mktg 310 or consent of instructor.

Mktg 442(G) Marketing Seminar (4)

A study of selected marketing topics of contemporary interest; preparation, presentation, and discussion of research papers. May be repeated for credit upon permission of instructor. Prerequisites: Mktg 311; senior standing.

Mktg 469 Student Internship (3 to 16)**Mktg 470(G) Independent Study (1-4)**

An opportunity for extensive study in a subject area beyond the formal class offering. Prerequisite: consent of instructor.

Mktg 498(G) Problems in Marketing (1-4)

An inquiry into some problematic aspect of marketing which is not dealt with in the regular curriculum. Students may register for this course more than once since content will vary. Prerequisite: consent of instructor.



MASS COMMUNICATIONS DEPARTMENT

Roger Hamilton, *Chairperson*; Howard Binford, Marvin Bossart, Terry W. Brown, Allen Carter, Lyle Huseby, Tom Lundquist, Cal Olson.

MASS COMMUNICATIONS CURRICULA

The major in Mass Communications at Moorhead State College, requiring 51 hours and leading to a Bachelor of Science degree, offers some options so that students may pursue interests in one of three areas of concentration: (1) News-Editorial (Journalism); (2) Advertising and Public Relations; and (3) Broadcast News. A fourth or general area is also available for students who are less interested in career preparation and more interested in testing and developing their abilities of self-expression, written and visual, or seek Mass Communications as a second major.

An ability to type, an interest in writing, and a potential to communicate through writing are basic for those selecting any of the areas listed below. Students are also introduced to the ways in which photography and graphics are used to convey news and information.

A primary concern in this program is to encourage students to develop a talent for gathering information and an ability quickly to determine and communicate what is meaningful and important to audiences they wish to reach. In addition to offering an entry to the basic skills needed, the program encourages students to study broadly, to draw upon the many departments of the college for more insights and understanding, and to acquire a productive background. The resources of the social sciences are especially recommended.

The Department of Mass Communications will also endeavor to accommodate students who are considering such careers as secondary teaching, public service and government, business and school administration where knowledge in this field may be useful. Such non-majors should consult with a department faculty member to determine a program of study and an area of concentration of at least 30 hours structured to meet their needs.

Major in Mass Communications — B.S. Degree

Major Requirements in Mass Communications 51 credits

MC 200 Introduction to Mass Communications (3)

MC 205 Beginning News Writing (3)

MC 215 Visual Communications (3)

MC 230 Basic Photography (3)

MC 304 American Journalism (3)

MC 440 Communication Law and Civil Rights (3)

Any two of the following (6):

MC 360 Mass Media and Society

MC 460 Responsibility of the Mass Media

MC 465 Communications Theory

One of the Concentration of General Areas listed below (27)

News-Editorial Concentration

MC 305 Advanced News Writing (3)

MC 310 Copy Editing (3)

MC 315 Layout and Typography (3)

MC 330 Photojournalism (3)

Any three of the following (9):

MC 400 Reporting of Public Affairs

MC 420 Interpretative/Investigative Reporting

MC 425 News Editorial Seminar

Any two of the following (6):

MC 318 Introduction to Advertising

MC 410 Public Relations

MC 416 Advertising, Copy Writing,

MC 430 Advanced Photography

MC 469 Internship*

Advertising-Public Relations Concentration

MC 315 Layout and Typography (3)

MC 318 Introduction to Advertising (3)

MC 330 Photojournalism (3)

MC 410 Public Relations (3)

MC 419 Advanced Advertising and Public Relations (3)

Any four of the following (12):

MC 305 Advanced News Writing

MC 310 Copy Editing

MC 325 Radio and Television Speaking

MC 416 Advertising, Copy Writing,

MC 469 Internship*

Broadcast News Concentration

MC 305 Advanced News Writing (3)

MC 320 Broadcast Journalism (3)

MC 325 Radio and Television Speaking (4)

MC 350 Basic Television Production (3)

MC 355 Television News Writing (3)

Any four of the following (12):

MC 250 Survey: Film Styles

MC 335 Television News Film-Making

- MC 400 Reporting of Public Affairs
 MC 425 News Editorial Seminar
 MC 469 Internship*

General Mass Communications

This program is designed for the student who is not interested in pursuing the career-oriented areas listed above and permits some flexibility in structuring courses to meet individual needs. It is especially recommended to students who select mass communications as a second major. The following requirements are stipulated for the general major in mass communications:

1. Substitute 27 credits in approved mass communications courses* for the area of concentration.
2. At least 36 of the 51 credits in the major must be at the 300 level or above.

*MC 469, Internship, is offered for 3-16 credits applicable to graduation requirements, but only three credits may be applied to the mass communications major.

MASS COMMUNICATIONS COURSES

MC 200 *Introduction to Mass Communications* (3)

Nature, function, and responsibilities of mass media agencies, including newspapers, radio and television, films, entertainment, and advertising.

MC 205 *Beginning News Writing* (3)

The evaluation of news, news gathering methods, discussions and exercises in writing and organizing news stories; responsibilities of reporting; many assignments in reporting and rewrite. Ability to type essential.

MC 212 *College Newspaper Publication* (2)

A practicum for students working regularly on the staff of the Moorhead State College *Advocate*. This course involves both evaluation of student work and extensive student critiques of their own publication. Regular assignments of work will be made outside of normal staff assignments. Repeat credit: up to six hours. Prerequisite: consent of publisher of *The Advocate*.

MC 215 *Visual Communications* (3)

An introduction to the nature and functions of visuals in the mass media. Mechanics will be examined as well as uses of visual techniques. The course aims to provide the student with information which will make him a more sophisticated consumer and user of visuals in communication.

MC 230 *Basic Photography* (3)

Elementary theory and practical work. Basic methods in black and white photography, visual perception and communication exposure, negative processing, and printing. Students are required to use an acceptable camera of their own or rent one through the College Bookstore at a fee of \$10 per quarter.

MC 250 *Survey: Film Styles* (3)

The study of the history and significance of the motion picture. Films are examined, discussed, and critically evaluated. Same as Speech 382

MC 304 *American Journalism* (3)

Development of the mass media in the United States from the time of the American colonies to the present. The foundations of American government and life will be examined in their relationships to the unique mass communications system found in this country for almost 300 years.

MC 305 *Advanced News Writing* (3)

Discussion and assignments covering a wide range of community news, providing experience in gathering information and writing all types of local news stories, problems of news handling, access to information, ethics. Prerequisite: MC 205.

MC 310 *Copy Editing* (3)

Study of the purposes and methods of evaluating and preparing news copy for publication with emphasis on accuracy, clarity, and style. Extensive practice in editing, headline and caption writing, and rewrite. Practice with live copy from the Associated Press Wire Service. Prerequisite: MC 205.

MC 315 *Layout and Typography* (3)

The process of graphic arts production with emphasis on the techniques of translating ideas and information into print. Layout, design, type, etc. are viewed as essential elements in information delivery systems. Prerequisite: MC 215.

MC 318 *Introduction to Advertising* (3)

Introduction of the theory and practice of advertising in print and broadcast media. This is a survey course that emphasizes planning and intelligent use rather than execution of advertising. Prerequisite: MC 215.

MC 320 *Broadcast Journalism* (3)

Basic theory and techniques of broadcast news; newsroom experience with emphasis on gathering and writing local news; the selection of wire news and preparation of newscasts. Discussion of the problems and responsibilities of broadcast newsmen. Ability to type essential. Prerequisite: MC 205.

Mass Communications

MC 325 Radio and Television Speaking (4)
The study and practice of selected types of radio and television speaking activities. Same as Speech 316.

MC 330 Photojournalism (3)
Picture content for visual reporting by print media. History of photojournalism, law, invasion of privacy, ethics. Prerequisites: MC 215 and MC 230.

MC 335 Television News Film-Making (3)
Theory and practice of filming and editing assignments for television news programs. Prerequisites: MC 215 and MC 230.

MC 350 Basic Television Production (3)
Introduction to the television broadcasting studio and control room equipment and its operation; program types, planning, directing, and performance. Some practical experience.

MC 355 Television News Writing (3)
Newsroom and studio assignments in the preparation and presentation of television news programs, including the use of local and national film clips. Programs are videotaped for class criticism. Prerequisite: MC 320.

MC 360 Mass Media and Society (3)
Examination of the economic, political, and social issues that influence the character and content of the mass media. Prerequisite: MC 200 or consent of instructor.

MC 400 Reporting of Public Affairs (3)
Instruction and practice in reporting municipal, school, county, state, and federal administrative and legislative agencies; municipal and district courts. Prerequisite: MC 305.

MC 401, 402, 403 Political Reporting (3-9)
Experience in reporting and analysis of media coverage of political campaigns and elections. To be offered one, two, or three quarters when appropriate.

MC 410 Public Relations (3)
Introduction to the principles of public relations, its impact of society, and its uses by government, business, and social institutions; public opinion theory; internal and external communications. Prerequisites: MC 200 or consent of instructor.

MC 416 Advertising: Copywriting, Print (3)
Instruction and practice in advertising copywriting for the print media. Emphasis will be placed on the development of skills, creativity, and criticism of work. Prerequisite: MC 318 or consent of instructor.

MC 417 Advertising: Copywriting, Broadcast (3)
Instruction and practice in advertising copywriting for radio and television. Emphasis will be placed on the development of skills, creativity, and criticism of work. Prerequisite: MC 318 or consent of instructor.

MC 419 Advanced Advertising/Public Relations (3)
A seminar for advanced students in advertising and public relations. Individual and team assignments will be made in the creation of advertising and public relations campaigns. All work will be produced for presentation to the seminar. This course may be repeated with the permission of the instructor up to 9 credits. Prerequisites: MC 410, MC 318, or consent of instructor.

MC 420 Interpretative/Investigative Reporting (3)
In-depth reporting of news with emphasis on local and regional events; reference works and source material bearing of the background of news; types of interpretative and investigative journalism such as the news review, background column, and the interpretative news and magazine articles. Prerequisite: MC 305.

MC 425 Advanced News-Editorial (3)
Individual assignments researching and writing news, features, or editorial material agreed upon by instructor and student. This course may be repeated up to a maximum of 15 credits.

MC 430 Advanced Photography (3)
Individual directed studies in selected phases of photography agreed upon by the instructor and student. This course may be repeated to a maximum of 15 credits. Prerequisites: MC 330 and consent of instructor.

MC 440(G) Communication Law and Civil Rights (3)
Consideration of the legal philosophy bearing upon the mass media. The development of freedom of expression and the privileges and restraints affecting the media as a result of libel, contempt of court, invasion of privacy, copyright, state and federal statutes, and self-regulatory codes.

MC 460 Responsibility of the Mass Media (3)
An examination of how the mass media have met the responsibilities inherent in the First Amendment; the role played by the media in news, censorship, propaganda, government relations; internal and external criticism of the media.

MC 465 Mass Communications Theory (3)
An examination of general communications theory, linguistics, effects of communications, attitude change, and experimental research.

MC 469 Internship (3-16)

Practical work for an approved media agency. Students earn one credit for 2½ hours of work per week up to a maximum of 16 credits during one or more academic quarters or the summer. All internship credits apply toward graduation but only three credits can count toward the major. Prerequisite: Junior or Senior majors, consent of the department, and 2.75 GPA in one of the following areas of concentration: news editorial, advertising and public relations, or broadcast news.

MC 480 Problems in Mass Communications (1-6)

Individual problems in areas of specific interest to the student. A student is required to submit a detailed outline of the problem he will examine to his adviser for approval by the department. Credits earned apply toward graduation but not toward the major.

MC 496 News-Editorial Workshop (1-3)

This is a course designed for workshops in the area of concentration, News-Editorial (Journalism).

MC 497(G) Advertising-Public Relations Workshop (1-3)

A course designed for workshops in the area of concentration, Advertising and Public Relations.

MC 499(G) Inservice Education Workshop (1-3)

A course designed to serve specific inservice education program.

MC 580 Problems in Mass Communications (1-4)

Individual problems in areas of specific interest to the student. A student is required to submit a detailed outline of the problem he will examine to his advisor for approval by the department. Credits earned apply toward graduation but not toward the major.

MATHEMATICS DEPARTMENT

Derald Rothmann, *Chairperson*; Carl Carlson, Marvel Froemming, James Hatzenbuehler, Milton Legg, Don Mattson, Bill Ritchie, Kenneth Schmidt, Marion Smith, Warren Thomsen, James Wallen, Shelda Warren, Fike Zahroon

MATHEMATICS CURRICULA**Major in Mathematics — B.A. Degree**

Major Course Requirements 54 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 Calculus (4)

Math 424 Abstract Algebra I (4)

Electives in Mathematics — 300 level and above, including at least 12 credits in either Group A or Group B below (22)

Group A: Math 425, 427, 461, 474

Group B: Math 450, 465, 467, 466, 475, 476

(Math 440 and 445 may not be applied to the B.A. major.)

Major in Mathematics (Teaching)

Major Course Requirements 57 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 Calculus (4)

Math 415 Foundations of Geometry (4)

Math 424 Abstract Algebra I (4)

Math 440 Mathematics in the Secondary School (3)

Electives in Mathematics — 300 level and above (At least 14)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Mathematics 31 credits

Math 231-232-233-234 Calculus I-II-III-IV (16)

Electives in Mathematics — 300 level and above (At least 15)

(Math 440 and 445 may not be applied to the B.A. minor.)

Minor in Mathematics (Teaching) 34 credits

Math 231-232-232-234 Calculus I-II-III-IV (16)

Three of the following four courses (12):

Math 327 Introduction to Linear Algebra (4)

Math 375 Intermediate Probability and Statistics (4)

Math 391 Foundations of Mathematics (4)

Math 415 Foundations of Geometry (4)

Math 440 Mathematics in the Secondary School (3)
 Electives in Mathematics — 300 level and above (3)
 (This minor can be awarded only in combination with at least one teaching major.)

MATHEMATICS COURSES

Math 100 Introduction to Mathematics (4)
 Development and study of axiomatic systems including logic, sets, and real numbers. This course satisfies general studies requirements but is not intended to prepare students for any subsequent mathematics courses except Math 203.

Math 121 College Algebra (4)
 Properties of the real number system. Elementary equations and functions: linear, quadratic, exponential, logarithmic. Emphasis on algebraic manipulation. Prerequisite: At least one year of algebra in secondary school.

Math 133 Trigonometry (3)
 Trigonometric functions, identities, applications. Prerequisites: Two years of secondary school algebra of Math 121. Not recommended for students who have had a previous course in trigonometry.

Math 134 Elementary Analysis (2)
 A study of functions, inequalities, elementary analytic geometry, theory of equations. Prerequisites: Two years of secondary school algebra or Math 121. Not recommended for students who have had an analysis course in high school.

Math 203 Foundations of Number Systems (4)
 Development and study of the rational number system and various systems of numeration, and basic geometrical concepts together with the applicability of such study to elementary school mathematics. Open to elementary education majors only. Prerequisite: Math 100.

Math 231-232-233-234 Calculus I-II-III-IV (4 each)
 Calculus I and II cover calculus of one variable with differentiation and integration of elementary functions and applications. Calculus III includes further techniques of integration and a study of infinite series. Calculus IV is the calculus of several variables and includes multiple integration and partial differentiation with applications. Sequential. Prerequisites: Math 133 and Math 134 or equivalent high school preparation.

Math 273 Mathematics for Behavioral and Social Sciences (4)
 Linear inequalities in two variables, matrix algebra, linear programming, introduction to the study of probability. Prerequisite: Math 121 or two years of algebra in secondary school. Not open to mathematics majors.

Math 274 Introduction to Statistics (4)
 Elementary probability theory. The processing of quantitative data and the making of valid inferences. Prerequisite: Math 273 or consent of instructor. Students who have completed Math 232 are encouraged to take Math 375 rather than Math 274. Not open to majors in mathematics.

Math 327 Introduction to Linear Algebra (4)
 An introduction to the study of linear algebra including the study of matrices, determinants, methods for solving systems of linear equations, and methods for solving linear programming problems. 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)
 Analysis of materials and methods of teaching applicable to elementary school mathematics. Open only to non-PFY elementary education majors. 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)
 (2 hours lecture — 2 hours laboratory). Development of content and methods for teaching mathematics in special education; topics include sets, numeration systems, number systems and informal geometry. Open only to majors or minors in Special Education.

Math 375 Intermediate Probability and Statistics (4)
 An introduction to probability and statistics including measures of location, measures of variation, sampling and sampling distributions, problems of estimation, hypothesis testing, regression analysis, and correlation. Prerequisite: Math 232.

Math 391 Foundations of Mathematics (4)
 Nature of mathematics. Study of axiomatic systems; symbolic logic, sets, operations, relations, functions, mappings. Prerequisite: Math 232.

Math 392 Intermediate Calculus (4)

A rigorous treatment of concepts in calculus used in Math 231–234. Topics include real number properties, limit, derivative, integral, and infinite series. Prerequisites: Math 234 and Math 391.

Math 400 History of Mathematics (3)

Topical and chronological survey of the main branches of mathematics. Prerequisite: Math 233 or consent of instructor.

Math 415(G) Foundations of Geometry (4)

Euclidean geometry. Comparison of the postulates of Euclid and Hilbert. Transformations, cross-ratio, geometry of circles, constructions. Prerequisite: Math 391.

Math 416(G) Modern Geometry (4)

Introduction to non-Euclidean geometries and projective geometry. Prerequisite: Math 415.

Math 423(G) Foundations of Algebra (3)

Development of the real number field from the Peano postulates. Prerequisite: Math 391.

Math 424, 425(G) Abstract Algebra I-II (4 each)

An introduction to abstract mathematical systems such as groups, rings, and fields. Topics include Lagrange's theorem, factor groups, and quotient rings. Sequential Prerequisite: Math 327 and Math 391.

Math 427(G) Linear Algebra (4)

An introduction to the theory of finite-dimensional vector spaces. Topics include linear transformations, characteristic polynomials, and inner product spaces. 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 in the elementary and middle schools. Prerequisites: a mathematics methods course and teaching experience.

Math 445(G) Computers in Secondary Mathematics (3)

Methods of using computers in the teaching of secondary mathematics courses and computer assisted instruction. This course does not apply to the B.A. major. Prerequisite: Completion of a calculus sequence.

**Math 450(G) Numerical Analysis I (4)**

Topics will include 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 (3)

Introduction to the theory of numerical analysis as related to the solution of systems of equations. Prerequisites: Math 450 and Math 327.

Math 461-462-463(G) Introduction to Real Analysis I-II-III (4 each)

An introduction to the theory of functions of a real variable including sets and functions, sequences and series of real numbers, limits and metric spaces, continuous functions on metric spaces, connectedness, completeness, compactness, Riemann integral, elementary functions, and sequences and series of functions. Prerequisite: Math 392.

Math 465(G) Applied Analysis (4)

Topics include an introduction to Laplace transforms with applications, a study of vector and matrix analysis, line and surface integrals, Green's theorem, and Stokes' theorem. Prerequisite: Math 331.

Math 466(G) Fourier Series and Boundary Value Problems (4)

An introduction to Fourier series and boundary value problems. Applications include finding solutions to partial differential equations. Prerequisite: Math 331.

Math 467(G) Complex Analysis (4)

An introduction to complex numbers and variables. Other topics include a study of analytic functions, the Cauchy integral formula, infinite series, and conformal mappings. Prerequisite: Math 392.

Math 474(G) Probability (4)

A study of the theory and applications of 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 375 and Math 392.

Math 480(G) General Topology (4)

An introduction to topology including metric spaces, topological spaces, continuity, compactness, connectedness, and separation axioms. Prerequisite: Math 461.

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)

Fundamental theorems and problems in number theory. 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 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 CURRICULA.

MEDIA EDUCATION DEPARTMENT

Evelyn Swenson, *Chairperson*; Shirley Brattland, E. Karen Kivi, George R. McMeen, Darrel M. Meinke, Lee M. Nordrum

Certification Programs

Coordinator of Audiovisual Education

Requirements

1. A valid teaching certificate.
2. Earned credits in at least two of the areas of Educational Administration, Elementary School Curriculum, High School Curriculum, and Supervision and Improvement of Instruction.
3. At least one course in audiovisual methods and one course in audiovisual administration.

Director of Audiovisual Education

Requirements

1. A valid teaching certificate based on a four-year degree.
2. Earned credit in each of the following: Educational Administration, Elementary School Curriculum, High School Curriculum, and Supervision and Improvement of Instruction.
3. At least 10 semester hours in audiovisual education courses.
4. At least 2 years of successful teaching experience.

Library Certificate

Requirements 25 credits

- MeEd 330 Cataloging and Classification (4)
- MeEd 340 Basic Reference Materials and Services (3)
- MeEd 420(G) Administration of the School Media Center (4)
- MeEd 430(G) Materials for the Elementary School (4)
- MeEd 440(G) Materials for the Secondary School (4)
- MeEd 450(G) Media Services in Elementary & Secondary Schools (3)
- MeEd 475(G) Practicum in School Media Services (2-4)

Media Generalist Certificate

A Media Generalist is qualified to work at a specialized professional level in both print and non-print areas (library science, audiovisual education, and other emerging instructional technologies) in an elementary or secondary school or in a school district. Requirements for Minnesota certification in addition to the course work in the Media Education Minor included MeEd 345 or 347, whichever was not selected in the minor, MeEd 465, Technology of Instructional Systems and two years of successful experience. Conversion of existing certificates is possible. Consult with the chairperson.

MEDIA EDUCATION CURRICULA**Audiovisual Education Minor**

Required Audiovisual Education Courses 15 credits

MC 230 Basic Photography (3)

*MeEd 356(G)audiovisual Materials & Methods (3)

*MeEd 345(G) Production of Instructional Materials,
Non-Projected (3)

*MeEd 347(G) Production of Instructional Materials, Projected (3)

*MeEd 493 (G) administering Audiovisual Programs (3)

Required Professional Education Courses 12 credits

*ED 522 Supervision in the Elementary School (3)

*ED 521 Administration in the Elementary School (3)

*Ed 442(G) Curriculum Foundations (4)

or both of the following

*ED 541 Elementary School Curriculum (3)

*ED 560 Secondary School Curriculum (3)

*Recommended additional courses to be selected to total 36
quarter hours:*

MeEd 455(G) Radio and Television in Education (3)

MeEd 465(G) Technology of Instructional Systems (3)

MC 350 Basic Television Production (3)

MC 410 Public Relation (3)

MeEd 330 Cataloging and Classification (4)

Library Minor

(See Certification Requirements)

Media Education Minor

The minor in Media Education is designed for the preparation of qualified school media personnel. It is especially recommended for students majoring in Elementary Education or enrolled in a secondary education curriculum. This minor when accompanied by a teaching certificate satisfies state requirements for certification in Library and a major part of the requirements for the Media Generalist, Director of Audiovisual Education and Coordinator of Audiovisual Education. Students electing this minor are advised to select General Studies Plan A to insure as broad a background as possible. At least one course in each of film form and appreciation, computer science, and mass communications is desirable.

