Graduate Academic Catalog (June 1969 - June 1970)

University of Nebraska at Omaha

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TABLE OF CONTENTS

Calendar .................................................................................................................. 4
Graduate Record Examination .................................................................................. 6
University Administration ......................................................................................... 7
Graduate Faculty ....................................................................................................... 8
Accredited Standing ................................................................................................... 12
Graduate College
   Historical Sketch and Purpose ............................................................................. 13
   Administration ........................................................................................................ 13
   Purpose .................................................................................................................. 14
Assistantships ............................................................................................................ 14
Scholarships ............................................................................................................. 14
Organizations for Graduate Students ....................................................................... 14

Procedures and Regulations
   Admissions and Transcripts .................................................................................. 15
   Classification of Admissions .................................................................................. 16
   Graduate Record Examination ............................................................................. 17
   Foreign Language Requirement ............................................................................ 17
   Registration Procedure ......................................................................................... 17
   Certification or Professional Growth .................................................................... 17
   Administrative Certificate .................................................................................... 18
   Admission to Candidacy for Degree .................................................................... 18
   Application for the Degree .................................................................................... 19
   Thesis ..................................................................................................................... 19
   Oral Examination on Thesis ................................................................................. 19
   Final Comprehensive Examination ....................................................................... 19
   Time Limit for Master's Degrees .......................................................................... 20
   Quality of Work ..................................................................................................... 20
   Class Attendance ................................................................................................. 20
   Study Load ........................................................................................................... 21
   Courses for Graduate Credit ................................................................................ 21
   Residence Requirements ....................................................................................... 21
   Transfer of Credit ................................................................................................ 21
   Withdrawal from University ................................................................................ 21
   Workshops ............................................................................................................ 21
   Procedure for Graduate Students ....................................................................... 22
   Tuition and Fees ................................................................................................... 23
   Refund Schedule ................................................................................................. 24
   Resident Status ..................................................................................................... 25

Degree Programs and Programs of Instruction
   Master of Arts ....................................................................................................... 26
   Master of Science ................................................................................................. 28
   Major Fields in Education .................................................................................... 31

Course Descriptions
   Art ......................................................................................................................... 40
   Biology .................................................................................................................. 40
   Business Administration ...................................................................................... 41
   Chemistry .............................................................................................................. 43
   Economics ............................................................................................................ 43
   Education
      Educational Foundation ..................................................................................... 45
      Elementary ......................................................................................................... 46
      Secondary ......................................................................................................... 47
      Educational Administration & Supervision ..................................................... 48
      Guidance and Counseling ............................................................................... 48
      Special Education ............................................................................................. 49
   Engineering ......................................................................................................... 52
   English .................................................................................................................. 54
   Foreign Languages ............................................................................................... 55
   Geography ............................................................................................................ 56
   History ................................................................................................................. 57
   Mathematics ....................................................................................................... 60
   Physics .................................................................................................................. 62
   Political Science .................................................................................................. 62
   Psychology ........................................................................................................... 64
   Sociology ............................................................................................................. 67
   Speech & Drama ................................................................................................. 69

Index ......................................................................................................................... 71
THE GRADUATE COLLEGE

OFFICIAL CALENDAR

SUMMER 1969

June 1  
Last day for submitting admission credentials for admission to Graduate College.

June 6-7  
Registration.

June 9-July 11  
First session.

June 19-July 31  
Evening session.

July 4  
Theses due in Graduate Office.

July 11  
Holiday.

July 14-Aug. 15  
Second session.

July 18  
Last day for filing applications for degrees to be conferred August 31, 1969.

FIRST SEMESTER 1969-70

August 15  
Last day for submitting admission credentials for admission to first semester.

September 8-12  
Registration and changes.

September 15  
Official beginning of first semester at 7:30 a.m. Day and evening classes begin.

September 16  
Late registration begins.

September 19  
Last day for registering for a day class, or adding a day class to a schedule, up to 4 p.m. (or changing a day class from "audit" to "credit" or "credit" to "audit").

September 20  
9 a.m. to 12 noon. Last day for registering for an evening class, or adding an evening class to a schedule (or changing an evening class from "audit" to "credit" or "credit" to "audit").

October 8  
Founder's Day.

November 7  
Last day a class may be dropped in order to receive a "W" or an "X."

November 7  
Theses due in Graduate Office.

November 26  
Thanksgiving recess begins at 1:00 p.m.

December 1  
Classes resume at 7:30 a.m.

December 8  
Last day for filing applications for degrees to be conferred in January 1970.

December 19  
Christmas Convocation.

December 20  
Christmas Vacation begins at noon.

January 2  
Last day for submitting credentials for admission to second semester.

January 5, 1970  
Classes resume at 7:30 a.m.

January 14-21  
Final Examinations.

January 22  
All grades due in Registrar's Office by 3:30 p.m.

January 24  
Mid-year Commencement (Saturday).

SECOND SEMESTER 1969-70

January 26-30  
Registration and changes.

February 2  
Official beginning of second semester at 7:30 a.m. Day and evening classes begin.

February 3  
Late registration begins.

February 7  
Last day for registering for a day class or adding a day class to a schedule, up to 4 p.m. (or changing a day class from "audit" to "credit" or "credit" to "audit").

February 7  
9 a.m. to 12 noon. Last day for registering for an evening class, or adding an evening class to a schedule (or changing an evening class from "audit" to "credit" or "credit" to "audit").

March 20  
Theses due in Graduate Office.

March 27  
Last day a class may be dropped in order to receive a "W" or an "X."

March 28  
Spring Vacation begins at noon.

April 6  
Classes resume 7:30 a.m.

April 10  
Last day for filing applications for degrees to be conferred in June 1970.

May 8  
Ma-ie Day—student holiday.

May 8  
Last day for submitting credentials for admission to Graduate College.

May 20-27  
Final Examinations.

May 28  
All grades due in Registrar's Office by 3:30 p.m.

May 29  
Alumni Achievement Day.

May 30  
Sixty-First Commencement (Saturday, Memorial Day).

SUMMER 1970

June 5-6  
Registration.

June 8-July 10  
First session.

June 8-30  
Evening session.

June 13  
Last day for submitting credentials for admission to second summer session.

June 19  
Theses due in Graduate Office.

July 4  
Holiday.

July 13-Aug. 14  
Second session.

July 17  
Last day for filing applications for degrees to be conferred August 31, 1970.
GRADUATE RECORD EXAMINATION

Registration Deadlines
- September 25, 1969
- November 13, 1969
- December 17, 1969
- March 25, 1970
- June 11, 1970

Testing Dates
- October 25, 1969
- December 13, 1969
- January 17, 1970
- April 25, 1970
- July 11, 1970

ADMISSION TEST FOR
GRADUATE STUDY IN BUSINESS

Registration deadlines and testing dates from Dr. Gale Oleson.

Graduate students must have Graduate Record Examination of the Admission Test for Graduate Study in Business scores on file in the Graduate College office prior to their second period of enrollment. Testing at UNO is under the supervision of Dr. Gale Oleson, Director, Academic Testing Bureau, Administration Building 213.
### The Graduate College

#### GRADUATE FACULTY

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
<th>Affiliation</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROBERT L. ACKERMAN</td>
<td>Education</td>
<td></td>
<td>Ed.D., University of Nebraska, 1969; Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>PAUL B. ACKERSON</td>
<td>Secondary Education</td>
<td></td>
<td>Ed.D., Oklahoma State University, 1969; Professor</td>
<td></td>
</tr>
<tr>
<td>FREDERICK W. ADRIAN</td>
<td>History</td>
<td></td>
<td>Ph.D., Ohio State University, 1942; Professor</td>
<td></td>
</tr>
<tr>
<td>CLIFFORD ANDERBERG</td>
<td>Philosophy</td>
<td></td>
<td>Ph.D., University of Wisconsin, 1968; Professor</td>
<td></td>
</tr>
<tr>
<td>BRUCE P. BAKER II</td>
<td>English</td>
<td></td>
<td>Ph.D., Texas Christian University, 1958; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>GEORGE BARGER</td>
<td>Sociology</td>
<td></td>
<td>Ed.D., Columbia University, 1962; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>WALTER J. BAEUPRE</td>
<td>Special Education</td>
<td></td>
<td>Ph.D., University of Kansas, 1967; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>ROBERT W. BENEKE</td>
<td>Accounting and Finance</td>
<td></td>
<td>D.B.A., University of Colorado, 1966; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>JOSEPH V. BENAK</td>
<td>Civil Engineering</td>
<td></td>
<td>Ph.D., University of Illinois, 1967; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>HOLLIE B. BETHEL</td>
<td>Elementary Education</td>
<td></td>
<td>Ed.D., University of Colorado, 1957; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>JOHN V. BLACKWELL</td>
<td>Art</td>
<td></td>
<td>Ph.D., State University of Iowa, 1957; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>RICHARD BLAKE</td>
<td>Counseling and Guidance</td>
<td></td>
<td>Ph.D., University of Missouri, 1966; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>ROBERT P. BORGMAN</td>
<td>Biology</td>
<td></td>
<td>Ph.D., Iowa State University, 1963; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>M. JEAN BRESSLER</td>
<td>Secondary Education</td>
<td></td>
<td>Ph.D., University of Nebraska, 1969; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>BARBARA BRILLHART</td>
<td>Educational Foundations</td>
<td></td>
<td>Ph.D., Pennsylvania State University, 1966; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>JOHN K. BRILLHART</td>
<td>Speech</td>
<td></td>
<td>Ph.D., Pennsylvania State University, 1942; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>MERLE E. BROOKS</td>
<td>Biology</td>
<td></td>
<td>Ph.D., University of Colorado, 1956; Professor</td>
<td></td>
</tr>
<tr>
<td>WILLIAM M. BROWN</td>
<td>Marketing</td>
<td></td>
<td>Ph.D., University of Pittsburgh, 1957; Professor</td>
<td></td>
</tr>
<tr>
<td>CHARLES M. BULL</td>
<td>Marketing</td>
<td></td>
<td>Ph.D., University of Nebraska, 1962; The Frederick W. Kayser Professor of Marketing</td>
<td>1969-70</td>
</tr>
<tr>
<td>DALE M. BUNSEN</td>
<td>Secondary Education</td>
<td></td>
<td>Ed.D., University of Nebraska, 1968; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>KENNETH BURKHOLDER</td>
<td>Educational Administration</td>
<td></td>
<td>Ph.D., University of Washington, 1959; Professor</td>
<td></td>
</tr>
<tr>
<td>KARL H. D. BUSCH</td>
<td>Biology</td>
<td></td>
<td>Ph.D., Ohio State University, 1940; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>H. CARL CAMP</td>
<td>Political Science</td>
<td></td>
<td>Ph.D., Washington University, 1965; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>ELTON S. CARTER</td>
<td>Speech</td>
<td></td>
<td>Ph.D., Northwestern University, 1969; Professor and Dean, Graduate College; Chairman, Graduate Faculty</td>
<td>1969-70</td>
</tr>
<tr>
<td>FERRY P. CHANG</td>
<td>Economics</td>
<td></td>
<td>Ed.D., University of Missouri, 1964; Professor; Director, Reading Clinic</td>
<td>1969-70</td>
</tr>
<tr>
<td>EDWIN L. CLARK</td>
<td>Speech</td>
<td></td>
<td>Ph.D., State University of Iowa, 1951; Professor; Director, University Theater</td>
<td>1969-70</td>
</tr>
<tr>
<td>DONALD CUSHENER</td>
<td>Reading</td>
<td></td>
<td>Ed.D., University of Missouri, 1964; Professor; Director, Reading Clinic</td>
<td>1969-70</td>
</tr>
<tr>
<td>HARL DALSTROM</td>
<td>History</td>
<td></td>
<td>Ph.D., University of Nebraska, 1968; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>JOSEPH G. DUNN</td>
<td>Education</td>
<td></td>
<td>Ed.D., University of Missouri, 1955; Professor and Head of Department, Department of Educational Foundations</td>
<td>1969-70</td>
</tr>
<tr>
<td>LAWRENCE E. EHlers</td>
<td>Engineering</td>
<td></td>
<td>M.S., Kansas State University, 1960; Registered Professional Engineer; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>CRAIG FULLERTON</td>
<td>Education</td>
<td></td>
<td>Ed.D., State University of Iowa, 1955; Graduate Lecturer</td>
<td>1969-70</td>
</tr>
<tr>
<td>G. WAYNE GLIDDEN</td>
<td>Secondary Education</td>
<td></td>
<td>Ed.D., University of Nebraska, 1964; Professor</td>
<td></td>
</tr>
<tr>
<td>FRANK H. GORMAN</td>
<td>Education</td>
<td></td>
<td>Ph.D., University of Missouri, 1931; Professor; Dean Emeritus, College of Education</td>
<td>1969-70</td>
</tr>
<tr>
<td>DONALD J. GRANDGENETT</td>
<td>Elementary Education</td>
<td></td>
<td>Ed.D., Arizona State University, 1967; Assistant Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>ERL J. GUM</td>
<td>History</td>
<td></td>
<td>Ed.D., Louisiana State University, 1963; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>PAUL HAEDER</td>
<td>Mathematics</td>
<td></td>
<td>Ph.D., Iowa State University, 1958; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>ROBERT D. HARPER</td>
<td>English</td>
<td></td>
<td>Ph.D., University of Chicago, 1949; Professor; Dean of the College of Liberal Arts and Sciences</td>
<td>1969-70</td>
</tr>
<tr>
<td>GEORGE T. HARRIS</td>
<td>Finance</td>
<td></td>
<td>Ph.D., State University of Iowa, 1953; The Frederick W. Kayser Professor of Finance</td>
<td>1969-70</td>
</tr>
<tr>
<td>GEORGE C. HELLING</td>
<td>Sociology</td>
<td></td>
<td>Ph.D., University of Minnesota, 1959; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>WAYNE M. HIGLEY</td>
<td>Accounting &amp; Statistics</td>
<td></td>
<td>Ph.D., University of Illinois, 1962; C.P.A.; Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>*JACK A. HILL</td>
<td>Management</td>
<td></td>
<td>Ph.D., University of Texas, 1964; Professor</td>
<td></td>
</tr>
<tr>
<td>PETER W. HILL</td>
<td>Art</td>
<td></td>
<td>M.F.A., Cranbrook Academy of Art, 1958; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>WILLIAM C. HOCKETT</td>
<td>Accounting</td>
<td></td>
<td>M.B.A., University of Denver, 1949; C.P.A.; Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>LETA F. HOLLEY</td>
<td>Secretarial Science</td>
<td></td>
<td>Ed.D., University of Colorado, 1969; Professor and Head of Department</td>
<td>1969-70</td>
</tr>
<tr>
<td>JAMES Q. HOSICK</td>
<td>Engineering</td>
<td></td>
<td>M.S.C.E., University of Nebraska, 1959; Registered Professional Engineer; Associate Professor</td>
<td>1969-70</td>
</tr>
<tr>
<td>FRANCIS M. HURST</td>
<td>Psychology</td>
<td></td>
<td>Ph.D., Indiana University, 1954; Professor</td>
<td></td>
</tr>
<tr>
<td>CHARLES O. INGHAM</td>
<td>Biology</td>
<td></td>
<td>Ph.D., University of Utah, 1969; Assistant Professor</td>
<td>1969-70</td>
</tr>
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Course credits from the University are accepted by other colleges and universities which are members of the North Central Association and by other regional accrediting agencies.

