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# Graduate Bulletin, 1980-1982 (1980) 

Moorhead State University

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

Moorhead State University is, above all, an institution for undergraduate education. Graduate programs have developed out of the undergraduate programs. They have been added cautiously, to meet clear needs and to meet those needs well.
The most recent report of the North Central Association commended both the caution and the quality. We can take pride in our graduate curricula, reminding ourselves, as we so often have in the past, that size has no necessary relationship with quality.
If we have been cautious, we have also been responsive, matching our sense of academic integrity with the needs of people in that area of the state where higher education is our responsibility.
Graduate education at Moorhead State has become an important part of our total program


## general information

## The University

Moorhead State University, established in 1885 as a Normal School, graduated its first students in 1890 and following years of growth and maturity now enrolls approximately 5000 students in its instructional offerings on campus and in the surfounding area in Minnesota. Bachelor's degrees may now be earned in 71 major fields of study. Graduate instructions was authorized in 1953, and the first Masier's degree was conferred in 1957. Master's degrees presently are offered in 17 maiors, and a Filth Year Program of study is availabie to teachers who may select from course offerings of more than 20 departments. In the University's committment of service to persons in its area, more than a third of its Iraduate instruotion is being provided in a number of off-campus locations in morthwestern Minnesota. Programs offered by Moorhead State University are accredited by the North Central Association of Colleges and Secondary Schools and by the National Courncl for Acc reditation of Teacher Education
The University occupies a 104-acre campus in Moorhead, Minnesota. Most of the 28 major buildings on the campus have been constructed since 1957 . Extensive library hoidings and an excellent computer facility are supplemented by cooperative arrangements among institutions in the community and through statewide networds linking this University with others in Minnesota. Laboratories and study centers are available with modern equipment to enable a wide variety of research.
Moorhead State University has become a cultural and intellectual center of western Minnesota Moorhead and adjacent Fargo North Dakola, have a population of about 100,000. Many organizations and projects in the community are mutually supportive of the programs of the University and two other institutions of higher education, Concordia College and North Dakota State University The three institutions form a broadly cooperative consortium, the Tri-College University, through which expanded instructional offerings are available by home. campus registration.

## Employment Opportunities and

 Financial AidsA limited rumber of Graduate Assistantships are available to which students in Master's programs may be appointed. These assistantships generally require 10 to 15 hours of duties per week and provide opportunity for gaining experience in the field of major interes: by duties performed under close faculty
supervision. Inquiries should be directed to the Office of Graduate Studies.
Some departments hire student help on an hourly basis and should be contaoled directly for information on such assignrnents. Both a Job Shop and Placement Office ase located on campus and may be consulted for part-time job listings which are available in the community. The University particicates in the College Work Situdy, Educationa! Opportunity Granis, and the National Direct Suident Loan programs. Eligibility for participation in these programs may be determined by contacting the Student Financial Aid Office. Veterans are encouraged to seek the assistance of the Veteran's Office for counseling and Gl Bill certifications.

## Housing and Dining Facilities

Accommodations are available in five residence halls and dining services are avallable on campus throughout the year. Graduate students may be assigned as resident hall assistants. Inquiries relating to housing should be directed to the Housing Office.

## Tuttion and Fees

## Application Fee

All students applying for admission to Moorhead State University for the first time must submit with their application a check or money order for $\$ 10,00$. This application fee is non-refundable.

## Tuition

Tuition and fees are set by the Minnesota State University Board and are subject to change. Present tuition rates are
Minnesota resident
$\$ 13.65$ per quarter hour credit
Non-resident
$\$ 27.40$ per quarter hour credit
Residents of Minnesota 62 years of age of older may register for courses in which space is available by paying an administration fee of
$\$ 2$ per credit hour. Application for such permission should be made with the Admissions and Records Office.
Residents of North Dakota or Wisconsin may apply for tuition reciprocity privilege by submitting forms, available on request trom the Graduate Studies or Registrar's Office, to the higher education agency in their home state.
Late registration and change-of-registration fees are chargeable. Graduate students enrolling for undergraduate courses pay the current undergraduate tuition. The University's general catalog should be consulted for additional information.

## Fees

Fees are payable at the time of registration each quarter at the rate of $\$ 2.50$ per credit hour registered to a maximum of $\$ 42.50$ in an academic term.

## programs offered

Master of Arts<br>Biology<br>Chemistry<br>Master of Science<br>Art<br>Biology<br>Business Education<br>Chemistry<br>Counseling and Guidance<br>Elementary Education<br>English

Health, Physical Education, and Recreation
Industrial Education
Mathematics
Music
School Psychologist
Memedial Reading
Special Education
Social Studies
Speech Pathology and Audiology
Speech Theatre
Master of Business Administration Fifth Year Program

## Educational Administration

Moorhead State University cooperates in programs leading to the Master of Science and Specialist in Edveation degrees offered by the Tri-College University.

## Admission to Graduate Study <br> Persons with a bacoalaureate degree from an

 accredited college or university may apply for admission to a Master's Program, the Fitth Year Program, or as a Graduate Soecial Student.
## Application Deadlines

Students desiring admission to a Master's Program or Fifth Year Program must complete the anolication file by August 15 (for the fall quarter), November is (for the winter quarter), February 15 (for the spring quarter) or May 15 (for the summer sessions). Some departments require earlier application to programs of limited enroilment. Such information will be provided in program desoriptions in the graduate bulletin.

A student may be admitted in Graduate Special status at any time prior to firsi registration on completion of the application process (see below). All application materials may be obtained from the Graduate Studies Office.

## Admission to a Master's Program

Admission to a Master of Science or Master of Arts degree program requires an undergraduate grade points average of 2.75 , or 3.25 for the most recent 45 quarter hour oredits of graded coursework based on a 4.0 scale, and submission of scores on the Graduate Record examiniation (Generai Aptitude) or Miller Analogies Test as required in specific programs. Some departments have additional requirernents for admission. therefore applicants should consult sections in the graduate bulietin prior to preparing-an application. A completed application form is required along with official transoripts of all college or university work taken, scores on the required (tests), and specific materials required by a department, before review of the application will be initiated. Departmental approval is required for admission to a graduate program and will in no case be waived, but approval by the major department does not guarantee admission lo graduate study.
A minimum grade point average of 3.0 is required for continuation in a program.
Students whose grade point average falls below 3.0 will be placed on probationary status. The record will be reviewed by the maior department and by the Dean of Graduate Studies after completion of 12.15 additional hours of credit to determine continuing status, but in no case will continuation in the program be permitted if the grade point average remains less than 3.0 at the time of the review.
Admission to a graduale study program does not guarantee that the applicant will be advanced to Candidacy for an advanced degree.
Specific requirements for the application and admission to the Master of Business Adminsitration program are provided under that section of the graduate bulletif.
Admission to Fifth year Program The application, with an official transcript. must be filed with the Graduate Studies Office. Speciflic requirements for admission are given in this bulletin, under the section entitled the Filth Year Program.

## Admission as a Graduate Special Student

A student desiring to take courses for graduate credit but not seeking admission to a Master's or Fith Year Program must complete an application for admission. Should admission to a program be desired at a later date the student must submit a complate application lor that program and meet the same admission oriteria in effect for other students, Oredits earned in Graduate Special Status which later might be counted in fulfilling minimum regulrements for a program may not exceed nine hours for the Master's degree or 15 hours for a Fifth Year Program

## Senior Registration

A senior enrolled at Moorhead Stale University who has 12 quarter hours or fewer to complete for graduation may be permitted by the Graduate Dean to enroll in graduate courses. This permission must be oblained in advance of registration.

## Registration and Academic Performance

## Pegistration

Graduate students are expected to register cluring the regular registration period at the beginning of each quarter or summer session. For evening and off-campus caurses only. students register at the first class meeting. During the academic year, the normal graduate load per quarter is 12 to 15 quarter hours depending upon laboratory and research work. The normal load in each summer session is 6 to 8 quarter hours.

## Graduate Courses

Courses whose numbers are followed by " $g$ " are open to graduate students as well as advanced undergraduate students; a higher level of achievement is required of graduate students in these courses. Courses numbered in the 500 series are open only to graduate students.

## Grading System

Grades given in graduate courses inicude $A, B$, C, D, F, and $S$ (Satisfactory). In a continuing research course a student may be given a grade of $x$ until the course is completed. W sigrities withdrawal from the course. Only those credits which were completed with a grade of $A, B$, or S (or C in some programs) may be applied towards a Master's degree.
The maik of 1 (theomptete) is given in cases where a student is unable to complete the last of his course requirements for reasons beyond his control. Arrangements for this musl be
made with the instructor before the end of the next quarter in which a student is registered. It is the responsiblity of the student to make arrangements for removing an incomplete.
A student's grade point average is computed from credits earned in courses in which the grades of $A, B, C, D$, and $F$ are given. A grade $A$ earns 4 grade points per credit hour, B, 3 grade points; C, 2 grade points; D, 1 gracie point and F. 0 grade points. An incomplete (1) is counted as an $F$ until it is made up.

## Auditing Courses

An eniry of V (visitor or auditor) may be made upon a student's permanent record when a course is audited. As an auditor a student may attend all class sessions, but need not complete assignments or projects, take part in olass discussion, or take examinations, A student who wishes to audit a course must register and pay fuition and fees as though faking the course for credit A student may change from regular (credit) to audit status with the written permission of the instructor through ithe tenth day of classes during the regular quarter, or the fourth day of classes in a summer session. Credit may not be earned in courses taken as a visitor or auditor excent by re-enrollment for credit and completion of the eourse with a satisfactory grade.

## the master's degree

## Master of Science

The Master of Science is offered by Moornead State University to extend the potential lor perlormance by persons presently involved in or intending to enter teaching or other services pertaining to the delivery of education. Complation of the degree will not, in itself. qualify one for an earned teaching certificate. However, all persons entering or completing the degree program will be required to have presented evidence of experience in some aspect of an education-delivery system. This may be demonstrated by an earned teaching certificate; or by evidence for the equivalent of nine months of full-time experience in a position of responsibility directly related to the delivery of education, e.g. Area Vocational Techaical School tuinior College Training Program in Business and Industry, etci; or by the completion of a planned internship of 120 hours within a period of 3.6 continuous months.
In adalion to undergracuate work appropriate to the field of graduate study, to be determined by incividual departments of areas, the student. is expected to present college work, not a part
of the minimum requirements for the Master s degree, representing not less than 12 credits earned in eourses relating to at least four of the following fieids: teaching and curriculum planning, tuman development and educational psychoiogy, guidance and assessment, administration, areas speciality education studies
Genaral Course Requirements
A minimum of 45 graduate tredits are required, of which at least 15 must be earned int the 500 geries.
Groupl Frotes sionea Education (intintivin 8 Fours) Ed. 501 Psychological Foundation (3). Ed. 503-Introduction to Research (3), one additional Professional Education course (3)
Group 11 Major Field of Concentration (miaimum 24 hours)
Group ill Related Area courses (minimum) 9 hours)
Remairsing 3 hours for the required 45 may be taken in any group. Not more than nine hours earned in workshops (499g) or special inservice (d89g) ccurses may be counted toward the minimum requrremerits tor a degree
A Candidate for a Master of Science may choose to tulfill the research requirement in either of the following ways.
Plan A: The candidate writes a thesis for which 6 credit hours are granted, to be included in the 24 credit hours required in the major field.
Plan B: The candidate writes a non-crealt starred paper tor each of ihree courses in which erralled. Two of these papers should be written in connection with courses in the major field and one in a related area. The
Professional education coursec equired of all candidates for the Master of Science degree may not be chosen for these papers.
Areas of study are given on page 2 of this Bulletin. Specific requirements for particular majors are given in departmental or program sections. The student, after being admitted to graduate study, will, in consultation with his departmental advisor, develoo a preliminary plan of study which will meet the specific standards of the department as well as the general requirements for all Master's degrees.