**Indicates courses required as part of Minnesota requirements for
certification as an Audiovisual Director.*

Requirements 41 credits

MeEd 330 Cataloging and Classification (4)

MeEd 340 Basic Reference Materials and Services (3)

MeEd 345(G) Production of Instructional Materials,
Non-Projected (3)

or

MeEd 347(G) Production of Instructional Materials, Projected (3)

MeEd 356(G) Audiovisual Materials and Methods (3)

MeEd 420 (G) Administration of the School Media Center (4)

MeEd 430(G) Materials for the Elementary School (4)

MeEd 440(G) Materials for the Secondary School (4)

MeEd 450(G) Media Services in Elementary & Secondary
Schools (3)

MeEd 455(G) Radio and Television in Education (3)

MeEd 493(G) Administering Audiovisual Programs (3)

ED 442 Curriculum Foundations (4)

*MeEd 475(G) Practicum in School Media Services (3)

MEDIA EDUCATION COURSES

MeEd 330 Cataloging and Classification (4)

The organization of materials in libraries, including the systematic arrangement of print and non-print materials and their representation in the card catalog. Underlying principles and their application.

MeEd 340 Basic Reference Materials and Services (3)

Introduction to reference librarianship; survey and evaluation of basic reference tools, their content and organization; development of skills in the use of tools.

*MeEd 345(G) Production of Instructional Materials,
Non-Projected (3)*

Basic techniques for the preparation of non-projected audiovisual instructional materials. Laboratory and lecture experience. Prerequisite: MeEd 356 or consent of instructor.

*MeEd 347(G) Production of Instructional Materials,
Projected (3)*

An examination of what constitutes good visuals plus an in-depth study of how to create good educational visuals. Major emphasis

**Concurrent registration with PFY, Professional Elementary
Teacher Education. The student will participate in the regular
activities of Ed 420 under the supervision of a school media
specialist. Practicum for secondary education students will be
independently arranged.*



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is placed on still pictures, slides, and motion pictures. Prerequisite: MeEd 356 or consent of instructor.

MeEd 356(G) Audiovisual Materials and Methods (3)
Characteristics, advantages, and limitations of audiovisual materials, projected and non-projected. Practice in equipment operation. Introduction to the principles of audiovisual instruction.

MeEd 420(G) Administration of the School Media Center (4)
Philosophy and function of the modern media center including organization, services, program, and facilities with emphasis on national standards.

MeEd 430(G) Materials for the Elementary School (4)
Survey and evaluation of print and non-print media on elementary level; introduction of appropriate selection aids; attention to utilization in school curricular programs.

MeEd 440(G) Materials for the Secondary School (4)
Survey and evaluation of print and non-print media on secondary level; introduction of appropriate selection aids; attention to utilization of materials in school curricular programs.

MeEd 450(G) Media Services in Elementary and Secondary Schools (3)
Planning media programs and services; techniques for bringing student and media together; review of research related to reading, viewing, and listening; and survey of methods of instruction in media skills. Prerequisites: MeEd 420, 430, 440.

MeEd 455(G) Radio and Television in Education (3)
The study of radio and television media including history, educational influences, appropriate utilization techniques for education, and an introduction to production techniques. Prerequisites: MeEd 356 or consent of instructor.

MeEd 465(G) Technology of Instructional Systems (3)
The analysis, design, and implementation of such systems as CCTV, audio production and duplication, public address, student response, information retrieval, computers, ITFS, and ETV. Prerequisite: consent of instructor.

MeEd 470(G) Problems in Media Education (2-6)
Individual projects on topics of special interest or concern to the student. Prerequisite: consent of instructor.

MeEd 475 Practicum in School Media Services (1-3)
Supervised practical experience in elementary and/or secondary school libraries. Prerequisite: Completion of the Library minor and/or permission of Department Chairperson.

MeEd 490(G) 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 methods and styles of illustration.

MeEd 493(G) Administering Audiovisual Programs (3)
Experience in audiovisual administration in selection and purchase of equipment, budgeting, teacher training, AV Center operation, and evaluation of AV programs.

MINORITY GROUP STUDIES DEPARTMENT

Melvin Hendrix, *Acting Chairperson*; David Beaulieu, Dieter Beminger, John Foote, Donald McRaven, Lois Selberg
Areas of Study: Minority Group Studies, Afro-American Studies, American Indian Studies, Mexican American Studies

The Minority Group Studies Department offers a series of interdisciplinary courses which serve as follows: supplements for the general studies applied to the social sciences and humanities areas; electives for interested students; specific areas of concentration related to existing major or minor curricula and as part of the Human Relations Program for teacher certification. These objectives may be developed as minors in (1) Minority Group Studies, (2) Afro-American Studies, (3) American Indian Studies, and (4) Mexican American Studies and as primary areas of study under the individualized major program.

A unique feature of the program is that the student may focus on the character of single cultures or cultural styles or on several cultures or cultural styles.

MINORITY GROUP STUDIES CURRICULA

Minor in Afro-American Studies — B.A. or B.S. Degree (Teaching) 36 credits

Requirements in Afro-American Studies 20 credits

MGS 101 The Afro-American Experience (4)*

MGS 201 Introduction to Afro-American Literature I (4)

MGS 301 Afro-American Music (4)

MGS 451 Seminar on the Afro-American (2)*

Hist 349 Afro-American History (3)

Soc 310 Majority-Minority Group Relations (3)

Electives in Related Fields 16 credits

Econ 210 Economics of Black America (2-4)

Econ 380 Economics and Social Security (4)

Ed 498 Education for the Culturally Different (3)

Hist 100 Highlights of African History (3)

Hist 210 Race and Nationality in American History (3)

Hist 261 History of Africa I (3)

Hist 262 History of Africa II (3)

Hist 263 History of Africa III (3)

MGS 100 Minority Cultures (5)

MGS 311 Afro American Literature II: poetry and drama (4)

MGS 350 Institutional Racism (2)

MGS 451 Seminar on the Afro-American (2-4)*

MGS 461 Readings on the Afro-American (1-3)*

MGS 469 Student Internship (3-16)

Pol 323 American Minority Group Politics (4)

Pol 430 Topics in Constitutional Law (3)

SSer 400 Minorities and Social Welfare (4)

SSer 431 Social Legislation (3)

Spch 210 Communicative Arts of Ethnic Minorities (3)

Any other course with the approval of the MGS Chairperson

Minor in American Indian Studies 36 credits

Requirements in Minority Group Studies 20 credits

MGS 102 The Contemporary American Indian (4)*

MGS 202 Traditional American Indian Cultures (4)*

MGS 402(G) Indians of Minnesota (4)

MGS 452(G) Seminar on the American Indian (2)*

Hist 100 Indians and Europeans in the Americas (3)

Soc 310 Majority-Minority Group Relations (3)

Electives in Related Fields 16 credits

Anth 215 Indians of South America (4)

Anth 220 Indians of Middle America (4)

Anth 225 Indians of North America (4)

Econ 380 Economics and Social Security (4)

Ed 498 Education for the Culturally Different (3)

Hist 210 Race and Nationality in American History (3)

MGS 100 Minority Cultures (5)

MGS 350 Institutional Racism (2)

MGS 452(G) Seminar on the American Indian (2-4)*

MGS 462(G) Readings on the American Indian (1-3)*

MGS 469 Student Internship (3-16)

Pol 323 American Minority Group Politics (4)

SSer 400 Minorities and Social Welfare (4)

SSer 431 Social Legislation (3)

Spch 210 Communicative Arts of Ethnic Minorities (3)

Any other course with the approval of the MGS Chairperson

Minor in Mexican American Studies 36 credits

Requirements in Minority Group Studies 17 credits

MGS 103 The Contemporary Mexican American (4)*

MGS 203 The Mexican American Culture (4)*

MGS 453 Seminar on the Mexican American (2)*

Hist 354 History of Mexico (4)

Soc 310 Majority-Minority Group Relations (3)

Electives in Related Fields 19 credits

Anth 220 Indians of Middle America (4)

Econ 380 Economics and Social Security (4)

ED 498 Education for the Culturally Different (3)

Hist 210 Race and Nationality in American History (3)

Hist 334 History of Latin America I (4)

Hist 335 History of Latin America II (4)

Minority Group Studies

MGS 100 Minority Cultures (5)
MGS 350 Institutional Racism (2)
MGS 453 Seminar on the Mexican American (2-4)*
MGS 463 Readings on the Mexican American (1-3)*
MGS 469 Student Internship (3-16)
Pol 323 American Minority Group Politics (4)
Pol 353 Politics of Latin America (3)
SSer 400 Minorities and Social Welfare (4)
SSer 431 Social Legislation (3)
Span 312 Latin American Literature I (3)
Span 313 Latin American Literature II (3)
Span 434 Spanish American Prose Fiction I (3)
Span 435 Spanish American Prose Fiction II (3)
Spch 210 Communicative Arts of Ethnic Minorities (3)
Any other course with the approval of the MGS Chairperson

Language Requirement

Students must demonstrate competency in reading and/or speaking Spanish.

Minor in Minority Group Studies 45 credits

Requirements in Minority Group Studies 33 credits

MGS 101 The Afro-American Experience (4)*
MGS 102 the Contemporary American Indian (4)
MGS 103 The Contemporary Mexican American (4)*
MGS 201 Introduction to Afro-American Literature (4)
MGS 202 Traditional American Indian Culture (4)
MGS 203 The Mexican American Culture (4)*
MGS 451 Seminar on the Afro-American (2)*
MGS 452 Seminar on the American Indian (2)*
MGS 453 Seminar on the Mexican American (2)*
Soc 310 Majority-Minority Group Relations (3)

Electives in Related Fields 12 credits

Anth 215 Indians of South America (4)
Anth 220 Indians of Middle America (4)
Anth 225 Indians of North America (4)
Anth 230 Cultures of Africa (4)
Econ 380 Economics and Social Security (4)
Ed 498 Education for the Culturally Different (3)
Hist 100 Highlights of African History (3)
Hist 210 Race and Nationality in American History (3)
Hist 261 History of Africa I (3)
Hist 262 History of Africa II (3)
Hist 263 History of Africa III (3)
Hist 334 History of Latin America I (4)
Hist 335 History of Latin America II (4)
Hist 100 Indians and Europeans in the Americas (3)

MGS 100 Minority Cultures (5)
MGS 301 Afro-American Music (4)
MGS 350 Institutional Racism (2)
MGS 311 Afro-American Literature II — poetry and drama (4)
MGS 402 Indians of Minnesota (4)
MGS 451 Seminar on the Afro-American (2-4)*
MGS 452 Seminar on the American Indian (2-4)*
MGS 453 Seminar on the Mexican American (2-4)*
MGS 461 Readings on the Afro-American (1-3)

MGS 462 Readings on the American Indian (1-3)*
MGS 463 Readings on the Mexican American (1-3)*
MGS 469 Student Internship (3-16)
Pol 323 American Minority Group Politics (4)
SSer 400 Minorities and Social Welfare (3)
SSer 431 Social Legislation (3)
Span 312 Latin American Literature I (3)
Span 313 Latin American Literature II (3)
Span 434 Spanish American Prose Fiction I (3)
Span 435 Spanish American Prose Fiction II (3)
Spch 210 Communicative Arts of Ethnic Minorities (3)
Any other course with the approval of the MGS Chairperson

MINORITY GROUP STUDIES COURSES

MGS 100 Minority Cultures in America (5)

A survey of the life styles and contributions of the American Indian, Mexican-American, and Afro-American, and the nature of discrimination and racism as applied to these American minorities.

MGS 101 The Afro-American Experience (4)

An introduction to Afro-American studies.

MGS 102 The Contemporary American Indian (4)

An introduction to the experience of the indigenous people of North America focusing on the past decade.

MGS 103 The Contemporary Mexican American (4)

A survey of recent Mexican-American culture.

MGS 201 Introduction to Afro-American Literature I (4)

Introduction to Afro-American culture through the study of classic and contemporary Black literature.

MGS 202 Traditional American Indian Cultures (4)

A historical perspective on living, traditional cultures of American Indian groups. A survey of "culture areas" and specific tribal groups. Topics include religion, social organization, art and architecture, and ecological adaptations.

MGS 203 *The Mexican American Culture* (4)

A study of the Mexican American's contribution to the North American scene particularly in terms of one or more of the following: culture, history, philosophy, literature, and religion.

MGS 301 *Introduction to Afro-American Music* (4)

An introduction to the music of Black Americans and its position in, and influence on, the dominant culture. Includes study of the origin and development of folk music, blues, jazz, and related forms as well as contributions of Black Americans to classical music. Also involves some study of related arts such as dance, theatre, painting, sculpture, and poetry.

MGS 311 *Afro-American Literature II: Poetry and Drama*

Introduction to plays and poetry written by Black Americans from colonial times to the present. Black Americans on stage and film. Prerequisites: MGS 101, 201, or consent of instructor.

MGS 350 *Institutional Racism* (2)

A study of institutional structures which subordinate a person or group on the basis of race.

MGS 399 *Art and Culture of the Afro-American* (4)

Survey of Art & Culture of Afro-Americans. A survey of Black artists and their work from slavery to the present with emphasis on the cultural and political influences of Black & White society. Same as Art 499.

MGS 402 *Indians of Minnesota* (4)

A course emphasizing aspects of the minority group experience of Indians in Minnesota. Special areas of attention: Chippewa history and culture, the urban Indian, and Indian education.

MGS 451(G) *Seminar on the Afro-American* (2-4)

Advanced topical seminar on the Afro-American experience. May be repeated for credit.

MGS 452(G) *Seminar on the American Indian* (2-4)

Advanced topical seminar on the Native American peoples. May be repeated for credit.

MGS 453(G) *Seminar of the Mexican American* (2-4)

Advanced topical seminar on the Mexican American experience. May be repeated for credit.

MGS 461(G) *Readings on the Afro-American* (1-3)

Independent reading and research on the Afro-American. May be repeated for credit.

MGS 462(G) *Readings on the American Indian* (1-3)

Independent reading and research on the American Indian. May be repeated for credit.

MGS 463(G) *Readings on the Mexican American* (1-3)

Independent reading and research on the Mexican American. May be repeated for credit.

MGS 469 *Student Internship* (3-16)

Placement in the field under agency and departmental supervision. An opportunity for on-the-job learning experience. Prerequisite: Consent of MGS Chairperson.

MULTIDISCIPLINARY STUDIES

Catherine Warrick, *Chairperson*; Michael Greenwood, Janice Hood, Judy Knudson, Emil Kochis, Michael Meeker, Rosemarie Pihlaja

The New Center for Multidisciplinary Studies offers career-oriented programs leading to the A.A. degree and also assists students planning to transfer to programs in the regular college. See also "The New Center" in the section on Academic Programs in this catalogue.

All Multidisciplinary Studies Courses are offered on a Satisfactory/No credit (S/N) basis. Students register for full credit for each course through a contract with the instructor. The number of credits earned is determined by the contract objectives completed by the student.

MULTIDISCIPLINARY STUDIES COURSES

MDS 104 *Issues in Evaluation* (5)

This course is designed to develop sorting and evaluation skills. The student will learn some measurement concepts: reference populations and norms, percentile rank and standard scores, validity, and reliability; he will apply these understandings to interpreting the results of 9 standardized tests which he will take; he will learn value clarification strategies and strategies for setting and implementing personal growth goals. He will be exposed to human growth models that stress human potential rather than averages of human experience.

MDS 105 *Group Skills and the Democratic Process* (5)

This seminar focuses on the need for effective group membership skills in a democratic society and understanding the relationship.

MDS 106 *The Meaning of Work* (5)

This seminar is designed to develop a realistic concept of work and an understanding of factors that affect career satisfaction and society's work ethic. Resource persons, places, and tools will be

used to investigate career clusters, their value configurations, their social utility, and differences between employment motivated by economic necessity and meaningful work as a component of the good life.

MDS 108 *Outward Bound* (2)

Outward Bound is a structured, deliberate learning process which uses challenges found in a natural setting as its teaching medium. The student is presented with successively difficult physical challenges and problems.

MDS 109 *Individual Development Projects* (1-3)

The New Center for Multidisciplinary Studies requires each of its students to develop his/her own plan for an A.A. degree. This course is used to complete that planning and testing process. (For New Center students only.)

MDS 110 *Developmental Writing* (4)

This course stresses the developmental model of writing; it recognizes that the actual process of writing can help discover meaning, rather than assuming a clear notion of intended thesis. Such writing grows naturally through stages, eventually seeking its own organic organization. Editing and traditional revising occur only after the piece has developed through several complete versions. Students are expected to keep a freewriting journal, submit one "finished" piece of writing per week, and involve themselves in the teacherless writing classes. No prerequisites. (For New Center students only.)

MDS 111 *Expository Writing* (4)

This course emphasizes formal organizational models of exposition as they relate to explanation, persuasion, argumentation, and comparison. It strives for increased syntactic maturity in the writing process and does not include a unit on literature. (For New Center students only.)

MDS 115 *Oral Communication* (5)

This course focuses on the basic elements present in both the everyday and more formal aspects of communication. An attempt will be made to understand some communications constants such as audience or listener feedback, emotional involvement, organization ideas, and models for understanding interpersonal communication. (For New Center students only.)

MDS 116 *Reading Development* (2)

An individually tailored reading tutorial designed for New Center students who wish to concentrate on understanding a particular reading disability. It places the New Center student in a one-to-one relationship with some other person on a contract for

improvement basis. The MSC Reading Clinic supervises the experience. It can be repeated. (For New Center students only.)

MDS 118 *Listening as Communicating* (2)

This course is designed to develop six critical listening skills: separation of principle and secondary points, the use of key words and phrases for remembering, the blocking of external distractions, filtering out emotion-laden statements from facts, distinguishing main data from colorful asides or examples, and dealing with two and threelevel outlining.

MDS 120 *Math I* (4)

This course is designed for students who have inadequate background in mathematics. The text-workbook goes from basic arithmetic through trigonometry to college algebra. Students proceed at their own individual rate, but credits can be lost if minimum college-level performance is not attained.

MDS 121 *Business Mathematics* (4)

A course designed for students who plan careers in the business area and need to acquire additional math background. Content: review of math fundamentals, percentages, mark-up and discounting, payroll, taxes, insurance, inventory, etc. Students work at individualized rate using programmed text. No prerequisites.

MDS 125 *Introduction to Computer Science* (2)

This is a non-mathematical introduction to computers. The student acquires general knowledge about how computers function as well as an introduction to the language of the computer in order to be able to communicate with it. 75% of the time the student will be working on the terminal. Vocational possibilities will be covered. No prerequisites.

MDS 130 *Family Health* (5)

Examination of facts, fallacies, developments, and trends in the field of health. Emphasis will be on 1) acquiring knowledge and understanding of the foregoing with respect to selected health concerns, and 2) analyzing health practices and attitudes in one's own life situation. Students will have opportunity to pursue mini-studies on both an individual and a group project basis.

MDS 131 *Perception* (5)

This seminar focuses on why people see what they see rather than what is there to be seen. The first unit is a study of the physical and physiological limitations of perception; the second and third units focus on individual and cultural differences in perception; the fourth unit examines perception as an element in the visual arts; the final unit relates descriptive writing to the process of perceiving.

MDS 132 *Human Sexuality* (5)

A 5-credit core class exploring male-female roles in the American culture. The class emphasizes sexual roles in the arts, changing concepts of masculinity and femininity, and sexuality, including biological views of men and women, heterosexuality, and homosexuality. No restrictions or prerequisites.

MDS 135 *Behavioral Systems* (5)

A cross-disciplinary study of behavior in the open field. Attempts to understand animal and human behavior is made in terms of evolutionary trends and individual development. Behavior systems are focused on from the viewpoint of comparative psychology across animal species relative to such behavior as: instinctive behavior, emotional behavior, social behavior, maternal behavior, perceptual responses, and communicative process.

MDS 136 *Man in the Sea* (5)

A cross disciplinary study of the need/implication (economic, scientific and political/military) of man as a functional intraocean inhabitant. The revolutionary and philosophical implications of man's returning to the ocean as homoacquatics is discussed. The laboratory requirement for this course will SCUBA train the students as a practicum in the gas laws and the thermal and hydrodynamics of the human body.

MDS 137 *The Architecture of Behavior* (5)

The primary focus of the course is psychophysiological studies and theories relative to brain functioning. The functioning of the central nervous system is conceptualized as a computer mechanism. Particular attention is paid to the work of Hebb and the use of the Hebbian neurophysiological constructs. The theoretical implications presented in this course are related to the open field system utilization of animals; i.e. the biological torpedo of marine mammals (dolphins/whales/sea lions).

MDS 140 *Moods of Western Civilization* (5)

This course attempts to recreate for students the mood of various periods in Western civilization through a study of the music, drama, and history of a given period. It requires an interdisciplinary faculty.

MDS 160 *Introduction to Dramatic Art* (3)

Participation in theatre activities such as pantomime, game playing, improvisation, acting, and directing. Included in the class are a study of at least six plays by representative playwrights from various periods. The primary focus of study is on the motivations and goals of the characters.

MDS 161 *Introduction to Dramatic Art II* (3)

Same as 160 with the use of different plays and greater attention to the literature.

MDS 170 *Studies in Popular Culture* (3)

Individual topics in various aspects of "popular" or contemporary culture such as science fiction, song lyrics, detective stories, and comics, will be used as focal points for discussing the need for self-expression of the relationship of art and society, and man's freedom and fate in a technological age.

MDS 180 *Plants and Man I* (3)

General biology course for non-science majors emphasizing the relationships of plants and man through principles of landscaping, ecology, vegetative propagation, reproduction, and metabolic processes, such as mitosis and meiosis. No prerequisite.

MDS 181 *Plants and Man II* (3)

General biology course for non-science majors emphasizing the relationships of plants and man through the principles of sexual reproduction of flowering plants. Major topics: study of the parts of the flower in relation to function; processes of pollination, and fertilization in relation to fruit and seed production; processes, and conditions related to seed germination.

MDS 185 *Man and His Environment* (4)

A multidisciplinary approach to the study of environmental problems. Content: introduction to ecology, agricultural environments, pesticides, radioactive wastes, air pollution, water pollution, solid wastes, growth of human populations, thermal pollution and noise pollution. Concepts in biology, chemistry, and physics will be introduced as needed. Project required. No prerequisites. Vocational possibilities will be covered. (For New Center students only.)

MDS 190 *Science of the Human Body* (5)

A course exploring basic concepts in biology, chemistry, and physics as applied to the structure and functioning of the human body. Especially helpful for students interested in surveying the para-medical and health areas as possible vocations. Lab work particularly in biology will be required. No prerequisites. (For New Center students only.)

MDS 195 *Astronomy* (4)

Introductory survey course in astronomy especially for those who wish to consider it as an avocation. Location and identification of major stars, constellations, galaxies, planets, etc. with the aid of

star charts, telescopes, and the planetarium. Basic science concepts via demonstrations, films, slides, and programmed workbook. No prerequisites. (For New Center students only.)

MDS 197 Natural Phenomena (4)

An experimental course structured around the questions students pose about natural phenomena: mirages, Northern Lights, rainbows, destructive storms. The course content will vary each quarter and will be determined in great part by student interests. Film program. Project may be required.

MDS 220 Collective Biography (4)

This course is designed to accomplish three major objectives: acquaint students with sampling techniques and the designing of questionnaires; involve students with original research of their own choosing; and develop skills in writing formal research papers and reports. Essentially each student will identify his own research topic, design and administer a questionnaire to an appropriate sample population, and turn the accumulated data into a paper summarizing the trends and conclusions that emerge.