UNIVERSITY REGULATIONS

The University and its various colleges, divisions, and departments reserve the right to change the regulations controlling admission to, instruction in, and graduation from the University or its various divisions. Such regulations are operative whenever the University authorities deem necessary and apply not only to prospective students but also to those currently enrolled in the University.

The University also reserves the right to withdraw courses, to reassign instructors, and to change tuition and fees at any time.

ACREDITED STANDING

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GRADUATE COLLEGE

Elton S. Carter, Dean
Robert C. O'Reilly, Assistant Dean

The first Master's degree was awarded by a special vote of the Board of Regents of the University of Omaha in June, 1931. Graduate work leading to the Bachelor of Arts degree was authorized by the newly organized Municipal University, September, 1931, to be supervised by a Committee on Graduate Studies. In 1942, the Graduate Division was established. The degree of Master of Science in Education was approved in 1946. In 1954, the Committee on Graduate Studies became the Graduate Council and the Chairman became the Director of the Division. In 1960, the Board of Regents authorized a year of graduate study in Education beyond the Master's degree. In 1966, the Graduate Faculty replaced the Graduate Council.

Recognizing the growing importance of graduate education, the Board of Regents, in October, 1962, established the College of Graduate Studies as the sixth college of the University of Omaha. In 1966, the name was changed to The Graduate College.

The Graduate College at the University of Nebraska at Omaha was established to provide an opportunity for advanced study and independent investigation in limited numbers of fields of learning for qualified students:

1. To work toward a Master of Arts, Master of Science, Master of Business Administration, or Education Specialist degree.
2. To earn graduate credit for the issuance or renewal of certificates for teachers and administrators.
3. To provide for professional advancement and scholarly objectives.

Consistent with these objectives, numerous opportunities are provided for advanced students to design and conduct original research or investigation to discover facts, methods or values. Working with the guidance of a major adviser, the student must exercise his own initiative to master and apply the principles of methodical study and evaluation, utilizing the existing literature in his chosen field of study. To enable the student to attain these objectives, the Graduate College provides workshops, institutes, seminars, research and special problems courses, and the supervision of theses or special projects.

Thus the Graduate College promotes the spirit of free investigation in the various fields of knowledge, and at the same time serves to unite the various branches of the University in the common task of advancing human knowledge and providing for society intelligent, capable leadership.

ADMINISTRATION

The Graduate Faculty prescribes the qualifications of all professors who offer graduate work and approves all courses which may be taken for graduate credit. The Dean of the College serves as Chairman of the Graduate Faculty.

A member of a department offering courses for graduate credit, upon recommendation of the Dean of the College in which he teaches and of the Dean of the Graduate College, with concurrence of the appropriate Department Head, shall be nominated for membership in the Graduate Faculty by the Academic Standards and Curriculum Committee of the Graduate College if:

-
1. He has an earned doctorate or the equivalent; or, if a doctorate is not usual in the field in which he teaches, a terminal degree and special competence in the field being taught.

2. He has demonstrated ability in scholarly research or professional development activities.

3. He has three years teaching experience at the college or university level beyond graduate assistantships or part-time instructorships, or equivalent experience.

4. He holds a full-time appointment at the University with faculty rank.

5. He has a rank of assistant professor or higher.

Graduate faculty members have the responsibility within their departments to design and revise courses for which graduate credit is offered. They counsel graduate students in major and minor fields and serve on graduate students' committees.

**PURPOSE**

The Graduate College provides the opportunity, the faculty and the resources to meet the various needs of graduate students for more advanced and more specialized education than the undergraduate work upon which all graduate programs are founded.

**GRADUATE ASSISTANTSHIPS**

Available for qualified students who are enrolled in a graduate degree program are graduate assistantships in teaching, research or laboratory supervision. The assistant's assignment is designed to provide unexcelled opportunities for supervised educational experiences at the graduate level in conjunction with the degree program. The stipends range upwards from $2400. Approximately twenty hours of work per week is required. The enrollment of students with assistantships will be limited to no more than twelve credit hours per semester unless the student has demonstrated extraordinary efficiency and the Head of the major department recommends the abnormally high work load to the Graduate Dean for his approval.

Graduate assistants or interns who must earn money for self-support may be required to reduce correspondingly the number of hours for which they may register. Such adjustments shall be subject to the approval of the Dean of the Graduate College.

Applications and their supporting credentials must be received on or before March 1. Address requests for information and application forms to the Dean of the Graduate College.

**SCHOLARSHIPS**

Phi Delta Gamma, a national sorority for women, offers an annual scholarship of $300 to a woman graduate student who has completed approximately half her graduate work with an excellent record. For applications and details concerning this scholarship, contact the Dean of the Graduate College. Applications should be in the Graduate Office by March 1 of each year to be considered for the following academic year. Loans are also available to qualified graduate students.
CLASSIFICATION OF ADMISSION

Unconditional admittance to graduate study may be granted to a student who has a Bachelor's degree from a regionally accredited institution, who has earned at least a B average in the undergraduate work in his proposed graduate major and minor, and who presents at least 15 semester hours of undergraduate work that meet specific requirements of the departments in his graduate major and minor. A student from an institution which is not regionally accredited will be admitted on the same basis as he would be admitted by the state university or reporting institution in that state. In such cases, further work may be required, or suitable examinations, or in some cases the completion of a Bachelor's degree in an accredited institution. In addition to the specified transcript record, appropriate scores of the Graduate Record Examination must be supplied to the Graduate Dean.

Provisional admission may be granted to a student who has a Bachelor's degree from a regionally accredited institution but who has not completed all of the undergraduate prerequisite course requirements for admission to the Graduate College. This provisional status will continue until such time as the student has completed all of the undergraduate prerequisites for graduate study. A student on a provisional basis may, with the recommendation of the department head concerned, and the approval of the Graduate Dean, take the undergraduate prerequisite courses and a graduate course concurrently, provided he has met the prerequisite requirements for the graduate course.

Provisional admission may occasionally be granted to a student who has less than a B average in the undergraduate work in his proposed graduate major and minor, (but in no case less than a C average) upon recommendation of the department head of the major department (and minor if one is involved) and written approval by the Graduate Dean. This admission may be made for reasons of maturity, experience, or other extenuating circumstances under which the student may be deemed capable of high quality graduate study. This provisional admission will not be removed until the student has successfully demonstrated to the satisfaction of the Department and the Dean his ability to pursue graduate study.

A student may not apply for admission to candidacy for any degree until he has met the requirements of unconditional admission.

Non Degree

Some students who do not anticipate pursuing a degree program may be admitted to graduate study. Credentials for admission include a completed application blank and two undergraduate transcripts. Credit hours accumulated in this category could be counted toward a degree only if (a) the transition from non degree status is accomplished no later than the first opportunity to file candidacy for degree, and (b) the petition for change is accompanied by a departmental recommendation that the specified credit hours count toward the degree. For students desiring to change prior to completion of 9 credit hours, the Request to Change Graduate Degree Program form should be used; for those having completed 9 hours the Application for Admission to Candidacy form should be used.

EXAMINATIONS FOR GRADUATE STUDENTS

Graduate students are required to take the Graduate Record Examination (or ATGSB) during their first semester of enrollment in the Graduate College, unless they have taken it previously and have made the scores available to the Dean of the College.

This examination, which requires no special preparation or review, gives valuable evidence of a student's qualifications for graduate work and is helpful in planning courses of graduate study. A nominal fee is charged for the examination. A student who has not taken the examination prior to his application for admission to the Graduate College but who is judged from other evidence to be capable of graduate study, is assigned provisional status. A final determination of classification will be made after the examination scores have been studied.

Applicants for admission to the Master of Business Administration program are required to take the Admission Test for Graduate Study in Business in lieu of the Graduate Record Examination.

FOREIGN LANGUAGE REQUIREMENT

The major department may require a candidate for the Master's degree to demonstrate by examination a satisfactory reading knowledge of one modern foreign language. Specific instructions regarding the language requirement may be obtained from the student's adviser.