## Residence and Transfer Credit

An approved program of study must include at least 36 credits to be completed after admission to study for the Master's degree Subject to the approval of departments concerned a maximum of 15 credits may be accepted in transfer from other accredited institutions providing that they are included in a properly approved program (see Candidacy). Courses approved for registration through the Tri-Gollege University are not subject to this transter limitation, Subject to their inclusion in a pregram previousty approved by the eeparments concemed and the Graduate Dean courses constifuting up to hall of the mimmum hours reguired for the degree may be taken at other Minnesota State Universities; however, in such instances the number of haurs accepted from other institutions will be reduced correspondingly. $A$ grade of $A$ or $B$ is required in any courses to be included in the program and not taken at this University. At least half of the hours constituting the minimum requirements for the degree will be completed through registrations at the University in offerings by its faculty.,

## Time Limitation

A student may begin coursework up to six months after admission to graduate study. In most departments all requirernents for the degree must be completed within seven yearsi however a few programs require completion within five years. In certain cases the Graduate Dean may consider a student's

- petition for an extension of time.


## Research Components

Thesis Research (Plan A)
A part of the program of every Master's degree candidate under Plan $A$ is the demonstration of ability to do incividual. independent work of a creative or investigative kind in an area related to the major fleld through the preparation of a thesis. The thesis will be supported by the work represented in 6 hours of registration in thesis 599 but not more than 6 hours of 599 may be counted in satisfying the minimum requirements for the Master's degree under plan A, except that up 109 hours of Thesis are allowed for the Master of Atts degree in Biology: 15 hours are required for the Master of Arts degree in Chemistry Credit hour registration in a givent term may vary with the nature of the study. according to the department or area, and on the previous agreement between the student and the advisor for expected research effort and adequate supervision.

If research is to involve human subjects the major department will, through an established procedure, review the research plan to determine if human subjects will be placed at risk. The research shall not be initiated until this review is completed; and an Examining Committee will not be appointed by the Graduate Dean until there is provided an assurance for the protection of the rights and welfare of those subjects, and the procedure established for obtaining informed consent.
Starred Papers (Plan B)
Students enroiled in a Plan B Master's degree program must submit three starred papers in lieu of the thesis requirement. These starred papers must represent the quality but not the range of the Master's thesis. They shall be prepared in conjunction with three graduate courses, as approved by the examining committee, under the direction of the course instructor. The student must receive prior approval of both the examining committee and the instructor of the course.

## Admission to Candidacy

Following admission in full-standing, and prior to the completion of more than 15 quarter hours of graduate work (which should include coursework in research methodology) which may be counted in meeting minimum requirements for the degree, the student will submit to the Graduate Studies Office through the assigned advisor and major department, a program of study and application for admission to candidacy. If a student is not recommended for candidacy prior to completion of 15 quarter hours of credit, hours in excess may not be accepted in counting toward the minimum requirement for the degree. Following admission to candidacy by the Graduate Dean any changes in the program must have his approval and recommendation of the advisor.
A candidate for a Master's degree must maintain an over-all grade point average of " $B$ " in his graduate studies. A degree candidate shall be placed on probation should the over-all grade point average fall below "B. " Probational status will be removed if at the end of 15 additional quarter hours a " $B$ " over-all grade point average has been achieved; otherwise the student will lose graduate status.

## Examining Committee

When a thesis topic or courses for starred papers have been selected the Candidate will petition the Graduate Studies Office for the appointment of an examining committee. The examining committee, appointed by the Graduate Dean on consultation with the major department, will consist of at least three

Graduate Faculty members with the Advisor serving as chairperson.
The examining committee shall be responsible for continuous advisement on the research project as it progresses, for determining the nature of the written comprehensive examination, and for conducting the oral examination.

## Written Comprehensive Examination

At least three weeks before a Master's degree is to be awarded the candidate must demonstrate competerce in the major field in a written comprehensive exarnination. The student's examining committee will determine the nature of the examination which must be satisfactorily completed before the oral examination can be held. The candidate for the Master of Science degree also is required to pass a written examination in professional education. The Department of Education should be consulted for the scheduled offering of this examination. A student who fails to pass either examination may appeal through the examining committee to repeat it during a subsequent quarter. A second failure will result in termination of candidacy for a degree.

## Final Form for Thesis or Starred Papers

Standards for the preparation of a research thesis may be found in William G. Campbell: Form and Style in Thesis Writing or Kate L. Turabian: Manual for Writers of Term Papers, Thesis and Dissertations. Departments may modify style requirements to suit the specific need in their field. The student must work closely in regular and frequent consultation with the advisor and examining committee in the preparation of the thesis.
The thesis must be typewritten on sixteen or twenty pound rag-content bond paper. Multigraph, multilith, xerox and carbon methods of reproduction of the second and third copies may be accepted. Suitable reproduction processes may be used for charts, graphs, etc. A left hand margin of one and one-half inches, a right hand margin of one inch, and top and bottom margins of about one and one-quarter inches, each, are required. Either pica or elite type may be used.
Starred papers must be prepared in triplicate in the same manner as the thesis.
Neither the thesis nor the starred papers should be bound in any permanent form prior to the oral examination.

## Oral Examination

When the written comprehensive examination has been passed, all required coursework completed (except for the last courses in which the student is currently enrolled and in good standing), and the thesis or starred papers completed the candidate must-at least two weeks in advance-petition the Graduate Studies Office for an oral examination. The petition will be accompanied by an abstract prepared according to instructions from the Graduate Studies Office and three typewritten copies of the thesis or starred papers.
The oral examination will be conducted by the exarnining committee and the Graduate Dean principally on the research but it may require the candidate to deal with material covered in coursework a part of the program. If serious weaknesses in the candidate's performance or in the research andor its presentation are determined, these shail be specifically explained to the candidate and the oral examination may be continued on a later date on the committee's approval. Failure to perform in the second half of the orai examination will result in termination of candidacy.

## Final Report

After the oral examination has been successfully completed the student must submit three copies of the thesis or starred papers, with all corrections and additions required by the examining committee, to the University Library. The thesis or starred papers must be accompanied by a final report form signed by the advisor verifying that the final copy has been approved. The librarian will, upon receipt of the binding fee (approximately $\$ 5.00$ per volume), verify the thesis or starred papers deposit by signing the final report, and will negotiate an agreement with a local bindery. The student is responsible for submilting the final report form, with required signatures, io the Graduate Studies Office not later than two days prior to the date of Cornmencement.

## Master of Arts Degree

Programs leading to the degree of Master of Arts are available with a major in Biology or in Chemistry. These programs are designed for the student having an undergraduate preparation in a discipline essentially the equivalent of a major at this institution but not necessarily desiring a further preparation for public school teaching. They provide for more specialized advanced study with a strong emphasis on original research.
Applications for admission are processed in the same manner as for the Master of Science degree.

The Master of Arts requires a minimum of 45 hours including a thesis based on original research, Academic performance, admission to candidacy, the appointment of an examining committee, requirements of a written comprehensive examination and final oral examination, and preparation and submission of a thesis are essentially the same as for the Master of Science. A maximum of five years is allowed for the completion of the Master of Arts.
Specific requirements for the degree with a major in Biology or in Chemistry are given in the departmental section of this Bulletin.

## Master of Business Administration

This program is designed as a formal learning experience for the practitioner seeking a foundation for steady growth as a professional manager. Applicants must hold a Bachelor's degree from an accredited institution, and are required to provide scores on the Graduate Management Admission Test, letters of recommendation, and a personal statement of qualifications and career objectives. There must be demonstrated a proficiency in elementary economics (macro and micro), and elementary statistics prior to admission. Any deficiency following admission in basic finance, marketing, management (one course each), and accounting (one-year sequence) must be removed before graduate courses in the corresponding functional areas may be taken.

## General Course Requirements

The program requires a minimum of 47 quarter credits, in which a minimum grade point average of 3.0 is required. Not more than 9 credits earned at this or other accredited institutions prior to admission may be counted toward the minimum requirements for the degree. A maximum of 15 quarter credits included in a previously approved program may be accepted in transfer from other accredited institutions; however, at least 24 credits must be earned through registrations at this University in offerings by its faculty. The course requirements are as follows:
Business Core ( 15 credits)
Finc. 501 Financial Institutions (3)
Mgmt. 550 Business and Society (3)
Mktg. 501 Marketing Administration (3)
Acct. 501 Management Law (3)
Acct. 530 Managerial Accounting (3)

Business Tools (9 credits)
Math 575 Statistical Tools for Business
Management (3)
Econ./Mgmt. 530 Managerial
Microanalysis (3)
Econ. 501 Macroeconomic Policy
Electives (20 credits)
At least 3 of the courses must come from these listed.
Acct. 335 g Governmental Accounting (3)
Finc. 456 g Principles of Investment (4)
Mgmt. 420 g Formal Organizations (4)
Mgmt. 451 g Human Relations in Business (4)
Mktg. 410 g Marketing Logistics (4)
Research (3 credits)
Registration in Research 598 (Acct., Econ., Finc., Mgmt., Mktg.)

## Research Components

The student is required to complete starred papers in each of two 500 level courses other than 598 . These papers are beyond the regular requirements of the courses and must be planned for with the course instructer at the first class meeting. A third paper will evolve from research at the 598 level. Thesis style and technique will be reauired for this paper. although the breadth of the study and length of the paper will be less than that normally expected of a Thesis. All papers, prepared in original and two copies, will be presented at the time of requesting a final examination and will be available to the committee at that examination.

## Candidacy

It is essentiai that the student, upon admission, consult with the assigned adviser to plan initialregistration and to discuss possibie research interests. Prior to the completion of more than 16 credits, six hours of which must have been in courses at the 500 level, the student will present a planned program of study with Research Components identified, and a petition for the formation of an Advisory Committee (a research adviser as chairperson, plus two additional members of the Graduate Faculty from areas in which course work is to be taken) The program and Committee request is reviewed by the MBA Program Committee which may recommend for approval, to the Graduate Office Upon approval of the program and Advisory Committee by the Graduate Dean, the student is admitted to Candidacy for the degree. All requirements for the degree must be completed within seven calendar years.

## Final Examination

The Final Examination shall be oral and conducted by the Advisory Committee, plus an External Examiner to be appointed by the Graduate Dean. The examination will be conducted primarily toward the research, but may also deal with other components of the program.
At least two weeks prior to the Final Examination the Candidate shall present to the Graduate Studies Office the original and two copies of each of two starred papers and the Research paper, an abstract prepared accorcling to instructions from the Graduate Studies Office, and a request for the Finai Examination, The Final Examination must be passed at least two weeks prier to the date of the Commencement at which the degree may be conferred.

## Final Report

After the Final Examination has been successfully completed, the student presents the starred papers and Research paper, with any additions or corrections required by the Advisory Committee, to the University Library for binding, The librarian will, on receipt of the binding fee, verify the deposit of the papers by signing the report form. The student is responsible for submitting the final report form, with required signatures to the Graduate Studies Office at least two days prior to the date of Commenciement.

## sequence of procedures for the master's degree

## Procedure

Completion of application file as described under "Admission to Graduate Study'
Appointment of Advisor

Preparation of an extended study pian
Registration
Qualifying Examination
Application for candidacy for Master's degree
Selection of topic for thesis or starred papers
Appointment of Examining Committee
Written Comprehensive Exam-
ination-
Major
Related Fields
Professional Education
Order academic garb for Commencement
Submission of thesis or starred papers and abstract

Oral Examination

Thesis deposit and Final Report
Commencement

Office
Graduate
Studies Office
Graduate Studies Office in consultation with appropriate department
Advisor : Prior to enroilment
Advisor
Advisor
Advisor and Graduate Studies Office
Advisor
Advisor and Graduate Studies Office

Examining
Committee
Education Department
Bookstore
Graduate Studies Office

Dean of Graduate
Studies and Student's Examining Committee

Library and Graduate Studies Office

## Date

Initiate at leasi two months prior to first course work

Prior to enrollment

See Calendar
If required, during first quarter or summer session of enroliment
Prior to completion of more than 15 hours of graduate credit
After aoceptance as a candidate for the Master's degree
After selection of thesis topic
After completion of course work or during term in which it is being completed. At least four weeks prion to oral examination.
Apply in term prior to examination
At least four weeks prior to Commencement
After written comprehensive examination and at least two weeks before oral examination
After completion of written comprehensive examination and after submission of the thesis, starred papers and abstraci. At least two weeks before Commencement At least two days prior to Commencement
End of Spring Quarter or end of Summer Session. All candidates are required to attend unless excused. Graduate students are expected to become thoroughly familiar with the contents of the Graduate Builetin as they apply to these procedures and are responsible for compiying with the requirements as stated.