MDS 241 Introduction to Photography (3)

Through field trips each week, the student will learn the art of photography by doing. In critique sessions each week, the student will study line, composition, perspective, and lighting in his own work and the work of others. He should be prepared to shoot no less than one roll of film each week and to develop a photographic essay on a subject of his choice.

MDS 242 Photography Laboratory (2)

Working with his own film, the student learns the skills necessary to develop and present his own photographic work, including enlarging and mounting. Must be taken in connection with MDS 241.

MDS 260 Introduction to Bookkeeping and Economics (3)

This course provides an opportunity for students with no bookkeeping or economics background to test out a possible interest in the field, of business. The student is introduced to concepts like assets and liabilities, business transactions, the accounting cycle, financial statements, inventory, internal control, payroll accounting, supply and demand, circular flow of income, commercial banking, the federal reserve system, and monetary policy tools. This course prepares a student for Accounting 229 and Economics 110.

MDS 271 Field Experience in Allied Health (3)

Each student will be assigned to work with a physically handicapped person for 5 hours each week under supervision. There will be a weekly seminar meeting and outside reading and reporting assignments will be required. (New Center students only.)

MDS 280 Career Planning (1-6)

An individualized course designed to help a student explore his vocational choice. The student learns task analysis, observation and interviewing. The student will also learn the occupational literature of his area and will write a consolidated analysis of the data learned above. (New Center students only.)

MDS 281 Career Placement (1-16)

An internship experience for students who are completing their individualized career plan. (New Center students only.)

MDS 300 Educational Planning (2)

A required orientation course for adult learners (25 years of age and older) who are considering the external studies program as a method of attaining a BA or BS degree from Moorhead State College. The class emphasizes the development of planning and assessment skills and the student applies these skills in designing an individualized degree program. (External Studies students only.)

...and they
...life as it is
...as it could be
...dream about
...paradise
...artist has
...desire to reclaim
...lost.
...artists have an
...a special social
...responsibility, not just
...to camouflage the ills
...of life, but to stand
...up for what they consider
...to be the real quality

Kepes

...
...Earth
...from constant
...dedicated to
...in reality,
...but life must
...with it.
...
...Earth
...up and beyond
...where subtle
...into the best
...try with it—
...Achieving it—
...is with it.
...
...Earth
...and a sense of
...ality.



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MUSIC DEPARTMENT

Donald Key, *Chairperson*; Alice Bartels, David C. Ferreira, Earnest Harris, Nancy Harris, Norman Hessert, Mildred Holstad, Patricia Logsdon, Arthur Nix, Albert Noice, Mary King Osterfield, Robert Pattengale, Roberta Russell, Andrew Smith, Ricardo Visus, William Wilson.

MUSIC CURRICULA

The curricula listed below include majors and minors leading to the degree of Bachelor of Arts or Bachelor of Science (teaching). Graduate programs for the Master of Science in Education (Music) are likewise offered, and detailed information is available from the Dean of Graduate Studies.

Private Lesson Fees

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

Requirement of Senior Recital

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

Teacher Certification in Music

Students seeking teacher certification in both instrumental and vocal music should select the combined major with a concentration in one of the areas of voice, piano, or instrument. Also required are the professional education courses (31 credits) described under Education Curricula — Secondary School Teaching.

Transfer Students

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

Majors in Music — B.A. Degree*Core Courses for All B.A. Majors (90 credits)*

Mus 101-102-103 Comprehensive Musicianship I-II-III (18)
Mus 201-202-203 Comprehensive Musicianship IV-V-VI (18)
Mus 301-302-303 Comprehensive Musicianship VII-VIII-IX (18)
Class or Private Lessons in Major Performance Area (24 — 2 each quarter)
Music Ensemble (12 — 1 each quarter)

Major in Voice — B.A. Degree 99 credits

B.A. Core Courses in Music (90)
Class and Private Piano Lessons or Equivalent Proficiency (6)
Mus 114-115-116 Diction for Singers I-II-III (3)

Major in Piano — B.A. Degree 96 credits

B.A. Core Courses in Music (90)
Mus 404 Small Piano Ensemble (2)
Mus 441-442 Piano Pedagogy I-II (4)

Major in String Instruments — B.A. Degree 96 credits

B.A. Core Courses in Music (90)
Class and Private Piano Lessons (6)

Major in Wind or Percussion Instruments — B.A. Degree 96 credits

B.A. Core Courses in Music (90)
Class and Private Piano Lessons (6)

Majors in Music (Teaching)

Core Courses for All B.S. Majors (65 credits)
Mus 101-102-103 Comprehensive Musicianship I-II-III (18)
Mus 201-202-203 Comprehensive Musicianship IV-V-VI (18)
Mus 301-302-303 Comprehensive Musicianship VII-VIII-IX (18)
Music Ensemble (11 — 1 each quarter except Student Teaching)

Major in Vocal Music (Teaching) 96 credits

B.S. Core Courses in Music (65)
Class or Private Lessons in Voice or Piano (22)
Class or Private Lessons in Remaining Area (6)
Mus 114-115-116 Diction for Singers I-II-III (3)

Major in Instrumental Music — (Teaching) 98 credits

B.S. Core Courses in Music (65)
Class or Private Lessons in Major Instrument (22)
Class or Private Lessons in Piano (3)
Class Lessons in Strings, Woodwinds, Brass, Percussion (8)

Major in Vocal and Instrumental Music (Teaching)

One of the following concentrations may be selected:

Concentration in Vocal Music 107 credits

B.S. Major in Vocal Music (96)
Class or Private Lessons in One Wind or String Instrument (3)
Class Lessons in Strings, Woodwinds, Brass, Percussion (8)

Concentration in Instrumental Music 104 credits
 B.S. Major in Instrumental Music (98)
 Class Lessons in Voice (3)
 Mus 114-115-116 Diction for Singers I-II-III (3)

(All Teacher Education Requirements shall be fulfilled to complete the above teaching majors. See ACADEMIC INFORMATION.)

Minor in Music 42 credits

Mus 101-102-103 Comprehensive Musicianship I-II-III (18)
 Class or Private Lessons in One Major Performance Area (6)
 Music Ensemble (6)
 Electives in Music (12)
 (Elementary Education majors must include Mus 308 Survey of Music Literature II among the electives.)

MUSIC COURSES

Mus 101-102-103 Comprehensive Musicianship I-II-III
 (6 each)

The development of visual, aural, music writing, and performance skills, and the ability to verbalize concepts through the study of musical genre of Western and non-Western cultures selected from all style periods. Must be taken in sequence.

Mus 110 Fundamentals of Music (4)

A course in the rudiments of music specially designed for students in the elementary curriculum. The course includes a study of scale structure, rhythmic patterns, and musical terminology.

Mus 114-115-116 Diction for Singers I (Italian)-II
 (German)-III (French) (1 each)

Fundamental diction in international phonetics.

Mus 150-168 Private Instruction — Level 1 (1-2 each)

Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows:

150 Piano	160 Voice	166 Woodwinds
155 Organ	165 Brass	167 Strings
		168 Percussion

Mus 201-202-203 Comprehensive Musicianship
 IV-V-VI (6 each)

The development of visual, aural, music writing, conducting, and performance skills, and the ability to verbalize concepts through the study of musical genre of Western cultures selected from all style periods. Prerequisite: Mus 103.

Mus 220 Concert Band (1)

Open to all students by arrangement with director. May be repeated for credit.

Mus 223 Symphonic Wind Ensemble (1)

Organized in the fall. Membership by audition only. May be repeated for credit.

Mus 224 Stage Band (1)

Membership by audition only. May be repeated for credit.

Mus 225 Orchestra (1)

Membership by audition only. May be repeated for credit.

Mus 230 Concert Choir (1)

Membership by audition only. May be repeated for credit.

Mus 231 Collegiate Chorale (1)

Open to all students by arrangement with director. May be repeated for credit.

Mus 250-251 General Applied Music (1-2)

Class instruction, including procedures and methods for use in public school classes. On request. May be repeated for credit. Areas as follows:

250 Piano
 251 Voice

Mus 252-255 General Applied Music (2 each)

Class instruction, including procedures and methods for use in public school classes. Areas as follows:

252 Strings
 253 Woodwinds
 254 Brass
 255 Percussion

Mus 258-268 Private Instruction Level II (1-2 each)

Private instruction, pedagogy, and master classes. May be repeated for credit. Areas as follows:

258 Piano	260 Voice	266 Woodwinds
259 Organ	265 Brass	267 Strings
		268 Percussion

Mus 290 European Concert and Study Tour (3)

This is a tour arranged from both a concertizing and study point of view. Qualified tour guides lecture on the art, history, and culture of the various cities visited. In each major city, art museums are visited as well as the city itself, and historical reference is put into clear focus.

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

THE NEW CENTER

See MULTIDISCIPLINARY STUDIES

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PHILOSOPHY DEPARTMENT

Charles Magel, *Chairperson*; Mark Chekola, Arnold Johanson, David Myers

PHILOSOPHY CURRICULA

Philosophy courses are designed to encourage critical thinking about and examination of beliefs related to basic aspects of human existence (such as morality, religion, society, the self, and knowledge) as well as to make students aware of what past and present thinkers have said about these issues. The philosophy major is suitable for students planning to enter such professions as law and theology and for those desiring a general liberal arts background, as well as for those planning on graduate study in philosophy. Philosophy is especially suitable as a second major (or as a minor) combined with almost any other major, since it provides a student with an opportunity to explore the philosophical bases of his or her other major.

Major in Philosophy — B.A. Degree

Major Course Requirements 52 credits

Phil 110 Logic (4)

Phil 115 Ethics (4)

Phil 250 Classical Philosophy (4)

Phil 251 Late Classical and Medieval Philosophy (4)

Phil 252 Modern Philosophy (4)

Electives in Philosophy, including at least 24 credits at the 300 and 400 level (32)

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 251 Late Classical and Medieval Philosophy

Phil 252 Modern Philosophy

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)*
An introduction to 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? Does man have free will? No prerequisite.
- Phil 205 Philosophy of Religion (4)*
Study and discussion of basic problems related to religion, such as: What is religion? Is there a God? Is there a life after death? Why is there evil in the world? Are there good reasons for religious belief? 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 250 Classical Philosophy (4)*
A study of the development of philosophical thinking from the Presocratics through Aristotle. No prerequisite.
- Phil 251 Late Classical and Medieval Philosophy (4)*
Study of Stoicism, Epicureanism, scepticism, and medieval philosophy. No prerequisite.
- Phil 252 Modern Philosophy (4)*
The development of western philosophy from Descartes through Kant. No prerequisite.
- Phil 310 Symbolic Logic (4)*
Modern symbolic logic including propositional calculus and first-order functional calculus. Prerequisite: Phil 110 or consent of the instructor.
- Phil 320 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 340(G) Advanced Ethics (4)*
Analysis of fundamental moral concepts, judgments, and arguments; consideration of major meta-ethical theories. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 350 American Philosophy (4)*
Study of the development of American Philosophy from Puritanism through Pragmatism. 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 the instructor.
- Phil 381(G) Aristotle (4)*
A study of several major works of Aristotle. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 385(G) Continental Rationalism (4)*
Analysis of philosophical thought of Descartes, Spinoza, and Leibniz. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 390(G) British Empiricism (4)*
Analysis of philosophical thought of Locke, Berkeley, and Hume. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 410(G) Nineteenth Century Philosophy (4)*
Analysis of thought of major nineteenth century philosophers, typically selected from the following: Hegel, Marx, Schopenhauer, Kierkegaard, Nietzsche, J. S. Mill. Prerequisite: One course in philosophy or consent of instructor.
- Phil 420(G) Contemporary Analytic Philosophy (4)*
Study of some major themes and figures in contemporary analytic philosophy. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 430(G) Kant (4)*
A study of one or more major works of Kant. Prerequisite: One course in philosophy or consent of the instructor.
- Phil 440(G) Selected Philosophical Problem (1-4)*
Intensive study of a selected philosophical problem. Specific topic for each term offered will be announced in class schedule. Students may register for this course more than once since content will vary. Prerequisite: One course in philosophy or consent of the instructor.

Phil 450(G) Seminar on Major Philosopher (4)
 Intensive study of the work of an important classical or contemporary philosopher. The specific philosopher for each term offered will be announced in class schedule. Students may register for this course more than once since content will vary. Prerequisite: One course in philosophy or consent of the instructor.

Phil 480 Contemporary Philosophical Issues (1)
 Intensive study and discussion of contemporary philosophical problems, using recent journal articles or books. Students may register more than once since content will vary. Prerequisite: Consent of instructor.

Phil 490(G) Independent Study (2-4)
 Intensive independent study of a philosophical problem, major philosopher, or 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.

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PHYSICAL EDUCATION COURSES

See HEALTH-PHYSICAL EDUCATION-RECREATION for Curricula

PE 1 Fundamental Activities (1)

PE 2 Analysis of Human Motion (Body Mechanics) (1)
 An introduction to physical education which includes both lecture and laboratory situations. The mechanics of movement as well as the place and purpose of exercise, fitness, and good posture are explored. Emphasis is placed upon movement skills which will develop more effective and efficient use of the body.

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 and Volleyball (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 60 Beginning Swimming (1)

For non-swimmers only.

PE 61 Intermediate Swimming (1)

PE 62 Swimmers Course (1)

Prerequisite: PE 61.

PE 63 Advanced Swimming (1)

Prerequisite: PE 62 and 66.

PE 66 Senior Life Saving (1)

Prerequisite: PE 62.

*PE 67 Synchronized Swimming (1)**PE 68 Diving (1)**PE 110 Introduction to Physical Education (2)*

Foundations, nature, and scope of professional field. Required as prerequisite to all other courses for majors and minors.

PE 220 Human Anatomy (4)

Study of the bone and muscle structure of the body.

PE 223 Water Safety Instructor's Course (3)

Given under the general direction of the American Red Cross. Students who complete the work satisfactorily are eligible for the Red Cross Water Safety Instructor's Certificate. Prerequisite: Current Red Cross Senior Life Saving certificate and Red Cross Advanced Swimming Course.

PE 240 Physical Education in the Elementary School (2)

Games, rhythms, and other activities recommended for the physical education program in the elementary school. Class meets three hours per week.

PE 243 General Methods for Teaching Physical Education and Team Sports (3)

A two-part course that introduces the student to (1) a variety of methods usable for instructing activity classes and (2) specific methodologies for instruction of team sports. Prerequisite: two team sport activity classes and sophomore standing.

PE 244 Techniques and Skills in Gymnastics (3)

Analysis of fundamental skills in teaching these activities; emphasis on progression and grading materials, and safety measures. Prerequisite: PE 110 and PE 16 and PE 19. Class meets four hours per week.

PE 250 Officiating Football and Wrestling (2)

Study of the rules and mechanics of officiating; responsibilities and qualifications of an official. Class meets three hours per week.

*PE 251 Officiating Basketball and Baseball (2)**PE 252 Officiating Volleyball (2)**PE 253 Officiating Girls' Basketball (2)**PE 305 Principles of Physical Education (3)*

Study of the facts and principles providing the basis of modern physical education. Prerequisites: PE 110 and HLTH 110

PE 321 Human Physiology (4)

Study of the functions of the human body.

PE 343 Techniques for Teaching Gymnastics and Team Sports (3)

A course designed to cover the techniques and methods in teaching gymnastics and team activities as they differ from other activities. Specific information as to class organization, equipment safety, skills tests, strategy, tournaments, meets, judging, lead-up activities, etc. Prerequisites: PE 110, PE 243, PE 16 and 19, and two (2) team activity courses.

PE 345 Techniques for Teaching Dance and Individual Sports (3)

Techniques and methods in teaching dance and individual activities as they differ from other activities. Specific to teaching folk, square, and ballroom dance, plus life time sports activity of golf, tennis, bowling, archery, badminton. Prerequisites: PE 110, PE 243, two (2) dance activities, and three (3) of the above individual activities.

PE 371 Coaching Football (2)

Fall.

PE 372 Coaching Basketball (2)

Winter.

PE 373 Coaching Baseball (2)

Spring.

PE 374 Coaching Track and Field (2)

Spring.

PE 375 Coaching Wrestling (2)

Winter.

PE 376 Coaching Golf and Tennis (2)

Spring.

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)

A study of the function of the systems of man most notably affected by exercise, the lack of exercise, and various work aids. Common physiological problems in the teaching of physical education and coaching of athletics will be considered. Class meets four hours per week. Prerequisite: PE 321 or similar course in human physiology.

Physical Education

PE 422 *Kinesiology* (4)

Analysis of movements of the human body, and the kinesthetic laws involved. Prerequisite: PE 220.

PE 448 *Elementary Physical Education Workshop* (2)

Demonstration and practice in methods of teaching physical education in the elementary school. Movement exploration techniques; teaching in rhythms, self-testing, games, and special events. For experienced teachers or supervisors. Summers only.

PE 452(G) *Adapted Physical Education* (3)

A course designed to promote a knowledge and understanding of the problems, responsibilities, and procedures of physical education for the exceptional individual. The preventive, corrective and remedial aspects of physical education are included in the content of the course. Prerequisite: Physical Education major or minor with senior standing or consent of the instructor.

PE 453 *Physical Education for the Mentally Retarded* (3)

A study of the activities and administration of the physical education program as it is related to the needs, interests, abilities and characteristics of the mentally retarded. Class meets three hours per week.

PE 460 *Principles of Coaching* (2)

The nature of coaching; psychology of handling athletes; analysis of speed, accuracy, strength, endurance, form, and other factors influencing athletic performance. Prerequisite: six hours of coaching courses and senior standing.

PE 460W *Principles of Coaching* (2)

The history, philosophies, and psychology of coaching; analysis of factors affecting athletic performance; introduction of Minnesota State High School League regulations. Prerequisites: senior standing and instructor approval.

PE 474 *Tests and Measurements in Physical Education* (3)

Basic approach to statistics, measurements, and evaluation in physical education.

PE 475(G) *Administration of Athletics* (3)

Study of problems, policies, and procedures in the administration of the high school athletic program. Prerequisite: PE 110 and senior standing.

PE 495(G) *Administration of Physical Education* (3)

Policies, procedures, and problems in administration of physical education. Prerequisite: PE 110 and senior standing.

PE 505 *History and Philosophy of Physical Education* (3)

PE 540 *Problems in Physical Education* (3)

Study of individual problems and problems common to groups.

PE 560 *Studies in Athletic Training* (3)

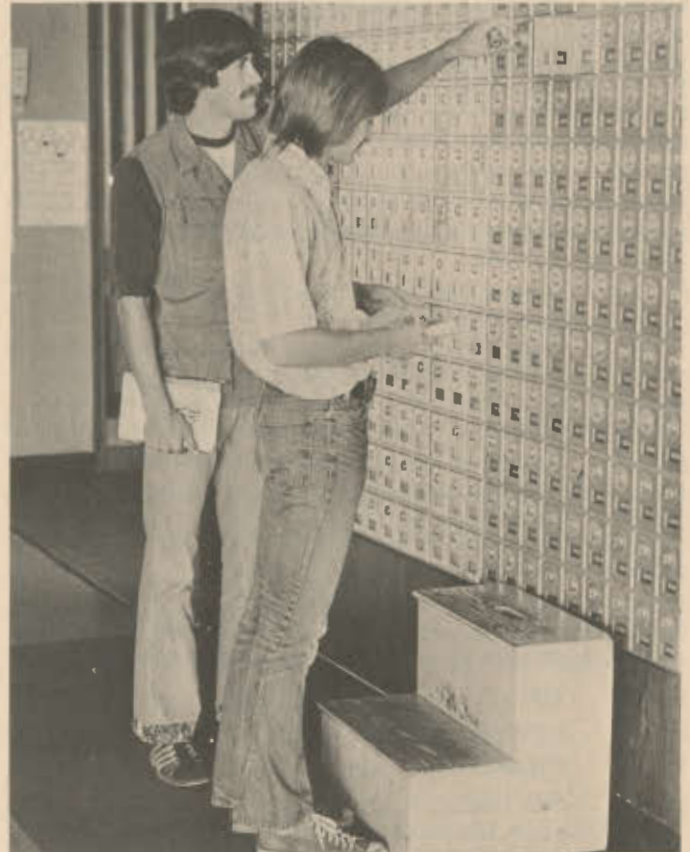
Directed reading and discussions; special emphasis on research in athletics. Prerequisite: Playing and/or coaching experience in athletics.

PE 574 *Tests and Measurements in Physical Education* (3)

Standardized tests; test construction and administration.

PE 599 *Thesis in Physical Education* (6)

Registration only after consultation with major advisor.



PHYSICS-ASTRONOMY DEPARTMENT

Walter Wesley, *Chairperson*; Gerald Hart, Roger Sipson, Walter Vollmers, James Wray, Hsin-Yang Yeh.

Areas of Study: Astronomy, Physics

PHYSICS-ASTRONOMY CURRICULA**Major in Physics — B.S. Degree**

Major Requirements in Physics 65 credits

Physics 118-119-220-221: General Physics I, II, III, IV (16)

Physics 240: Electronics (4)

Physics 322: Elementary Modern Physics (3)

Physics 330-331: Intermediate Mechanics I, II (6)

Physics 350-351-352: Junior Physics Laboratory I, II, III (6)

Physics 370-371: Electromagnetic Theory I, II (6)

Physics 451-452: Advanced Physics Laboratory I, II (2)

Physics 490: Physics Seminar (1)

Electives in Physics — 21 hours at 200 level or higher with at least 15 of these hours at 300 level or higher (21)

Requirements in Related Fields 20 credits

Math 231-232-233-234 Calculus I-II-III-IV (16)

Math 331 Differential Equations (4)

Major in Physics — B.S. Degree (Teaching)

Major Requirements in Physics 44 credits

Physics 118-119-220-221: General Physics I, II, III, IV (16)

Physics 240: Electronics (4)

Physics 322: Elementary Modern Physics (3)

Physics 330: Intermediate Mechanics I (3)

Physics 350-351-352: Junior Physics Laboratory (6)

Physics 440: Physics Methods for Secondary Schools (3)

Electives in Physics (200 level or higher) (9)

Requirements in Related Fields 31 credits

Chem 111-112-113 General Chemistry I-II-III (11)

Chem 111L-112L-113L General Chemistry Laboratory I-II-III (4)

Math 231-232-234 Calculus I-II-III-IV (16)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Physics — B.A. or B.S. Degree

Minor Requirements in Physics 31-37 credits

118-119-220-221: General Physics I, II, III, IV (16)

Physics 240: Electronics (4)

Physics 322: Elementary Modern Physics (3)

Physics 350-351-352: Junior Physics Laboratory I, II, III (6)

Approved electives (6)

Minor in Astronomy — B.A. or B.S. Degree 35-38 credits

Ast 100 Introduction to Astronomy and Space Science (4)

Ast 101 Observational Astronomy (3)

Ast 200 Cosmology

or Ast 210 The Evolution of Stars (3)

Ast 410 Astrophysics (3)

Phys 111-112-113 Elementary Physics I-II-III

or Phys 218-219-220 General Physics I-II-III (12 or 15)

Electives in Astronomy or Physics, including one of the following courses (10):

Ast 300 Topics in Modern Astronomy

Ast 499 Topics in Advanced Astronomy

Phys 450 Advanced Physics Laboratory IV

PHYSICS COURSES

Phys 101 Introduction to Physics (4)

An introductory survey of physical concepts including mechanics, electricity and magnetism, waves, atomic and nuclear physics. Limited mathematics background is assumed. Three lectures plus one three hour lab.