REGISTRATION PROCEDURE

The student is to follow the usual procedure in registering for courses by filling out the proper class cards and other registration blanks and by paying fees at the Business Office. At each registration period the student must secure the signature of his major adviser and of the Dean of the Graduate College if he is registering for more than twelve hours or more than fifteen hours without an assistantship. Students must have been formally admitted to the Graduate College prior to their first registration.

Graduate students who are not working toward a degree are classified as Non-degree students. This classification includes:

1. Late admissions
2. graduate students taking courses for teacher certification
3. graduate students taking courses for professional growth
4. graduate students taking courses for cultural advancement
5. graduate students taking courses for transfer to another institution.

CERTIFICATION OR PROFESSIONAL GROWTH

Students who wish to take courses for graduate credit to be used for teacher certification or professional growth must meet the same admission requirements as other graduate students. They must also make application for admission to the Graduate College. (See Admission to Graduate College.)
ADMISSION INTO CANDIDACY FOR GRADUATE DEGREE

Admission to the Graduate College does not admit the student to candidacy for any degree.

It is the student's responsibility to make application for candidacy for the degree as soon as he can qualify for admission to candidacy. The qualifications are: (1) the scores on the Graduate Record Examination (or the Admission Test for Graduate Study in Business, if applicable) must be on file in the Graduate Office; (2) nine hours of graduate credit must have been completed at this University; and (3) a grade average of "B", with no grade lower than "C".

As a rule, no degree can be awarded in the same semester as candidacy for the degree is approved.

A Screening Committee will review the applications for candidacy for graduate degrees and will recommend approval or disapproval to the Graduate Faculty. This Screening Committee is appointed by the Graduate Dean and will consist of one member of the Graduate Faculty from each undergraduate college containing departments offering work toward graduate degrees and one representative of the Graduate College. Application forms should be filled out by the student—in consultation with his major and minor advisers—as soon as the student can qualify for admission to candidacy. Both the major and minor programs should be carefully and completely planned at this time and the application should be signed by both the major and minor advisers. The application form and the programs of study should be filed in the graduate office and copies should be provided for the major adviser, the minor adviser, and the student.

Programs of study should be planned with acceptable alternatives included. Once approved, any modification of a program of study is permissible only upon recommendation of the major adviser if the major is concerned, the minor adviser if the minor is concerned, and the approval of the Dean of the Graduate College. One course may be substituted in an approved program, in case of exceptional hardship, by action of the Dean of the Graduate College upon recommendation of the major and minor advisers.

APPLICATION FOR THE DEGREE

The candidate for the degree must file an application for degree in the Registrar's Office in the semester or session in which the degree is to be granted. The graduation fees must be paid at the same time as the application is made. (See Calendar for date.)

THESIS

All candidates for the Master of Arts degree are required to prepare a thesis under the direction of the major adviser supported by a committee. The thesis provides an opportunity for the student to obtain firsthand experience in research methods under competent direction. Up to six hours of credit is allowed for the thesis and the candidate must include the thesis as a course in his schedule during at least one semester in residence. At the beginning of each semester after the student has initially registered for thesis credit he must inform the Graduate Office concerning the progress of his thesis. Failure to notify the Graduate Office or to be in continuous progress toward the completion of the thesis may result in loss of the thesis topic. The thesis should be initiated at least eight months before the commencement in which the student plans to receive his degree.

Three typewritten copies of the thesis (two copies for the University Library and the student's personal copy), plus an additional copy if required by the department, must be approved by the major adviser and submitted to the Graduate Office in final form no later than the second week in November in the fall semester, the third week in March in the spring semester, or the second week of the summer session. The first copy must be a typewritten copy on permanent bond paper of 20-pound weight; the other two copies should be on paper of at least 16-pound weight. Either pica or elite type may be used in typing. Full instructions for the preparation of theses should be obtained from the Graduate Office when the student registers for thesis.

The responsibility for placing the thesis in final form rests with the student and his major adviser. All theses must be written in accordance with a standard thesis manual. The Graduate Faculty has approved an official manual for each department and the student will be advised by his major adviser of the standard form to be used. The cost of binding these copies (see Fees) must be paid by the candidate at the time the thesis is submitted in final form to the Graduate Office. If the department conducting the thesis requires an additional copy, it is to be bound at department expense. The fees are payable in the Cashier's Office.

ORAL EXAMINATION ON THESIS

After the thesis has been delivered to the Graduate Office in final form, the Dean, upon nomination from the major adviser, will appoint or reconfirm a committee to read the thesis and to conduct the oral examination over the thesis and thesis field. This committee shall consist of members from the major department and at least one graduate faculty member from another department of the University. If the thesis examination is to be combined with the oral comprehensive (noted above), one-half the time shall be devoted to the thesis and one-half to the graduate courses taken by the candidate.

Final comprehensive oral examinations must be taken at least 30 days before the convocation at which it is expected that the degree will be conferred.

Oral examinations cannot be scheduled during the period between the close of the first term of the summer session and the beginning of the subsequent fall semester.

FINAL COMPREHENSIVE EXAMINATION

A final comprehensive examination is required of all candidates for the Master's degree near the conclusion of their graduate study. For those who are candidates for the 36-hour Master of Science degree, the examination is a written one. For the degree of Master of Arts, the final comprehensive examination may be either written or oral. If written, it must be arranged at the convenience of the major adviser. If the comprehen-
sive is to be oral, it should be arranged at the time of the oral examination
over the thesis, at which time one-half of the examination can be
devoted to the courses taken by the candidate and one-half to the thesis.

For the degree Master of Business Administration, the final comprehensive examination will be both written and oral. The written portion
will be administered on dates corresponding to those for the M.S. degree.

If the course work has been of very high quality the minor adviser
may suggest and the student's committee recommend to the Graduate
Dean that the candidate be excused from the comprehensive examination
covering the minor field. This does not prejudice the privilege of the
minor professor giving a comprehensive, if he so desires. The minor
comprehensive is given at a date arranged at the convenience of both the
student and the minor adviser but falling within the limits established
for all comprehensive examinations.

Students should register for the comprehensive examination at the
time of their final enrollment. This registration should be made in the
Graduate College. (Note: Students who plan degree program completion
in August should register for the comprehensive in the preceding June.)

TIME LIMIT FOR ALL MASTER'S DEGREES

In evaluating credits earned toward an advanced degree, credits dating
back five years or more are subject to reduction in value as determined
by the Graduate Faculty. Once a student has been admitted to the
Graduate College, he is expected to complete the requirements for the
degree within a period of five years. Time spent in the military service
of the United States may be excepted in the application of this rule.

QUALITY OF WORK

A "B" average must be maintained in all work taken as part of the
requirements for the degree. A final grade of "C" in each of two courses
in either the major or minor area will require action on the part of the
Graduate Dean before the student is allowed to count further work to­
toward the degree. A grade of "C" in each of three courses will result in
automatic dismissal from the degree program.

A grade of "D" or below in either the major or minor area is con­
sidered a failing grade and the student receiving such a grade will
automatically be dropped from the degree program. The student thus dropped
may take course work as a non-degree student but may not be a can­
didate for a degree unless reinstated by the Graduate Faculty when recom­
mened by the Graduate Dean.

A course in which a student has received a "failing" grade may not
be repeated; another course may not be substituted for it in a degree
program.

INC.-A student may be reported "incomplete" if some minor portion
of the work remains unfinished, provided the student's standing in the
course is not below "D." An "incomplete" must be made up during the
first eight weeks of the following semester. After this time an "INC." is
computed as a failure, unless the Dean of the Graduate College has ap­
proved an extension of time.

CLASS ATTENDANCE

Students are expected to attend all meetings of classes for which they
are registered. Absences are reported regularly. In case of an unavoidable
absence it is the student's responsibility to contact his instructor
promptly and arrange to make up any work missed.

STUDY LOAD

An average study load for a full-time student is 12 hours of course
work. The maximum load for anyone working full time on another job
is six hours of course work.

COURSES FOR GRADUATE CREDIT

Courses which are available for graduate credit are those which have
been especially approved by the Graduate Faculty with syllabi on file
in the Graduate Office.

Courses numbered 500 and above are open only to graduate students.
A limited number of upper-division courses are available for graduate
credit but the graduate student is expected to do a higher level of work
than the undergraduate students.

RESIDENCE REQUIREMENTS

A minimum of 30 semester credit hours in residence (36 in case of the
Master of Science in Education and the Master of Business Administra­
tion degrees), is required for granting of the Master's degree, except as
provided for in the transfer of credit. No credit will be allowed for
extension or correspondence work.

TRANSFER OF CREDIT

Students who have completed graduate courses at other approved
graduate schools (excluding extension schools) may petition to transfer
as much as six hours of credit, provided the courses considered are per­
mitting to the student's graduate program. Courses for which transfer is re­
quested must not have been used to satisfy the requirements for any
previously awarded degree. Grades in courses for transfer of credit must
be the equivalent of "B" or higher. No transfer of credit can be made
until the student has been admitted to candidacy for the degree. All
work accepted for transfer of credit must have been taken within the
five-year period allowed for the Master's degree.

A student who has been approved as a candidate for the Master's degree
may, with the prior recommendation of the major adviser and the ap­
proval of the Graduate Dean, earn transfer credit in other graduate
schools to the limit of six semester hours in the Master of Arts and
Master of Business Administration program and nine semester hours
in the Master of Science in Education program. The total hours of trans­fer
credit may not exceed the amount stated.

In the Educational Specialist degree, six semester hours of work beyond
the Master's level may count as transfer credit, upon recommendation by
the major adviser and with the approval of the Graduate Dean.

Students who wish to take graduate courses at the University of
Nebraska at Lincoln for transfer to UNO should secure the Inter-Campus
Graduate Student Exchange form from the Graduate College office.

WITHDRAWAL FROM A COURSE OR FROM THE UNIVERSITY

A student who wishes to drop all classes and withdraw from the Uni­
versity proceeds as follows:

1. Obtain withdrawal slip from the Registrar's Office or his adviser.
2. Confer with his adviser and obtain his signature on the withdrawal card.
3. Confer with his Academic Dean and obtain his signature on the withdrawal card.
4. Report to the Office of the Dean of Student Personnel and turn in his activity and library cards.

Refunds will be based on the official schedule.

Drop.—When a student finds it necessary to drop a course, he should notify the Registrar and see his adviser immediately. If a student is failing at the time he withdraws, his record will be marked "F," indicating that he withdrew in good standing. If the student is passing at the time he withdraws, his record will be marked "W" indicating that he was failing at the time of withdrawal. A student may not drop a course with any grade other than "F" after the eighth week of the semester.

WORKSHOPS

No more than one workshop of three hours credit may count toward the Master's degree (College of Business Management program excepted.)

Exceptions to the above general and special rules and regulations may be made in meritorious cases only with the consent of the Graduate Dean upon recommendation of the major and minor advisers.

REQUIRED PROCEDURE FOR GRADUATE STUDENTS
1. File two official transcripts of undergraduate credits (and graduate, if any) and an application for admission form with the Director of Admissions. You will be notified by mail of your admission to the college.
2. Arrange your class schedule with your adviser and have him sign your registration slip.
3. Arrange to take the Graduate Record Examination or the Admission Test for Graduate Study in Business in Room 218, Administration Building. If you have previously taken the examination, have the scores sent to the Graduate Office.
4. Apply for admission to candidacy for the degree in accord with the procedure described above.
5. In the semester or session in which the degree is to be conferred, the candidate must file his intention of taking the degree in the Office of the Registrar. (See Calendar for exact date.)
6. Arrange with your adviser at least three weeks in advance of administration for the Comprehensive Examination. This applies to all degree candidates whose work requires written comprehensives. The Graduate College must be informed of your intent at the same time.
7. The thesis for the Master of Arts degree must be submitted in final form to the Graduate Office not later than the second week in November in the fall semester, the fourth week in March in the spring semester, or the second week of the first Summer Session. No thesis examinations will be scheduled during the second Summer Session.
8. Master of Arts candidates must arrange for the Oral Examination to be given at least 30 days before the date of commencement. In the Summer Session, oral examinations must be completed before the close of the first term.
9. Order the cap and gown from the Book Store.
10. Attend Commencement unless excused by petition to the Graduate Dean at least two weeks in advance.