## the fifth year program

The Fifth Year Program at Moorhead State University is a post-baccalaureate program leading to a statement of completion provided by transcript but not involving candidacy for a degree. The program is designed to meet the needs of the individual teacher through one or more of the following purposes:
(1) To strengthen the in-service teacher's preparation in the teaching field (for secondary teachers usually the academic major, for elementary teachers usually the area of concentration); (2) to broaden the teacher's background and eliminate deficiencies in the undergraduate preparation; (3) to add depth and understanding to an academic major or area of concentration; (4) to allow a degree of specialization in some professional field; (5) to enable the student to take some graduate work in an academic major or area of concentration.

## Requirements for Admission

An applicant may be granted admission to the Fifth Year Program in Teacher Education provided:
(1) that a bachelor's degree in teacher education is held froma college or university accredited by the appropriate regional or national accrediting agency, or by a college recognized by the state university of the state in which the college or university is located, and if a valid teacher's certificate is possessed, provisional admission to take courses in the Fifth Year Program will be granted.
(2) that, if holding a bachelor's degree from an unaccredited institution, the applicant will be provisionally admitted to the Fifth Year Program after (a) producing evidence of holding a valid teacher's certificate in the state where teaching and (b) he completes at least 15 quarter hours of creditable work.
(3) that, lacking prior teaching experience, the student will complete one year's successful teaching experience before completing the requirements of the Program.

## Registration and Academic Performance

Prior to enrolling in any course for graduate credit, a Fifth year student must secure in advance of registration, the permission of the advisor and the instructor of the course in question.
Students with an undergraduate GPA of under 2.5 will be required to take at least 15 hours on the undergraduate level and attain a minimum GPA of 2.5 in this work before they will be allowed to take graduate courses. In certain instances a student with less than 15
hours or work in his Fifth Year Program with an undergraduate GPA of under 2.5 can appeal for permission to take graduate courses by obtaining the permission of the advisor, the Graduate Studies Office, and the instructor of the course to be taken.
The selective retention factor will be a cumulative grade point average of 2.5 . The grade point average will be figured at the end of the first nine to twelve hours of course work and will be carried forward throughout the entire program. A stuclent whoso curnulative GPA falls below 2.5, may, at the discretion of the Graduate Dean, be dropped from the program.

## Application for Final Admission to the Program <br> Before completing more than 15 hours

 (including transfer credits) of the program, the Fifth Year student must submit an advisorapproved outline of the courses to be taken to complete requirements for the Fifth Year Program. This application must be submitted to the Graduate Studies Office.A maximum of 15 quarter hours of work otherwise creditable to the Fifth Year Program may be accepted in transfer from any one or a combination of the ioliowing sources: (a) credits earned at a college after the bachelor's degree has been granted by that college but prior to admission to the Fifth Year Program; (b) credits earned by extension, TV, correspondence, and tours; and (c) transfer credits from other accredited colleges or universities.

## General Requirements for Completion of the Fifth Year Program

(1) A minimum of 45 uarter hours shall be required for the completion of the Fifth Year Program.
(2) A minimum of one-third of the work in secondary programs shall be taken in courses open to graduate students only (i.e. in 500 courses).
(3) A minimum of one-third of the work in elementary programs shall be taken at the graduate level (i.e in 300 or 400 " $g$ " courses or in 500 courses).
(4) A minimum cumulative grade point average of 2.5 will be required for completion of the Fifth Year Program.
(5) Courses in which a grade of " $D$ " is earned will not be credited toward completion of the Fifth Year Program.
(6) All requirements for completing the Fifth Year Program must be completed within seven years.
(7) The normal load for Fifth Year students is 12.16 credit hours per quarter for the regular acadernic year and $6-8$ credit hours for any summer session; the smaller load in each instance being recommended if courses on the graduate level are included.
(8) The Dean of Graduate Studies shall certify completion of the Program to the Registrar, who shall note this completion on the student's permanent record. The Registrar shall nolify the student on completion of the program.
(9) This program shall have clear relevance to teaching competence. (a) Students shall take a minimum of 30 hours in a single discipline and/or cognate disciplines and/or needed subject matter. (b) Students may take up to a maximum of 15 hours in professional education.
Exception: Students working for centification in special education or in remedial reading or in library science.
(10) Modification of basic program requirements must be approved through petition to the Graduate Dean.
There are two basic prograin tracks in the Fifth Year Prograrn:
The non-certification track:
This track is open to any certificated elementary or secondary school teacher wishing to up-grade and up-date professional qualifications but not seeking an advanced graduate degree. Programs are pianned to meet specific needs of the individual teacher in consultation with an assigned facuity advisor. Such programs can be designed for any teacher in any of the departments which presently have undergraduate programs leading to certification. Specific questions by prospective Fifth year students should be addressed to the Graduate Studies Office, of to the chairperson of the following departments:
Art
Biology
Business Education
Chemistry
Economics
English
Languages
Geography and Geology
Health, Physical Education and Recreation
History
Industrial Studies
Mass Communications

Mathematics
Music
Physics
Political Science
Sociology and Anthropology
Speech
The special certificate track:
The certilicated teacher may wish 10 qualify for an additionai certificate while working in a
Fifth Year Program. Persons admitted to the
Program may be assigned an advisor to plan
for the following special certifications:
Audiovisual Coordinator
Audiovisual Director
School Library Certificate
Media Generalist
Developmental Reading - Secondary
Remedial Reading - Elementary
Remedial Reading - Secondary
Mentally Retarded - Educable
Mentally Retarded - Trainable
Special Learning Disabilities .
Learning Disabled
Special Learning Disabilities . Emotionally Disturbed

## Specialist in Education

Programs leading to the degrees, Specialist in Education and Master of Science, are available in the field of educational administration. Both degrees provide programs in the various cortification areas appropriate to elementary and secondary school administration. The degree granting institution is the Tri-College University, a consortium composed of Moorhead State University, North Dakota State University, and Concordia College. Application forms and information may be obtained from the Graduate Studies Office.

## programs and courses

## Accounting Department

Graduate Facuily: Dorian Olson (Chairperson), Eddy Birrer, Wilbert Fischer, George
Sanderson, Donald Wirries.
Courses offered by the Accounting Department may be included in the Master of Business Administration program and in the maior, Business Education, for the Master of Science degree (see page 3).

## Accounting Courses

Acct 330-331-332(g) Intermediate Accounting I-11-111 (3 each)
Acct $355(\mathrm{~g})$ Governmental Accounting (3)
Acct 430-431-432(g) Advanced Accounting I-II-III (3 each)
Acct 450-451-452(g) Federal and State Tax I-11-1II (3 each)
Acct $460-461(\mathrm{~g})$ Auditing I-11 (3 each)
Acct $470(\mathrm{~g})$ Accounting Systems (4)
Acct 480(g) Accounting Theory (4)
Acct 498(g) Problems in Accounting (1-4)
Acct 501 Managerial Law (3)
Acct 530 Managerial Accounting (3)
Acct 598 Research in Accounting (3)

## Art Department

Graduate Faculty: P. Richard Szeitz (Chairperson), John Holland, Lyle Laske, Phillip Mousseau, Marcel Stratton, John Youngquist.

## Master of Science

The degree may be earned with a major in Art. Requirements are those cited on pages 3.6 with the following specific conditions:
Admission applications, to be completed at least three months prior to the intended beginning of graduate studies, require the scores on the General Aptitude portion of the Graduate Record Examination and a portfolio of original work. Deficiencies in credits or quality of work will be removed by appropriate completion of undergraduate work.
A qualifying examination, administered by the department, must be passed before a stưdent may be admiltecl to candidacy. The examination will cover historical works major masters and theories of major movements in art history, visual arts, basic theories and problems of contemporary art education.
The candidate working in History or Theory should follow Plan A. The candidate with emphasis in Studio is advised to follow Plan B. One starred paper must be in connection with Art 580 or 581 . In lieu of the other two papers the candidate must prepare and hold an exhibit of his art work as partial fulfillment of requirements for the degree. The exhibit and starred paper are to be defended before the
examining committee at an oral examination. and following successful completion of the written examination in Professional Education.
The program can be completed during one academic year and a summer session on the following schedule:
Fall quarter: Ed 501 (3), Art History (4), Aft Concentration (3), Art Elective (2).
Winter quarter: Ed 503 (3), Art History (4), Art Concentration (2), Art 580 (3).
Spring quarter: Ed elective (3), Art History (4), Art Concentration (3), Art elective (2).
Summer Session: Art Concentration (3), Art elective (6).

## Art Courses

Art 400(g) Individual Studio (1-15)
Art $410(\mathrm{~g})$ Ancient Classic Art (4)
Art 411-412(g) Medieval Art I-11 (4 each)
Art 430-431-432(g) Modern Art l-II-1II (4 each)
Art 433(g) Modern Architecture (4)
Art 432-435(g) Art in the United States $1-11$ (4 each)
Art 444(g) Special Studies in Elementary School Art (2)
Art 445(g) Special Studies in Secondary School Art (2)
Art 484(g) The Art of Primitive Peoples (4)
Art 532 Studies in Art History (3-18)
Art 540 Current Practices in Art Education (3)
Art 542 Studies in Art Education (3)
Art 552 Studies in Painting (3-18)
Art 554 Studies in Sculpture (3-18)
Art 560 Studies in Ceramics (3-18)
Art 574 Studies in Graphics (3-18)
Art 580 Seminar in Art Education (3)
Art 581 Graduate Seminar in Art (3)
Art 584 Studies in Graphic Design (3-18)
Art 599 Thesis (1-6)

## Biology Department

Graduate Faculty: Robert Tolbert
(Chairperson), Monroe Bartel, Thomas Collins,
Yvonne Condell, Phyllis Harber, Oscar Johnson, Jesse Parsons, Richard Pemble, Mary Shimabukuro, Kenneth Skjegstad, Robert Weibust.
The graduate programs in Biology will be available only through special permission. interested persons should consult the Graduate Office relative to admission. Scores on the General Aptitude portion of the Graduate Record Examination are required with an application for admission.

## Master of Science

The degree may be earned with a major in Biology and according to the general requirements given on pages 3-6.

## Master of Arts

The Master of Arts in Biology is a parallel program to the Master of Science with a major in Biology. A prospective candidate for the M.A. in biology should have completed an undergraduate major or minor in biology. Deficiencies in the student's undergraduate background as ascertained by the graduate faculty in biology, may be removed by completing appropriate courses for which no graduate credit will be allowed.
The student should consult with the graduate facuity in biology prior to filting application for admission to graduate study.