Phys 105 Physics of Music (4)

Deals with the physical principles involved in the production, transmission, and reception of musical sounds. Topics include: Vibrations and waves, loudness measures, pitch, tone formation, room acoustics, and musical instrument design principles. A background in music is strongly recommended.

Phys 106 Man and Energy (3)

Man and Energy traces the path of energy through industrial society. The laws of energy conservation and entropy increase are developed in this context. Energy resources, energy demand, energy conversion processes, energy transportation, energy storage and energy policy form the scenario for a discussion of the environmental effects of energy flow through society. More emphasis is placed on pending ecological catastrophes such as posed by radioactive wastes and thermal pollution than the relatively short term effects of air pollution, a by-product of the fossil fuel age. Possible energy conversion schemes of the future including breeder reactors, fusion, and solar are dealt with at length exploring their pros and cons relative to the energy categories discussed above.

Phys 107 Lasers and Light (3)

This is a non calculus based course on the nature of light and the laser, its applications and how it works. Topics to be discussed

include: wave theory; the wave theory of light; holography; properties of laser light (coherence, narrow bandwidth, energy density); laser operation; laser applications in holography, communication, thermonuclear fusion research, cartography, medicine, etc.; and the particle theory of light. Each student will make a hologram. No prerequisites or math requirements.

Phys 110 Topics in General Physics (3)

An in-depth study of a specific area of physics. Examples might be: light, atmospheric physics, energy sources, and history of mechanics. Limited mathematics background is assumed.

Phys 111-112-113 Elementary Physics I-II-III (4 each)

111: Concepts and principles of mechanics. 112: Concepts and principles of heat, light, sound. 113: Concepts and principles of electricity, magnetism, and modern physics. Emphasis on application to medicine, dentistry, and other professional fields except engineering. Prerequisite: Math 131. Three lectures plus one three hour lab.

Phys 210 Topics in Modern Physics (3)

An in-depth study of a specific area of modern Physics. Examples might be: atomic and nuclear physics, the solid state, and elementary particle physics. Prerequisite: High school physics, Physics 101, Physics 110 or permission of instructor.

Phys 118 General Physics I (4)

A calculus-based study of mechanics. Newton's laws for linear and rotational motion. Work, power, and energy. Conservation of energy, linear momentum, and angular momentum. 3 lectures and 1 recitation session. Prerequisites: Math 231. Corequisite: Math 232.

Phys 119 General Physics II (4)

Continued study of mechanics including simple harmonic motion and elements of fluid mechanics. Wave motion. Sound and its properties. Thermal properties of matter. First and second laws of thermodynamics. 3 lectures and one three-hour laboratory. Prerequisite: Phys 118 or permission of instructor.

Phys 220 General Physics III (4)

A study of electric charges, the electric field and potential. Capacitors and Dielectrics. Electric current. Simple D.C. and A.C. circuits. Magnetic fields. Magnetic properties of matter. 3 lectures and one three-hour laboratory. Prerequisite: Phys 119 or permission of instructor.

Phys 221 General Physics IV (4)

Continued study of electromagnetism including electromagnetic waves and their propagation. Light and its properties. Geometrical optics. Physical optics including interference,

diffraction, and polarization. Preview of modern physics. 3 lectures and one three-hour laboratory. Prerequisite: Phys 220 permission of instructor.

Phys 240 Electronics (4)

A course for science students designed to give them a working understanding of electronics and instrumentation. Includes D.C. circuits, A.C. circuits, electrical measurements, diodes, transistors, amplifier circuits, waveform generators, and operational amplifiers. Prerequisites: Phys 113 or Phys 220 or permission of instructor.

Phys 322 Elementary Modern Physics (3)

Modern concepts and phenomena of physics. Includes: special relativity, particle properties of waves, wave properties of particles, the nuclear atom, Bohr atom, quantum mechanics, quantum mechanical treatment of hydrogen atom, electron spin and many-electron atoms, molecules, solid state physics, nuclear properties, radioactivity, nuclear reaction, elementary particles. Prerequisites: Phys 221 and 331 or consent of instructor.

Phys 290 Introduction to Relativistic Physics (3)

An introduction to the foundations of the special theory of relativity. Principle of relativity, Lorentz transformations, length and time, space-time, space-time diagrams, energy and linear momentum, equivalence of energy and rest mass. Prerequisites: Physics 221 or Physics 113, Math 234.

Phys 320 Elements of Physical Science (4)

Basic concepts of physical science in the elementary education curriculum. Emphasis is on the functional approach with lecture-demonstrations as well as laboratory experience when possible. Numerous teaching aids demonstrated. Restricted to seniors and juniors in elementary education except by permission of the instructor. (Formerly Science 220)

Phys 330-331(G)-332(G) Intermediate Mechanics I-II-III (3 each)

An advanced unified approach to physical problems. Includes: Newton's Laws; algebra and calculus of vectors; particle dynamics in one, two, and three dimensions; systems of particles; gravitation; moving reference frames; Lagrange's equations; dynamics of rigid bodies; Hamilton's equations; variational principles; Hamilton-Jacobi theory; small oscillations; mechanics of continua; special theory of relativity. Prerequisites: Phys 221 and Math 331 or permission of instructor.

Phys 345(G) Aerospace Education Workshop (4)

A functional approach to the learning of scientific principles relating to aerospace science. Included are basic principles of

mechanics, meteorology, and astronomy. Numerous guest lecture-demonstrations and opportunities to construct teaching aids. Field trips. An air tour is provided when possible. No prerequisite, but restricted to elementary and secondary teachers and teaching candidates except by permission of the instructor. First summer session only. (Formerly Science 345).

*Phys 350-351-352 Advanced Physics Laboratory
I-II-III (2 each)*

Laboratory for intermediate and advanced courses in physics. Prerequisite: Phys 221 and Phys 240 or permission of the instructor.

Phys 370-371-372(G) Electromagnetic Theory and Physical Optics I-II-III (3 each)

An advanced study of electromagnetism, electromagnetic waves, and light. Includes: Boundary value problems for Poisson's and Laplace's equations, electrostatics of microscopic media, magnetostatics, Maxwell's equations, plane electromagnetic waves, Huygen's principle, interference, polarization, Fresnel's equations, radiation and diffraction, multipole fields, scattering and dispersion, Lienard-Wiechert potentials, self forces, radiation of moving charges, relativistic particle dynamics, covariant formulation of electro-dynamics. Prerequisites: Phys 221 and Math 331.

Phys 399 Thermodynamics (3)

Elements of classical thermodynamics, thermodynamic state, first law of thermodynamics, applications of the first law of gasses, Carnot cycle, entropy, second law of thermodynamics, equilibrium conditions, thermodynamic potentials, chemical equilibrium, the third law of thermodynamics. Prerequisites: Physics 221 or permission of instructor.

Phys 402 The Relevance of Physics (4)

Chief world models of physics, central themes of physics, physics and other disciplines, place of physics in human culture, physics and technology. Prerequisite: High school physics, one quarter of college physics or permission of instructor.

Phys 430(G) Introduction to Wave Mechanics (3)

Basic tools of atomic and nuclear physics. Quantum mechanics, wave-particle duality, the Uncertainty Principle, Schroedinger equation, free-particle solutions of the Schroedinger equation, the harmonic oscillator, the one-electron atom. Prerequisites: Physics 332 and 371 or permission of instructor.

Phys 431(G) Atomic and Molecular Physics (3)

Applications of wave mechanics to atoms and molecules, spin-orbit interaction, quantization of angular momentum, fine

and hyperfine structure in hydrogen, Pauli principle and the periodic table, atomic spectroscopy, molecular binding, molecular spectra, quantum statistics. Prerequisite: Physics 430 or permission of instructor.

Phys 432(G) Nuclear and Solid State Physics (3)

Solid State Physics: Crystalline structure of solids, lattice dynamics, thermal properties of crystals, free-electron theory of metals, X-rays and X-ray diffraction. Nuclear Physics: Basic properties of nuclei, radioactivity nuclear models, nuclear reactions, elementary particles. Prerequisite: Physics 431 or permission of instructor.

Phys 440 Physics Methods for Secondary Schools (3)

For secondary education students majoring in physics. Consisting of materials and methods typical to high school physics and those unique to P.S.S.C. and Harvard Project Physics. Prerequisite: Senior status in Physics major.

*Phys 450-451 Advanced Physics Laboratory IV-V
(1 each)*

Laboratory for advanced courses in physics. Prerequisite: Permission of the instructor.

Phys 460 Mathematical Concepts for Modern Physics (3)

Elementary concepts of topological, metric, Banach, and Hilbert spaces; the theory of distributions; group representations. Primarily intended for students considering graduate work in physics. Open to senior physics majors only except by permission.

Phys 490(G) Physics Seminar (1 each)

Examination of some of the current literature in the field. Analysis and presentation of some aspects of this literature by students. Prerequisite: Permission of Department Chairman.

Phys 499(G) Special Problems in Physics (1 to 4)

Considers special intermediate and advanced problems in physics. Area and credit to be specified in transcript. Prerequisite: Permission of Department Chairman.

POLITICAL SCIENCE DEPARTMENT

David Flint, *Chairperson*; John Calvert, Edward Estes, Anoushiravan Khoshkish

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 any 400-level seminar 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 (36):

American Studies or Minority Group 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, 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)

Major Course Requirements 31 credits

Pol 110 Political Science as a Discipline (4)

Pol 120 National Government (4)

Pol 250 Comparative Government of Western Europe (4)

Pol. 160 International Relations (4)

Pol. 410 Topics in Western Political Thought (4)

At least one quarter of any 400-level seminar to be selected by the student (3-4)

Electives in Political Science (At least 8 credits)

Ed. 440 Social Studies in the Secondary School (3)

Anthropology or Sociology

History

Economics

Geography

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

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 any 400-level seminar to be selected by the student (3-4)

Electives in Political Science: One course.

POLITICAL SCIENCE COURSES

Pol 110 Political Science as a Discipline (4)

The place of political science among and its relations with other sciences; man and his behavior in the political context; order, justice, and liberty; authority and government and their different forms.

Pol 120 National Government (4)

Fundamentals of political institutions, structures, processes and functions, with particular emphasis on American Government.

Pol 160 International Relations (4)

Nation-state and sovereignty; national interests and motivations; power politics and balance of power; diplomacy, intelligence, and war; rules of the game; dilemma of peace.

Pol 221 State and Local Government (4)

Examination of the structure, operation, and politics of state and local government. Attention is given to municipal, county, special district, and regional units of government as well as to 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; natural law; positive law; legal realism; sources of law; common law and customs; jurisprudence; administration of justice; the jury and the judge.

- Pol 240 Public Administration (4)*
An introduction to the study of the public bureaucracy within the context of a democratic political system. Included are such topics as staff functions, program planning, and the administrative direction of agency affairs.
- Pol 250 Comparative Government of Western Europe (4)*
Political systems of major Western European states.
- Pol 290 Introductory Seminar in Political Science (2-4)*
An examination of an issue, problem, or concept at an introductory level in a seminar setting. May be repeated as the topic varies.
- Pol 310 Scope and Method (3)*
The current dispute between "behaviorists" and "traditionalists" about proper methodology, approach, and technique in political science. Representative studies are used to illustrate different approaches to the study of politics.
- 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)*
Historical evolution of Communism in Eastern and Western cultures as a theory and practice of government. Marxism and the nineteenth century development of Communism, its dialectic of historical materialism and the future stateless society; will the state wither away?
- Pol 320 The American Congress (3)*
A study of the role of Congress within the American political system. Special attention is given to Congressional decision making, organization, and relationships with other branches of the federal government.
- Pol 321 The American Presidency (3)*
A study of the role of the President within the American political system. Special attention is given to presidential decision making and relationships with other branches of the federal government.
- Pol 323 American Minority Group Politics (4)*
A study of political and social interaction of minority groups and the political institutions, processes and behavior in the United States.
- Pol 324 American Political Parties (3)*
The nature and role of parties, interest groups, and public opinion, with particular emphasis on the American political system.
- Pol 325 Urban Politics (3)*
Examination of the nature of urban politics. Emphasis is given both to the urban political system and to selected urban problems and policies.
- Pol 326 Public Opinion (3)*
An analysis of the formation and structure of public opinion, with particular reference to American politics. Special attention is given to the problem of the manipulation of public opinion.
- Pol 330 The Judicial System (4)*
The legal institutions, their functions and procedures, with particular emphasis on Anglo-Saxon experience. The American judiciary system; case studies from both private and public law.
- Pol 341(G) Policy and Administration (3)*
The policy processes of the national government, focusing particular attention on the interplay between the political forces and administrative agencies. Detailed exploration of how the Executive and the Congress direct and control administration, with illustrations from major foreign and domestic policies.
- Pol 352(G) Political Problems in Developing Countries (3)*
Analysis of the social and economic conditions affecting political institutions and their forms in the developing countries. The third world in the political and economic context of international relations.
- Pol 353 Politics of Latin American Countries (4)*
Comparative analysis and interpretation of political forces operating in Latin America and their impact on the form of government and political institutions in the area.
- Pol 355(G) Politics of Scandinavia*
A discussion of the current political structures and problems of the Scandinavian Countries.
- Pol 360(G) American Foreign Policy (4)*
The particularities of the U.S. foreign policy in the light of its historical evolution; geographical position; economic, military, and political interests. Theory and practice within the federal system of government and the American democracy.
- Pol 361(G) Topics in International Law (3 each, may be repeated)*
The legacy of international law; the doctrine of sovereignty; sources of international law; rights and obligations of states; freedom of the high seas; disputes, conflicts and the laws of war. New approaches in the light of the new international patterns. International law through the cases. The development of

international jurisdiction; negotiation, arbitration, and judicial settlement. The court system and its development.

Pol 362(G) Topics in International Organizations (3 each, may be repeated)

The historical development of international organizations; the ideal and functional approaches. The nineteenth century European experiences; from the League of Nations to the United Nations; the charter; its meaning, and its interpretation. The Specialized Agencies of the United Nations; different regional organizations, their economic, political, cultural, or military purposes and the degree of their integration.

Pol 410(G) Topics in Western Political Thought (4 each, may be repeated)

Political thought from ancient times to the Reformation. Political thought from the seventeenth century to the present.

Pol 411(G) Eastern Political Thought (3)

An introduction to the traditional concepts of government in Asia. The major schools of political thought in China, India, and Persia through the ages and later developments in Japan and the Middle East up to the advent of modern states.

Pol 420(G) Seminar in American Politics (3)

Research and advanced analysis of selected topics. Supervised personal studies by students interested in the American political system. May be repeated as content is changed.

Pol 430(G) Topics in Constitutional Law (3 each, may be repeated)

Interpretation of the Constitution of the United States by federal courts with particular emphasis on the federal governmental system. Interpretation of the Constitution of the United States by federal courts with emphasis on civil rights.

Pol 431(G) Social Work and the Law (3)

An examination of legal procedures and services with which social workers are concerned. Discussion focused on our court system, probation and parole system, evidence and court procedures, marriage annulment, divorce, support and paternity, guardianship and paternity, adoption, foster home placement, child abuse, and other related legal problems. Same as SSer 431(G).

Pol 441 Topics in Public Administration (2-4 may be repeated for credit)

Topics will be selected from such topics as: public personnel (development and maintenance of an efficient, effective and representative public service) and organization theory and

problems (how organizations are managed with emphasis on bureaucracies) and other appropriate subjects.

Pol 450(G) Topics in Comparative Government of Asia (3 each, may be repeated)

Analysis of political systems of Asian countries with traditional patterns and modern governmental institutions of western inspiration, including India, Japan, and Southeast Asia. An examination of the Marxist theory and practice of government as applied in the Asian context, with particular emphasis on China. The role and leadership of Communist parties in changing the social and political pattern of Asian institutions.

Pol 455 Topics in Comparative Government (2-4 may be repeated for credit)

Topics will cover such areas as the British Commonwealth, Europe, Africa, Asia, or the middle East or some particular aspects of Comparative Government or regions of the world. Issues and problems appropriate to the topic will provide the organizational frame work for each course.

Pol 460(G) International Politics (4)

A systematic survey of contemporary theories of international conflict. The roles played by the individual, the state, and the international environment as "actors" in global politics. Motivation of actors; international ethics; bargaining, strategy, and the balance of power; nationalism and ideology; and transformation of the current world system.

Pol 461(G) Independent Study in Political Science (1-6)

Selected readings in political science done under the close supervision of members of the department. A research paper may be required; special projects may be arranged. 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)

An examination of an issue, problem, or concept at a senior level in a seminar setting. May be repeated as the topic varies. Prerequisites: Pol 110 and 120 or consent of instructor.

Pol 590 Graduate Seminar in Political Science (2-4)

An examination of an issue, problem, or concept at a graduate level in a seminar setting. May be repeated as the 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.

PSYCHOLOGY DEPARTMENT

James F. Condell, *Chairperson*; Bradley Bremer, Rudolph Chang-Yit, David Cole, Richard Y. Reed, Phillip L. Rice, Mildred Treumann, Helen K. Wilson

PSYCHOLOGY CURRICULA**Major in Psychology — B.A. Degree**

Major Requirements in Psychology 56 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)

Any two of the following courses (8):

Psy 442 Learning

Psy 444 Motivation and Emotion

Psy 445 Physiological Psychology

Psy 446 Perception

Psy 481 Seminar in Psychology (4)

Electives in Psychology 20 credits; at least 16 should be at the 300 level or above

**Psy 101-115-117 may be substituted with departmental approval. The student should maintain "B" level work in substitute courses.*

Requirements in Related Fields 4 credits

Math 121 College Algebra (4) or equivalent mathematics proficiency

Major in Psychology (Teaching)

Major Requirements in Psychology 60 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 & Methodology I, II (10)

Psy 346 Principles of Learning (4)

Psy 351 Individual Differences (4)

Psy 440 Psychology in the Secondary Schools (4)

Psy 481 Seminar in Psychology (4)

Electives in Psychology (20) Sixteen credits should be at the 300 level or more**Psy 101-115-117 may be substituted with departmental approval. The student should maintain "B" level work in substitute courses.*

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Psychology 38-39 credits

Psy 103-104-105 Introductory Psychology I-II-III (12)*

Psy 106-107 Introductory Psychology Laboratory I-II (2)

One of the following (4-5):

Psy 231 Psychological Statistics and Methodology

Math 274 Introduction to Statistics

Soc 350 Applied statistics for sociology (4)

Psy 346 Principles of Learning (4)

Electives in Psychology, including one of the following sequences and one additional course (16):

Clinical — Psy 460, 465, 476

Developmental — Psy 401-402-403

Differential — Psy 301, 352, 353

Social — Psy 320, 321, 322

**Psy 101-115-117 may be substituted with department approval. The student should maintain "B" level work in substitute courses.*

Minor in Psychology (Teaching) 38-39 credits

This minor is designed specifically for those prospective secondary school teachers who also seek to be qualified as part-time teachers of psychology. To qualify for this minor the student must complete a secondary teaching major in another field and earn a B.S. (teaching) degree.

Psy 103-104-105 Introductory Psychology I-II-III (12)*

Psy 106-107 Introductory Psychology Laboratory I-II (2)

One of the following (4-5)

Psy 231 Psychological Statistics and Methodology

Math 274 Introduction to Statistics

Soc 350 Applied statistics for Sociology (4)

Psy 321 Social Psychology (4)

Psy 346 Principles of Learning (4)

Psy 351 Individual Differences (4)

Psy 440 Psychology in the Secondary School (3)

Psy 460 Abnormal Psychology (4)

**Psy 101-115-117 may be substituted with department approval. The student should maintain "B" level work in substitute courses.*

(This minor can be awarded only in combination with at least one teaching major.)

PSYCHOLOGY COURSES

Psy 101 *General Psychology* (4)

Survey of content and methods of modern psychology. Students in 101 may not take Psy 103-104-105 for credit.

Psy 103-104-105 Introductory Psychology I-II-III (4 each)
 103-104: Survey of psychological topics such as learning, motivation, emotions, intelligence, personality and social relations. Students may be asked to participate in psychological experiments outside of class. For up to five hours per quarter.
 105: A survey of contemporary problems in the field of psychology with an emphasis on an integration of research in the major area. Students in 103-104-105 may not take Psy 101 for credit.

Psy 106-107 Introductory Psychology Laboratory I-II (1 each)
 Classical and contemporary experiments/exercises in psychology in the traditional areas of Introductory Psychology. Prerequisite: Concurrent or prior enrollment in Psy 103-104-105 or 101-115-117.

Psy 115 Developmental Psychology (4)
 Psychological development of the individual through adolescence. Reports of research dealing with genetic, pre-and post-natal influences; relations with parents and peers; social, emotional and intellectual development. Prerequisite: Psy 101.

Psy 117 Personality (4)
 Application of psychological principles to an introductory understanding of personality and interpersonal adjustments; social motivation, frustration, conflicts, and adjustment mechanisms; the assessment of personality and some theories of psycho-therapy. Prerequisite: Psy 101.

Psy 201 Contemporary Issues in Psychology (4)
 To provide an in depth look at some subjects in Psychology and their current developments, with emphasis on the applications of findings and theories of Psychology to the situation and problems of contemporary society. Prerequisite: Psy 101, 103, or the equivalent.

Psy 220 The Psychology of Women (4)
 A course designed to investigate the biological, physiological and psychological development of the female. It is to offer available scientific evidence on sex differences, role differentiation, motivations of men's and women's role in modern society. Prerequisite: consent of the instructor.

Psy 231-232 Psychology Statistics and Methodology I, II (5 each)
 Investigation of the application of scientific method of psychology.
 231: Introduction to Probability. Frequency distribution and their graphic representation; normal distributions and probability; sampling methods; linear regression and correlation. Laboratory included.

232: Advance Probability and Statistics. Mathematical probability as a basis for statistical theory. Discrete and continuous probability models. Conditional probability, random variables, sampling distributions, estimations, confidence intervals, test of hypotheses, some non-parametric tests. Laboratory included. Must be taken in sequence.

Psy 301 People, Work and Organizations (4)
 Introduction to the principles of psychology as applied to business and industry. Prerequisite: 12 hours of Psy or consent of the instructor.

Psy 320 Social Psychology (4)
 Coverage of the theories and empirical research in social perception attitudes, group process and socialization. Prerequisite: 12 hours of psychology or sociology or consent of instructor.

Psy 321 Attitude Organization and Change (4)
 Examination of attitude organization; relationships between affective cognitive and behavioral components; theories of attitude change, including an examination of current propaganda techniques. Prerequisite: 12 hours of course work in the social sciences or consent of the instructor.

Psy 322 Group Dynamics (4)
 An examination of factors involved in the functioning of any group with emphasis on small groups. Consideration given to both theory and current research in the field. Prerequisites: Psy 320, Soc 305 or consent of the instructor.