TUITION AND FEES

Student fees are payable in full at the time of registration. Registration is not complete until cleared by the cashier. The University reserves the right to change the amount of tuition and fees at any time, or to assess breakage, deposit, lost property, or service fees not specifically listed in this schedule.

Students in need of loans, deferred payments, or other financial assistance must consult the Student Aid Officer in room Adm. 240, at least two weeks prior to the start of classes.

INSTRUCTION

Tuition, per semester credit hour:
Undergraduate, Graduate or Audit Resident of Nebraska .................................................. $15.00 Nonresident .......................................................... 25.00

Applied Music—Voice and all instruments except pipe organ (Fee may be waived by the Head of the Music Department)
One semester credit—additional fee .................................................. 45.00 Two semester credit hours (same instrument) add'l fee ............... 90.00
Non-credit: 16 lessons .................................................. 50.00 8 lessons .................................................. 25.00
Public Health Nursing—additional fee .................................................. 35.00
TV Classroom (per 3 hr. course—includes materials) .................................................. 60.00

Fees are determined for each offering on an individual basis.

GENERAL FEES

Full-time student (12 credit hours or more) per sem. .................................................. $30.00 Part-time students (less than 12 hours) per sem. .................................................. 15.00

Summer Sessions (per session) .................................................. 8.00

General fees are assessed to every student each semester, except that summer session students who complete registration for both sessions at the initial registration period will be assessed the fee only once. Included in this fee are charges for registration, health service, library, and student center as well as materials and supplies furnished by the University for instruction.

The full-time fee of $30.00 also entitles the student to a regular student activities card covering athletics, publications and general student activities. Part-time students may obtain a regular student activities card by paying an additional $9.00 per semester.

GRADUATION FEES

Graduate College .................................................. $15.00 Baccalaureate Degree .................................................. 12.50 Associate Title .................................................. 7.50

Degree in absentia—additional .................................................. 5.00

OTHER FEES, CHARGES AND DEPOSITS

Matriculation and change of college .................................................. $19.00 Payable upon initial enrollment and upon each subsequent change of college Late Registration (Day or Evening Classes) .................................................. 3.00 Deferred Payments (if approved by Student Aid Officer) ......................... 3.00 Change of Schedule—per change .................................................. 3.00 Change of Academic Record—per change .................................................. 3.00 Removal of incomplete, grade change, etc. .................................................. 3.00 Transcript Evaluation (transfer students and Graduate College) ......................... 5.00 Transcript of Academic Record—per copy .................................................. 2.00 Teacher Placement Registration .................................................. 6.00 Thesis Binding (additional copy—$4.00) .................................................. 12.00

University of Nebraska at Omaha 23
Bad Check (insufficient or no-fund check) minimum
Insufficient fund or no-fund checks are considered to be deferred payments. $5.50
Late registration fee may also be assessed if applicable.
Replacement of Student Activity Card (with approval) 1.00
A.F.R.O.T.C. Activity Fee—per semester 2.00
A.F.R.O.T.C. Uniform Deposit (refundable) 15.00
Key Deposit (if authorized) (refundable) 1.00
Tests and Examinations:
Guidance and Placement—at scheduled times 5.00
C.C.T. tests for credit in the College of Continuing Studies—$50.00
of this amount may be applied toward tuition if test score is satisfactory—per test 25.00
Vocational Testing and Counseling:
Fees for these services depend upon tests administered and extent of counseling. Inquire in room Adm. 213 for charges.

REFUND SCHEDULE
Refunds are computed from the date application is received by the Registrar, NOT from date of withdrawal from classes. Refund slips issued by the Registrar and given to students are void and not redeemable, unless presented to the Cashier (room Adm. 150) within 30 days after date of issue.
A student must file notice of withdrawal from class, accompanied by written approval of the adviser and the Dean of Student Personnel, with the Registrar immediately upon dropping any course.
Students paying tuition and fees on a deferred payment basis or under any other loan, granted by the University, who withdraw before the account is paid in full are not relieved from payment of the balance due. Refunds will first be applied to unpaid balances, and any remaining balance must be paid in cash.

REGULAR SEMESTER
Withdrawal before classes start 100%
Withdrawal during 1st or 2nd week 75%
Withdrawal during 3rd or 4th week 50%
Withdrawal during 4th to 8th week 25%
Withdrawal after 8th week 0%

SUMMER SESSIONS (5 WEEK SESSION)
Withdrawal before classes start 100%
Withdrawal during 1st three days 75%
Withdrawal during remainder of the 1st week 50%
Withdrawal during 2nd week 25%
Withdrawal after 2nd week 0%

CREDIT COURSES (8 WEEK SESSION)
Withdrawal before classes start 100%
Withdrawal during 1st week 75%
Withdrawal during 2nd week 50%
Withdrawal during 3rd week 25%
Withdrawal during 4th week 0%

NON-CREDIT AND SPECIAL COURSES
(10 weeks or more)
Withdrawal before classes start 100%
Withdrawal during 1st week 75%
Withdrawal during 2nd week 50%
Withdrawal after 2nd week 0%

(LESS THAN 10 WEEKS)
Withdrawal before classes start 100%
Withdrawal during 1st week 75%
Withdrawal during 2nd week 50%
Withdrawal after 2nd week 0%
The Master's degree or the Specialist in Education degree is conferred by the Board of Regents upon recommendation of the Graduate Faculty, and with the final approval of the faculty of the University of Nebraska at Omaha.

The following departments offer work toward both the Master of Arts and Master of Science Degrees: biology, counseling and guidance, economics, educational administration and supervision, elementary education, geography, mathematics, psychology, secondary education, sociology, and special education. Some departments offer a single degree, the Master of Arts: English, history, and speech and drama; engineering students may receive the Master of Science. The Master of Business Administration (MBA) is a recently initiated addition to graduate study at the University, with first graduates in January, 1968.

The Specialist in Education degree is a two-year program of graduate study. The program was offered for the first time in the 1964-65 school year.

THE MASTER OF ARTS DEGREE

WITH MAJORS IN BIOLOGY, COUNSELING AND GUIDANCE, ECONOMICS, EDUCATIONAL ADMINISTRATION AND SUPERVISION, ELEMENTARY EDUCATION, ENGLISH, GEOGRAPHY, HISTORY, MATHEMATICS, PSYCHOLOGY, SECONDARY EDUCATION, SOCIOLOGY, SPECIAL EDUCATION, SPEECH AND DRAMA.

The program for the Master of Art's degree will usually be arranged to conform to either of the following general patterns (English excepted):

1. A major of 24 semester hours in the major field of study.
   OR:
   2. A minor of 15 semester hours in the major field of study.
   3. A thesis not to exceed six semester hours in independent study under the direction of the major adviser.

WITH A MAJOR IN BIOLOGY

To enter the program for the Master of Arts degree in biology, the student must present in the biological sciences of one semester each of basic botany and basic zoology, or two semesters of general biology, and the ancillary sciences of two semesters of general or inorganic chemistry, two semesters of general physics, and mathematics through trigonometry.

To complete the degree, it will be necessary that the student present a minimum of 24 undergraduate and 30 graduate hours in the biological sciences. Combined undergraduate and graduate credit in the biological sciences shall include courses in genetics, evolution, structural sciences, physiology, cellular biology, taxonomy, ecology, seminar, and credit up to six hours in a thesis.

WITH A MAJOR IN ENGLISH

To be admitted to graduate study in English, a student should have completed at least eighteen credit hours in undergraduate English courses above the freshman level with an average grade of "B" or above.

All candidates for Master's degrees in English are required to take English 501 (Introduction to Literary Research), to pass proficiency examinations in French or German, and to follow one of the following plans of study:

I. A total of 24 credit hours in course work, including at least nine hours in seminar courses, and a thesis on an approved topic accepted after oral defense before a faculty committee.

II. A total of 36 credit hours in course work, including at least twelve hours in seminar courses, and a written comprehensive examination prepared and judged by a faculty committee.

WITH A MAJOR IN GEOGRAPHY

An applicant for admission to the Master of Arts degree program in geography must present as a prerequisite a minimum of 15 undergraduate semester hours of geography including physical, economic, political, and cartography.

Degree Requirements: The degree requires a minimum of 30 semester hours in geography courses numbered 400 and 500, including thesis. Permission of the department head is required for a student to take more than two 400 level courses to apply toward an M.A. degree. A thesis involving field work in an area of study under the direction of a major adviser is required.

Basic courses required for an M.A. degree include Urban Geography, Cultural Geography, Political Geography Seminar, Geomorphology or Physiography of North America and Field Geography.

WITH A MAJOR IN PSYCHOLOGY

Admission Requirements: An applicant for admission to this program must present a minimum of 15 undergraduate semester hours of psychology courses beyond the introductory course. These should include a course in Basic Statistics, The Psychology of Learning, and a laboratory course in Experimental Psychology.

Degree Requirements: To complete the M.A. degree in psychology, the student must present 30 hours of graduate course work in psychology, or 21 hours in psychology plus 9 hours in a related minor field. Up to 6 hours of thesis credit are to be included in this total. Psychology 501 (History of Psychology), and either Psychology 415 (Multiple Regression and Factor Analysis) or Psychology 416 (Analysis of Variance), are required of all graduate students in this program, and one of these required courses must be taken during the first 9 hours of graduate work. The remainder of the student's course work is elective, but must be planned in conference with his academic adviser, in order to meet the individual needs and interests of the student. The student may emphasize one of the following areas: educational, general-experimental, industrial, quantitative, personality, or child psychology.

WITH A MAJOR IN SPEECH PATHOLOGY

Candidates for the degree Master of Arts with a major in speech pathology are expected to meet the following requirements in addition to those for general admission:
DEGREE PROGRAMS AND PROGRAMS OF INSTRUCTION

The Master's degree or the Specialist in Education degree is conferred by the Board of Regents upon recommendation of the Graduate Faculty, with the final approval of the faculty of the University of Nebraska at Omaha.

The following departments offer work toward both the Master of Arts and Master of Science Degrees: biology, counseling and guidance, economics, educational administration and supervision, elementary education, geography, mathematics, psychology, secondary education, sociology, and special education. Some departments offer a single degree, the Master of Arts: English, history, and speech and drama; engineering students may receive the Master of Science. The Master of Business Administration (MBA) is a recently initiated addition to graduate study at the University, with first graduates in January, 1968.

The Specialist In Education degree is a two-year program of graduate study. The program was offered for the first time in the 1964-66 school year.

THE MASTER OF ARTS DEGREE

WITH MAJORS IN BIOLOGY, COUNSELING AND GUIDANCE, ECONOMICS, EDUCATIONAL ADMINISTRATION AND SUPERVISION, ELEMENTARY EDUCATION, ENGLISH, GEOGRAPHY, HISTORY, MATHEMATICS, PSYCHOLOGY, SECONDARY EDUCATION, SOCIOLOGY, SPECIAL EDUCATION, SPEECH AND DRAMA.

The program for the Master of Arts degree will usually be arranged to conform to either of the following general patterns (English excepted):

(1) A major of 24 semester hours in the major field of study.
(2) A thesis not to exceed six semester hours in independent study under the direction of the major adviser.