## Course Requirements

A minimum of 45 graduate credits in biology and related areas, as approved by the graduate faculty in biology. This must include at least 15 credits in courses numbered in the 500 series.
A properly balanced program approved by the department graduate committee.
Participation in seminar.
A thesis based upon original research, for which a maximum of 9 graduate credits may be allowed.
Successful completion of a written comprehensive examination and a final oral examination.
The maximum time allowed to complete the requirements for the M.A. in biology is 5 years from the date of admission to graduate study.
Biology Courses
Biol $301(\mathrm{~g})$ Vertebrate Embryology
Biol 302(g) Histology (4)
Biol $343(\mathrm{~g})$ Microtechnique (4)
Bioi $350(\mathrm{~g})$ Microbiology (4)
Biol 355(g) Wildlife Ecology (4)
Biol $356(\mathrm{~g})$ Plant Ecology (4)
Bioi 401(g) Endocrinoiogy (4)
Biol 410(g) Parasitology (4)
Biol 414(g) Protozoology (4)
Biol 417 (g) Ornithology (4)
Biol 423 (g) Plant Anatomy (4)
Biol 424(g) Plant Physiology | (4)
Biol 425(g) Plant Physioiogy II (4)
Biol 433(g) Plant Morphology: The Lower Forms (4)
Biol 434(g) Plant Morphology: The Vascular Plants (4)
Biol 445(g) Limnology (4)
Biol 449(g) Cytology (4)
Biol $450(\mathrm{~g})$ Cell Physiology (4)
Biol 455(g) Recent Developments in the Biological Sciences (2)
Biol 470(g) Immunology (4)
Biol $481.482 .483(\mathrm{~g})$ Biology Seminar I-11-11 (1 each)

## Business Administration Department <br> Graduate Faculty: Wayne Alexander <br> (Chairperson), Evelyn Larson, David Nelson, James Swenson. Courses offered by the Business Administration Department may be included in the Master of Business <br> Administration program (page 6) and in the major, Business Edueation, for the Master of Science degree (see page 3). <br> Finance Courses

Finc 340(g) Corporate Finance I (4)
Finc $341(\mathrm{~g})$ Corporate Finance II (4)
Finc 342(g) Financial Decision Making (4)
Finc 456(g) Principles of Investment (4)
Finc $457(\mathrm{~g})$ Security Analysis (4)
Finc 458(g) Portfolio Management (4)
Finc 498(g) Problems in Finance (1-4)
Finc 501 Financial Institutions (3)
Finc 598 Research in Finance (3)
Management Science Courses
Mgmt 405(g) Small Business Management (4)
Mgmt 416(g) Labor Economics (4)
Mgmt 420(g) Formal Organizations (4)
Mgmt 421(g) Executive Decision Making (4)
Mgmt 430(g) Managerial Economics (4)
Mgmt 440(g) Personnel Management (4)
Mgmt 450(g) Production Management (4)
Mgmt $451(\mathrm{~g})$ Human Relations In Business (4)
Mgmt 455(g) Quantitative Decision Making (4)
Mgmt 456(g) Management Information Systems (4)
Mgmt 460(g) Managerial Policy (4)
Mgmt 461(g) Management Seminar (4)
Mgmt 498(g) Problems in Business Administration 1-4)
Mgmt 550 Business Policy (3)
Mgmt 594 Seminar in Business Management
(4)

Mgmt 598 Research in Management (3)
Mgmt 599 Thesis in Management (1-6)

## Marketing Courses

Mktg 410(g) Marketing Logistics (4)
Mktg 415(g) Industrial Marketing (4)
Mktg 420(g) Marketing Channels and Institutions (4)
Mktg 421(g) Retail Management (4)
Mktg 430(g) Sales and Sales Management (4)
Mktg 441 (g) Social Issues in Marketing (4)
Mktg 442(g) Marketing Seminar (4)
Mktg 470(g) Independent Study ( $1 \cdot 14$ )
Mktg 498(g) Problems in Marketing (1-4)
Mktg 501 Markeling Administration (3)
Mktg 598 Research in Marketing (3)

## Business Education Department

Graduate Faculty: Howard Lysne
(Chairperson), Evelyn Grove, Grace Reardon

## Master of Science

The degree may be earned, with a major designated as Business Education, according to the general requirements given on pages 3.6 Serres on the General Aplitude portion of the Graduate Record Examination are required with an application for admission. The program may include courses from the Department of Business Education and also from the Depariment of Accounting and the Departiment of Business Administration.

## Business Education Courses

BEd $413(\mathrm{~g})$ Word Processing Methods
BEd 415(g) Model Office Methods and Materials (4)
BEd $443(\mathrm{~g})$ Cooperative Business and Office Methods and Materials (4)
BEd $498(\mathrm{~g})$ Problems in Business and Office Education (1.4)
BEd 599 Thesis in Business Education ( $7-6$ )
Distributive Education Courses
DEd 407(g) Planning Instruetion for Distributive Education Classes (3)
DFed 402(g) Using Leaming Activities (3)
DEd 403(9) Teaching Distributive Education Subjects (3)
DEd $440(\mathrm{~g})$ Organization \& Administration of Vocational Programs (3)
DEd 443(9) Coordination Techniques (3)
DEd $495(\mathrm{~g})$ - Philosophy of Vocational Education (3)
DEd 497(g) Vocational Education Curriculum (3)
DEd $498(\mathrm{~g})$ Problems in Distributive Education (1-4)

## Chemistry Department

Graduate Faculty Judith Strong (Chairperson), Dewey Brummond, Nicolas Kowanko, Dennis Krzyzaniak, Dennis Mathiason, B. Spencer Meeks Janet Paulson, James Shaw. WUlliam Treumann.

## Master of Science

The degree may be earned with a major in Chemistry: Applicants must provide scores on the General Aotifude portion of the Graduate Record Examination, and a diagnostic examination is required prior to completion of the first term of enroliment. The general requirements for Plan A (page 4) apply except that 15 hours of course work must be completed in a major area in chemistry. The program must be completed within live years.

## Master of Arts

Applicants must have completed an undergraduate major in Chemistry. Scores on the General Aptifurde portion of the Grafuate Record Examination are required with an application for admission. A diagnostic examination is required prior to completion of the first term of enrollment. The program must he completed within five years of tirst admission.
Within the minhmurn 45 hours requifed tor the degree at least 15 hours must be in courses in the 500 series. The program must provide a balanced study within chemistry as well as al least 15 hourg in an area of major concentration (analytical chemistry, biochemistry, inorganic, organic or physical chemistry). Participatlon in a graduate seminar is required. A thesis must be presented representing eriginal research contributing to the knowledge of chemistry; a maximum of 15 hours in Chemistry 598 may be granted, for research leading toward the thesis.
A thesis committee, consisting of four graduate laculty members from the Department of Chemistry and a graduate faculty member at large, shall be appointed early following first enrollment. That committee is responsibie for planning the program. recommendation to candidacy, and the conduct of the written comprehensive and final examination.

## Chemistry Courses

Chem 305(g) Ghemical Literature (1)
Chem 314(g) Aquatic Chemistry (3)
Chem $361(\mathrm{~g})$ Infroduction to Biochemistry (4)
 (3)

Chem 427 (g) Topics in Analytical Chemistry (1-3)
Chem 432(g) Advanced Organic Chemistry (3)

Chem $437(\mathrm{~g})$ Topics in Organic Chemistry (1-3)
Chem 438(9) Chemical Pollutants (4)
Chem $447(\mathrm{~g})$ Topics in Physical Chemistry (1-3)
Chem 457 g ) Topics in Inorganic Chemistry (1.3)

Chem 461-462-463(g) General Biochemistry 1-11-11| (3 each)
Chem $464 \cdot 465-466$ (g) General Biochemistry Laboratory l-II.III (1 each)
Chem 467(g) Topics in Biochemistry (1-3)
Chem 480(g) Seminar (1)

## Counseling and Guidance

The Master of Science degree (sce page 3) may be earned with a major in Counseling and Guidance, an interdepartmental program involving the departments of Education and Psychology and the college counseling staff. The Dean of Education, Chairman of the Education Department, Chairman of the Psychology Department, Director of Counselting Services and Coordinator of Counselor Education form the Counseling and Gudance Admissions and Program Committee
Applicants are required to provide the score on the Mitter Anaiogies Test. The new student should immediately contact the coordinator of Counseior Eduoation for a personal interview, assistance in initial oourse planning and information regarding any now reguifements of the program: In exceptional cases, the teaching experience requirement may be waived by committee action
After fuil admission to graduate siudy, a student wishing to appiy for admission to candidacy in the program must:
have successfully completed 15 hours of pertinent course work described below with a guade of " B " or better.
arrange with the Coordinator of Counselor Education to take any inventories or tests prescribed by the Admissions and Program Committee,
provide the Adrissions and Program Committee with al least three written recommendations concerring professioral and personal qualifications:
request the Coordinator of Counselor Education for a perisonal interview with the Admissions and Program Commiltee when all other qualifications have been met.

## Course Requirements

Group 1. Professional Education (9 credits required)
Ed. 501 (3), 502 (3), 503 (3) required.
Group II- Counseling and Guidance Major ( $30-33$ creidts required)
Ed 410 g (3), 411 g (3), 412 g (3), 525 (3), 526 (3),
574 (3). 579 (3) and 591 (6) required, and 599
(6) if Plan A, or elective (3) it Plan B.

Group III - Related Area ( 9 credits required) Psy 460 g (3), 476 g (3) required, and elective (3)
Electives from:
Ed 497 g (3), 512 (3), 550 (3), 560 (3), SpEd 420 g (3), 421 g (3), Psy 501 (3), 502 (3), 581 (2-6)
Students who do not have the equivalent of one year's undergraduate credit in general psychology will be required to take Psy 103-104-105, Introduction to Psychology. without graduate credit. Credit in these courses does not count toward the 48.51 credits required to complete this program.
If a thesis is done instead of three starred papers, the 6 thesis credits will contribute toward a total minimum of 51 credits Starred papers may be done in any Group 11 or Group It course in the program except Ed 591 provided the student's adivsor and instructor consent, and provided all requirements for starred papers are met

## Economics Department

Graduate Feculty: Daniel Knighton
(Chairperson), Eugene Philipps, John- frainor
Courses ottered by the Economics Department may be inctuded in the mafor, Social Studies (see page 24), Tor the degree Master of Science.
Economics Courses
Econ $410(\mathrm{~g})$ Advanced Micro-Economic Theory (4)
Econ 411-412(g) Economic History of the United States I-II (4 each)
Econ $415(\mathrm{~g})$ Industrial Organization and Public Policy (4)
Econ 416(9) Labor Economics (4)
Econ 425 (g) International Trade and Finance (4)

Econ $430(g)$ Managerial Economies (4)
Econ 450(g) Individual Study in Economies (1-4)
Econ 460(g) Advanced Macro-Economio Theory (4)
Econ 499(g) Economics Seminar (3-4)
Econ 501 Macroeconomic Policy (3)
Econ 598 Research in Economics (3)

## Education Department

## Graduate Faculty: Leslie Crawford

 (Chairperson), Lawrence Anderson, Leonard Bergquist, Norman Buktenica, Joseph DiCola, Howard Freeberg, Jane Johnston, Larry Jones, Ronald Kopita, Bella Kranz, Jack Neufeld,Donald Rush, George Smith, G. Max Spriggs, Joseph Thorman Martin Tonn, Barbara Wasson, John Wasson, Thomas Williams.
The degree, Master of Science, may be earned with a major in Counseling and Guiclance, Elementary Education, Remedial reading, or Special Education. Requirements for the degree are given on page. The score on the Miller Analogies Test is required for admission to these programs.

## Master of Science

Counseling and Guidance (see page 14).

## Master of Science

## Elementary Education

Applicants for a Master of Science degree in Elementary Education must have completed a satisfactory undergraduate program in Elementary Education or the equivalent, and present the score on the Miller Analogies Test.

## Course Requirements

Group 1 - Professional Education (minimum 9 credits)

## Ed 501 <br> (3), 502 <br> (3), 503 <br> (3) required.

Group II - Elementary Education Major (minimum 24 credits)
Ed 540 (3), 541 (3), 542 (3) and 599 (6) or Plan B papers required. Selected courses from any or all areas listed below approved by advisor and department:
Early Childhood - Ed $470 \mathrm{~g}(3), 471 \mathrm{~g}$ (4), 472 g (3), 473 g (6)

Curriculum and Foundation. Ed 331 g (3), $488 \mathrm{~g}(3), 495 \mathrm{~g}(3), 497 \mathrm{~g}$ (3)
Guidance and Counseling. Ed 410g (3), $411 \mathrm{~g}(3), 491 \mathrm{~g}(3), 493 \mathrm{~g}(3), 512$ (3), 574 (3)
Media Education - MeEd 300 g (3), 330 g (3), $400 \mathrm{~g}(3), 420 \mathrm{~g}(3)$
Reading/Language Arts - Ed $390 \mathrm{~g}(3), 430 \mathrm{~g}$ (3), $445 \mathrm{~g}(3), 446 \mathrm{~g}(3), 447 \mathrm{~g}$ (2), 448 g (3) 449 g (4), 592 (3)

Special Education. SpEd $421 \mathrm{~g}(3), 422 \mathrm{~g}(3)$, $460 \mathrm{~g}(3), 461 \mathrm{~g}(3), 471 \mathrm{~g}(3), 477 \mathrm{~g}$ (3)
Other areas of emphasis with advisor and department consent.
Group III - Related Fields (minimum 9 credits).
All students are required to complete a minimum of nine credits in fields that differ from the professional areas of emphasis used
in Group II. In addition to those listed above are: Art 444 g (2), Eng 492 g (4), 493 g (4), 494 g (4), 520 (3). H1th 4749 (2), 4769 (2-6), 540 (3), Hist $370 \mathrm{~g}(4), 371 \mathrm{~g}(3-4), 372 \mathrm{~g}(3-4), 402 \mathrm{~g}(3-4)$, $403 \mathrm{~g}(3-4), 405 \mathrm{~g}$ (3-4), Ind Ed 446 g (2), 461 g (3), Sci 390 g (3), Spch $330 \mathrm{~g}(3-6), 331 \mathrm{~g} \mathrm{(3-6)}$, $341 \mathrm{~g}(3), 344 \mathrm{~g}(4), 345 \mathrm{~g}(3)$
Other electives with advisor and department consent.