Psy 346 Principles of Learning (4)
 A theoretical and laboratory course detailing the fundamental principles of learning which can be subsequently applied to related fields of psychology. Not intended for majors in psychology. Laboratory included. Experiments in learning analysis are conducted. Prerequisites: Junior standing or above. Psy 231, Math 274, or Soc 350.

Psy 351 Individual Differences (4)
 Ways in which individuals differ; methods, theories, and techniques for understanding and studying personality structure in relation to causation. Prerequisite: 12 hours of Psy or the consent of the instructor.

Psy 352 Psychometrics (4)
 An examination of the assumptions underlying the assignment of numbers to behavioral attributes. Discussion of the statistical indices and techniques involved in scale construction. The taxonomy of measuring devices. Prerequisite: 12 hours of Psy or the consent of the instructor.

Psy 401(G) Child Psychology (4)

Study of the developing child from the prenatal period to puberty with emphasis on physical, cognitive, social and emotional development. Prerequisite: Consent of the Instructor.

Psy 402(G) Adolescent Psychology (4)

An introduction to the psychological research on adolescent development with emphasis on physical, intellectual, social, emotional, and sexual development. Prerequisite: Consent of the Instructor.

Psy 403(G) Human Development (4)

Discussion of some of the major theoretical approaches and current issues in human development. Prerequisite: Consent of the Instructor.

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 the instructor.

Psy 442(G) Learning (4)

Laboratory course applying theory and methodology in experimentation. Principal topics: Learning theory and motivation. Laboratory included. Prerequisite: Psy 232.

Psy 444(G) Motivation and Emotion (4)

Motivation, emotion and perception. Lectures and laboratory study of these processes with emphasis on experimental procedures. Laboratory included. Prerequisite: Psy 232.

Psy 445(G) Physiological Psychology (4)

The study of the basic neurochemical, neurophysiological, and neuroanatomical characteristics of the nervous system which function in the control of behavior. The physiological processes underlying perception, motivation, and learning will be those of primary interest. Experiments in the laboratory will be an integral part of the course work. Prerequisite: Psy 232.

Psy 446(G) Perception (4)

The way in which the individual interprets his physical environment and reacts to it. A study of the sensory determinants of behavior. Laboratory included. Prerequisite: Psy 232.

Psy 447(G) Comparative Psychology (4)

The study of animal behavior from an ontogenetic and phylogentic point of view; intra- and interspecific comparisons of innate behavioral patterns, sensory and learning processes, and social behavior. Laboratory included. Prerequisite Psy 232.

Psy 448(G) Cognition (4)

An investigation of theoretical approaches and experimental evidence related to human cognitive processes. Topics include

conceptualization, problem solving, and originality. Laboratory included. Prerequisite: Psy 232.

Psy 460(G) Abnormal Psychology (4)

Behavior pathology; theories of development of functional disorders; theories of remediation. Prerequisite: Consent of the instructor.

Psy 465(G) Clinical Psychology (4)

Survey of approaches to diagnosis of maladjustment and its remediation. Introduction to techniques of psychotherapy. Prerequisite: Consent of the instructor.

*Psy 469 Student Internship in Psychology (3-16)**Psy 470(G) History and Systems of Psychology (4)*

Contemporary theories and their historical development. Prerequisite: Consent of the instructor.

Psy 476(G) Theories of Personality (4)

Theoretical approaches to the study of personality; trait theories, field theory, psychoanalysis, social theories. Prerequisite: Consent of the instructor.

Psy 481(G) Seminar in Psychology (4)

Topics of special interest. For majors, and advanced students in other areas. This may be repeated. Prerequisite: Consent of the instructor.

Psy 491(G) Problems in Psychology (4)

Individual projects on subjects of special interest. This may be repeated. Prerequisite: Consent of the 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 Seminar in Professional School Psychology (1)

Introduction to the background and practical aspects of the educational enterprise from the viewpoint of professional school psychology. Prerequisite: Consent of the Instructor.

Psy 501 Introduction to School Psychological Services (3)

Psychology as it applies to the school setting; history, role and function of the school psychologist; introduction to common referral problems. Prerequisite: Consent of the instructor.

Psy 502 Theory and Principles of Measurement (3)

Theoretical background of psychological testing; background, administration and interpretation of individual intelligence scales. Prerequisite: Consent of the 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: Consent of the instructor.

Psy 504 Advanced Individual Psychological Testing (3)
Individual personality appraisal of children and adolescents. Prerequisite: Consent of the instructor.

Psy 505-506 Practicum in School Psychology I, II (2 each)

Diagnostic work with school-age populations in one of several community facilities. Twelve clock hours per week under supervision of a certified school psychologist. Prerequisite: Full time enrollment in the school psychology training program.

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.

Rec 41 Intermediate Horsemanship (1)
Offered to anyone who has had a basic knowledge of riding or has taken beginning horsemanship.

Rec 42 Advanced Horsemanship (1)
Offered to those who have had intermediate horsemanship, and to those who have a special interest in horseshow competition.

Rec 50 Self-Defense (1)
Combination of various oriental self-defense techniques. Includes Karate, Judo and Aikido.

Rec 110 Introduction to Recreation Education (2)
Broad understanding of the whole recreation field; principles, nature, and scope of recreation; types of recreation agencies; study of leisure-time needs and interests of all ages; organization and administration of programs and facilities.

Rec 140 Camping and Outdoor Education (3)
Designed to give a broad perspective of the field of organized camping; aims, purposes, and values; leadership training for counselors.

Rec 210 Leadership in Recreation (3)
Methods, materials, and techniques in recreation leadership. Analysis of activities, qualifications, selection, and training of voluntary leaders. Vocational opportunities.

Rec 253 Youth Organizations (2)
History and development of selected youth organizations. Study of objectives, administration, program, and vocational opportunities.

Rec 254 Scouting Organizations (2)

Rec 450 Field Work in Recreation (3)
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)
An opportunity for students to work with state and/or local recreation agencies. The program will assist students in developing a better understanding of school-community relations, aid them in determining career opportunities, and provide cooperating agencies contact with potential recreation personnel. Prerequisite: recommendation of HPER advisor.

RECREATION COURSES

See HEALTH-PHYSICAL EDUCATION-RECREATION for Curricula

Rec 10 Table-Net Games (1)
Table tennis, paddle ball, aerial darts, deck tennis, billiards, and shuffleboard.

Rec 21 Curling (1)
Beginning course on the basic fundamentals of the Scottish game called curling.

Rec 23 Beginning Ice Skating (1)

Rec 25 Beginning Figure Skating (1)

Rec 27 Beginning Skiing (1)
Fundamentals and practice application of the American Ski technique. Emphasis on form, technique, and knowledge of ski safety.

Rec 34 Scuba Diving (1)

Rec 40 Beginning Horsemanship (1)
Offered to those who have never ridden or to those who felt they could not start in intermediate.

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.

RUSSIAN LANGUAGE COURSES

Courses below may be offered only if demand warrants.

Rus 101-102-103 Beginning Russian I-II-III (5 each)
Inductive approach to grammar; reading of simple texts; oral practice stressed.

Russ 201-202-203 Intermediate Russian I-II-III (4 each)
Modern readings; grammar review. Prerequisite: Russian 101-102-103 or equivalent.

Rus 297 Independent Study in Russian (1-3)
Selected project as agreed by student and instructor.
Prerequisites: Completion of, or concurrent enrollment in, Russian 201-202-203. Consent of instructor. Approval by department chairman upon presentation of proposal. May be repeated up to a total of 6 credits.

SCANDINAVIAN STUDIES

The Scandinavian studies program at Moorhead State College is an interdepartmental offering involving the Departments of Art, English, Languages and History. Participating faculty from these departments are:

Kenneth Smemo, *Chairperson* (History), Roy Boe (Art), Clarence Glasrud (English), Victor Peters (History), Kathleen Stokker (Languages)

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 General Studies Plan "B".

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.

Minor in Scandinavian Studies — B.A. or B.S. Degree (36)

Maximum of 12 Credits in Norwegian Language Applicable:

Scan 101-102-103 Beginning Norwegian I-II-III (5 each)

Scan 201-202-203 Intermediate Norwegian I-II-III (4 each)

Electives in Scandinavian Studies to Complete Minor:

Art 465 The Art of Norway (3)

Engl 481/Scan 381 Older Literature of Scandinavia (4)

Engl 482/Scan 382 Ibsen and Strindberg (4)

Engl 483/Scan 383 Modern Scandinavian Novel (4)

Hist 348 Studies in European History — Scandinavian Topics (3 each):

Earliest Times to the 18th Century

18 Century to WWII

Modern Scandinavia in Historical Perspective

Hist 349 Studies in North American History — Scandinavian Topics (3):

The Scandinavians in America

Hist 404 Seminar in European History — Scandinavia (4)

Scan 231 Scandinavian Culture and Civilization (3)

Scan 297 Independent Study (1-3)

Scan 397 Independent Reading in Norwegian (1-3)

(It is recommended that students electing this minor also complete the Hist 101-102-103, Western Civilization I-II-III, sequence in addition to the minor.)

SCANDINAVIAN LANGUAGE AND LITERATURE COURSES

Scn 101-102-103 Beginning Norwegian I-II-III (5 each)

An introductory course. Strong emphasis on the spoken language; pronunciation; aural-oral drill. Reading, an inductive study of grammar. Language Laboratory: Regular periods as required by instructor.

Scan 201-202-203 Intermediate Norwegian I-II-III (4 each)

Continued emphasis on spoken language. Rapid and intensive review of grammar; selected prose readings of progressive difficulty. Prerequisite: Scan 101-102-103 or its equivalent.

Scan 231 *Scandinavian Culture and Civilization* (3)
Lectures and discussions in English on selected topics in Scandinavian culture and civilization, with special attention to Scandinavia from ancient times through the Middle Ages, and Scandinavia today.

Scan 297 *Independent Study in Norwegian-Sophomore Level* (1-3)

Selected project as agreed by student and instructor.

Prerequisites: Completion of, or concurrent enrollment in, Scan 201-202-203 or consent of instructor. Approval by department chairman upon presentation of proposal. May be repeated up to a total of 6 credits.

Scan 381(G) *The Older Literature of Scandinavia* (4)
Selections from the prose Edda and the poetic Edda, selected tales and ballads, with special attention to the question of art vs. oral tradition. In English translation. Same as English 481(G).

Scan 382(G) *Ibsen and Strindberg* (4)
Major and representative plays of Ibsen and Strindberg, including Ibsen's Peer Gynt, Brand, Ghost, The Wild Duck, The Pillars of Society, The Enemy of the People, The Lady from the Sea, When We Dead Awaken, Hedda Gabler, The Master Builder, A Doll's House, John Gabriel Bjorkman, and Rosmersholm, and Strindberg's Miss Julie, The Father, A Dream Play, Easter, The Stranger, and The Ghost Sonata. Same as English 482(G).

Scan 383(G) *The Modern Scandinavian Novel* (4)
Masterpieces by the major Scandinavian novelists of the 20th Century, the Dane Martin Andersen Nexø, the Icelander Holldor Laxness, the Norwegians Knut Hamsun and Sigrid Undset, the Swedes Selma Lagerlof and Par Lagerkvist, and others. In English translation. Same as English 483(G).

Scan 397 *Independent Study in Norwegian — Junior Level* (1-3)

Selected project as agreed by student and instructor.

Prerequisites: Completion of Scan 201-202-203 or consent of instructor; approval by department chairman upon presentation of proposal. May be repeated up to a total of 6 credits.

SCIENCE

The natural sciences at Moorhead State College are offered under the several departments of Biology, Chemistry, and Physics, as well as courses in geology from the Department of Geography and Geology. However, the faculties of these departments provide a number of courses of a general or interdisciplinary nature which are described under SCIENCE COURSES.

SCIENCE COURSES

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.

SECRETARIAL

See BUSINESS CURRICULA.

SOCIAL SERVICES DEPARTMENT

Margaret F. Reed, *Chairperson*; Richard DuBord, Joan Seidel, James Svobodny

SOCIAL SERVICES CURRICULA**Major in Social Services — B.A. Degree**

Major Requirements in Social Services 42 credits

- SSer 220 Introduction to Social Welfare (4)
 SSer 259 Seminar: Introduction to Social Work Practice I (4)
 SSer 301 Seminar: Introduction to Social Work Practice II (4)
 SSer 302 Seminar in the Multi-Problem Family (4)
 SSer 469 Internship (16)
 SSer 470 Internship Seminar (4)

Electives in Social Services Courses (At least 6 credits)

Social Services Electives 13–21 credits of electives available

- SSer 400 Seminar in Minority Programs and Social Welfare (3)
 SSer 401 Seminar in Corrections (3)
 SSer 402 Seminar in Child Welfare (3)
 SSer 403 Personal & Social Aspects of Illness (3)
 SSer 425-427(G) Topical Seminar in Social Welfare (1–9)
 (May be repeated as a variety of social problems are investigated.)
 SSer 431(G) Social Legislation (3)
 SSer 461 Independent Study (3)

Additional credits for Social Service majors under Social Services 440 — Field Experience — and specialized short-term workshops are available to meet graduation requirements but not as electives in the major.

Requirements in Related Fields 62 credits

Electives distributed as follows:

Anthropology, Economics, History, Minority Group Studies and/or Political Science (at least 30 credits) to include the following courses:

- Economics 100 — The American Economy
 Economics 380 — Economic and Social Security
 History 141 — The Evolution of the Social Services
 Minority Group Studies 100
 Political Science 120 — National Government
 Psychology (At least 16 credits)
 Sociology (At least 16 credits) to include 350 — Social Statistics

Minor in Social Services 30–40 credits

Required Courses in Social Services 19–20 credits

- SSer 200 Introduction to Social Welfare (4)
 SSer 259 Social Work Practice I (4)
 SSer 440 Field Experience (8)

One elective in Social Services. Social Services 301 or 302 may be taken as an elective for the minor.

**Note: 16 credit internship in a related major may be used to fulfill the Social Services 440 requirement with consent from the Social Services advisor. In such instances 8 credits shall be taken from among the Social Service Course offerings.*

Required Courses in Related Areas

20 hours from among the following related areas other than the major: American Studies, Anthropology, Business, Computer Science, Criminal Justice, Early Childhood Education, Economics, Health-Physical Education-Recreation, History, Minority Group Studies, Political Science, Psychology, Sociology, Special Education.

In order to obtain recognition for a minor in Social Services, the student must have his program accepted by The Social Services Department no later than the second quarter of his junior year.

SOCIAL SERVICES COURSES

SSer 200 *An introduction to the Field of Social Welfare* (4)

Concepts from other disciplines are pulled together with the focus on their relationships to social welfare. Values, problems, and issues are discussed within the framework of social welfare institutions. Activities, programs, and sources of support of social agencies and the role of the social worker in these settings are indicated. Prerequisites: Sociology 110, 111 and/or 112; History 141.

SSer 259 *Introduction to Social Work Practice I* (4)

Introduction to problem solving, basic systems, principles and concepts of Social work practice. Emphasis on the processes of contract, assessment, planning, intervention, evaluation and termination. These processes are applied to different size systems for human service. Prerequisites: SSer 200 and consent of instructor.

SSer 301 *Social Work Practice II* (4)

Further study of the principles, concepts, processes, and methods of social work practice. Emphasis on the processes of assessment, planning, and intervention. Intervention is expanded to cover a variety of roles performed by social workers in their social work practice. Both processes and methods are applied to different size systems for human service. Prerequisites: SSer 200, 259, and consent of instructor.

SSer 302 The Multi-Problem Family (4)

The family under stress is examined and discussed within the Social Welfare framework. Pressures impinging upon family functioning are introduced with emphasis upon their causes and effects. Social problems such as poverty, minority group membership, marital disruption, crime and delinquency, mental illness, mental retardation, alcoholism, and drug addiction are examined across disciplinary lines. The social worker's role underlies all discussion. Prerequisites: SSer 220, 259 and consent of instructor.

SSer 400 Minority Problems and Social Welfare (Elective Seminar) (3)

Emphasis on individuals and society. The Social Worker's role as related to this situation. Prerequisites: SSer 200 or consent of instructor.

SSer 401 The Field of Corrections and Social Welfare (Elective Seminar) (3)

The Social Worker in the field of corrections. Causes and effects of delinquent and criminal behavior. Settings for correctional programs, the role of the social worker in probation, correctional institutions and parole. Prevention, rehabilitation and alternatives for program planning shall be considered. Prerequisites: SSer 200 Consent of Instructor.

SSer 402 Seminar in Child Welfare (Elective Seminar) (3)

A discussion of problems encountered in the area of child welfare. Emphasis on problems of prevention, treatment and rehabilitation. Existing programs examined with a view to their effectiveness and possible change. Prerequisites: SSer 200 or consent of instructor.

SSer 403(G) Personal and Social Aspects of Illness (3)

Examines the effects of mental and physical illness on the individual, family, and community. Examines and discusses problems of terminal care and the rehabilitation process as it affects individuals and families in a social framework. Discusses the unique setting in which the social worker carries out his/her role. Prerequisites: SSer 200 or consent of instructor.

SSer 425(G) Topical Seminar in Social Work (1-9)

Detailed examination of selected topics of concern to Social Services Social Work students and human services professionals. The relationship of the profession of Social Work to the alleviation of social problems. Prerequisite: SSer 200 or consent of instructor.

SSer 431(G) Social Legislation (3)

A course offered in coordination with the Minnesota State Departments of Public Welfare and Corrections. An examination of legal procedures and services with which social workers are concerned. Discussion is focused on court systems, probation and parole, court procedures, marriage, annulment, divorce, support and paternity, foster home placement, adoption, child abuse, and other related problems. Prerequisites: SSer 200 or consent of instructor.

SSer 440 Field Experience (4-15)

Students who wish to take a short-term field assignment either prior to or following the internship may request such a placement under departmental supervision. Prerequisite: SSer 200, 259, and consent of instructor.

SSer 461 Elective Independent Study in the Social Services (3)

Selected readings in Social Welfare-Social Work under close supervision of members of the department. A research paper is required. Prerequisites: SSer 200 or consent of instructor.

SSer 469 Internship (16)

Placement in the field under agency and departmental supervision. An opportunity for an on-the-job learning experience. Prerequisites: SSer 200, 259, 301, a volunteer experience of at least 20 hours, and consent of instructor. Application must be made two quarters prior to the internship.

SSer 470 Internship Seminar (4)

Sharing experiences in the field, relating field to academic program, goal attainment, personal assessment, role identification and related topics are explored. Prerequisite: SSer 469 and consent of instructor.

SSer 498(G) Social Services Workshops (1-3)

Workshops shall be offered in the Department of Social Services to meet specific needs of students and agency personnel in the community.

SOCIOLOGY-ANTHROPOLOGY DEPARTMENT

Nancy Parlin, *Chairperson*; Kenneth Ames, John Bruce, Marjorie Brunton, Joel Charon, Mark Hansel, Swaran Sandhu, George Smart, Thomas Schade, Beverly Wesley

Areas of Study: Anthropology, Sociology

SOCIOLOGY-ANTHROPOLOGY CURRICULA

See also SOCIAL SERVICES

Major in Sociology — B.A. Degree

The major in sociology offers the student two alternative options. For those who will undertake graduate sociology study, Option A is recommended. Those who seek employment after graduation in the fields in which a sociology degree is preferred should elect Option B. The latter option should enable a student to develop concentration in areas such as family, criminal justice, collective behavior, power, stratification and conflict, and problems of urban living.

OPTION A

Major Requirements in Sociology 63 credits

Soc 110-111-112 Principles of Sociology I-II-III (12)

Soc 211 Introduction to Sociological Theory (3)

Soc 305 Social Psychology (3)

Soc 350 Methods of Social Research I (4)

Soc 351 Methods of Social Research II (4)

Soc 411 Current Sociology (3)

Soc 415 Social Organization (3)

Electives (31 — up to 12 may be taken in Anthropology. At least six must be at 400 level in Sociology)

OPTION B

Major Requirements in Sociology 63 credits

Soc 110-111-112 Principles of Sociology I-II-III (12)

Soc 211 Introduction to Sociological Theory (3)

Soc 305 Social Psychology (3)

Soc 350 Methods of Social Research I (4)

Soc 351 Methods of Social Research II (4)

Electives (37 — up to 8 may be in Anthropology)

Recommended Electives:

Soc 469 Internship (Up to 16)

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)

Major Requirements in Sociology 55 credits

Soc 110-111-112 Principles of Sociology I-II-III (12)

Soc 211 Introduction to Sociological Theory (3)

Soc 305 Social Psychology (3)

Soc 310 Majority-Minority Group Relations (3)

Soc 350 Methods of Social Research I (4)

Soc 351 Methods of Social Research II (4)

Soc 418 Sociology of Education (3)

Electives in Sociology and/or Anthropology (At least 23)

Recommended Electives:

Soc 215 Population (3)

Soc 321 Rural Sociology or 322 Urban Sociology (3)

Requirements in Related Fields 27 credits

Ed 440 Social Studies in the Secondary School (3)

History (At least 12)

At least one course in each of the following (12): Economics

Geography

Political Science

Professional Education Requirements 31 credits

See EDUCATION CURRICULA — Secondary School Teaching

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Major in Anthropology — B.A. Degree

Major Course Requirements 59 credits

Anth 110-111 Human Culture I-II (8)

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 Evolution OR 310 Evolution of Man (4)

Anth 315 New World Archeology OR 316 Latin American

Archeology OR 320 Old World Archeology (4)

Anth 370 Descriptive Linguistics OR 375 Language in Culture (4)*

Anth 400 Development of Anthropological Theory (4)

Any one of the following (4):

Anth 420 Theory in Archeology

Anth 425 Theory in Physical Anthropology

Anth 430 Theory in Cultural Anthropology

Anth 435 Theory in Linguistics

Anth 421, 422, 423 — Senior Project (9)

Electives in Anthropology and Sociology (14 — including a maximum of six credits in Sociology)

*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 statistics course offered in the Sociology Department be included in the program.

Major in Anthropology (Social Studies) (Teaching)

Major Course Requirements 56 credits

Anth 100-111 Introductory (8)

At least three of the following:*

Anth 215 Indians of South America (4)

Anth 220 Indians of Middle America (4)

Anth 225 Indians of North America (4)

Anth 230 Cultures of Africa (4)

Anth 235 Ethnology of Selected Areas (4)

Anth 310 Evolution of Man (4)

Anth 315 North American Archeology (4) *

Anth 340 Social-Cultural Change (4)

Anth 370 Descriptive Linguistics (4)*

Anth 375 Language in Culture (4)

Anth 400 Development of Anthropological Theory (4)

Recommended Electives

320 Old World Archeology (4)

330 Social and Cultural Anthropology (4)

445 Seminar (4)

Requirements in Related Fields:

Ed 440 Social Studies in Secondary Schools (3)

At least one course in each of the following:

Sociology, Economics, Political Science, History, Geography

Professional Education Requirements (31)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Sociology 33 credits

Soc 110-111-112 Principles of Sociology I-II-III (12)

Electives in Sociology (At least 21 credits)

Minor in Sociology (Teaching) 36 credits

Requirements for the B.A. Minor (33)

Ed 440 Social Studies in the Secondary School (3)

At least one course from each of the following areas:

Economics

Geography

History

Political Science

*See coordinator about possible course substitutes in these areas from the curriculum at North Dakota State University.

(This minor can be awarded only in combination with at least one teaching major.)