OR:

(1) A major of 15 semester hours in the major field of study.
(2) A minor of nine semester hours in a related field of interest.
(3) A thesis not to exceed six semester hours in independent study under the direction of the major adviser.

Note: Sociology students—see Master of Science degree with a major in applied sociology for specific examination requirements.

WITH A MAJOR IN BIOLOGY

To enter the program for the Master of Arts degree in biology, the student must present credit in the biological sciences of one semester each of basic botany and basic zoology, or two semesters of general biology, and the ancillary sciences of two semesters of general or inorganic chemistry, two semesters of general physics, and mathematics through trigonometry.

To complete the degree, it will be necessary that the student present a minimum of 24 undergraduate and 30 graduate hours in the biological sciences. Combined undergraduate and graduate credit in the biological sciences shall include courses in genetics, evolution, structural sciences, physiology, cellular biology, taxonomy, ecology, seminar, and credit up to six hours in a thesis.

WITH A MAJOR IN ENGLISH

To be admitted to graduate study in English, a student should have completed at least eighteen credit hours in undergraduate English courses above the Freshman level with an average grade of "B" or above.

All candidates for a Master's degree in English are required to take English 501 (Introduction to Literary Research), to pass a proficiency examination in French or German, and to follow one of the following plans of study:

I. A total of 24 credit hours in course work, including at least nine hours in seminar courses, and a thesis on an approved topic accepted after oral defense before a faculty committee.

II. A total of 36 credit hours in course work, including at least twelve hours in seminar courses, and a written comprehensive examination prepared and judged by a faculty committee.

WITH A MAJOR IN GEOGRAPHY

An applicant for admission to the Master of Arts degree program in geography must present as a prerequisite a minimum of 15 undergraduate semester hours of geography including physical, economic, political, and cartography.

Degree Requirements: The degree requires a minimum of 30 semester hours in geography courses numbered 400 and 500, including thesis. Permission of the department head is required for a student to take more than two 400 level courses to apply toward an M.A. degree. A thesis involving field work in an area of study under the direction of a major adviser is required.

Basic courses required for an M.A. degree include Urban Geography, Cultural Geography, Political Geography Seminar, Geomorphology or Physiography of North America and Field Geography.

WITH A MAJOR IN PSYCHOLOGY

Admission Requirements: An applicant for admission to this program must present a minimum of 15 undergraduate semester hours of psychology courses beyond the introductory course. These should include a course in basic statistics, the psychology of learning, and a laboratory course in experimental psychology.

Degree Requirements: To complete the M.A. degree in psychology, the student must present 30 hours of graduate course work in psychology, or 21 hours in psychology plus 9 hours in a related minor field. Up to 6 hours of thesis credit are to be included in this total. Psychology 501 (History of Psychology), and either Psychology 415 (Multiple Regression and Factor Analysis) or Psychology 416 (Analysis of Variance), are required of all graduate students in this program, and one of these required courses must be taken during the first 9 hours of graduate work. The remainder of the student's course work is elective, but must be planned in conference with his academic adviser, in order to meet the individual needs and interests of the student. The student may emphasize one of the following areas: educational, general-experimental, industrial, quantitative, personality, or child psychology.

WITH A MAJOR IN SPEECH PATHOLOGY

Candidates for the degree Master of Arts with a major in speech pathology are expected to meet the following requirements in addition to those for general admission:
1. Pass an examination to determine adequate personal voice and speech proficiencies and adequate hearing acuity for speech. This examination is administered by the Speech and Hearing Clinic of the University.

2. Have successfully completed a minimum of 24 semester hours of courses (or their equivalents) comparable to the following: FED 208 Introduction to Teaching, FED 205 Human Growth and Learning, FED 418 Mental Health in Schools, SPED 445 Phonetics of American Speech, SPED 447 Neurophysiology of the Speech Handicapped, and SPED 465 Teaching the Exceptional Child.

A major sequence in speech pathology requires a minimum of 54 hours of course work plus a thesis (six hours). Candidates wishing to meet special state or national certification requirements for speech clinicians often need additional hours of course work and practicum. Students should consult with their department adviser before planning their programs.

WITH A MAJOR IN ECONOMICS

An applicant for admission to the program for the Master of Arts in Economics must have the equivalent of 15 undergraduate semester hours in Economics.

Degree Requirements: The course program must include a balanced coverage of the major areas in economics. At least 13 hours of the required 30 hours, including thesis, must be courses approved at the 500-level or above. Students must also satisfactorily complete Economics 521, 523 and 545.

THE MASTER OF SCIENCE DEGREE

The Master of Science degree is typically a 36 hour, non-thesis program, with majors in a number of areas of education and special education, psychology, applied sociology, geography, mathematics, engineering, and economics.

WITH A MAJOR IN BIOLOGY

To enter the program for the Master of Science degree in biology, the student must present credit in the biological sciences of one semester each of basic botany and basic zoology, or two semesters of general biology, and the ancillary sciences of two semesters of general or inorganic chemistry, two semesters of general physics, and mathematics through trigonometry.

To complete the degree, it will be necessary that the student present a minimum of 24 undergraduate and 36 graduate semester hours in the biological sciences. Combined undergraduate and graduate credit in the biological sciences shall include courses in genetics, evolution, structural sciences, physiology, cellular biology, taxonomy, ecology, seminar and biological research.

WITH A MAJOR IN GEOGRAPHY

An applicant for admission to the Master of Science degree program in geography must present as a prerequisite a minimum of 15 undergraduate semester hours in geography including physical, economic, political, and cartography.

Degree Requirements: The degree requires a minimum of 36 semester hours in geography courses numbered 400 and 500. No thesis is required for the M.S. degree. Permission of the department head is required for a student to take more than two 400 level courses to apply toward an M.S. degree.

Basic courses required for an M.S. degree include Urban Geography, Cultural Geography, Political Geography Seminar, Geomorphology or Physiography of North America, and Field Geography.

WITH A MAJOR IN APPLIED SOCIOLOGY

The applicant for admission to the graduate program in sociology must present a minimum of 15 undergraduate semester hours in sociology and a course in statistics.

The student will be expected to complete Sociology 501 and a minimum of 27 additional graduate semester hours. In addition, the student must complete satisfactorily six semester hour equivalents in a supervised work practicum related to his academic area of concentration and write an acceptable report on the experience. Students whose career objectives are in the social welfare professions are advised to apply for admission to the Graduate School of Social Work at the University of Nebraska at Lincoln.

The Master of Arts degree is preferable as preparation for college level teaching and continued scholarly work, the Master of Science as preparation for field or action application of sociology. Both degrees require the student to demonstrate proficiency in the subject by means of the qualifying and comprehensive examinations.

Examinations

Both the M.A. and M.S. degree programs in sociology require the student to demonstrate proficiency in the subject by means of the following qualifying and comprehensive examinations.

A. Qualifying examinations

Qualifying examinations on sociological concepts and statistics must be taken by all full-time graduate students during their first year of graduate work. Part-time students must complete these examinations before they complete more than 15 hours of course work. These qualifying examinations will be given three times annually, during the months of October, January and May. Nine hours of course work and successful completion of the qualifying examinations are prerequisite for application for candidacy for the degree.

B. Comprehensive examinations

Comprehensive examinations must be taken by all graduate students. There will be four examinations covering the following areas:

Social Organization and Processes
Methods of Social Research
Sociological Theory
Social Psychology

Students must pass the two qualifying examinations before attempting the comprehensive examinations. These examinations will be given twice annually, during the months of January and May. Each examination will be given on a separate day.
will ordinarily include up to 3 hours of Psychology 595 (Practicum in Psychology) and in addition in the Educational Psychology program, Psychology 553 and 554 (Individual Tests).

A six-hour written comprehensive examination is required of all students and will be identical with the comprehensive examination taken by students in the M.A. program who elect to specialize in one of these two areas of psychology.

WITH A MAJOR IN AN AREA OF EDUCATION

Students may major in the following fields: elementary education, counseling and guidance, educational administration and supervision, secondary education, special education (includes reading, speech pathology, education for the deaf or mentally retarded), and college business management. Minor fields include: foundations of education (for those majoring in academic fields), elementary education, reading, secondary education and others. Students pursuing a Master of Science degree with a major in education shall be expected to take selected courses in areas outside the field of education as indicated in the following program outlines. The suggested programs apply only to the M.S. in Education. Programs for the M.A. degree with a major in education will be determined by the major adviser, upon request.

MAJOR IN ELEMENTARY EDUCATION

<table>
<thead>
<tr>
<th>I. Selected Cognate Courses</th>
<th>6-9 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Required Courses</td>
<td>21 hours</td>
</tr>
<tr>
<td>Fed. 501, Introduction to Research</td>
<td></td>
</tr>
<tr>
<td>Fed. 505, History and Philosophy of Education</td>
<td></td>
</tr>
<tr>
<td>EEd. 515, Diagnostic and Remedial Instruction</td>
<td></td>
</tr>
<tr>
<td>EEd. 540, Innovations and Trends in Elementary Education</td>
<td></td>
</tr>
<tr>
<td>EEd. 543, Introduction to Curriculum Planning—Elementary</td>
<td></td>
</tr>
<tr>
<td>EEd. 594, Seminar in Elementary Education</td>
<td></td>
</tr>
<tr>
<td>EAD 596, Administration and Supervision in Elementary Schools</td>
<td></td>
</tr>
<tr>
<td>III. Selected Courses</td>
<td>6-9 hours</td>
</tr>
<tr>
<td>To be determined by student and his adviser</td>
<td></td>
</tr>
</tbody>
</table>

MAJOR IN SECONDARY EDUCATION

<table>
<thead>
<tr>
<th>I. Selected Cognate Courses</th>
<th>12-18 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Required Courses</td>
<td>9 hours</td>
</tr>
<tr>
<td>Fed. 501, Introduction to Research</td>
<td></td>
</tr>
<tr>
<td>Fed. 505, History and Philosophy of Education</td>
<td></td>
</tr>
<tr>
<td>Fed. 505, Educational Seminar</td>
<td></td>
</tr>
<tr>
<td>III. Selected Courses</td>
<td>9-15 hours</td>
</tr>
<tr>
<td>To be determined by student and his adviser</td>
<td></td>
</tr>
</tbody>
</table>

MAJOR IN READING

The Master of Science degree with a major in reading conforms to standards of the International Reading Association for the professional training of Reading Specialists. Applicants for admission must be eligible for teacher certification at the undergraduate level. The following program of studies will prepare the student as a teacher of reading at either the elementary or secondary level.