## Master of Science

Remedial Reading
Applicants for the Master of Science degree must have completed a satisfactory undergraduate teacher education program and present the score on the Miller Analogies Test. Particular courses may be selected to augment preparation at the elementary or secondary level.
Course Requirements
Group 1 - Professional Education (9 credits minimum)
Ed 501
(3), 502
(3) 503
(3) required.

Group II - Remedial Reading Major (24 credits minimum)
Ed $411 \mathrm{~g}(3), 446 \mathrm{~g}$ (2), 512 (3), 526 (3), 545 (3), 546 (2) 574 (3), 592 (3), 599 ( 6 for Plan A), and Ed 445 g (3) for elementary emphasis, or Ed 448 g (3) and Engl 392 g (3) for secondary emphasis required.
Group III - Related Fields ( 9 credits minimum)
At least two courses to be taken from SpEd $420 \mathrm{~g}(3), 461 \mathrm{~g}$ (3), Psy 460 g (3), 476 g (3), Soc 415 g (3), 418 g (3); SpEd 463 g (3) and/or Engl 392 g (3) for elementary emphasis, SpEd 464 g (3) and/or Engl 491 g (3) for secondary emphasis

## Master of Science

## Special Education

Applicants must have completed an appropriate major (e.g., special education teacher program, school psychology, speech pathology and audiology, or other approved by the Graduate Faculty of Special Education) and meet the general requirements for admission to a Master of Science degree program (see page 3).
Course Requirements
Group 1-Professional Education (minimum 9 credits).
Ed 501 (3), 502 (3), 503 (3), required.

Group II - Special Education Major (minimum 24 credits).
The program will include a practicum or internship of $3-9$ credits, and may include independent studies, in addition to Thesis, to a maximum of 6 credits. Either Plan A (Thesis) or Plan B (three starred papers) may be followed, with Plan A encouraged for those selecting supervisory or administrative programs.
Group III - Related Area (minimum 9 credits).
Courses selected from psychology, sociology, education, biology, anthropology or other appropriate areas.

## Education Courses

Ed. $331(\mathrm{~g})$ Special Methods in Social Studies in the Elementary School (3)
Ed. $390(\mathrm{~g})$ Improvement of Instruction in Reading and Language Arts (3)
Ed. 405(g) Philosophy of Education (4)
Ed. 408(g) Human Relations I (3)
Ed. $409(\mathrm{~g})$ Human Relations 11 (3)
Ed $410(\mathrm{~g})$ Basic Counseling Skills (3)
Ed. 411 (g) Introduction to Guidance (3)
Ed. $412(\mathrm{~g})$ Group Counseling (3)
Ed. $413(\mathrm{~g})$ Interpersonal Communications (3)
Ed. $425(\mathrm{~g})$ Workshop in Educational Development (1)
Ed $430(\mathrm{~g})$ Human Relations Through Children's Literature (1-3)
Ed. $442(\mathrm{~g})$ Curriculum Foundations (4)
Ed $443(\mathrm{~g})$ Industrial Arts for Elementary or Special Education Teachers (4)
Ed. $445(\mathrm{~g})$ Remedial and Corrective Reading (3)

Ed. $446(\mathrm{~g})$ Remedial and Corrective Reading Clinic (2)
Ed. $447(\mathrm{~g})$ Correotive Reading and Phonies Workshop (2)
Ed. $448(\mathrm{~g})$ Reading Study Skills in the Content Areas (3)
Ed. $449(\mathrm{~g})$ Developmental Reading (4)
Ed. $461(\mathrm{~g})$ Linguistic Foundations for Reading Instruction (3)
Ed. $470(9)$ Development of Young Children
Ed. $471(\mathrm{~g})$ Curriculum and Instruction in Kindergarten Education (4)
Ed. $472(\mathrm{~g})$ Curriculum and Instruction for Early Childriood Education (3)
Ed. $473(\mathrm{~g})$ Practicum in Early Childhood Education (3-6)
Ed. 474(g) Language Arts in Early Childhood (3)

Ed $476(\mathrm{~g})$ Early Childhood Education Workshop (1-3)
Ed. $480(\mathrm{~g})$ Learning Theory Workshop (1-3)
Ed. 481 (g) Curricuium Development Workshop (1-3)
Ed $488(\mathrm{~g})$ Education for the Culturally Different (3)

Ed. $490(\mathrm{~g})$ Foundations of Education (3)
Ed. $491(\mathrm{~g})$ Topics in the Socio-Cultural
Foundations of Education (1-5)
Ed. 492(g) The Impact of the Educational Systern on Women (3)
Ed. 493(g) Education for Internationai Understanding (3)
Ed. 495(g) Comparative Education (3)
Ed. $496(\mathrm{~g})$ Study Tour in Comparative and international Education (6)
Ed. $497(\mathrm{~g})$ Readings in Education (3)
Ed. 501 Psychological Foundations of Education (3)
Ed. 502 Statistics in Educational Research (3)
Ed. 503 Methods of Research (3)
Ed. 504 The School and Society (3)
Ed. 505 Junior College-Community College Institute I-VI (2)
Ed. 506 Junior College-Community College Institute I-VI (2)
Ed. 507 Junior College-Community College Institute I-VI (2)
Ed 508 Junior College-Community College Institute I-VI (2)
Ed. 509 Junior College-Community College Institute I-VI (2)
Ed. 510 Junior College-Community College institute |V| (2)
Ed. 512 Study of the Individual (3)
Ed. 525 Career Development Guidance (3)
Ed. 526 Counseling Theories and Techniques (3)

Ed. 530 Introduction to Educational Administration (3)
Ed. 531 Teacher and Student Rights (3)
Ed. 532 Strategies for Solving School Organizational Problems (3)
Ed. 533 Computer Utilization in Classrooms (3)

Ed. 534 School Finance (3)
Ed. 535 The Process of Supervision (6)
Ed. 536 Supervisory Theories (3)
Ed. 537 Curriculum Theory and Principles (3)
Ed. 538 Secondary School Curriculum (3)
Ed. 539 Administration of the Secondary School (3)
Ed. 540 Studies Affecting Elementary Education (3)
Ed 541 Seminar in Elementary School Teaching Problems (3)
Ed. 542 Elementary School Curficulum (3)
Ed. 543 Administration of the Elementary School (3)
Ed. 544 Middle School/Junior High School Administration (3)

Ed. 545 Diagnosis and Correction of Reading Difficulties (3)
Ed. 546 Reading Clinic: Diagnosis (2)
Ed. 574 Appraisal Techniques (3)
Ed. 579 Organization and Administration of Guidance Service (3)
Ed. 580 Special Problems for Counselors (3)
Ed 581 Legal Aspects of Education (3)
Ed. 582 School Management and Decision Making (3)
Ed. 583 Computer Data Management and Decision Making (3)
Ed 584 School Personnel Administration (3)
Ed. 586 School Plant Planning and Maintenance (3)
Ed. 588 School Business Management (3)
Ed. 589 School Community Relations (3)
Ed. 591 Practicum in Counseling and Guidance (1-6)
Ed. 592 Administration and Supervision of Remedial Reading (3)
Ed. 594 Practicum: Education Administration (1.9)

Ed. 597 Individual Study (1-3)
Ed. 598 Seminar in School Administration and Supervision (1-6)
Ed. 599 Thesis in Education (1-6)
(1.6)

Special Education Courses
SpEd 401(g) Classroom Assessment Approaches (3)
SpEd $416(\mathrm{~g})$ Mental Retardation (3)
SpEd $417(\mathrm{~g})$ Orientation to the Physically Handicapped (3)
SpEd $420(\mathrm{~g})$ Education of the Exceptional Child (3)
SpEd $421(\mathrm{~g})$ The Gifted Child (3)
SpEd 422(g) Curriculum and Methods for the Gifted (3)
SpEd 430(g) Industrial Arts for Special Education Teachers (3)
SpEd $431(\mathrm{~g})$ Teaching Occupational Education to the Mentally Retarded (3)
SpEd $435(\mathrm{~g}$ ) Topics in Mental Retardation (3)
SpEd 436(g) Problems in Special Education (1-3)
SpEd $437(\mathrm{~g})$ Workshop in Special Education (4)

SpEd 438(g) EMH Teaching Methods I (3)
SpEd 439(g) EMH Teaching Methods II (3)
SpEd $440(\mathrm{~g})$ Methods in Teaching the Mentally Retarded (3)
SpEd 441 (g) Language Development for Exceptional Children (3)
SpEd 442(g) Creative Activities for Exceptional Children (3)
SpEd 443(g) Industrial Arts for Elementary or Special Education Teachers (4)
SpEd 445(g) Remedial and Corrective Reading (3)

SpEd 446(g) Remedial and Corrective Reading Clinic (2)
SpEd 447 (g) Teaching Basic Skills to Seconcary Students (3)
SpEd 456(g) Curriculum Development and Teaching the Trainable Mentally Retarded (3)
SpEd 457(g) Personal, Social and Vocational Education for the TMR (3)
SpEd 458 (g) Recreative Skills for the Severely Handicapped (3)
SpEd 459(g) Methods and Materials for Language Development for the Severely Handicapped (3)
SpEd 460(g) Education of the Emotionally Disturbed Child (3)
SpEd 461(g) Education of Children with Specific Learning Disabilities (3)
SpEd 462(g) Topics in Learning Disabilities (3)
SpEd 463(g) Measurement and Assessment in Special Education (3)
SpEd $464(\mathrm{~g})$ Education of the Learning Disabled Secondary Student (3)
SpEd $465(\mathrm{~g})$ Special Education Reading (3)
SpEd 466(g) Special Education Reading Clinic (2)
SpEd $467(\mathrm{~g})$ Practicum: Diagnosis and Treatment of Learning Disorders I (6)
SpEd $468(\mathrm{~g})$ Practicumi Diagnosis and Treatment of Learning Disorders II (6)
SpEd $470(\mathrm{~g})$ Guidance of the Handicapped (3)
SpEd $471(\mathrm{~g})$ Behavioral and Environmental Management (3)
SpEd 472(g) Psychoeducational Diagnosis and Programming (3)
SpEd $473(\mathrm{~g})$ Behavior Problems in Children (3)

SpEd $477(\mathrm{~g})$ Seminar in Early Childhood Education of the Handicapped (3)
SpEd $494(\mathrm{~g})$ Administration of Special Education (3)
SpEd 545 Diagnosis and Correction of Reading Difficulties (3)
SpEd 546 Reading Clinic: Diagnosis (2)
SpEd 567 Emotionally Disturbed Practicum I (9)

SpEd 568 Emotionally Disturbed Practicum II (9)

SpEd 590 Seminar: Current Trends in Special Education (3)
SpEd 599 Thesis in Special Education (1-6)

## Elementary Education

The major is available in the Master of Science program (see page 15).

## English Department

Graduate Faculty: John Sherman (Chairperson), Rufus Bellamy, Cheng Lok Chua, Marjorie Corner, Daniel Deneau, V. Dennis Flood, Allan Hanna, Bernard Heringman, Gary Litt, Thomas McGrath, Joseph Miller, Robert Pender, Mary Ann Pryor, Donald Short, Rosernary Smith, Keith Tandy, William Woolwine.

## Master of Science

The degree may be earned with a major in English with the following specific conditions:
Prospective candidates should have an undergraduate major in English with a grade-point-average of at least 3.0. Very rarely, students who do not have an undergraduate major in English but who show exceptional promise may be admitted. All candidates for admission to graduate studies in English must submit scores on the General Aptitude portion of the Graduate Record Examination and two letters of recommendation that speak to academic qualifications.