Minor in Anthropology 40 credits

Anth 110-111- Human Culture I-II (8)

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 Evolution

Anth 310 Evolution of Man

One of the following (4):*

Anth 315 New World Archeology

Anth 316 Latin American Anthropology

Anth 320 Old World Archeology

One of the following (4):

Anth 370 Descriptive Linguistics

Anth 375 Language in Culture

Electives in Anthropology (At least 20)

SOCIOLOGY COURSES

Soc 110 Principles of Sociology I (4)

Nature of sociology, elements of social organization, culture, social stratification, socialization, deviance, social control, collective behavior, social change.

Soc 111 Principles of Sociology II (4)

Problems in Social institutions such as family, education, religion, government, economy, and other structured problems such as racism, militarism, and inequality. Prerequisite: Soc 110.

Soc 112 Principles of Sociology III (4)

Approaches to the study of deviance. Topics may include crime, delinquency, alienation, drug taking, mental illness, suicide, illegitimacy, abortion, prostitution, and homosexuality. Prerequisite: Soc 110.

Soc 211 Introduction to Sociological Theory (3)

A survey of the most important ideas in the development of sociology from the Enlightenment to contemporary theorists.

Soc 215 Population (3)

Social and cultural aspects in national and international

*See coordinator about possible course substitutes in these areas from the curriculum at North Dakota State University.

population change. Implications of population trends.
Prerequisite: Soc 110.

Soc 220 *Family as an Institution* (3)
Conceptual, structural, historical, and comparative analysis of the family. Prerequisite: Soc 110 and 111.

Soc 300 *Criminology* (3)
Survey of the field of criminology. Prerequisite: Soc 110 and 112 or consent of the instructor.

Soc 301 *Delinquent Behavior* (3)
Conditions associated with delinquent behavior, and programs for its prevention, treatment and control. Prerequisites: Soc 110 and 112 or consent of the instructor.

Soc 303 *Punishment and Penology* (3)
The history and rationales of punishment and institutional control. The development of the modern penal system in the U.S. Comparison of alternative penal systems — their strengths and weaknesses. Prerequisites: Soc 110 and 112 or consent of the instructor.

Soc 305 *Social Psychology* (3)
An introduction to the theories about the relation of the individual to the social environment. Prerequisite: 12 credits in sociology and/or psychology, or consent of the instructor.

Soc 306 *Social Movements and Collective Behavior* (3)
A comprehensive survey of the field of collective behavior. Study of topics, e.g., panics, rumors, riots, public opinion, and propaganda. Theories of political, religious, and minority movements. Prerequisite: Soc 110 or consent of instructor.

Soc 307 *Criminal Justice and Corrections* (3)
Overview of the contemporary criminal justice system. Analysis of the institutionalized responses to criminal behavior through which society attempts to rehabilitate offenders. Prerequisite: Soc 110 and 112 or consent of instructor.

Soc 310 *Majority-Minority Group Relations* (3)
Study of the relationships between dominant and subordinate groups. Emphasis on the distribution of social power and social privilege. Prerequisite: Soc 110 and 111 or consent of instructor.

Soc 320 *Social Psychology of the Family* (3)
An analysis of the social and psychological sources of family conflict and cohesion. The inter-personal, interacting processes between parents and among offspring. Situational analysis, family problem solving, and family break-up. Focus on the American family. Prerequisite: Soc 110 and 111 or consent of instructor.

Soc 321 *Rural Sociology* (3)
An analysis of the forms of social organization, processes, and action typical of rural life. Prerequisite: Soc 110 and 111 or consent of instructor.

Soc 322 *Urban Sociology* (3)
An analysis of the forms of social organization, processes, and action typical of urban life. Prerequisite: Soc 110 and 111 or consent of instructor.

Soc 333 *The Sociology of Human Sexuality* (3)
Examination of sexism social roles, maturation, identification, conflict, changes, interaction, and current issues related to human sexuality in the American society. Prerequisite: Soc 110 or consent of instructor.

Soc 350 *Methods of Social Research I* (4)
Introduction to methods of social research; scientific method and alternative data gathering techniques; procedures for critically reading and analyzing professional reports; descriptive statistical methods and introduction to inferential techniques. Prerequisite: Soc 110 or consent of instructor.

Soc 351 *Methods of Social Research II* (4)
Advanced treatment of social research techniques and statistical analysis, extension of inferential methods presented in Soc 350, and indepth discussion of the philosophy of science and the relationship between sociological theory and sociological research. Students are expected to become proficient in technical report writing and to develop an original research project design. Prerequisite: Soc 350.

Soc 355 *Society and the Ecosystem* (3)
The study of social systems and their relation to man's use of space, the human distributive systems, and the value systems determining man's use of space. Prerequisite: Soc 110 or consent of instructor.

Soc 401 *Sociology of Religion* (3)
A study of religion in society. The reciprocal relationship of religion to other institutions and the individual.

Soc 404 *Social Power* (3)
An examination of the theoretical perspectives on and social policy implications of the distribution of social power resources with special attention to contemporary American society. Prerequisite: Soc 211 or consent of instructor.

Soc 411 *Current Sociology* (3)
Study of sociology and the sociologist. Present trends in theory and research with particular emphasis on theoretical models and

their consequences in research design. Prerequisite: Soc 211 and 351.

Soc 414(G) Topics in Political Sociology (3)
Studies in the processes of political behavior. Variable topics such as Political Sociology, Sociology of Political Elite, Sociology of Revolutions, Sociology of Modernization, Sociology of Violence and Non-Violence. Prerequisite: upper division status and consent of instructor. May be repeated for credit.

Soc 415(G) Social Organization (3)
Analysis of social groups and complex organizations. Characteristics of bureaucracy. Integration and disintegration of social organizations. Prerequisites: 18 credits in sociology or consent of instructor.

Soc 417(G) Topics in Sociology of Change (3)
Studies in the processes of social change. Topics such as Sociology of Change, Theories of Socio-Political Change, Sociology of Future, Sociology of Countercultures, Sociology of Utopias. Prerequisites: upper division status and consent of instructor. May be repeated for credit.

Soc 418(G) Sociology of Education (3)
Social processes and patterns of interaction in education institutions, relation of the school to other groups and institutions, methods and data of sociology applied to the school situation. Prerequisites: Soc 110 and 9 credits in sociology or 9 credits in education or consent of instructor.

Soc 425(G) Seminar in Sociology (3)
Selected topics in sociology. Prerequisites: Upper division status and consent of the instructor. May be repeated for credit.

Soc 435(G) Sociology of Health and Medicine (3)
A discussion of the relationship between certain social factors and health, patients, health professionals, and hospitals. Prerequisites: 6 credits in sociology or consent of instructor.

Soc 449(G) Topics in Social Stratification (3)
Studies in the nature and processes of social inequality. Variable topics, such as Social Stratification, Sociology of Poverty, Sociology of Sexism, Sociology of Welfare, Sociology of Medical Aid and Medicare, Sociology of Unemployment, Sociology of Migrant Labor. Prerequisites: upper division status and consent of instructor. May be repeated for credit.

Soc 452(G) Topics in Advanced Research Techniques (3)
Studies of advanced methodologies and analytic techniques for sociological research. Variable topics such as Participant Observation, Evaluative Research, Data Analysis, Balance

Theory, Markov Chains. Prerequisite: upper division status and consent of instructor. May be repeated for credit.

Soc 461(G) Readings in Sociology (1-6)
Selected readings in sociology under the close supervision of the members of the department. May be repeated to a maximum of 6 credits. Prerequisites: Senior status and consent of instructor.

Soc 469 Internship in Sociology (3-16)

Soc 499(G) Topical Workshop (1)

Soc 500-501 Sociological Theory I-II (3 each)
Advanced current sociological theory. Prerequisite: Graduate standing and permission of the instructor.

Soc 510 Individual Research (3-6)
Maximum 3 credits per quarter. May be repeated once for credit. Research on selected topics in sociology under the close supervision of the members of the department. Prerequisite: Graduate standing and consent of the instructor.

Soc 512 Topical Seminar in Sociology (3-6)
Maximum 3 credits per quarter. May be repeated once for credit. Detailed exploration of selected topics in sociology. Prerequisite: Graduate standing and permission of the 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 the instructor.

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

SPANISH LANGUAGE AND LITERATURE COURSES

See LANGUAGE for Curricula

Span 101-102-103 Beginning Spanish I-II-III (5 each)
An introductory course. Strong emphasis on the spoken language; pronunciation, aural-oral drill. Reading and inductive study of grammar. Language Laboratory: Regular periods as required by the instructor.

Span 105 Rapid Review of Spanish Fundamentals (5)
This course is open to students with previous exposure to the Spanish language. Grammar review through abundant oral and written exercises. Pronunciation practice and vocabulary build-up will be featured.

Span 115-116 Beginning Spanish IA-IIA (8 and 7)
This two-course sequence corresponds to Span 101-102-103 and covers one full year of beginning Spanish for a total of 15 credits.

Span 211-212-213 Intermediate Spanish I-II-III (4 each)
Continued emphasis on spoken language. Rapid and intensive review of grammar; selected prose readings of progressive difficulty. Language Laboratory: Regular periods as required by the instructor. Prerequisite: Spanish 101-102-103 or two years of high school Spanish.

Span 261-262-263 Hispanic Life and Literature I-II-III (4 each)

A three course sequence of selected masterpieces of Hispanic literature within the framework of cultural history, designed for students with little or no competence in reading Spanish. The works selected span the middle ages to the twentieth century. Not intended for Spanish majors. Same as Humanities 261-262-263.

Span 321-322-323 Conversation and Composition I-II-III (3 each)

Achievement of oral fluency. Some practical experience in writing Spanish. Recommended as a prerequisite for advanced literature courses, and particularly for freshmen with 4 years of high school Spanish.

Span 341-342-343 Introduction to Hispanic Literature I-II-III (4 each)

341: Analysis and discussion of major works of Spanish and Latin American literature from 1800 to 1936. 342: Analysis and discussion of major works of Spanish and Latin American literature from 1936 to the present. 343: Analysis and discussion of major works of Spanish and Latin American literature from their origins to 1800.

Span 351-352-353 Spanish Practicum I-II-III (3 each)

An educational experience in which elementary education Spanish minors, elementary school students, and a master teacher explore the problems and opportunities of a FLES program.

Span 425(G)-426(G)-427(G) Advanced Spanish Composition and Conversation I-II-III (3 each)

Advanced composition with emphasis on syntax and stylistics. Achievement of a high level of fluency. Prerequisite: Completion of Spanish 323 or consent of instructor.

Span 431(G) Nineteenth Century Novel of Spain (3)

The regional and realistic fiction of the second half of the nineteenth century, particularly Galdos, Alas, and Pardo Bazan.

Conducted in Spanish. Prerequisite: Spanish 341-342-343 or consent of the instructor.

Span 432(G) Twentieth Century Novel of Spain (3)
Emphasis on the fiction of the Generation of '98 (Unamuno, Valle-Inclan and Baroja) and on novels published since the end of the Spanish Civil War. Conducted in Spanish. Prerequisite: Spanish 341-342-343 or consent of the instructor.

Span 433(G) Twentieth Century Poetry and Drama of Spain (3)

Emphasis on the lyric poetry of the Generations of '98 and '27 and on post-Civil War Drama. Conducted in Spanish. Prerequisite: Spanish 341-342-343 or consent of the instructor.

Span 434-435(G) Spanish American Prose Fiction I-II (3 each)

Reading and analysis of outstanding and representative works, supplemented by study of the historical and cultural background. 434: Emphasis on the regional and realistic novels. 435: Emphasis on the more cosmopolitan contemporary trends in fiction. Conducted in Spanish. Prerequisite: Three years of college Spanish or consent of the instructor.

Span 436(G) Latin-American Poetry, 1890 To Present (3)

The poetry of Latin-America: modernism, post modernism, and contemporary trends. Prerequisite: Spanish 341-342-343 or consent of the instructor. Conducted in Spanish.

Span 451-452-453 Spanish Secondary Practicum (3 each)

Practical experience in the classroom for prospective secondary school teachers, assisting in the language laboratory and in first year classes, preparing materials and working with small groups of students.

Span 480(G) Special Topics in Spanish Literature and Culture (2-4)

In-depth study of a selected topic in Spanish. The topic may focus on historical development, a theme, motif, genre, movement, period, or a single major author. Or it may be comparative in nature; e.g. literature and politics, the arts, or science of a given period. May be repeated for credit. Prerequisites: Span 341, 342, 343 or consent of instructor.

SPECIAL EDUCATION COURSES

See EDUCATION for Curricula

SpEd 416(G) Mental Retardation (3)

Incidence and description of mental retardation. Methods of diagnosis and educational organization. Prerequisites: Ed 212 or 213, 305 or Psy 201, or permission 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 420(G) Education of the Exceptional Child (3)

An introductory course in the recognition, incidence, and educational needs of handicapped and gifted children: Prerequisites: Ed 212 or 213, 305 or Psych 201, or permission of instructor.

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)

The relationship of the curriculum to the special learning talents of the gifted. The ways in which to construct a curriculum suitable for the education of gifted students. Appropriate methods for teaching gifted elementary and secondary students. Prerequisite: SpEd 421.

SpEd 430(G) Industrial Arts for Special Education Teachers (3)

Projects and experiences in industrial arts and crafts designed for teachers of the mentally retarded.

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 416.

SpEd 435(G) Topics in Mental Retardation (3)

Advanced treatment of selected topics on research and practice in mental retardation. Prerequisites: SpEd 416, 420 and consent of instructor.

SpEd 436(G) Problems in Special Education (1-3)

Directed field placement, reading, or research in special education. Prerequisites: SpEd 420 and consent of advisor.

SpEd 437(G) Workshop in Special Education (4)

Organization and curriculum of programs in the area of mental retardation. Includes parental counseling and occupational

programs. Problems of children with cerebral dysfunction. Prerequisite: SpEd 416.

SpEd 440(G) Methods in Teaching the Mentally Retarded (3)

Methods of teaching the mentally retarded child. Curriculum and materials. Prerequisite: SpEd 416, 420, 435, or consent of instructor.

SpEd 441(G) Language Development for the Mentally Retarded (3)

An examination of how language develops in infants and young children with specific attention to the mentally retarded. Prerequisite: Speech Pathology 468, SpEd 416, 420, or consent of instructor.

SpEd 442(G) Creative Activities for Exceptional Children (2)

The importance of creative activities in the lives of exceptional children. Therapy, hobbies, practical experiences in the areas of art, crafts, music, drama, and their interrelationships. Prerequisite: SpEd 416, 420, 436.

SpEd 445(G) Remedial and Corrective Reading (3)

Presentation of special methods and materials found useful in teaching reading to disabled readers at the primary, intermediate, and secondary level. Prerequisite: SpEd 345 or teaching experience.

SpEd 450 Student Teaching of the Mentally Retarded (5-16)

Experience under qualified supervising teacher in classroom for mentally retarded. Prerequisite: Consent of instructor.

SpEd 456(G) Curriculum Development and Teaching the Trainable Mentally Retarded (2)

Investigation of educational goals, and objectives for the trainable and the curricula, educational methods and techniques best suited to achieving these goals and objectives. Attention is directed to the organization, planning, and carrying out of classroom experiences along with the use of appropriate teaching techniques and materials. Students develop instructional objectives, curriculum units and plans.

SpEd 457(G) Personal, Social and Vocational Education for the TMR (2)

Personal, social, and vocational adjustment needs and problems of TMR individuals are studied. Special emphasis is placed upon self-care skills, social development, basic academic skills, sex education, training for work activity, sheltered workshops, or competitive employment.

- SpEd 458(G) *Recreative Skills for the Severely Handicapped* (2)**
Motor development, physical education, recreation and leisure activity skills for handicapped children.
- SpEd 459(G) *Methods and Materials for Language Development for the Severely Handicapped* (2)**
Designed for teachers dealing with materials and methods for stimulating and improving speech and language with severely handicapped children in the classroom. Students are trained with specially designed materials used in language development with handicapped children.
- SpEd 460(G) *Education of the Emotionally Disturbed Child* (3)**
Causes of, and classroom procedures with, the emotionally disturbed child. Prerequisite: Psy 460, or consent of instructor.
- SpEd 461(G) *Education of Children with Specific Learning Disabilities* (3)**
Recognition of and classroom procedures with children who have specific learning disabilities. Prerequisites: SpEd 420 or permission of instructor.
- SpEd 462(G) *Topics in Learning Disabilities* (3)**
Advanced treatment of selected topics on research and practice in learning disabilities. Prerequisites: SpEd 420, 461, 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 420.
- SpEd 464(G) *Education of the Learning Disabled Secondary Student* (3)**
Recognition of learning disabilities among secondary students; programming for the adolescent with a learning disorder. Prerequisite: SpEd 461.
- SpEd 465(G) *Special Education Reading* (3)**
Presentation of special methods and materials found useful in teaching reading to children with behavior problems, mental retardation, or neurological impairment. Prerequisites: Ed 345, 446, SpEd 461, 463, consent of instructor, student teaching or teaching experience.
- SpEd 466(G) *Special Education Reading Clinic* (2)**
Supervised practice in diagnosis and remediation of reading problems for children with behavior problems, mental retardation,

or neurological impairment. Prerequisites: Ed 345, SpEd 463, 465 or concurrently with 465.

SpEd 467(G) *Practicum: Diagnosis and Treatment of Learning Disorders*
Methods for identifying and treating academic disabilities in the area of reading, arithmetic, spelling, writing, and speaking; supervised experience working with learning disabled children. Prerequisites: Ed 445, 446, SpEd 461, 463, consent of instructor, student teaching or teaching experience.

SpEd 468(G) *Practicum: Diagnosis and Treatment of Learning Disorders II* (6)
Methods for identifying and treating learning disabilities with emphasis on learning process problems; supervised experience working with learning disabled children, their teachers and parents. Prerequisite: SpEd 467, consent of instructor.

SpEd 469 *Student Internship* (3-16)

SpEd 470(G) *Guidance of the Handicapped* (3)
Methods and techniques of guiding handicapped children and youth to personal, social, and occupational adequacy. Prerequisite: SpEd 416, 420, 436, and consent of instructor.

SpEd 471(G) *Behavioral and Environmental Management* (3)
The analysis and programming of behavior and environmental variables as they relate to handicapped children in the classroom. Prerequisite: SpEd 460, 461, and consent of instructor.

SpEd 472(G) *Psycho-Educational Diagnosis and Programming* (3)
Practical applications of psychological principles of handicapped children to classroom situations will be emphasized. Prerequisite: Psy 101 or Psy 105, junior standing and consent of instructor.

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, 461.

SPEECH DEPARTMENT

Delmar Hansen, *Chairperson*; Robert Badal, Virgil Black, Timothy Choy, Jean Elliot, Dale Gronhøvd, Michael Kelly, Paul Kurtz, Theodore Larson, Davis Scott, Hazel Scott, Marie Swanson, Arne Teigland.

Areas of Study: Rhetoric and Public Address, Theatre Arts, and Speech Pathology and Audiology

SPEECH CURRICULA

See also ENGLISH CURRICULA for English-Speech Teaching combination major.

The Department of Speech administers programs of study in the areas of rhetoric and public address, the theatre art, and speech pathology and audiology. Rhetoric and Public Address offers the student the opportunity to develop his knowledge of and his skills in communicative situations. Courses are designed to investigate how men can influence the attitudes and actions of others, to evaluate how men have effected changes in their society and to observe how men are currently attempting to influence the attitudes and the actions of those around them. The program would be of particular value to prospective lawyers, teachers, personnel workers, preachers, businessmen, labor or management specialists and other professional men and women who need to be effective in their use of the spoken word.

The theatre art is a complex, but single fine art related to but distinct from the other fine arts of music, painting, sculpture, architecture, design, and dance. The study of the theatre art, like the study of the other arts, is essentially humanistic, aiming not only at acquiring a body of knowledge, but also at meaningful self-development through a sharpening of the sense perceptions and the increasing ability to express inner realizations. Because of the complexity and breadth of the theatre art, it is regarded as one of the best means to relate, unify, and reach out to the other arts, languages, literature, philosophy, psychology, sociology, religion, and history.

Speech Pathology and Audiology, narrowly defined, are areas of study concerned with the disorders of speech, hearing, and language. In a broader sense, the study encompasses all factors relating to the processes of speech production and speech reception. Emphasis is placed on the physiological, acoustical, and psychological bases of oral communication, the processes through which language and speech behavior are acquired, the nature and causes of communication disorders, and the principles and procedures for improving speech, hearing, and language

performance. In addition to being of value to persons who wish to pursue professional training, the courses offered should be of general interest to any student who wishes to increase his understanding of the nature of communicative behavior.

The various programs are designed to provide academic training for those entering the teaching profession in any one of the areas, for those wishing to pursue additional work at the graduate level, for those wishing to work in speech and hearing clinics, for those who wish to train for various careers in the professional theatre, and for those who wish to develop critical proficiency in their use of oral language.

Major in Rhetoric and Public Address — B.A. Degree

The Bachelor of Arts degree is designed for the student who wishes to pursue additional work at the graduate level in the field of rhetoric and public address. It is also designed as a terminal degree for students choosing to begin a career in personnel work, sales work, advertising, radio and television, etc. The fields of history, psychology and mass communications are recommended as related areas of study for students wishing to supplement their work in the rhetoric/public address curriculum.

Major Course Requirements 60 credits

Spch 100 Fundamentals of Speech (4) or Spch 200 (4)

Spch 101 Voice and Diction (4)

Spch 202 Introduction to Rhetoric (3)

Spch 204 Principles of Debate (4)

Electives in rhetoric/public address and related fields (45)

(The student with a sound high school background in public speaking and debate should plan to substitute Speech 200, Advanced Communicative Speaking, for Speech 100, Fundamentals of Speech.

(It is recommended that each rhetoric/public address major balance his course selection by electing work in all three areas of speech as well as recommended related fields. Suggested related speech courses would include Speech 220, Theatre Form and Appreciation; Speech 250 Introduction to Speech Pathology and Audiology; Speech 253 Language and Communication; Speech 322-324-326, Development of the Drama I-II-III. At least fifty per cent of his credits must be in the 300 and 400 level courses.)

Major in Theatre — B.A. Degree

The Bachelor of Arts degree is designed for the student who wishes to pursue additional work at the graduate level in the field of theatre. It is also a terminal degree for students choosing to begin a career in the professional theatre. The fields of English, art, rhetoric/public address, and mass communications are

recommended as related areas of study for students wishing to supplement their work in the theatre curriculum.

Major Course Requirements 60 credits

- Spch 101 Voice and Diction (4)
- Spch 205 Beginning Oral Interpretation (4)
- Spch 220 Theatre Form and Appreciation (3)
- Spch 222 Principles of Acting (4)
- Spch 224 Technical Production (4)
- Electives in theatre and related fields (41)

(It is recommended that the theatre major should balance his course selection by electing work in all areas of theatre (acting, directing, dramatic literature, and technical theatre) as well as related fields. At least fifty per cent of his credits must be in 300 and 400 level courses.)

Major in Rhetoric/Public Address and Theatre (Teaching)

The Bachelor of Science degree in Education with a major in rhetoric/public address-theatre 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 rhetoric/public address-theatre instructor in secondary schools.