<table>
<thead>
<tr>
<th>I. Core Professional Courses</th>
<th>12-15 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Including work in graduate reading courses (Sped. 511, 512, 513, 514, and 515 or their equivalents)</td>
<td></td>
</tr>
<tr>
<td>II. Related Professional Courses</td>
<td>12 hours</td>
</tr>
<tr>
<td>Including introduction to research and selected work in such areas as foundation and general education, elementary education, secondary education, special education, and psychology.</td>
<td></td>
</tr>
<tr>
<td>III. Related Cognate Courses</td>
<td>9-12 hours</td>
</tr>
<tr>
<td>Including selected work in such areas as guidance and counseling and/or the various subject areas mentioned under sections I and II</td>
<td></td>
</tr>
</tbody>
</table>
MAJOR IN ELEMENTARY EDUCATIONAL ADMINISTRATION AND SUPERVISION

I. Selected Cognate Courses .................................................. 6 hours
II. Required Courses ............................................................. 24 hours
Fed. 501, Introduction to Research
Fed. 502, History and Philosophy of Education or
Fed. 505, Seminar in Education
Ed. 564, Foundations of Educational Administration and Supervision
Ed. Ad. 567, Administration and Supervision in the Elementary School
Ed. Ad. 569, Administration and Staff Personnel
Ed. Ad. 570, Practicum in Educational Administration
Ed. Ad. 571, Advanced Practicum in Educational Administration

III. Select two of the following ................................................. 6 hours
Ed. Ad. 563, School Plant Planning and Operation
Ed. Ad. 564, School Law
Ed. Ad. 565, School Business Management
Ed. Ad. 568, School Finance

*MAJOR IN SECONDARY EDUCATIONAL ADMINISTRATION AND SUPERVISION

I. Selected Cognate Courses .................................................. 6 hours
II. Required Courses ............................................................. 24 hours
Fed. 501, Introduction to Research
Fed. 502, History and Philosophy of Education or
Fed. 505, Seminar in Education
Coun. 420, Principles of Guidance
Ed. Ad. 567, Foundations of Educational Administration and Supervision
Ed. Ad. 567, Administration and Supervision in the Secondary School
Ed. Ad. 569, Administration and Staff Personnel
Ed. Ad. 570, Practicum in Educational Administration and Supervision
Ed. Ad. 571, Advanced Practicum in Educational Administration and Supervision

III. Select two of the following ................................................. 6 hours
Ed. Ad. 563, School Plant Planning and Operation
Ed. Ad. 564, School Law
Ed. Ad. 565, School Business Management
Ed. Ad. 568, School Finance

MAJOR IN COUNSELING AND GUIDANCE

Programs in Counseling and Guidance are arranged on an individual basis. Areas of frequent specialization, however, are secondary school counseling,* elementary school counseling,* general counseling and student personnel services. Required courses are determined in relation to the students' previous course work, experience and anticipated work setting. Most programs, however, would fit within the following general framework. Where standards have been developed, each program conforms to the recommendations of the American Personnel and Guidance Association.

MAJOR IN GENERAL COUNSELING

I. Foundation Courses .......................................................... 6-9 hours
Fed. 501, Introduction to Research
Fed. 505, Seminar in Education
Fed. 507, Statistical Methods

II. Selected Cognate Courses .................................................. 6-12 hours
These are most often selected from offerings of the Psychology and Sociology Departments.

III. Counseling & Guidance Courses .......................................... 18-24 hours
Coun. 400, Principles of Guidance and Counseling
Coun. 409, Principles of Guidance and Counseling
Coun. 424, Counseling Practices
Coun. 524, Counseling Practices
Coun. 525, Counseling Practicum

*MAJOR IN SCHOOL COUNSELING—SECONDARY LEVEL*

I. Foundation Courses .......................................................... 6-9 hours
Fed. 501, Introduction to Research
Fed. 505, Seminar in Education
Fed. 507, Statistical Methods
Psy. 551, Advanced Educational Psychology
Psy. 552, Child Psychology

II. Selected Cognate Courses .................................................. 6-12 hours
These are most often selected from offerings of the Psychology and Sociology Departments.

III. Counseling and Guidance Courses ...................................... 18-24 hours
Coun. 400, Principles of Guidance and Counseling
Coun. 409, Principles of Guidance and Counseling
Coun. 424, Counseling Practices
Coun. 425, Counseling Practicum
Coun. 524, Counseling Practices
Coun. 525, Counseling Practicum

*MAJOR IN SCHOOL COUNSELING—ELEMENTARY LEVEL*

I. Foundation Courses .......................................................... 9-12 hours
Fed. 501, Introduction to Research
Fed. 505, Seminar in Education
Fed. 507, Statistical Methods
Psy. 551, Advanced Educational Psychology
Psy. 552, Child Psychology

II. Selected Cognate Courses .................................................. 6-12 hours
Including courses in such areas as psychology, sociology, special education, elementary education, or more work in categories I and II.

III. Counseling and Guidance Courses ...................................... 18-24 hours
Coun. 400, Principles of Guidance and Counseling
Coun. 409, Principles of Guidance and Counseling
Coun. 424, Counseling Practices
Coun. 425, Counseling Practicum
Coun. 524, Counseling Practices
Coun. 525, Counseling Practicum
Coun. 526, Group Techniques in Guidance
Coun. 530, Guidance in the Elementary School

*MAJOR IN STUDENT PERSONNEL SERVICES

I. Foundation Courses .......................................................... 6 hours
Fed. 501, Introduction to Research
Fed. 507, Statistical Methods

II. Selected Cognate Courses .................................................. 6-12 hours
These are most often selected from offerings in the Psychology and Sociology Department.

III. Counseling and Guidance Courses ...................................... 21-27 hours
Coun. 400, Principles of Guidance and Counseling
Coun. 409, Principles of Guidance and Counseling
Coun. 424, Counseling Practices
Coun. 425, Counseling Practicum
Coun. 524, Counseling Practicum
Coun. 526, Group Techniques in Guidance
Coun. 530, Guidance in the Elementary School

* Only students with teaching experience will receive institutional endorsement to serve as secondary or elementary school counselors.

MAJOR IN TEACHING THE DEAF

* I. Required Courses .......................................................... 38 hours
Psych. 551, Advanced Educational Psychology
(Or Sped. 490, Teaching the Exceptional Child)
Sped. 490, History, Education and Guidance of the Deaf
MAJOR IN TEACHING THE MENTALLY RETARDED

* Required Courses 30 hours

Fed. 501, Introduction to Research
Sped. 570, Seminar in Special Education
Sped. 556, Vocational Training of the Mentally Retarded
Sped. 566, Teaching the Exceptional Child (or Psych. 490, Psychology of Exceptional Children)
Sped. 653, Curriculum for the Mentally Retarded Child
Sped. 461, Methods and Materials for Teaching the Retarded
Sped. 569, Observation and Student Teaching the Mentally Retarded
Sped. 544, Disorders of Symbolization (or Sped. 523, Teaching Language to Deaf)
Sped. 441, Speech Development and Correction
Sped. 548, Measurement of Hearing (or Psych. 555, Tests and Measurements in Education)

MAJOR IN SPEECH PATHOLOGY

The Master of Science degree with a major in speech pathology involves these requirements:

1. Pass an examination to determine adequate personal voice and speech proficiencies and adequate hearing acuity for speech. (Administered by the Speech and Hearing Clinic of the University.)
2. Have successfully completed a minimum of 24 semester hours of courses (or their equivalents) comparable to the following: FED 208 Introduction to Teaching, FED 205 Human Growth and Learning, FED 418 Mental Health in the Schools, SPED 441 Speech Development and Correction, SPED 445 Phonetics of American Speech, SPED 447 Neuropsychology of the Speech Handicapped, and SPED 406 Teaching the Exceptional Child.

A major sequence in speech pathology requires a minimum of thirty-six hours of course work and practicum. Candidates wishing to meet special state or national certification requirements for speech clinicians often need additional hours of course work and practicum. Students should consult with their department adviser before planning their programs.

Prerequisite: Teacher Certificate or equivalent at the undergraduate or graduate level.

** Electives in Areas of Specialization 9-13 hours

** Practicum (30 clock hours minimum) Credit may not exceed 6 credit hours of graduate and/or undergraduate work.

Prerequisite: See requirements on page 31.

THE MASTER OF BUSINESS ADMINISTRATION DEGREE

Mr. Bull, Mr. Harris, Mr. Higley, Advisers

This is a professional graduate degree designed to provide a broad educational experience for students who wish to assume positions of responsibility in business.

Courses in the program give students an understanding of the principles of management, marketing, finance and proficiency in the use of accounting and statistics as tools for analysis of business problems. At the same time the student becomes aware of the societal, economic, legal and political factors which influence business decisions and develops an appreciation of the social responsibilities of business.

Emphasis is placed on decision making and problem solving.

Foundation Courses: Applicants for admission to the M.B.A. degree program must have completed the following foundation courses with a satisfactory grade.

Economics (Micro)
Economics (Macro)
Accounting (2 courses)
Marketing
Management

A student who is deficient in any of the foundation courses will be required to make up the deficiency with appropriate courses.

The Admission Test for Graduate Study in Business is required. The test should preferably be taken prior to admission, but it must be taken not later than the end of the first semester of graduate work.

Degree Requirements: The degree requires a minimum of 36 semester hours for completion. Of these, 27 hours must be in the following required courses:

Econ. 551, Seminar in Micro-Theory
Econ. 552, Macroeconomic Theory
Bus. Adm. 540, Marketing Policies
Bus. Adm. 530, The Environment of Management
Bus. Adm. 556, Accounting for Management Control

or

Bus. Adm. 521, Contemporary Accounting
Bus. Adm. 500, Quantitative Analysis
Bus. Adm. 561, Business and Society
Bus. Adm. 562, Behavioral Sciences in Business

or

Bus. Adm. 531, Human Relations

Emphasis in specific areas can be achieved by selection of nine hours of approved electives, three hours of which may be outside of business administration. Elective courses include the following:

Bus. Adm. 525, Seminar in Accounting
Bus. Adm. 526, Seminar in Management
Bus. Adm. 541, Promotional Policies
Bus. Adm. 545, Seminar in Marketing
Bus. Adm. 551, Security Analysis
Bus. Adm. 552, Seminar in Investment Management
Bus. Adm. 555, Seminar in Finance
Bus. Adm. 590, Independent Research

A thesis is not required for the degree. A comprehensive final examination, both written and oral, will be required when the student has completed his course work or is in his final semester.
MASTER OF SCIENCE DEGREE
WITH A MAJOR IN COLLEGE BUSINESS MANAGEMENT

This degree is designed for finance officers of colleges and universities. For more complete details of this program, write to the Dean of the Graduate College.

A maximum of four hours of this program may be obtained through participation in the short course for college business officers (EdAd 546, College Business Management, two hours credit, offered during the last week in July each year.)

In addition to the four hours of short-course credit, the candidate for the Master’s degree must earn 12 hours of credit in the field of education as noted below (Fed 481, 500, 502, and 505). Electives comprising 18 to 21 credit hours may be taken from graduate level courses in other areas approved by the major adviser. The student must present a total of 36 credit hours for the Master of Science degree. If the student desires, he may receive a Master in Arts degree by presenting 24 hours of credit plus a thesis of six hours credit in lieu of a corresponding number of hours of elective work. It will be noted that as many as six hours of credit may be transferred from other accredited graduate schools, provided the transferred credits can be fitted into the degree program.

Prerequisite: Bachelor’s degree from an accredited institution which must include six hours in accounting. Students with inadequate preparation in accounting must remove this deficiency before being degree candidates.

I. Academic Electives
(Not to exceed 21 hours)
(From graduate level courses in education, political science, psychology, English, history, sociology, economics or business administration)

II. Required Courses
Fed. 441, Principles of Adult Education
Fed. 510, Research Project (Subject to be associated with college business management and report worthy of publication)
Fed. 562, History and Philosophy of Education
Fed. 565, Education Seminar
EdAd. 546, College Business Management

PROGRAM FOR SCHOOL PSYCHOLOGISTS

Students holding Master’s degrees may be admitted to do additional work leading to recommendation for certification as a school psychologist if they show promise of ability to succeed beyond the Master’s level. Application for such admission must be filed with the Director of Admissions, accompanied by credentials and an application fee. Credentials must include two official transcripts for all previous college work, scores for the Graduate Record Examination Aptitude Test and Psychology Test, and a vita including names of individuals willing to write reference letters. Before a final decision is made concerning admission, the applicant must be interviewed by the Chairman and one or more members of the Department of Psychology. If the applicant has not completed a Master’s program equivalent to that required for the Master of Science in Educational Psychology, he may be required either to take additional graduate courses or to complete successfully a six-hour qualifying examination in general and educational psychology.