## Course Requirements

Professionai Education Courses ( 9 credits) English 400 g -, or 500 -series ( 21 credits) English 500 Literary Scholarship ( 3 credits) English 510-598: two courses ( 6 credits) English 599 Thesis or Symposium (6 credits) Total - (45 credits)
Upon formal petition to the Graduate Faculty in English, a candidate for the Master's degree may sometimes be permitted to take as many as 9 credits in a related area instead of 9 credits in English; but he may not omit any of the required credits of English in the 500 -series.
If the undergraduate transcript does not show individual courses in Chaucer, Shakespeare, and Milton, and in linguistics or the history of the English language, the siudent musi make up the deficiency by taking appropriate course(s) in the graduate program.
The work of each student intending to take the Masier's degree shall be subject to automatic review by a committee of three members of the Graduate Faculty in English at the time he has completed three graduate-level courses at the University. This review will include a report from each of three professors acquainted with the student's work and explicit recornmendations from these professors concerning retention in the program. The committee will then decide, on the basis of the review, whether the student is to be allowed to continue graduate studies in the Department. Moreover, any student working toward the degree shall be subject to departmental evaluation of all work upon request of any member of the Graduate Faculty in English.

The student, after having been admitted to candidacy and having completed 30 credits in English but before beginning to write the thesis or symposium, must pass an examination of one of three kinds: (a) on major writers, (b) on major works, or (c) ona comprehensive knowledge of English and American Literature.
The student is also required to take the comprehensive examination given by the Department of Education.
A candidate for the Master's degree may satisfy the research requirement by either Plan $A$ : a thesis of moderate length (usually under 100 pages) on a subject approved by the advisor; or Plan B: a symposium, likewise on a subject approved by the advisor. The word "symposium" is used here in the unconventional and special sense of " $a$ collection of papers, of a critical or scholarly nature, written by one person." The symposium in English requires three substantial papers, two of them falling in the same field, which are equal in their quality to an acceptable thesis and have been undertaken with the same degree of independence that one brings to the writing of a thesis.
The first task of the candidate is to get the thesis or symposium into respectable first-draft shape under the general direction of the advisor. At this point the candidate must submit the draft to the examination committee and then make whatever revisions are required by its members.

## English Courses

Engl 391(g) Teaching English in Secondary Schools (4)
Engl 392(g) Adolescent Literature (3)
Engl 393(g) Grammar Usage for Teachers (3)
Engl 408(g) Studies in American Literature (4)
Engl $410(\mathrm{~g})$ Studies in British Literature (4)
Engl 414(g) Advanced Shakespeare (4)
Engl $430(\mathrm{~g})$ Individual Author (4)
Engl $440(\mathrm{~g})$ Advanced Genre Studies (4)
Engl 450 (g) Critical Traditions (4)
Engl 480(g) Advanced World Literature
Engl $488(\mathrm{~g})$ Advanced Creative Writing
Engl $491(\mathrm{~g})$ Introduction to Descriptive Linguistics (4)
Engl 492(g) Transformational Grammar (4)
Engl 493(g) History of the English Language (4)

Engl 494(g) American English (4)
Engl 498(g) Tutorial (1-3)
Engl 500 Literary Scholarship (3)
Engl 510 British Literature (3)
Engl 520 American Literature (3)
Engl 590 Special Topics (3)
Engl 598 Directed Readings (3)
Engl 599 Thesis (1-6)

Geography and Geology Department
Graduate Faculty: Eleanor Ritchie (Chairperson)
Geography Courses
Geog 410 (g) Regional Geography Seminar (4)
Geog $411(\mathrm{~g})$ Geographic Factors in Culfural Development (3)
Geog $420(\mathrm{~g})$ Historieal Geography of the United States (3)
Geog 444(9) Seminar in Geographic Thought (2)

Geog 480(g) Seminar in Conservation (3)
Gecg $490(\mathrm{~g})$ Special Problems in Geography (1.4)

Geog 495 (g) Field Techniques in Geography (4)

Health, Physical Education, and Recreation Department
Graduate Faculty: Loel Frederickson
(Chairperson), Donald Anderson, Dwaine Hoberg, Laurence Macleod, Mary Nontgomery, Orlow Nokken. T. Edison Smith, Willam Thomas.

## Master of Science

The degree may be earned with a major in Health, Physical Education and Recreation, according to the general requirements given on pages 3-6. The scores on the General Aptitude portion of the Graduate Record Examination are required with the application for admission

## Health Courses

Hith 412(g) Marriage and Family Life Education (4)
Hith 465(g) Organization and Administration of School Health Education (3)
HIth $474(\mathrm{~g})$ Workshop in Health Education (2)
Hith $476(\mathrm{~g})$ Seminar in Health Problems (2-6)
Hith 540 Problems in Health Education (3)
Hlith 565 Coordination of School Health Education (3)
Hith 599 Thesis in Health (6)

## Physica! Education Courses

PE 380(g) Supervision of Physical Education in the Elementary School (4)
PE 421(g) Physiology of Exercise (3)
PE 452 (g) Adapted Physical Education (3)
PE 453 Physical Education for the Mentally Retarded (3)
PE 475(g) Administration of Athletics
PE 495(g) Administration of Physical Education (3)
PE 505 History and Philosophy of Physical Education (3)
PE 540 Problems in Physical Education (3)
PE 560 Studies in Athletic Training (3)
FE 574 Tests and Measurements in Physical Education (3)
PE 599 Thesis in Physical Education (6)

## Recreation Courses

Rec $465(\mathrm{~g})$ Organization and Acministration of Recreation (3)
Rec 540 Probiems in Fecreation (3)
Flec 599 Thesis in Pecreation (6)

## History Department

Graduate Faculty: Lee Grugel (Chairperson), Dieter Berninger, Robert Davies. William Eagan, Christopher-Hong, Murray Kranz, Lysle Meyer, Victor Peters, I. Kenneth Smemo, Neison Whyatt.
Courses offered by the History Department may be included in the major, Soclal Studies (see page 24), for the degree Master of science.

## History Courses

Hist 307 (g) Studies in Asian History (3-4)
Hist 3089. Studies in African History (3-4)
Hist 309(g) Studies in Latin American History (3.4)

Hist $310(\mathrm{~g})$ Studies in European History (3-4)
Hist $311(\mathrm{~g})$ Studies in North American History (3.4)

Hist 312-313.314(g) Ancient History |-11-1II (4 each)
Hist $315(\mathrm{~g})$ Medieval Europe (3)
Hist 316(g) The Renaissance (3)
Hist $317(\mathrm{~g})$ The Reformation (3)
Hist 318-319-320(g) History of Germany |-II-III (3 each)
Hist 331-332-333(g) Russian History I-11.11I (3 each)
Hist $338-339(\mathrm{~g})$ intellectual History of Western Civilization 1.11 ( 4 each)
Hist 354-355-356(g) History of Science I-II-II! (3 each)
Hist $357-358(\mathrm{~g})$ United States Foreign Relations (1.1) ( 3 each)
Hist 359(g) National Histories (2.4)
Hist $364.365(\mathrm{~g})$ Economic History of the United States I-1I (4 each)
Hist $366-367(\mathrm{~g})$ Constitutional History of the United States III (4 each)
Hist 368-369(g) Social and Intellectual History of the United States III ( 4 each)
Hist 370(g) The American West (4)
His1 371-372(g) Colonial America ! 11 (3-4 each)
Hist 381-382(g) History of Canada I-11 (3 each)
Hist 402(g) Seminar in African History (3-4)
Hist 403(g) Seminar in Latin American History (3-4)
Hist 404(g) Seminar in European History (3-4)
Hist $405(\mathrm{~g})$ Seminar in North American History (3.4)

Hist 560 Tutorial in History: Graduate (1-3)
Hist 599 Thesis in History (1-6)

## Industrial Studies Department

Graduate Faculty: Wade Swenson (Chairperson), Ciyde Kale, Albert Mudgett, Otto Ursin, Marlowe Wegner, Leland White.

## Master of Science

The degree may be earned with a major in Industrial Education. The general requirements for the degree are given on pages 3.6. The scores on the General Aptitude portion of the Graduate Record Examination are required with the application for admission.
Industrial Studies Courses
IndS 420(g). Wood Technology (4)
IndS $430(\mathrm{~g})$ Tour of Industry (1-2)
IndS 444(g) Industrial Design (3)
IndS 450(g) Graphic Arts Technology (4)
IndS 461(g) Career Education-(3)
IndS $486(\mathrm{~g}$ ) World of Manufacturing (4)
IndS 491(9) Materials inspeetion and Testing (4)

IndS 493(g) Occupational Satety
Inds $494(\mathrm{~g})$ Trends and Developments in Industrial Education (3)
IndS 505 History of Industrial Education (3)
IndS 510 Current Issues of Industiy (3)
IndS 599 Thesis in Industrial Education (1.6)
Vocational Educational Courses
VOED $440(\mathrm{~g})$ Organization \& Administration of Vocational Programs (3)
VOED $441(\mathrm{~g})$ Measurement in Vocational Education (3)
VOED 443 (g) Industrial Arts for Elementary or Special Education Teachers (4)
VOED $446(\mathrm{~g})$ Visuai Materials for Vodational Education (2)
VOED $480(\mathrm{~g})$ Special Problems in Vocational Edication (1-6)
VOED 495(g) Philosophy of Vocational Education (3)
VOED $496(\mathrm{~g})$ Literatuie of Vocational Eaucation (3)
VOED 497(9) Curriculum Planning in
Vocational Education (3)

## Languages Department

Edward Clark (Chairperson), Graduate Faculty: Hi:Sook Hwang, James Kaplan, Johanna Neuer, G. Theodore Schaum.

## French Courses

Fren $440(\mathrm{~g})$ Advanced Seminar (3)
Fren $480(\mathrm{~g})$ Special Topics in French Literature and Cuiture (2.4)
Fren 487 (g) Studies in the French Language (3)

## German Courses

Ger 331 (g) German Culture and Civilization (4)

Ger $411(\mathrm{~g})$ Survey of German Lilerature (4)
Ger 440(g) Advanced Seminar in German Literature, Culture, and Language (3)
Ger 480(g) Special Topics in German Literature and Culture (2-4)

## Spanish Courses

Span 425-426-427(g) Advanced Spanish Composition and Conversation $1-1 /-1 I I$ ( 3 each)
Span $431(\mathrm{~g})$ Nineteenth Century Novel of Spain (3)
Span 432(g) Twentieth Century Novel of Spain (3)
Span $433(\mathrm{~g})$ Twentieth Century Poetry and Drama of Spain (3)
Span 434-435(g) Spanish American Prose Fiction 1.11 (3 each)
Span 436(g) Latir-American Poetry, 1890 to Present (3)
Span $440(\mathrm{~g})$ Advanced Seminar (3)
Span $480(\mathrm{~g})$ Special Topics in Spanish Literature and Culture (2-4)

## Mass Communications Department

Roger Hamilton (Chairperson), Graduate Faculty: Allen Carter

## Mass Communications Courses

MC 350(g) Basic Television Production (3)
MC 440(g) Communication Law and Civif Rights (3)
MC 496(g) News-Editorial Workshop (1-3)
MC 497(g) Advertising-Public Relations Workshop (1-3)
MC 580 Problems in Mass Communications (1-4)

## Mathematics Department

Graduate Faculty: Milton Legg (Chairperson), James Hatzenbuhler, Don Mattson, Bill Ritchie, Derald Rothmann, Marion Smith. Warren Thomsen, James Wallen, Fike Zahroon.

## Master of Science

The degree may be earned with a major in Mathematics. General requirements for the degree are given on pages 3.6. Scores on the General Aptitude portion of the Graduate Record Examination are required with the application for admission.
Candidates are expected to provide evidence of proficiency in undergraduate Mathematics. A candidate is expected to include in the course selection (either within the program or prior) all required 400 -level courses in the existing undergraduate major plus at least 16 hours of mathematics courses which are not required by the undergraduate major. A second course in at least two of the following areas is required: algebra, geometry, analysis, mathematical statistics, applied mathematics. Written comprehensive examinations will be administered in general mathematics and two mathematical areas according to the program planned by the candidate and the advisor and approved by the department.