The fields of English, art and history are recommended as related areas of study for students wishing to supplement their work in rhetoric/public address and theatre. Because of the close relationship between speech and English in many high schools, the B.S. degree rhetoric/public address-theatre major may wish to consider a dual major with English. Selection of elective courses should be made with a consideration of the student's interests and abilities.

Major Course Requirements 61 credits

- Spch 100 Fundamentals of Speech (4) or Spch 200 (4)
- Spch 101 Voice and Diction (4)
- Spch 202 Introduction to Rhetoric (3)
- Spch 204 Principles of Debate (4)
- Spch 205 Beginning Oral Interpretation (4)
- Spch 220 Theatre Form and Appreciation (3)
- Spch 280 History of the film (4)
- Spch 222 Principles of Acting (4)
- Spch 224 Technical Production (4)
- Spch 312 Principles of Persuasion (3)
- Spch 340 The Teaching of Speech (4)
- Spch 344 Principles of Play Direction (4)
- Spch 468 Speech and Hearing in the Classroom (3)
- Electives in rhetoric/public address-theatre, and related fields (13)

(Depending on the student's interests, electives in technical theatre, dramatic literature, or the history and criticism of rhetoric/public address are recommended. To satisfy the requirements of the State Board of Education for secondary certification with a major in rhetoric/public address-theatre, students must participate in at least two speech activities: forensics, theatre, oral interpretation, or broadcasting. At least fifty per cent of all course work on the major must be in courses at the 300 and 400 level; courses in dramatic literature are particularly recommended.)

(All teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Dual Major in English and Rhetoric/Public Address-Theatre (Teaching)

Major Requirements in English 54 credits

- Engl 211-212-213 Survey of English Literature I-II-III (12)
- At least two consecutive quarters of one of the following sequences (8):
- Engl 301-302-303 through Engl 361-362-363
- Engl 371-372-373 Survey of American Literature I-II-III (12)
- At least one of the following (4):
- Engl 374 Shakespeare I
- Engl 375 Shakespeare II
- Engl 389 Advanced Composition (3)
- Engl 391 Teaching English in the Secondary School (4)
- At least one of the following (4):
- Engl 399 American English
- Engl 401 Transformational Grammar (4)
- Electives in English intended for major (7)

Major Requirements in Speech 52 credits

- Spch 100 Fundamentals of Speech (4) or Spch 200 (4)
- Spch 101 Voice and Diction (4)
- Spch 202 Introduction to Rhetoric (4)
- Spch 204 Principles of Debate (4)
- Spch 205 Beginning Oral Interpretation
- Spch 220 Theatre Form and Appreciation (3)
- Spch 280 History of Film (4)
- Spch 222 Principles of Acting (4)
- Spch 224 Technical Production (4)
- Spch 312 Principles of Persuasion (3)
- Spch 340 The Teaching of Speech (4)
- Spch 344 Principles of Play Direction (4)
- Spch 468 Speech and Hearing Problems in the Classroom (3)
- Electives in rhetoric/public address and theatre (4)

(To satisfy the requirements of the State Board of Education for secondary certification with a major in rhetoric/public address and theatre, 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 ACADEMIC INFORMATION.)

Major in Speech Pathology and Audiology — B.A. Degree or B.S. Degree (Teaching)

The major in Speech Pathology and Audiology is designed for students who are interested in the study of the processes of speech communication and in the study of communication disorders. The course of study is appropriate for students who wish to prepare for clinical, teaching, or research careers in speech pathology, audiology, and speech and hearing science. Students who choose to major in this area should do so with the understanding that the American Speech and Hearing Association and a growing number of certifying agencies and employers are designating the master's degree as the minimal level of training required. Thus, the requirements for the undergraduate major are geared toward qualifying students for admission to graduate study.

Students who pursue the B.S. degree program are expected to complete the required professional education courses. The B.S. degree is usually recommended for students who plan to seek clinical positions in the schools. The B.A. degree is available for students who plan on clinical positions in other types of agencies and for those interested in non-clinical careers. Both degree programs are designed to prepare students for professional training in speech pathology and audiology at the graduate level.

In addition to required courses, all majors are expected to participate in practicum experiences. Also, in order to supplement their study of communicative behavior, to qualify for certification, and to meet requirements for graduate study, all majors are required to complete a minor or equivalent in one or more related areas of study. The student should select elective and supplementary courses carefully and with the advice and consultation of his advisor. The specific requirements for the major can be obtained by contacting the Director of Speech Pathology and Audiology in the Department of Speech.

Major Course Requirements 60 credits

Spch 100 Fundamentals of Speech (4) or Spch 200 (4)
 SPAA 250 Introduction to Speech Pathology and Audiology (3)
 SPAA 251 Phonetics (4)
 SPAA 252 Speech and Hearing Science (5)

Spch 253 Language and Communication (4)
 SPAA 351-352-353 Speech Pathology I-II-III (15)
 SPAA 363 Speech Pathology Methods (4)
 SPAA 371 Audiology (3)
 SPAA 372 Audiometry (3)
 SPAA 373 Aural Rehabilitation (3)
 SPAA 466 Clinical Practicum (6)
 SPAA 467 Diagnostic Procedures (4)

Electives to be selected in consultation with advisor (2)

(All Teacher Education Requirements shall be fulfilled to complete this major. See ACADEMIC INFORMATION.)

Minor in Rhetoric/Public Address 34 credits

Spch 100 Fundamentals of Speech (4) or Spch 200 (4)
 Spch 101 Voice and Diction (4)
 Spch 202 Introduction to Rhetoric (3)
 Spch 204 Principles of Debate (4) or
 Spch 205 Beginning Oral Interpretation (4)
 Spch 209 Parliamentary Procedure (1)
 Spch 309 Rhetorical Criticism (4)
 Spch 310 Contemporary Public Address (3)
 Spch 312 Principles of Persuasion (3)

Electives in 300 or 400 level courses to be selected in consultation with a rhetoric/public address advisor (7)

Minor in Rhetoric/Public Address (Teaching) 34 credits

Spch 100 Fundamentals of Speech (4) or Spch 200 (4)
 Spch 101 Voice and Diction (4)
 Spch 202 Introduction to Rhetoric (3)
 Spch 204 Principles of Debate (4)
 Spch 205 Beginning Oral Interpretation (4)
 Spch 209 Parliamentary Procedure (1)
 Spch 340 The Teaching of Speech (4)
 Spch 468 Speech and Hearing Problems in the Classroom (3)
 Electives in 300 and 400 level courses to be selected in consultation with a rhetoric/public address advisor (7)

(This minor can be awarded only in combination with at least one teaching major.)

Minor in Theatre 34 credits

Spch 101 Voice and Diction (4)
 Spch 205 Beginning Oral Interpretation (4)
 Spch 220 Theatre Form and Appreciation (3)
 Spch 222 Principles of Acting (4)
 Spch 224 Technical Production (4)
 Spch 344 Principles of Play Direction (4)
 Electives in 300 and 400 level courses (11)

Minor in Theatre (Teaching) 34 credits

- Spch 101 Voice and Diction (4)
 Spch 205 Beginning Oral Interpretation (4)
 Spch 220 Theatre Form and Appreciation (3)
 Spch 222 Principles of Acting (4)
 Spch 224 Technical Production (4)
 Spch 337 Stage Lighting (4)
 Spch 342 The High School Dramatics Program (3)
 Spch 344 Principles of Play Direction (4)
 Electives in 300 and 400 level theatre courses (4)

(This minor can be awarded only in combination with at least one teaching major.)

SPEECH PATHOLOGY-AUDIOLOGY COURSES

See SPEECH for Curricula.

SPAA 171 Environmental Noise (3)

A survey of the nature of environmental noise, its effects on humans and their communication, and means of noise control. Demonstrations and field trips included.

SPAA 250 Introduction to Speech Pathology and Audiology (3)

A study of the basic processes of speech, hearing, and language; of the development of speech and language in children; and of the major speech, hearing, and language disorders.

SPAA 251 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 in evaluating and treating problems in oral communication.

SPAA 252 Speech and Hearing Science (5)

The basic scientific concepts fundamental to the understanding of speech production and reception.

SPAA 350 Speech and Hearing Laboratory (1-3)

A survey of classical and contemporary research procedures and problems in the speech and hearing sciences; experience in conducting independent research projects; may be repeated for a maximum of 4 credits. Prerequisites: Concurrent or prior enrollment in SPAA 251, 252, or 253, and permission of the instructor.

SPAA 351 Speech Pathology I (5)

The nature, etiology, and treatment of functional disorders of articulation and voice. Prerequisite: Spch 251 and 252, or consent of instructor.

SPAA 352 Speech Pathology II (5)

Significant theories and therapies for stuttering.

SPAA 353 Speech Pathology III (5)

A survey of the natures, etiologies, and treatments of the speech and language anomalies resulting from organic conditions, including cleft palate, cerebral palsy, dysarthria, aphasia, and voice disorders. Prerequisites: SPAA 351.

SPAA 363 Speech Pathology Methods (4)

Methods of treatment of speech disorders; the organization and administration of speech pathology programs in public schools and in other clinical settings. Prerequisite: Spch 351 and 352 and consent of the instructor.

SPAA 371 Audiology (3)

The study of hearing and hearing disorders. Prerequisite: Spch 251 and 252, or consent of instructor.

SPAA 372 Audiometry (3)

The measurement of hearing; the diagnostic variables related to hearing impairment; supervised practice administering hearing tests. Prerequisite: SPAA 371 or consent of instructor.

SPAA 373 Aural Rehabilitation (3)

The principles and procedures of auditory training, lip reading, language and speech training for individuals with hearing impairment. Prerequisite: SPAA 371 and 372 or consent of instructor.

SPAA 452(G) Speech Anatomy and Physiology (4)

The anatomy and physiology of the mechanisms involved in speech production and reception; a critical review of representative research. Prerequisite: SPAA 251 and 252.

SPAA 453(G) Language Disorders of Children (4)

The nature, etiologies, and treatment of language disorders of children. Prerequisite: SPAA 253.

SPAA 458(G) Language Development for the Handicapped (3)

An examination of how language develops in infants and young children with specific attention to the mentally retarded and to intervention procedures. Prerequisite: SPAA 250, Spch 253, or consent of instructor. (Same course as SpEd 441(G).)

SPAA 466 Clinical Practicum (1-3)

Supervised clinical experience with children and adults who present speech, hearing, or language problems; requires from 4 to 8 hours of clinical activity per week in addition to staffings, conferences, planning, and reporting; may be repeated by

undergraduate majors for a total of 9 quarter hours of credit. Prerequisite: 20 quarter hours of credit in speech pathology and audiology courses and consent of the instructor.

SPAA 467(G) *Diagnostic and Appraisal Procedures* (4)
The evaluation and use of diagnostic tools; participation in evaluations and preparation of clinical reports. Prerequisite: 20 quarter hours of credit in speech pathology and audiology courses and consent of the instructor.

SPAA 468(G) *Speech and Hearing Problems in the Classroom* (3)
The major disorders of speech, language, and hearing encountered in schools; the teacher's role in detecting and helping the speech or hearing handicapped student; the theory and practice of speech improvement activities in the classroom. (Not open to majors in speech pathology and audiology.) Prerequisite: None.

SPAA 469 *Internship in Speech Pathology and Audiology* (3-16)

SPAA 472(G) *Advanced Audiometry* (3)
The measurement of hearing with special emphasis on bone conduction, masking, and speech audiometry. Prerequisites: SPAA 371 and 372.

SPAA 479(G) *Readings in Speech Pathology and Audiology* (3)
Selected readings in speech pathology, audiology, or speech science under the direction and supervision of members of the department; may be repeated twice for credit. Prerequisite: Senior or graduate status and consent of the director of speech pathology and audiology.

SPAA 499(G) *Topical Workshop* (1-4)

SPAA 550 *Research in Speech Pathology and Audiology* (3)
A study of bibliographical resources and the methods and techniques of research and professional writings in speech pathology and audiology; a critical review of selected classical and current experimental studies in the field. Prerequisite: Consent of the instructor.

SPAA 551 *Organic Voice Disorders* (3)
The nature, etiologies, and treatment of organic voice disorders, including speech for the laryngectomized. Prerequisite: SPAA 351 and consent of the instructor.

SPAA 552 *Structural Speech Disorders* (3)
The nature and etiology of cleft lip and palate and other structural

anomalies; the principles and procedures of speech habilitation. Prerequisite: SPAA 351 and consent of the instructor.

SPAA 553 *Neurological Speech Disorders* (3)
The nature and etiology of cerebral palsy and other neurological problems; the principles and procedures of speech and language rehabilitation. Prerequisite: SPAA 351 and consent of the instructor.

SPAA 561 *Seminar in Articulation* (3)
A critical review of research related to the nature, etiology, and treatment of articulatory disorders. Prerequisite: SPAA 351 and consent of the instructor.

SPAA 562 *Seminar in Stuttering* (3)
A critical review of research related to the nature, etiology, and treatment of stuttering. Prerequisite: SPAA 352 and consent of the instructor.

SPAA 563 *Aphasia* (3)
The nature, etiology and treatment of aphasia and other symbolic disorders; a critical review of related research. Prerequisite: Consent of the instructor.

SPAA 566 *Clinical Practicum* (1-3)
Supervised clinical experience with children and adults who present speech hearing, or language problems; requires from 4 to 8 1/2 hours of clinical activity per week in addition to staffings, conferences, planning, and reporting. Prerequisite: 20 quarter hours of credit in speech pathology and audiology courses and consent of the instructor.

SPAA 571 *Seminar in Audiology* (3)
A critical review of research related to the nature, etiology, and treatment of hearing disorders. Prerequisite: SPAA 371 and consent of the instructor.

SPAA 579 *Topical Seminar in Speech Pathology and Audiology* (3)
The examination of the literature on a selected topic of current interest; may be repeated twice for credit. Prerequisite: Consent of the director of speech pathology and audiology.

SPAA 599 *Thesis in Speech Pathology and Audiology* (1-6)
Registration only after consultation with major advisor.

SPEECH COURSES (RHETORIC-PUBLIC ADDRESS)**Spch 10** *Intercollegiate Forensics* (1)

(Maximum 4 credits) Practice in debate, discussion, readers' theatre, and individual events.

Spch 100 *Fundamentals of Speech* (4)

The study and practice of speech skills, stressing both content and delivery in oral communication.

Spch 101 *Voice and Diction* (4)

The fundamentals of voice and sound production with drills designed for voice and articulation improvement.

Spch 200 *Advanced Communicative Speaking* (4)

The advanced study and practice of speech skills stressing both content and delivery in different communicative settings. Prerequisite: Extensive speech work in high school, or Spch 100, or consent of instructor.

Spch 202 *Introduction to Rhetoric* (3)

The principles and techniques of oral communication in the light of classical and modern rhetorical theory. Readings in rhetoric/public address theory from Aristotle to Kenneth Burke.

Spch 204 *Principles of Debate* (4)

A study of the principles of debate, including analysis, briefing, case planning, evidence, reasoning, and refutation; class debating on vital national and international issues.

Spch 205 *Beginning Oral Interpretation* (4)

The study in the nature and function of oral reading.

Spch 206 *Advanced Oral Interpretation* (4)

The study of selection and presentation of literature suited for oral interpretation. Prerequisite: Speech 205 or consent of instructor.

Spch 209 *Parliamentary Procedure* (1)

The study of established parliamentary rules used to conduct organized meetings.

Spch 210 *Communicative Arts of Ethnic Minorities* (3)

The study of the communicative acts of rhetoric and theatre as vehicles of social change by ethnic minority groups.

Spch 251 *Applied 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 in evaluating and treating problems in oral communication.

Spch 253 *Language and Communication* (4)

The development of speech and language; the psychological and sociological bases of speech behavior.

Spch 308 *Group Discussion and Conference Methods* (3)

The theory and practice of discussion and conference methods with emphasis on types, techniques, and purposes. Prerequisite: Speech 100 or 200 or consent of instructor.

Spch 309 *Rhetorical Criticism* (4)

An examination of the criteria for evaluating speeches; including detailed examination of invention, style, organization, delivery, and effectiveness; comparisons to literary criticism and historical analysis. Prerequisite: Spch 202 or consent of instructor.

Spch 310 *Contemporary Public Address* (3)

The analysis of social, political, religious, ethical, and legal ideas and issues as reflected in the oral communication of today.

Spch 311 *Readers' Theatre* (3)

A study of the theory, principles, and techniques of the interpretation of drama, novels, and short stories in the medium of readers' theatre.

Spch 312 *Principles of Persuasion* (3)

Advanced theory and practice of persuasive public speaking; logical and psychological problems of persuasion. Prerequisite: Spch 100, 101, and 202.

Spch 316 *Radio and Television Speaking* (4)

The study and practice of selected types of radio and television speaking activities.

Spch 340(G) *The Teaching of Speech* (4)

Methods of teaching high school speech. Prerequisite: Spch 100, 312, or consent of instructor.

Spch 342(G) *High School Speech and Drama Activities* (4)

Methods of organizing and administering the high school extra-curricular speech program; the rationale for and study of forensics and dramatics.

Spch 345(G) *Speech in the Elementary Classroom* (3)

A study of the basic concepts of oral communication and their application in the elementary classroom; a survey of speaking and listening activities which can be utilized in the classroom; a survey and evaluation of objectives, procedures, and materials which will promote effective oral communication.

Spch 416(G) *Special Projects in Rhetoric and Public Address* (4)

Opportunity for the advanced public address student to do individual investigative work in a particular phase of public address. Prerequisite: consent of instructor.

Spch 469 *Internship in Rhetoric and Public Address* (3-16)

Spch 499(G) *Topical Workshop* (1-4)

Spch 540 *Problems in Speech Education* (3)
An examination of the problems involved in the development of speech programs.

Spch 599 *Thesis in Speech* (1-6)
Registration only after consultation with major advisor.

SPEECH COURSES (THEATRE)

Spch 30 *Stagecraft* (1) (Maximum 4 credits)
Experience in set construction and painting; backstage organization and house management. (Activity course.)

Spch 40 *Theatre Practicum* (1) (Maximum 10)
Laboratory participation in the technical phase of College theatre productions. In addition to practical work in areas such as set and costume construction, stage lighting and house management, each student will pursue independently the study of one facet of theatre production. Open only to speech-theatre majors or minors.

Spch 220 *Theatre Form and Appreciation* (3)
The study of theatre form, including dramatic theory and criticism with reference to plays, playwrights, and stage productions.

Spch 222 *Principles of Acting* (4)
The study of the basic theory and technique used by the actor in creating a role for the stage.

Spch 223 *Stage Make-up* (3)
The study and practice in the techniques of types and styles of stage make-up.

Spch 224 *Technical Production* (4)
The theory and practice of working with stage equipment and with the methods and procedures of the construction, rigging, and handling of stage scenery.

Spch 225 *Advanced Technical Production* (4)
The theory and practice of theatrical drafting, perspective techniques and scenery, painting techniques. Prerequisite: Spch 224 or the consent of the instructor.

Spch 228 *Theatre Organization and Management* (3)
The study of the organization of technical personnel and operations, before and during rehearsal and in performance.

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 in terms of their impact on American culture and their contribution to the developing art of film making.

Spch 281 *Film Form and Criticism* (4)
A critical approach to a limited number of artistically significant motion pictures and motion picture directors. The course is an attempt to increase the student's understanding of and sensitivity toward the basic elements of filmic art and the creative skills of successful film makers.

Spch 322(G) *Development of the Drama I* (4)
Representative readings in dramatic literature from Aeschylus to Shakespeare.

Spch 324(G) *Development of the Drama II* (4)
Representative readings in dramatic literature from Shakespeare to Ibsen.

Spch 326(G) *Development of the Drama III* (4)
Representative readings in dramatic literature from Ibsen to the present.

Spch 328(G) *The American Theatre* (4)
An examination of American Theatre and drama in which the significant contributions of selected players, playwrights and theatre craftsmen will be discussed as they relate to the study of representative American plays.

Spch 330(G) *Dramatic Production I* (3-6)
Study and practice in the play production techniques of acting, directing, and technical theatre through the production processes of preparing one play weekly for summer theatre audiences. Prerequisite: Consent of the instructor.

Spch 331(G) *Dramatic Production II* (3-6)
Study and practice in the play production techniques of acting, directing, and technical theatre through the production processes of preparing one play weekly for summer theatre audiences. Prerequisite: Consent of the instructor.

Spch 332(G) *Advanced Acting I: Stage Movement* (4)
The study and practice of movement and pantomime as it pertains to the actor's use of his body on the stage.

Spch 333(G) *Advanced Acting II: Characterization* (4)
The study and practice of improvisation, role analysis, and vocal training for the actor.

Spch 334(G) *Principles of Scene Design* (4)
The fundamentals of pictorial representation, including composition and color rendering in the planning and execution of scenic design. Prerequisite: Speech 225 or consent of the instructor.

Spch 336(G) Advanced Scene Design (4)
Detailed investigation of current practices in scenic design with experience in scenic rendering. Prerequisite: Spch 334 or consent of the instructor.

Spch 337(G) Stage Lighting (4)
The study of the use and capabilities of light in dramatic productions, with an examination of lighting instruments and control devices and experience in lighting design. Prerequisite: Speech 224.

Spch 338(G) Stage Costume Design (4)
A history of the development of clothing from the Egyptians to the twentieth century. Practical experience in costume design and water color rendering techniques.

Spch 341(G) Children's Dramatics (4)
The principles and practices in the conduct of informal drama with children; a study of improvised play making and the analysis of scripts and play production methods for the young audiences.

Spch 344(G) Principles of Play Direction (4)
Theory and practice in selecting and blocking plays, selection of casts, and rehearsal procedures; laboratory method.

Spch 382 Survey of Film Styles (4)
A descriptive approach to the forms which have developed in the cinema world-wide. Films from each genre are viewed and critically evaluated. Prerequisite: Speech 280 and Speech 281, or consent of instructor.

Spch 383 Experimental Film Making (4)
A practical approach for the non-professional film maker. Experimental films are viewed and discussed. Students learn to operate basic super 8 mm motion picture equipment and produce short films which are shown in class and critically evaluated.

Spch 384 Basic Television Production (3)
Introduction to the television broadcasting studio and control room equipment and its operation; program types, planning, directing and performance. Some practical experience. (Same as M.C. 350)

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: Speech 344 or consent of the instructor.

Spch 430(G) Styles of Directing (4)
Principles and problems in direction of major historical and theatrical styles.

Spch 431(G) Styles of Acting (4)
Principles and problems in the acting of major historical and theatrical styles.

Spch 434(G) Special Projects in Dramatic Arts (4)
Opportunity for the advanced theatre student to do individual creative or investigative work in a particular phase of dramatic arts. May be taken twice if content is substantially different. Prerequisite: Consent of the instructor and senior standing.

Spch 436(G) Experimental Theatrical Design (4)
Advanced investigation in scene design and projects in scene, costume, property, and lighting design for standard and experimental plays. Prerequisite: Speech 336 or consent of the instructor.

Spch 437(G) Styles of Stage Design (3)
The study of styles of selected designers from the Renaissance through the present.

Spch 438(G) Contemporary Drama (4)
A consideration of individual British and continental playwrights. The course may be elected twice when the reading lists are substantially different.