A total of 30 semester hours of work beyond the Master’s is required for the recommendation. No more than three hours of practicum credit should be taken during any one semester. For certification of school psychologists, many states require teaching certification or two years of successful teaching experience. Students will be expected to plan their programs as follows:

I. Psychological Foundations
   Required: three of the following
   Psych. 421, Experimental Psychology of Sensation & Perception
   Psych. 425, Psychological Psychology
   Psych. 427, Advanced Counseling Theory
   Psych. 428, Learning Theory
   Psych. 445, Experimental Social Psychology

II. Psychological Methods and Techniques
   Required: 12 hours
   Required Courses
   Psych. 455, Introduction to Therapeutic Techniques with Children
   Psych. 456, Practicum in Psychology (five or six hours)
   One or two of the following:
   Psych. 463, Programmed Instruction
   Psych. 471, Experimental Methods and Statistics
   Psych. 475, Sociometric Studies
   Psych. 479, Research Design and Analysis
   Coun. 525, Emotional and Educational Information
   Coun. 533, Individual Analysis

III. Educational Foundations
   Required: three of the following
   Sped. 443, Speech Pathology: Voice and Articulation
   Sped. 444, Speech Pathology: Rhythm and Symbolization
   Sped. 450, Teaching the Exceptional Child
   Sped. 452, Teaching the Educable Mentally Retarded
   Sped. 454, Teaching the Mentally Retarded
   Sped. 511, Teaching Reading—Elementary
   Coun. 522, Counseling Practice
   Coun. 525, Guidance Practice

SPECIALIST IN EDUCATION DEGREE

The Specialist in Education degree (Ed.S.) is an advanced degree, involving a minimum of one year of study beyond the Master’s degree. It is designed to prepare more competent educators. Each applicant will be considered in terms of his educational and professional background and experience. The Ed.S. is designed to be independent of the Master of Science. Some students, however, may wish to continue at another institution in a doctoral program. The receiving institution will determine the applicability of course work taken toward partial fulfillment of a doctoral program.

Admission and Degree Requirements

Applicants for admission to study in the Ed.S. program should be made to the Director of Admissions, University of Nebraska at Omaha (see Admissions). In general, the applicant:

1. Must hold a Master’s degree from an accredited institution offering graduate work.
2. Must have had successful teaching experience and provide letters of recommendation from principals, supervisors, or superintendents with whom he has taught.
3. Must be approved for admission to the program by the department head and the Graduate Dean.
4. Must submit the results of the Graduate Record Examination with the application for admission.
Before the applicant is accepted as a candidate in the degree program, he must be recommended by a graduate faculty advisory committee which will base its recommendations on:

1. A personal interview.
2. An evaluation of the applicant's general educational and professional qualifications to undertake the proposed program.
3. The results of the Graduate Record Examination.
4. A review of the applicant's proposed plan of study including courses, practicums and seminars, and work completed.
5. Prerequisite or deficiency courses which must be completed, if necessary, before the student may be accepted into the program.

The candidate will be notified in writing concerning his admission to the program.

Candidacy for Degree

Permission to enter the program does not automatically designate the applicant as a candidate for the Ed.S. degree. Before filing an application for degree candidacy, the student must complete twelve semester hours of course work, including work in statistics and research methods. For those students with statistics and research methods in their Master's program, substitutes may be made.

After a review of his early course work the candidate's committee will recommend to the Graduate Faculty which will make the decision concerning the applicant's candidacy for the degree. The applicant will be notified in writing by the Graduate Office of the decision of the Graduate Faculty. A permanent plan of study will be filed by the committee with the Graduate Office at the time of admission to candidacy.

Immediately after acceptance for candidacy, the student will file with his Committee a tentative proposal for his field project. This field project will be an independent study of a specific school-related problem. The subject of the study must be approved by the student's faculty committee and the Graduate Dean during the same term the candidate has been approved for candidacy for the degree. Failure to regularly report progress on the field project to the major advisor may result in loss of the topic.

Residency is a period of time when students can devote their full energy to study, develop associations with other students, and enjoy extended contact with senior faculty members. Typical patterns in which students might satisfy residency would include a credit hour load of no less than 12 hours during a Summer, or no less than 9 hours during a Fall or Spring session. Students who hope to satisfy residency through an Ed.S. internship should consult their supervisory committee.

Regular attendance assures a desirable rate of progress, and also assures that quality in a program which comes by way of acquaintance and interaction.

All work for the Ed.S. degree, including the field project report, must be completed within a period of six years from the time of first admission to the program. Upon completion of the field project, which will be done under the direction of the faculty committee, the student will submit three typewritten copies to the Graduate Office. This project must generally conform to the style prescribed by the Graduate College.

The final oral examination for the student shall center on the field project. The examining group shall be the Committee and the Graduate Dean or his representative.

SPECIALIST IN EDUCATION DEGREE
A MAJOR IN EDUCATIONAL ADMINISTRATION AND SUPERVISION
66 Hours Minimum

This outlined program includes the work which might typically constitute the fifth and sixth years of collegiate work. The total course work for both M.S. and Ed.S. would accumulate to no less than 66 graduate hours. The program reflects the philosophy which supports the theory that the University has adopted in each of its programs.

The program has been designed to include a specific number of courses in the field of interest of the student. The program is divided into three categories:

I. Core Professional Courses
   A. Education Administration
   B. Education Supervision

II. Related Professional Courses
   A. Education Finance
   B. Education Law

III. Cognate Courses
   A. Psychology
   B. Sociology

The program requires the completion of at least 33 hours of coursework in the field of interest. In addition, the student must complete a minimum of 33 hours of coursework in related areas, including professional education and liberal arts.

This program is designed for students who are interested in pursuing careers in the fields of education administration and supervision. The program provides a strong foundation in the theoretical and practical aspects of these fields, as well as an opportunity to gain practical experience through field work and internships.

The program is flexibility and individualized to meet the needs of the student. The student is encouraged to work closely with his committee to design a program that best suits his needs and ambitions.

The program culminates in the completion of a field project, which is a significant component of the program. The field project is a comprehensive examination of the student's knowledge and skills in the field of interest.

The overall goal of the program is to prepare students for successful careers in education administration and supervision. The program provides a strong foundation in the theoretical and practical aspects of these fields, as well as an opportunity to gain practical experience through field work and internships.

The program is designed to be completed within a period of six years from the time of first admission to the program. The program requires the completion of at least 33 hours of coursework in the field of interest. In addition, the student must complete a minimum of 33 hours of coursework in related areas, including professional education and liberal arts.

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### Key to Symbols:
- I—offered in the first semester of each year
- II—offered in the second semester of each year
- S—offered in the summer session
- E—offered only as an evening class at irregular intervals

Courses numbered 500 or above are open to graduate students only. Some courses numbered 400 are open to both seniors and graduates; the same is true of a selected few 300 numbered courses. It is expected as a rule that graduate students enrolled in courses numbered 300-400 will do work of a higher level than undergraduates. Typically, such differentiation might include depth studies, field studies, individualized research, and special interest projects.

### ART

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>341</td>
<td>Advanced Sculpture</td>
<td>Art 331 &amp; permission</td>
<td>3</td>
</tr>
<tr>
<td>344</td>
<td>Advanced Painting</td>
<td>Art 311 &amp; permission</td>
<td>3</td>
</tr>
<tr>
<td>450</td>
<td>Medieval Art History</td>
<td>A study of painting, sculpture, and architecture of the Western World from 200 B.C. to about 1500 A.D.</td>
<td>3</td>
</tr>
<tr>
<td>451</td>
<td>Advanced Printmaking</td>
<td>Intaglio process stressing technical proficiency in the various media</td>
<td>3</td>
</tr>
<tr>
<td>452</td>
<td>Advanced Ceramics</td>
<td>Advanced problems in the techniques of ceramics</td>
<td>3</td>
</tr>
<tr>
<td>520</td>
<td>Graduate Sculpture</td>
<td>Advanced problems in a particular sculpture medium</td>
<td>3</td>
</tr>
<tr>
<td>521</td>
<td>Graduate Painting</td>
<td>More complex problems in the oil medium and related materials</td>
<td>3</td>
</tr>
<tr>
<td>522</td>
<td>Graduate Printmaking</td>
<td>Advanced problems in the printmaking area with particular attention to the intaglio technique</td>
<td>3</td>
</tr>
<tr>
<td>579</td>
<td>Advanced Research Project in Art History</td>
<td>Special problems in Art History on an individually arranged basis</td>
<td>3</td>
</tr>
</tbody>
</table>

### BIOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>334</td>
<td>Ecology: The study of the behavior of whole organisms and groups of organisms in relation to their total living and non-living environment</td>
<td>Biology 145, 175, Junior-Senior</td>
<td>4</td>
</tr>
<tr>
<td>353</td>
<td>Flora of the Great Plains: The classification, identification, and recognition of common vascular plants, including weeds, ornamentals, and indigenous plants, found in the Omaha area</td>
<td>Biology 145</td>
<td>(ILS) 3</td>
</tr>
<tr>
<td>368</td>
<td>Plant Anatomy: A study of cells, tissues, and organs of vascular plants with particular emphasis on internal structure of seed plants</td>
<td>Biology 145</td>
<td>(ILS) 3</td>
</tr>
<tr>
<td>374</td>
<td>Histology: The microscopic anatomy of tissues and organs, their adaptations, and functional significance</td>
<td>Biology 175, a course in anatomy: Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>381</td>
<td>Embryology: An intensive study of the embryology and development of the vertebrate animal, particularly the human, from the moment of ovulation to organogenesis as revealed by a study of selected vertebrate embryos and fetuses</td>
<td>Biology 175 and a course in anatomy: Junior-Senior</td>
<td>(II) 4</td>
</tr>
<tr>
<td>414</td>
<td>Cellular Biology: This course is a comprehensive study of the structure and function of plant and animal cells.</td>
<td>Biology 215, Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>423</td>
<td>Organic Evolution: A study of organic evolution in terms of evidence which supports the theory and the mechanisms involved in the process</td>
<td>Biology 215, Junior-Senior</td>
<td>(II) 4</td>
</tr>
<tr>
<td>444</td>
<td>Plant Physiology: A study of plant processes and functions with particular emphasis on photosynthesis, respiration, mineral nutrition, and morphogenesis</td>
<td>Biology 215, Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>454</td>
<td>Taxonomy of Vascular Plants: The identification, nomenclature and classification of vascular plants with emphasis on angiosperms and gymnosperms</td>
<td>Biology 455</td>
<td>(II) 4</td>
</tr>
<tr>
<td>465</td>
<td>General Bacteriology: The nature of microorganisms, their life processes, their biological and economical significance</td>
<td>Biology 145, Chemistry 214, Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>474</td>
<td>Animal Physiology: This course is a comprehensive study of the functions of the animal body systems.</td>
<td>Biology 215, Junior-Senior</td>
<td>(II) 4</td>
</tr>
<tr>
<td>484</td>
<td>Vertebrate Zoology: A study of the general biology of the supphylum Vertebrata including the morphology, anatomy, physiology and ecology of representative vertebrates</td>
<td>Biology 175, Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>486</td>
<td>Parasitology: Taxonomy, morphology, life history, dissemination, and control of the parasitic protozoa, helminths, and arthropods</td>
<td>Biology 175, Junior-Senior</td>
<td>(II) 4</td>
</tr>
<tr>
<td>488</td>
<td>Invertebrate Zoology: A field-oriented course emphasizing the anatomy and natural history of the invertebrate animals</td>
<td>Biology 175, Junior-Senior</td>
<td>(I) 4</td>
</tr>
<tr>
<td>495</td>
<td>Entomology: The study of insects, their classification, morphology, behavior, life histories, ecology, and evolution.</td>
<td>Biology 175, Junior-Senior</td>
<td>(II) 4</td>
</tr>
<tr>
<td>497</td>
<td>Ornithology: An introduction to the general biology of birds, including their anatomy, physiology, behavior, ecology, classification and identification with emphasis on North American groups</td>
<td>Biology 175 and permission</td>
<td>(I) 4</td>
</tr>
<tr>
<td>502</td>
<td>Seminar in Biology: A study of current research in any of the divisions of biology</td>
<td>Graduate student in biology</td>
<td>(I,II,S) 1</td>
</tr>
<tr>
<td>503</td>
<td>Problems in Biology: Research investigation in various areas of biology</td>
<td>Graduate student in biology and the ancillary sciences necessary to pursue adequately the area of investigation involved</td>
<td>(I,II,S) 2</td>
</tr>
<tr>
<td>511</td>
<td>Experimental Genetics: A laboratory course utilizing techniques of biometric, computers, and experimentation with organisms such as Drosophila sp.</td>
<td>Biology 145, 175, Genetics, equivalent or concurrent</td>
<td>(II) 4</td>
</tr>
<tr>
<td>513</td>
<td>Advanced Genetics: Lecture covering quantitative, human, biochemical, and cytogenetical aspects of genetics</td>
<td>Biology 145, 175, Genetics, equivalent or concurrent</td>
<td>(II) 4</td>
</tr>
<tr>
<td>516</td>
<td>Experimental Genetics: Lecture and laboratory involving experimentation with organisms such as Drosophila sp., Neurospora sp., E. coli and T. phage.</td>
<td>Biology 215</td>
<td>(II) 4</td>
</tr>
<tr>
<td>601</td>
<td>Thesis: An advanced level of selection, investigation and solution of a problem with a report written in accordance with an acceptable style manual</td>
<td>University of Nebraska at Omaha</td>
<td>(I,II,S) 3</td>
</tr>
</tbody>
</table>
500 Quantitative Analysis
The study of quantitative techniques and models and their application in business decision making. 3 hours