## Mathematics Courses

Math 341 (g) Special Methods in Mathematics in the Elementary School (3)
Math $342(\mathrm{~g})$ Teaching Measurement Using the Metric System (2)
Math $400(\mathrm{~g})$ History of Mathematics (3)
Math $401(\mathrm{~g})$ Statistical Methods for Business Management (3)
Math $415(\mathrm{~g})$ Foundations of Geometry
Math $416(\mathrm{~g})$ Modern Geometry (4)
Math $423(\mathrm{~g})$ Foundations of Algebra (3)
Math $424-425(\mathrm{~g})$ Abstract Algebra I-II (4 each)
Math 427 (g) Linear Algebra (4)
Math $444(\mathrm{~g})$ Diagnosis and Remediation of Learning Difficulties in Mathematics (3)
Math $445(\mathrm{~g})$ Computers in Secondary Mathematics (3)
Math 450 (g) Numerical Analysis I (4)
Math $451(\mathrm{~g})$ Numerical Analysis II (3)
Math $461-462-463(\mathrm{~g})$ Introduction to Real Analysis I-II-III (4 each)
Math 465(g) Applied Analysis (4)
Math $466(\mathrm{~g})$ Fourier Series and Boundary Value Problems (4)
Math $467(\mathrm{~g})$ Probability (4)
Math $475-476(\mathrm{~g})$ Mathematical Statistics I.11 (4 each)
Math 480(g) General Topology (4)
Math 495(g) Theory of Numbers (4)
Math 540 Problems of Secondary School Mathematics (3)

Math 590 Special Problems in Mathematics (1-6)
Math 599 Thesis in Mathematics (1.6)

## Media Education Department

Evelyn Swenson (Chairperson), Graduate Faculty: George McMeen, Darrel Meinke

## Media Education Courses

MeEd 300 (g) Audiovisual Materials and Methods (3)
MeEd 320(g) Production of Audiovisua! Materials (3)
MeEd $330(\mathrm{~g})$ Development of Audiovisual Presentations (3)
MeEd 340(g) Television in Education (3)
MeEd $400(\mathrm{~g})$ Materials for the Elementary School (4)
MeEd $410(\mathrm{~g})$ Materials for the Secondary School (4)
MeEd 420(g) Media Services in Elementary and Secondary Schools (3)
MeEd 430(g) Administration of the School Media Center (4)
MeEd 450(g) Problems in Media Education (2-6)
MeEd 460 Practicum in School Media Services (1-3)
MeEd 490(g) History of Books and Printing

## Music Department

Graduate Faculty: Donald Key (Chairperson), Ruth Dahlke, David Ferreira, Earnest Harris, Norman Hessert, Albert Noice, Robert Pattengale, Andrew Smith.

## Master of Science

The degree may be earned with a major in Music according to the general requirements given on pages 3-6.
The degree is designed for vocal and instrumental public school teachers. Scores on the General Aptitude portion of the Graduate Record Examination are required with the application for admission, and an initial qualifying examination is taken during the period of the first enrollment. Any determined deficiencies must be made up at the undergraduate level.
Either Plan A or Plan B may be followed. The program should include, in addition to 9 hours of professional education, 27 hours of music and 9 hours outside the area of professional education and music.

## Music Courses

Mus 316(g) Composition (3)
Mus 330(g) Concert Band (1)
Mus $331(\mathrm{~g})$ Symphonic Wind Ensemble (1)
Mus 332(g) Stage Band (1)
Mus $333(\mathrm{~g})$ Orchestra (1)
Mus 335(g) Concert Choir

Mus 336(g) Festival Choir (1)
Mus 337(g) Pop Choir (1)
Mus 338(g) Chamber Singers (1)
Mus 343(g) Instrumental Conducting II (2)
Mus 347 (g) Choral Conducting II (2)
Mus 373(g) American Music (3)
Mus $378(\mathrm{~g})$ Collegium Musicum (1)
Mus $379(\mathrm{~g})$ Introduction to Ethnomusicology (3)

Mus 382(g) Solo and Ensemble Literature for Brass (1)
Mus 383(9) Solo and Ensemble Liferature for Woodwinds (1)
Mus 398(g) Chamber Music (1)
Mus 399-404(g) Small Ensemble (1 each)
Mus 406(g) Opera (2)
Mus 409(g) Psychology of Music (3)
Mus $410(\mathrm{~g})$ Oichestration (3)
Mus 411(g) Band Arranging (3)
Mus 413(g) 16th Century Polyphony (3)
Mus 414(g) Techniques of Musical Interpretation (3)
Mus 430ig) Electronic Music I (3)
Mus 431(g) Electronic Music II (3)
Mus 441 (g) Piano Pedogogy I (2)
Mus 442(g) Piano Pedogogy II (2)
Mus 443ig) Pedagogy of Theory (3)
Mus 444(g) String Methods and Materiais (2)
Mus 445(g) Stage Band Methods and Materials (2)
Mus $446-447(\mathrm{~g})$ Voice Pedagogy III ( $\ddagger$ each)
Mus 450-468(g) Applied Music Performance Level IV (1-2 each)
Mus 502 Research in Music and Music Education (3)
Mus 504 Workshops in Secondary School Music (2)
Mus 505 Graduate Recital (1-2)
Mus 510 Directed Study in Music Theory (3)
Mus 540 Problems in Teaching and
Supervising Music (3)
Mus 541 Advanced Studies in Teaching
Elementary School Generai Music (3)
Mus 542 Advanced Studies in Teaching Vocal Music in Secondary Schools (3)
Mus 545 Voice-Choral Techniques Instituie (3)
Mus 550-568 Applied Music Performance
Level V ( 1.2 each)
Mus 570 Introduction to Musicology (3)
Mus 571 Music in the Middle Ages (3)
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 (i-6)

## Philosophy Department

Graduate Faculty: Charles Magel
(Chairperson), Mark Chekola, Arnold Johanson, David Myers.

## Philosophy Courses

Phil $340(\mathrm{~g})$ dvanced Ethics (4)
Phil 380(g) Plato (4)
Phil 381(g) Aristotle (4)
Phil 385(g) Continental Rationalism (4)
Phil 390(g) British Empiricism (4)
Phil $410(\mathrm{~g})$ Nineteenth Century Philosophy (4)

Phil 420(g) Contemporary Analytic Philosophy (4)

Phil 430(g) Kant (4)
Phil 440(g) Selected Philosophical Problem (1-4)
Phil 450(g) Seminar on Major Philosopher (4)
Phil 490(g) Independent Study (2-4)

## Physics Department

Gerald P. Hart (Chairperson), Graduate
Faculty: Walter Wesley, Hsin-Yang Yeh.

## Physics Courses

Phys 331-332(g) Intermediate Mechanics II-III (3 each)
Phys 345(g) Aerospace Education Workshop (4)

Phys 370-371-372(g) Electromagnetic Theory and Physical Optics I-11-1II (3 each)
Phys $430(\mathrm{~g})$ Introduction to Wave Mechanics (3)

Phys 431 (g) Atomic and Molecular Physics (3)
Phys $432(\mathrm{~g})$ Nuclear and Solid State Physics (3)

Phys $490(\mathrm{~g})$ Physics Seminar (1 each)
Phys $499(\mathrm{~g})$ Special Problems in Physics (1-4)

## Political Science Department

Graduate Faculty: David Flint (Chairperson), Edward Estes, Anoushiravan Khoshkish.
Courses offered by the Political Science
Department may be included in the major,
Social Studies (see page 34) for the degree
Master of Science.

## Political Science Courses

Pol $310(\mathrm{~g})$ Scope and Method (3)
Pol 311 (a) American Political Thought (4
Pol 312(9) Communist and Marrist
Foundations of Govemment (3)
Pel 341i(s) Policy and Administration -3
Pol 352(g) Political Problems in Developing
Countries (3)
Pol $355(\mathrm{~g})$ Politics of Scandinavia (3)
Pol 360 (g) American Foreign Policy (4)
Pol 361(0) Topies in International Law
( 3 each, may be repeated)
Pol 362(g) Topics in International
Organizations ( 3 each, may be repeated)
Pol $410(\mathrm{~g})$ Topies in Western Political
Thought (4 each, may be repeated)
Pol $411(\mathrm{~g})$ Eastern Political Thought (3)
Pol $420(\mathrm{~g})$ Seminar in American Politios
Pol $430(g)$ Topies in Constilutional Law ( 2.4 each, may be ropeated)
Pol $431(\mathrm{~g})$ Social Work and the Law (3)
Pol 455 (g) Topics in Comparative Government
(2.4, may be repeated for credit)

Pol $460(\mathrm{~g})$ International Politics (4)
Pol 461(g) Independent Study in Pollitical Science (1-6)
Pol 590 Graduate Seminar in Political Science (2.4)
Pol 599 Thesis in Political Science (1.6)

## Psychology Department

Grduate Facuity: Bradley Bremer
(Chairperson), Rudolph Chang-Yit, David Cole, James Condell, Marcia Kierscht, Phillip Rice. Helen Wilison

## Master of Science

The degree may be earned with a School Psychologist maior. Requirements are those cited on pages $3-6$ with the following specific conditions:
In addition to the general requirements for admission the applicant must submit an undergraduate grade point average of at least 3.0 (B), the preparation to include at least 12 quarter hours of general or introductory psychology. Seores of 500 on beth the Verbal and Quantitative portions of the Graduate Record examination are required. A letter of intent specifying career goals and research
interests, and three letters of recommendation must be provided. Students are admitted only Onl a fuil-time basis.
Admission to candidacy is determined by a departmental committee. The curriculum is designed to meet requirements for School Psychologist I certiflcation in the State of Minnesota. Carvification in a teaching field is not required (or Scheol Psychologlat:
cenification, of for enrollment in the 9 hours of prolessional educatim ceurees elthrugh completion of a conurse in edrcational psychology is required prior to sugh enfoilment.
The program niust be completed ulider Plan $A_{1}$ the thesis being either reseacch or theory. oriented.

## Course Requirements

Group 1-Professional Education (9 hours minimum) Ed 501, 502, 503 required.
Group 11. Schrol Psychology Major (33 hours minimum) Psy $460 \mathrm{~g}, 465 \mathrm{~g}, 476 \mathrm{~g}$, 500 , $501,502,503,504,505,506,599$ required. Group III - Electives ( 6 hours minimum) Selected from education, counseling and guidance, psychology, remedial reading, sonial work, seciclogy, special education, speeeh pathology
Psychology Courses
Psy 401(g) Child Psychology (4)
Psy 402ig) Adolescent Psyohology (4)
Psy 403(9) Adulthood and Aging
Psy 442 (g) Learning (4)
Psy 444(g) Motivation and Emotion (4)
Psy 445(9) Physiologieal Psychology (4)
Psy 44Bia) Perceantion (4)
Psy 447(a) Comparative Psychology (4)
Psy 448(g) Cognition (4)
Psy 460(9) Abnormal Psychology (3)
Psy 465(g) Clinical Psychology (3)
Psy $470(\mathrm{~g})$ History and Sysiems of Psychology (4)

Psy 476(9) Theories of Personality (3)
Psy 481(g) Seminar in Psychology (4)
Psy 491 (g) Problems in Psychology (4)
Psy 405 (g) Field Work in Psychology (2.4)
Psy 500 SeminarlPracticum in Psyehelogy (2)
Psy 501 Introduction to School Psychological Services (3)
Psy 502 Theory and Principles of Measurement (3)
Psy 503 Individual Psychologloal Testing (3)
Psy 504 Advanced Individual Psychological Testing (3)
Psy 505-506 Practicum in School Psychology I.II (3 each)

Psy 581 Readings in Psychology (2-4)
Psy 599 Thesis in Psychology (1-6)

## Remedial Reading

The major is avallable in the Master of Solence program (see Dage 15).

## School Psychology

The major is available in the Master of Science program (see Psychology Department).

## Social Work Department

Graduate Faculty: Margaret Reed (Chairperson)

## Social Work Courses

SW 403(g) Social Work and Health Services (4)

SW 404(0) Rural Social Work (4)
SW 425(g) Topical Seminar in Social Work (1.9)

SW 431(g) Social Policy/Legislation (4)
SW 498(g) Social Services Workshops (1-3)

## Social Studies

The Master of Science degree (see page 24) may be earned with a major in Social Studies, an interdepartmental program involving the departments of Economics, History, Political Sclence, and Sociology and Anthropology. Admission may be provided to work in a program with either a departmenial or an area concentration. Persons seeking admission to the program with an area concentration should consult with a Graduate Faculty member in one of the participating departments in order to prepare a plan of studies to be presented with the application. Scores on the General Aptitude portion of the Graduate Record Examination are required with an application for admission. The program options are:

## Departmental Concentration

The program is completed with a thesis. Of the 45 credits required in a minimum program at least 24.27 credits (including six credis of thesis) are taken in one department. Nine to 12 credits are to be taken in other departments in the area, and nine credits are taken
in professional education.