Spch 469 Internship in Theatre (3-16)

Spch 485 Television and Film Acting
A practical approach to the skill needed by the student to perform successfully in television and film media. The student will create and perform a variety of personality "assignments" and acting roles in television drama, presentations, commercials, and short films. Prerequisite: Speech 385 and Speech 222 or consent of instructor.

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. The student is offered a series of creative projects in developing and directing short television programs and short films. Prerequisite: Speech 385 and Speech 344 or consent of instructor.

Spch 499(G) Topical Workshop (1-4)

Spch 520 Seminar in Educational Theatre (3)
An examination of the problems involved in the development of educational theatre programs. Prerequisite: Consent of instructor.

Spch 522 Dramatic Theory and Criticism (3)
Principles of dramatic criticism from Aristotle to the present day. Critical standards and methods, and theory application in the evaluation of drama in performance. Prerequisite: Consent of the instructor.

WOMEN'S STUDIES

Sylvia Kruger, *Coordinator*, (Humanities); Mildred Treumann (Psychology); John Bruce and Beverly Wesley (Sociology); Murray Kranz (History); Marjorie Comer (English); Bella Kranz (Education); Thomas Collins (Biology)

Minor in Women's Studies 24 credits

The proposed minor in Women's Studies has been submitted to the State College Board for approval. It provides students an opportunity for interdisciplinary learning related to women in society. Students will be expected to interrelate various kinds of knowledge and perspectives from the natural and social sciences, humanities, and education.

This minor is particularly appropriate for students preparing for careers in education or in the human services. The minor will also prepare a student to pursue further studies or to obtain advanced degrees in Women's Studies at other institutions.

Core required courses 12-14 credits

Humanities 310 Women's Studies (4)

Psychology 220 Psychology of Women (4) or Sociology 333 Sociology of Sexuality (3)

History 311 Women in History (3) or English 232 Women in Literature (4)

Humanities 320 Independent Study (2)

Electives (10-12)

Psychology 222 Psychology of Women (4)

History 311 Women in History (3)

English 232 Women in Literature (4)

Sociology 333 Sociology of Human Sexuality (3)

Sociology 310 Majority-Minority Group Relations (3)

Sociology 320 Social Psychology of the Family (3)

Biology 104 Human Biology (4)

Education 492 Educational Systems and Women (3)

Other appropriate courses offered by various departments as topics courses or seminars are available. Examples are American Studies 420: Directed Readings, and Sociology 425: Seminar. Additional courses related to a student's interests may be taken with approval of the Coordinator. Students are encouraged to avail themselves of courses at NDSU and at Concordia College which may be used as electives. The Coordinator of Women's Studies can give direction in this regard.



Administration

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John M. Jenkins *Director of Campus Planning*
Lester E. Johnson *Director of Design and Construction*
Arden E. Berg *Business Manager*
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James Aasness *Bookstore Manager*



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Marv Gerhardson *Associate Dean of Students*
Eileen Hume *Associate Dean of Students and Coordinator of Human Relations Programs*
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Mike Pehler *Assistant Director of Student Development and Coordinator of Night Watch*
Paul Braun *Assistant Director of Student Development*
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Ross Fortier *Director of Athletics*
David Anderson *Director of Financial Aids*
Martin Eia *Financial Aids Officer*
David Beauchamp *Financial Aids Officer*
Bruce Chambers *Student Union Operations and Recreation Manager*
Dorothy Nordick *Student Union Office Manager*
Connie Oxtan *Student Union Business Manager*

College Relations

Gerhard Haukebo *Director of College Relations*
Tom Lundquist *Director of Information Services*
Kathy Bakum *Coordinator of College Publications*

Development

John Jenkins *Director of Development and Vice President, Moorhead State College Foundation*

Faculty

Roland Dille, 1963. *President*. B.A., Ph.D., University of Minnesota.

Kenneth Ames, 1973. *Instructor of Anthropology*. A.B., George Washington University; M.A., University of New Mexico.

Dale D. Amundson, 1968. *Associate Professor of Art*. B.F.A., University of Manitoba; M.F.A., University of Arkansas. (Leave of absence 1974-75).

Beth C. Anderson, 1969. *Instructor of Education*. B.A., Jamestown College; M.A., Washington State University.

David H. Anderson, 1965. *Director of Financial Aids and Assistant Professor*. B.S., M.A., University of Minnesota.

Dennis L. Anderson, 1972. *Head Basketball Coach and Instructor of Health, Physical Education and Recreation*. B.S., Moorhead State College.

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- Victor J. Peters, 1961. *Professor of History*. B.A., M.A., University of Manitoba; Ph.D., University of Gottingen.
- Eugene A. Philipps, 1966. *Professor of Economics*. B.S., M.A., Ph.D., University of Illinois.
- Rosemarie Pihlaja, 1974. *Instructor of Multidisciplinary Studies*. B.S., M.S., Bemidji State College.
- Viola K. Powell, 1968. *Assistant Professor of Health, Physical Education and Recreation*. B.Ed., Winona State College; M.A., in Ed., Washington University.
- Harriet L. Powers, 1963. *Assistant Registrar*. B.A., Concordia College; M.S.Ed., North Dakota State University.
- Mary A. Pryor, 1965. *Professor of English*. B.A., Grinnell College; M.N., Yale University; M.A., Ph.D., University of Nebraska.
- Franz H. Rathmann, 1974. *Adjunct Professor of Astronomy*. B.A., M.A., University of Minnesota; Dr. Nat. Sci., University of Goettingen.
- Timothy L. Ray, 1970. *Assistant Professor of Art*. B.F.A., University of Manitoba; M.F.A., University of Arkansas.
- Lawrence L. Reed, 1968. *Serials Librarian*. B.A., M.A., University of Minnesota. (Leave of absence 1974-75).
- Margaret F. Reed, 1964. *Chairperson and Professor; Department of Social Services*. A.B., A.M., Ph.D., University of Chicago.
- Richard Y. Reed, 1964. *Professor of Psychology*. B.S., Drury College; M.A., Washington University; Ph.D., University of Chicago.
- Phillip Rice, 1974. *Associate Professor of Psychology*. B.A., Ft. Wayne Bible College; M.A., St. Francis College; Ph.D., Colorado State University.
- Roger Richman, 1967. *Instructor of Geography and Geology*. B.S., Wisconsin State College; M.A., Michigan State University.
- Glenn Ringstad, 1961. *Chairperson and Associate Professor; Department of Humanities*. B.S., Moorhead State College; M.A., San Francisco State College.
- Bill V. T. Ritchie, 1968. *Professor of Mathematics*. B.S., M.S., Ph.D., Purdue University.
- Eleanor B. Ritchie, 1969. *Chairperson and Professor; Department of Geography and Geology*. B.A., Wayne State University; M.A., Ph.D., Northwestern University.
- Conrad Rose, 1973. *Instructor of Multidisciplinary Studies*. B.A., University of Minnesota.
- Derald D. Rothmann, 1962. *Chairperson and Professor; Department of Mathematics*. B.S., University of North Dakota; M.A., University of Kansas; Ph.D., University of Missouri.
- Roberta C. Russell, 1972. *Assistant Professor of Music*. B.A., Smith College; M.M., Manhattan School of Music.
- Swaran S. Sandhu, 1968. *Professor of Sociology*. B.A., B.T., M.A., Punjab University; M.A., Ph.D., Wayne State University. (Leave of absence 1974-75).

G. Theodore Schaum, 1969. *Chairperson and Associate Professor: Department of Languages*. B.A., Princeton University; A.M., Ph.D., Indiana University.

Kenneth C. Schmidt, 1969. *Assistant Professor of Mathematics*. B.A., M.S., University of California, Berkeley. (Leave of absence 1974-75).

Davis A. Scott, 1966. *Professor and Director, Speech Pathology and Audiology*. A.B., Grinnell College; A.M., Ph.D., Indiana University.

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Joan Seidel, 1973. *Assistant Professor of Social Services*. B.A., College of St. Catherine; M.S.W. Saint Louis University.

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James E. Shaw, 1969. *Associate Professor of Chemistry*. B.S., Valparaiso University; Ph.D., University of Illinois.

John S. Sherman, 1969. *Assistant Professor of English*. B.A., M.A., University of Denver.

Mary A. Shimabukuro, 1966. *Associate Professor of Biology*. B.S., University of Wisconsin; M.S., Ph.D., University of Minnesota.

Donald A. Short, 1969. *Associate Professor of English*. B.S., M.S., Moorhead State College; M.A., Ph.D., University of Pittsburgh.

Barbara B. Sipson, 1972. *Coordinator of Northlands Planning*. B.S., University of Iowa; M.S., Syracuse University.

Roger F. Sipson, 1968. *Associate Professor of Physics*. B.S., Union College; Ph.D., Syracuse University.

Kenneth R. Skjegstad, 1966. *Professor of Biology*. B.S., Moorhead State College; Ph.D., University of California.

George R. Smart, 1972. *Assistant Professor of Sociology*. B.S., University of Kansas, Lawrence; Ph.D., University of Colorado.

I. Kenneth Smemo, 1967. *Professor of History and Languages*. B.S., Wisconsin State University; M.A., Ph.D., University of Minnesota.

Andrew W. Smith, 1968. *Associate Professor of Music*. B.S., Indiana State College; M.M., Ph.D., University of Michigan.

George E. Smith, 1968. *Assistant Professor of Education*. B.A., M.Ed., University of British Columbia.

Marion V. Smith, 1945. *Associate Professor of Mathematics*. B.A., Macalester College; M.A., University of Minnesota.

Rosemary L. Smith, 1968. *Assistant Professor of English*. B.A., M.A., University of Washington.

T. Edison Smith, 1949. *Golf Coach and Professor of Health, Physical Education and Recreation*. B.S., Moorhead State College; M.Ed., University of Minnesota; Ed.D., University of North Dakota.

G. Max Spriggs, 1974. *Director of Special Education and Associate Professor of Special Education*. B.S., University of Minnesota; M.S., St. Cloud State College; Ed.D., University of Minnesota.

Barbara A. Steinberg, 1974. *Instructor of English*. B.S., University of Wisconsin, Madison, M.A., University of California, Berkeley.

Edith B. Stevens, 1966. *Instructor of Spanish*. B.A., Milton College; M.A., University of Wisconsin. (Leave of absence 1974-75).

James R. Stevens, 1966. *Associate Professor of Humanities and Languages*. B.A., McGill University; M.A., Ph.D., University of Wisconsin.

Kathleen Stokker, 1973. *Instructor of Norwegian*. B.A., St. Olaf College; M.A., University of Wisconsin.

Marcel C. Stratton, 1955. *Associate Professor of Art*. B.F.A., University of Nebraska; M.A., University of Chicago.

Judith A. Strong, 1969. *Associate Professor of Chemistry*. B.S., State University of New York-Albany; M.A., Ph.D., Brandeis University.

Milo N. Sulentic, 1963. *Associate Professor of Industrial Education*. B.A., M.A., State College of Iowa. Ph.D., University of Minnesota.

James A. Svobodny, 1974. *Assistant Professor of Social Services*. B.A., North Dakota State University; M.S.W., University of Nebraska.

Linda A. Svobodny, 1972. *Instructor of Special Education*. B.S., North Dakota State University; M.Ed., University of Nebraska.

Julie Swanson, 1974. *Instructor of Special Education*. B.S., Moorhead State College; M.A., University of Minnesota.

- Marie E. Swanson, 1970. *Instructor of Speech*. B.S., M.S., Minot State College.
- Evelyn J. Swenson, 1961. *Chairperson and Associate Professor: Department of Media Education*. B.S., St. Cloud State College; B.S., IN L.S., University of Minnesota; M.A., University of Denver; Specialist Certificate in Library Science Education, University of Minnesota.
- James K. Swenson, 1972. *Associate Professor of Business Administration*. B.S., B.A., M.S., Ph.D., University of North Dakota.
- Wade T. Swenson, 1974. *Assistant Professor of Industrial Education*. B.S., Moorhead State College; M.A., Ball State University; Ed.D., Indiana University.
- P. Richard Szeitz, 1966. *Chairperson and Professor: Department of Art*. B.F.A., Layton School of Art; M.S., M.F.A., University of Wisconsin.
- Arne D. Teigland, 1968. *Assistant Professor of Speech Pathology and Audiology*. B.A., Moorhead State College; M.A., University of Washington.
- William L. Thomas, 1966. *Head Coach, Baseball and Chairman and Professor: Department of Health, Physical Education and Recreation*. B.S., Valley City State Teachers College; M.A., Ed.D., Colorado State College.
- Almoste Thompson, 1974. *Assistant Professor of Education*. B.S., University of California, Los Angeles; M.A., California State College, Long Beach; Ed.D., University of California, Los Angeles.
- Warren J. Thomsen, 1965. *Professor of Mathematics*. B.A., Iowa State Teachers College; M.S., Ph.D., State University of Iowa.
- Joseph H. Thorman, 1968. *Associate Professor of Education*. B.A., Jamestown College; M.A., Ph.D., University of Minnesota.
- Robert J. Tolbert, 1963. *Chairperson and Professor: Department of Biology*. B.S., B.A., Moorhead State College; Ph.D., Rutgers University.
- Martin H. Tonn, 1957. *Associate Professor of Special Education*. B.A., M.A., Ph.D., State University of Iowa.
- John F. Trainor, 1967. *Associate Professor of Economics*. B.A., College of St. Thomas; M.A., University of Minnesota; Ph.D., Washington State University.
- Mildred E. Treumann, 1968. *Instructor of Psychology*. A.B., M.A., University of Rochester.
- William B. Treumann, 1960. *Dean of Mathematical and Natural Sciences and Professor of Chemistry*. B.S., University of North Dakota; M.S., Ph.D., University of Illinois.
- Otto E. Ursin, 1946. *Professor of Industrial Education*. B.S., Bemidji State College; M.A., University of Minnesota; Ed.D., Bradley University.
- Vance Vannote, 1974. *Counselor and Assistant Professor of Education*. B.A., M.A., Ph.D., University of North Dakota.
- Mark L. Vinz, 1968. *Assistant Professor of English*. B.A., M.A., University of Kansas. (Leave of absence 1974-75).
- Ricardo Visus, 1971. *Assistant Professor of Music*. Certificate, Royal Conservatory of Music, Madrid, Spain.
- K. Walter Vollmers, 1968. *Assistant Professor of Physics*. B.S., Hofstra College; Ph.D., University of Pittsburgh.
- Ronald S. Walker, 1958. *Instructor of Industrial Education*. B.S., Moorhead State College; A.M., Colorado State College.
- James T. Wallen, 1967. *Assistant Professor of Mathematics*. B.A., Wartburg College; M.A., University of Nebraska.
- Shelda A. Warren, 1955. *Assistant Professor of Mathematics*. B.A., M.S. in Ed., Moorhead State College; Ed.S., George Peabody College for Teachers.
- Catherine M. Warrick, 1973. *Dean of Education and Regional Services, and Acting Director of the New Center*. A.B., Pasadena College; M.A., University of Southern California; Ph.D., Indiana University.
- Barbara M. Wasson, 1972. *Assistant Professor of Education*. B.A., M.A., Ph.D., University of Minnesota.
- John B. Wasson, 1971. *Assistant Professor of Special Education*. B.S., M.A., Ph.D., University of Minnesota.
- Dietta K. Watson, 1970. *Instructor of Health, Physical Education and Recreation*. B.A., University of Northern Iowa; M.A., Adams State College.
- Marlowe E. Wegner, 1947. *Chairperson and Professor: Department of Industrial Education*. B.S., Moorhead State College; M.A., University of Minnesota; Ed.D., University of North Dakota.
- Robert S. Weibust, 1970. *Assistant Professor of Biology*. A.B., Colby College; M.S., Ph.D., University of Maine.
- Beverly A. Wesley, 1974. *Instructor of Sociology*. B.A., Moorhead State College; M.A., North Dakota State University.

Walter G. Wesley, 1966. *Chairperson and Associate Professor; Department of Physics and Astronomy*. B.A., Texas Christian University; Ph.D., University of North Carolina.

Leland W. White, 1966. *Professor of Industrial Education*. B.S., Ellendale State Teachers College; M.E., Colorado State University; D.Ed., Texas A&M University.

Nelson T. Whyatt, 1967. *Associate Professor of History*. B.A., Harvard University; M.A., Ph.D., University of Minnesota.

Thomas D. Williams, 1968. *Assistant Director, Counseling Center and Associate Professor of Education*. B.A., M.A., University of Wisconsin; Ph.D., Washington State University.

Helen K. Wilson, 1972. *Associate Professor of Psychology*. A.B., San Diego State College; M.A., Ph.D., University of Minnesota.

William S. Wilson, 1974. *Instructor of Music*. B.M., University of Texas. M.M., Catholic University of America.

Donald A. Wirries, 1966. *Assistant Professor of Accounting*. B.S., M.B.A., University of Detroit; J.D., University of North Dakota.

Marvel G. Wooldrik, 1950. *Catalog Librarian*. B.S., B.S.L.S., M.A., University of Minnesota; M.S.L.S., Western Reserve.

William T. Woolwine, 1966. *Assistant Professor of English*. B.A., University of Richmond; M.A., University of Arizona. (Leave of absence 1974-75).

James G. Wray, 1969. *Professor of Physics*. A.B., Cornell University; Ph.D., Syracuse University.

Hsin-Yang Yeh, 1966. *Professor of Physics*. B.S., National Taiwan University; M.S., Kynshu University; Ph.D., University of North Carolina. (Leave of absence 1974-75).

John Youngquist, 1961. *Associate Professor of Art*. B.A., University of Minnesota; M.F.A. State University of Iowa. (Leave of absence 1974-75).

Fike A. Zahroon, 1966. *Assistant Professor of Mathematics*. B.S., Baghdad University; M.S., Ph.D., Ohio State University. (Leave of absence 1974-75).

Clarence J. Zuvekas, 1971. *Coordinator of Latin American Studies and Associate Professor of Economics*. B.A., Johns Hopkins University; Ph.D., Washington University.

Professors Emeriti

Betty Bergford, Assistant Professor Emeritus.
 Alice Corneliussen, Assistant Professor Emeritus.
 Frances Dillon, Professor Emeritus.
 Roy Domek, Assistant Professor Emeritus.
 Allen Erickson, Professor Emeritus.
 Grace Gregerson, Associate Professor Emeritus.
 Ruth Hanson, Associate Professor Emeritus.
 Paul Heaton, Professor Emeritus.
 Delsie Holmquist, Dean Emeritus.
 Nels Johnson, Professor Emeritus.
 Genevieve King, Professor Emeritus.
 Joseph Kise, Dean Emeritus.
 Jessie McKellar, Assistant Professor Emeritus.
 Byron D. Murray, Professor Emeritus.
 Viola Petrie, Assistant Professor Emeritus.
 Glaydon Robbins, Dean Emeritus.
 Laura Scherfenberg, Associate Professor Emeritus.
 Maude Wenck, Professor Emeritus.

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Academic Calendar 1974-75

FALL QUARTER, 1974

Residence Halls Open (9 A.M.)	Sunday, September 8
Faculty Meeting	Monday-Tuesday, September 9-10
Final Registration	Monday-Tuesday, September 9-10
New Student Orientation	Monday-Tuesday, September 9-10
All Classes Begin	Wednesday, September 11
Columbus Day - No Classes	Monday, October 14
Midterm	Friday, October 18
Winter Pre-Registration	Tuesday-Friday, November 12-15
Final Class Schedule	Wednesday-Friday, November 20-22
Residence Halls Close (5 P.M.)	Friday, November 22
Fall Quarter Closes	Tuesday, November 26

Total: 56

WINTER QUARTER, 1975

Residence Halls Open (12 Noon)	Sunday, December 1
Final Registration	Monday, December 2
Evening Classes Begin	Monday, December 2
Daytime Classes	Tuesday, December 3
Holiday Recess Begins	Saturday, December 21
Residence Halls Close (2 P.M.)	Saturday, December 21
Residence Halls Open (12 Noon)	Sunday, January 5
Classes Resume after Holiday	Monday, January 6
Midterm	Wednesday, January 22
President's Day - No Classes	Monday, February 17
Spring Pre-Registration	Tuesday-Friday, February 18-21
Final Class Schedule	Wednesday-Friday, February 26-28
Residence Halls Close (2 P.M.)	Friday, February 28
Winter Quarter Closes	Tuesday, March 4

Total: 56

SPRING QUARTER, 1975

Residence Halls Open (12 Noon)	Sunday, March 9
Final Registration	Monday, March 10
Evening Classes Begin	Monday, March 10
Daytime Classes Begin	Tuesday, March 11
Holiday - No Classes	Friday, March 28
Midterm	Wednesday, April 16
Fall Pre-Registration	Tuesday-Thursday, May 13-15
Final Class Schedule	Wednesday-Friday, May 21-23
Commencement for 1974-1975	Saturday, May 24
Residence Halls Close (5 P.M.)	Saturday, May 24
Spring Quarter Closes	Tuesday, May 27

Total: 56

Total Days for Year: 168

SUMMER SESSION I, 1975

Res Halls Open (12 Noon)
Registration
Classes Begin
Holiday - No Classes
First Session Closes

Sunday, June 8
Monday, June 9
Monday, June 9
Friday, July 4
Friday, July 11

SUMMER SESSION II, 1975

Registration
Classes Begin
Final Class Day
Summer Commencement
Second Session Closes

Monday, July 14
Monday, July 14
Friday, August 15
Friday, August 15
Friday, August 15

Academic Calendar 1975-76

FALL QUARTER, 1975

Faculty Meeting
Final Registration
New Student Orientation
All Classes Begin
Columbus Day - No Classes
Midterm
Final Class Schedule
Fall Quarter Closes

Monday, September 8
Monday-Tuesday, September 8-9
Monday-Tuesday, September 8-9
Wednesday, September 10
Monday, October 13
Friday, October 17
Wednesday-Friday, November 19-21
Tuesday, November 25

Total: 56

WINTER QUARTER, 1976

Final Registration
Evening Classes Begin
Daytime Classes Begin
Holiday Recess Begins
Classes Resume after Holiday
Midterm
President's Day - No Classes
Final Class Schedule
Winter Quarter Closes

Monday, December 1
Monday, December 1
Tuesday, December 2
Saturday, December 20
Monday, January 5
Wednesday, January 21
Monday, February 16
Wednesday-Friday, February 25-27
Tuesday, March 2

Total: 56

SPRING QUARTER, 1976

Final Registration
Evening Classes Begin
Daytime Classes Begin
Midterm
Holiday - No Classes
Final Class Schedule
Commencement for 1975-1976
Spring Quarter Closes

Tuesday, March 9
Tuesday, March 9
Wednesday, March 10
Wednesday, April 15
Friday and Monday, April 16 & 19
Monday-Wednesday, May 24-26
Thursday, May 27
Friday, May 28

Total: 57

Total Days for Year: 169

SUMMER SESSION I, 1976

Registration
Classes Begin
Holiday -No Classes
First Summer Session Closes

Monday, June 14
Monday, June 14
Monday, July 5
Friday, July 16

Total: 25

SUMMER SESSION II, 1976

Registration
Classes Begin
Summer Commencement
Second Summer Session Closes

Monday, July 19
Monday, July 19
Friday, August 20
Friday, August 20

Total: 25

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