## Area Concentration Plan A

The student plans a program with a committee appointed at the lime of admission. At least thirty-six oredits must be taken with at least three departments, and distributed so that no more than 18 credits (including six credits of thesis) are taken in any one department. The program will include at least nine credits in professional edueation

## Area Concentration B

An individualized program is planned by the student working with a committee appointed at the time of admission. At least thirty-six credits are taken in courses of the participating departments and distributed so that not less than nine credits are earned in each of three departments and not more than 18 credits in any one department. Three starred papers are written, relating to at least two departments in the area. At least nine credits will be taken in professional education.

## Soclology and Anthropology Department

Swaran Sandhu (Chaliperson), Anne Brunton, Joel Charon, Mark Hansel, Michael Michlovic, David Olday, Nancy Parlin, George Smart.
Courses offered by the Sociology and Anthropology Department may be included in the major, Social Studies (see page 24), for the degree Master of Science.

## Anthropology Courses

Anth $445(\mathrm{~g})$ Seminar in Anthropology (4)
Anth 461(g) Readings in Anthropology (1-8)

## Sociology Courses

Soc 411(g) Current Sociology (3)
Soc $414(\mathrm{~g})$ Topics in Political Sociology (3)
Soc 415(9) Social Organization (3)
Soc $417(\mathrm{~g})$ Topics in Sociology of Change (3)
Soc $418(9)$ Sociology of Education (3)
Soc 425(9) Seminar in Sociology (3)
So0 449(9) Topics in Social Stratification (3)
Soc 452(g) Topics in Advanced Research Techniques (3)
Soc 461(g) Readings in Socialogy ( 1.6 )
Soc 500-501 Sociological Theory I-11 (3 each)
Soc 510 Individual Research (3-6)
Soc 512 Topical Seminar in Sociology (3.6)
Soc 560 Studies in Sociology (3)
Soc 599 Thesis in Sociology (1-6)

## Special Education

The major is available in the Master of Science program (see page 15)

## Speech Department

Graduate Faculty: Delmar Hansen (Chairperson), Robert Badal, Virgil Black, Timothy Choy, Carol Gaede, K, Dale Gronhovd, Davis Scotl, Marie Swanson, Arne Tiegland.

## Master of Science

Programs are available in two areas of concentration Scores on the General Aptitude portion of the Graduate Record Examination are required with the application for admission The general requirements (pages $3 \cdot 6$ ) apply in each program, specific conditions being cited as they exist.

## Theatre Major

This prograrn is available to qualified students who seek careers in the educational or professional theatre Applicants should present an undergraduate major or minor in theatre, although excentions may be made for promising applicants whose undergraduate preparation is in cognate fields such as English, art, or music Those appilicants who lack a well-balanced background in theatre may expect that aciditional coursework to correct deticiencies will be required by their major advisor
In addition to thine hours of professional educalion courses, the student is advised to concentrate in either two or three of the following areas; dramatic literature and iheatre history lechnical theatre, acting and direeting; or educational theatre. If three arpas are selected, twelve hours of credit for each should be chosen; if only two areas, the student may choose from twelve to twenty four for each (to total thirty-six hours). For those students without solid undergraduate preparation in dramatic literature and theatre history, the Department recommends inclusion of this area, since the comprehensive examination demands a thorough understanding of the history, liferature, and theory of the dramatio art.
Speech Pathology and Audiology Major
An undergraduaie major in speech pathelogy and audiology is recommended but not mandatory. The prospective candidate who has limited or no background in this area of study, or who does not qualify for speech pathology certification in the State of Minnesota, will be expected to remove deficiencies by taking basic undergraduate courses for which no graduate credit will be allowed. The Master's degree requires a minimum of 45 graduate credits of which al least 15 are to be earned in the 500 series.

Most candidates for the Master's degree will also want to qualify for certification from the Amerioan Speech and Hearing Association and should keep these standards in mind when planning their graduate studles. This certification requires a total of 90 quarter hours of credit constifuting a well-integrated program (45 of these credits must be in courses that are available for graduate crecit at the institution in which they are taken) and 300 clock hours of supervised clinical experience ( 150 of these hours must be accumulated at the graduate level). The candidate should allow sufficient time and plan the program carefully with the advice and consultation of the advisor if wishing to meet not only the requirements for the degree, but also the requirements for certification,
In addition to the required professional educational courses, candidates must. complete a minimum of 30 credits in the major, including 6 credits in 566 and 12 credits in $561,562,563$, and one audialogy course. Candidales may select courses in such related areas of study as psychology, linguistics, counseling and guidance, speech and special education:

## Speech Courses

Spch $340(9)$ The Teaching of Speech (4)
Spch 343(g) High School Speech and Drame Activities (4)
Spch $345(\mathrm{~g})$ Speech in the Elementary Gassroom (3)
Spch $416(\mathrm{~g})$ Special Projects in Speech Communication (4)
Spch 499(g) Topical Workshop (1-4)
Spch 540 Problems in Speech Education (3)
Theatre Coulses
Spch 322(g) Development of the Drama I (4)
Spen $324(\mathrm{~g})$ Development of the Drama II (4)
Spch $326(\mathrm{~g}$ ) Development of the Drama ill (4)
Spech 330(g)-Dramatic Production I (3.6)
Spoh $331(\mathrm{~g})$ Dramatic Production II (3-6)
Spoh 332(g) Stage Movement (4)
Spoh 333 (g) Stage Voice (4)
Spoh 334(g) Principles of Stage Design (4)
Spch $336(\mathrm{~g})$ Advanced Stane Design (4)
Spch 387(g) Stage Lighting (4)
Spch $338(\mathrm{~g})$ Dance for the Stage (4)
Speh 341 (g) Creative Dramatics (3)
Spch 342(9) Children's Theatre (3)
Spch $344(\mathrm{~g})$ Prinoiples of Play Direction (4)
Spch $429(\mathrm{~g})$ Advanced Play Direction (4)
Spch 430(g) Styles of Directing (4)
Spch $431(\mathrm{~g})$ Styles of Acling (4)
Spch 434(g) Special Projects in Theatre Arls (4)

Spch $437(\mathrm{~g})$ Styles of Stage Design (3)
Spch 438 (g) Contemporary Playwrights (4)
Spch 520 Seminar in Educational Theatre (3)
Spch 522 Dramatic Theory and Crificism (8)
Spoh 599 Thesis in Speech (1-6)

## Speech Pathology Courses

## SPAA. 452(g) Speech Anatomy and Physiology

 (4)SPAA 458(g) Language Development for Exceptional Children (3)
SPAA 467 (g) Diagnostic and Appraisal Procedures (4)
SPAA $468(g)$ Speech and Hearing Problems in the Classroom (3)
SPAA 472(9) Advanced Audiometry (3)
SPAA 479(g) Readings in Speech Pathology and Audiology (3)
SPAA 499(9) Topical Workshop (1.4)
SPAA 550 Research in Speech Pathology
and Audlology (3)
SPAA 551 Organic Voice Disorders (3)
SPAA 552 Structural Speech Disorders (3)
SPAA 553 Newrological Speech Disorders (3)
SPAA 561 Seminar in Articulation (3)
SPAA 562 Seminar in Stuttering (3)
SPAA 563 Aphasia (3)
SPAA 565 Clinical Practicum (1-3)
SPAA 571 Seminar in Audiology (3)
SPAA 579 Topical Seminar in Speech
Pathology and Audiology (1-6)
SPAA 599 Thesis in Speeck Pathology and Audialogy (1-6)

## Speech Pathology and Audiology

The major is available in the Master of Science program (see Speech Department).

## Speech Theatre

The major is available in the Master of Science progiam (see Speech Department)

## Human Rights/Equal Opportunity

The State University System acknowledges its responsibility to ensure equal employment and educational opportunities without regard to race, cieed, color, religion, nationai origin, sex, age, reliance on public assistance, physical disability, marital status, or inclusion in any group or class against which discrimination is prohibited by State or Federal law, including Vietnam Era veterans. Furthermore, Moorhead State University will continue to develop and implement timely and comprehensive affirmative action procedures aimed at removing barriers to equal employmient opportunity.
Inquiries or grievances related to Affirmative Action or Titte X should be directed to Evelyn J. Swenson, Affirnnative Aotion/Title IX Coordinator, 291 Livingston Lord Library, MSU, Moorhead, MN 56560. (218)236-2922. Inquiries or grievances related to Section 504 of the Rehabilitation Act of 1973 as amerided, which protects the handicapped from discrimination, should be directed to Mel Schmitz, MSU 504 Coordinator, Owens 210, MSU, Moorhead, MN 56560. (218)236-2131.

## academic calendar

## 1977-78

Registration and payment of fees
Classes begin
Last day to apply for Oral Examination for degree in term
Last day to complete Written Comprehensive Examination for degree in term Last day for Oral Examination
Last day to submit Thesis to Library and
Final Report for degree in term
Final Examinations

## Commencement

Vacation (inclusive dates)

| Fall | Winter | Spring | Summer, Session 1 June 12 June 12 | Session 2 |
| :---: | :---: | :---: | :---: | :---: |
| Sept. 6-7 | Nov, 28 | Mar 9 |  |  |
| Sept. 8 | Nov, 28 | Mar. 9 |  | July 17 |
| Oct. 21 | Feb. 1 | Apr. 27 |  | July 21 |
| Oct 28 | Feb 8 | May 4 |  | July 28 |
| Nov. 4 | Feb. 15 | May 11 |  | Aug. 4 |
| Nov. 16 <br> Nov. 17-19 | Feb. 27 <br> Feb, 27. <br> Mar 1 | May 24 | July 14 | Aug. 16 Aug. 18 |
|  |  | May 23-25 |  |  |
|  |  | May 26 |  | Aug. 18 |
|  | Dec 17. Jan. 8 | Mar. $24-$ <br> Mar. 31 | July 4 |  |

## 1978-79

Registration and payment of fees
Classes begin
Last day to apply for Oral Examination for degree in term
Last day to complete Written Comprehensive Examination for degree in term Last day for Oral Examination
Last day to submit Thesis to Library and
Final Report for degree in term
Final Examinations
Commencement
Vacations (inclusive dates)

Fall
Sept. 5-6
Sept. 7
Oct. 20
Oct. 27
Nov. 3
Nov. 16
Nov. 16-18

Winter
Nov. 27
Nov. 27
Jan. 31
Feb. 7
Feb. 14
Feb. 26
Feb. 26-28
Dec. 16-
Jan. 7

Spring
Mar. 12
Mar. 12
Apr. 26
May 3
May 10
May 23
May 22-24
May 25
Apr. 13

July 13
July 4

Session 2
Summer,

## Session 1

June 11
June 11 July 16
July 20
July 27
Aug. 3
Aug. 15
Aug. 17
Aug. 17

## 1979-80

Registration and payment of fees
Classes begin
Last day to apply for Oral Examination for degree in term
Last day to complete Written Comprehensive Examination for degree in term
Last day for Oral Examination
Last day to submit Thesis to Library and
Final Report for degree in term
Final Examinations
Commencement
Vacations (inclusive dates)

| Fall | Winter | Spring | Summer, Session 1 June 9 June 9 | Session 2 |
| :---: | :---: | :---: | :---: | :---: |
| Sept. 4-5 Sept. 6 | Nov 26 | Mar. 10 |  | Session 2 |
|  | Nov. 26 | Mar. 10 |  | July 14 |
| Oct. 19 | Jan. 30 | Apr, 25 |  | July 18 |
| Oct. 26 Nov 2 | Feb 6 | May 2 |  | July 25 |
|  | Feb. 13 | May 9 |  | Aug. 1 |
| Nov. 15 <br> Nov. 15-17 | Feb. 25 | May 21 <br> May 20-22 <br> May 23 |  | Aug. 13 |
|  | Feb. 25-27 |  | July 11 | Aug. 15 |
|  |  |  |  | Aug. 15 |
|  | Jan. 6 |  | July |  |

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## administration

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