501 Business and Society
Exploration of the diversity of societal forces and pressures which produce continued transition in the system of American capitalism. 3 hours

502 Behavioral Sciences in Business
Integration of psychological, sociological and other behavioral science concepts with business decision making. 3 hours

529 Accounting for Management Control
Sounds of maximum utilization of accounting information by the management team. 3 hours

540 The Environment of Management
A study of the organizational environment in which decision-making occurs to accomplish the economic and efficient operation of organized endeavor. 3 hours

541 Human Relations
An inter-disciplinary study concerned with the problems of combining and utilizing human resources to satisfy the objectives of management and workers. 3 hours

555 Seminar in Management
A student participation course emphasizing current issues and problems in the areas of management theory and operation. 3 hours

540 Marketing Policies
A marketing management approach to the determination of policies employed in solving problems in marketing. 3 hours

541 Promotional Policies
Analysis of the methods and policies needed to develop and administer an effective promotional program. 3 hours

554 Seminar in Marketing
Exploration, study and critical analysis of contemporary marketing problems, techniques and approaches for seminar discussion and written report. 3 hours

556 Financial Management
Examination of the problems of managing the financial operations of an enterprise with emphasis on analysis and solution of long and short-term problems pertaining to policy decisions. 3 hours

557 Security Analysis
A study in the techniques of analysis of marketable securities. Statistical and financial ratio methods of analysis are examined as well as broader techniques for appraisal of an investment. 3 hours

555 Seminar in Investment Management
The theory of investment management and its application in formulation of policies for different types of investors. Selected topics from areas of business finance. 3 hours

559 Independent Research
Individual research in the field of accounting, finance, management, marketing, quantitative analysis, or the environment of business. Maximum of nine hours in three different fields.

CHEMISTRY

530 Physical Chemistry: An introduction to thermodynamics and atomic and molecular structure and the application of these concepts to thermodynamics, equilibrium, solutions, electrochemistry, kinetics, solids, and chemical bonding. (Lect-1, Lab-4) PREREQ: For Chem 340: Chemistry 230 and 214, Physics 212, Math 192 or 224; For Chemistry 349 with a grade of C or above (I, II) Each 4 hours

531 Instrumental and Advanced Quantitative Analysis: Instrumental, physico-chemical, and special methods applied to quantitative analysis. (Lect-2, Lab-2) PREREQ: Chemistry 330 (may be taken concurrently) (II) Each 3 hours

540 Advanced Inorganic Chemistry: Theories of chemical bonding, the determination of chemical structures, and the application of quantum techniques to classical and recent problems in inorganic chemistry. (Lect-3) PREREQ: Chemistry 330 (may be taken concurrently) (II) 3 hours

541 Advanced Inorganic Chemistry: Preparations: Laboratory preparation of representative types of inorganic compounds by various standard and special experimental techniques. (Lab-4) PREREQ: Chemistry 410 (may be taken concurrently) (I, II) Each 4 hours

543 Advanced Organic Chemistry: An advanced lecture course in modern theories and special topics. (Lab-3) PREREQ: Three years of college chemistry including Chemistry 214. (I, II) 3 hours

544 Identification of Organic Compounds: A laboratory course in the systematic identification of organic compounds by classification reactions, spectrophotometry, and the preparation of derivatives. (Lect-1, Lab-3) PREREQ: Three years of college chemistry including Chemistry 214. (I) 3 hours

545 Organic Chemistry and Biochemistry: Protein, carbohydrates, lipids, enzymes and energy. Biological oxidation. (Lect-2, Lab-4) PREREQ: Chemistry 214, Chemistry 493 is prerequisite to 494. (I, II) Each 4 hours

546 Inorganic Chemistry: Independent student research project. 3 hours

530 Three years of chemistry and permission of instructor

503 Research in Chemistry: Provides the student with an opportunity for experience in the solving of an actual research problem in the field of chemistry. PREREQ: Permission of instructor (I, II, S) Cr. Arranged

ECONOMICS

411 Government and Labor: Provides a background of knowledge and understanding of the development of public policy, the regulation of labor by government and the relationships of the various levels of government to labor. PREREQ: Econ. 315

412 Urban Geography (see Geography 412) 3 hours

413 Collective Bargaining: A study of issues, structures and procedures involved in collective bargaining, and the settlement of disputes, as well as the labor-management contract. PREREQ: Econ. 315

414 Advanced Firm & Industry Theory: The effects of changes in conditions of supply and demand under alternative market structures affecting firm and industry are examined. General equilibrium and welfare economics are introduced. PREREQ: Econ. 320 or permission

415 Advanced Macroe Theory: A study of the level of income, production, employment, and growth. Classical and Keynesian systems are contrasted, with recent theoretical paths being explored. PREREQ: Econ. 322 or permission

424 History of Economic Thought: From Mercantilism to the modern period. Focus is on the interactions of institutional milieu, thought and economic doctrine. PREREQ: Econ. 291 and 292

430 Econometrics: The study and application of modern statistical and mathematical procedures to theoretical economic models. PREREQUISITES: Permission of instructor

3 hours
Comparative Economic Philosophy: The mainstreams of political and economic philosophy are examined in order to understand both the political basis of comparative economic systems as well as to judge the political consequences of changing economic policy.

PREREQ: Nine hours of Economics or permission (1) 3 hours

443 Geography of Manufacturing (see Geography 443) 3 hours

445 Monetary Theory and Policy: The role of money in the stabilization at high levels of production, employment, income and prices. Emphasis is on contemporary problems.

PREREQ: Econ. 345 (1) 3 hours

546 State and Local Finance: Economic and administrative problems of state and local taxation, with particular attention to Nebraska and Omaha, are studied.

PREREQ: Econ. 356 or permission (II) 3 hours

546 Economic Development: Problems relating to early stages of economic development; investment priorities, mobilizing savings, balance of payments considerations; and policies and programs are studied.

PREREQ: Econ. 356 or permission (II) 3 hours

450 Managerial Economics: Managerial economics is economics applied in decision making, with special emphasis on the application of the micro-theory. It aims to bridge the gap between theory and managerial practice, stressing on the measurement of the critical concepts, collection and evaluation of information and comparison of alternatives.

PREREQ: Econ. 320 or permission (I) 3 hours

565 Economic Education: A study and examination of economic principles and how they can be related to the teacher's classroom presentation. This course is designed to furnish the public school teacher (K-12) with sufficient background and understanding to aid in the recognition of economic issues and the teaching of economics.

PREREQ: Open to any graduate student with no previous college work in economics teaching K-12. Not open to majors in Economics (I) 3 hours

566 Economic Education: A continuation of Econ. 365 (II) 3 hours

510 Economic Security: The course involves the analysis and discussion of problems and programs of economic security. Particular attention will be given to programs aimed at reducing urban poverty.

PREREQ: Permission of instructor (I) 3 hours

516 Seminar in Labor Economics: A study of labor economics and issues involving labor institutions, labor relations, wage theories and employment policies. Local and regional studies will be stressed.

PREREQ: Six hours of credit in undergraduate labor economics or permission (II) 3 hours

521 Seminar in Micro-Theory: This is required of graduates in Economics and Business students. Familiarization with quantitative tools in micro-economic analysis, including the recent development in the theory of the firm and operations research, will be investigated.

PREREQ: Econ. 320 or Econ. 421 or permission of the instructor (I) 3 hours

523 Macroeconomic Theory: A study of the many refinements of the Keynesian model, including some extensions of this theory, especially in connection with cyclical behavior, investment and economic growth. This is required of graduate Economics and Business students.

PREREQ: Econ. 322 or Econ. 423, or permission of the instructor (II) 3 hours

530 Econometrics: The study and application of statistical and mathematical techniques in economic research

PREREQ: Permission of instructor (III) 3 hours

540 Seminar in American Economic History: These seminars lay stress on individual research on significant problems as indicated by the titles. An introduction to bibliography and demonstration of the methods of historiographical research will be incorporated in each seminar.

Each 3 hours

545 Seminar in Money and Banking: Original research and writing of papers on basic problems in the area of money and banking, required of all Economics majors at the graduate level.

PREREQ: Permission of instructor (I) 3 hours

540 Independent Study in Topics on Urbanism (see Political Science 590) 3 hours
502 Comparative Education
To acquaint students with education philosophies and programs in selected countries; to identify changes in programs of countries; to compare programs in education of other countries with the situation in the United States.

505 Seminar in Education (I.III) 3 hours
Research of problems in education which are of current significance (or of historical, philosophical or psychological backgrounds in education).

506 Education and Society (D) 3 hours
To provide an opportunity for teachers to develop an understanding of certain selected contemporary affairs which have an influence upon society.

507 Statistical Methods (II.S) 3 hours
This course was designed for first year graduate students in education who have not had a previous course in statistics or whose background is such that a refresher course is desired.

508 Topics in Audio-Visual Education (II.S) 3 hours
A study of selected topics involving principles, problems, trends and materials in audio-visual education.

509 The Urban School (II.S) 3 hours
An analysis of the societal and institutional processes and problems which have bearing upon the education of children in urban settings. A study of the urban school.

510 Research Project Individual or group study and analysis of specific problems in schools.

513 Practicum Internship (I.III) 3 hours
An integration of community and school experiences with special reference to the disadvantaged pupil. Each semester focuses upon a curriculum area of the junior high and elementary schools-language arts, social studies, evaluation procedures, classroom control and curriculum are the focus.

518 Prerequisites: Teacher Corps

519 Diagnostic and Remedial Instruction (I.S) 3 hours
A study of methods of diagnosing children's difficulties in all subject areas of the educational program of the elementary school and remedial techniques for overcoming such problems. PREREQ: 601

520 Improvement of Instruction in Elementary Science (I.S) 3 hours
This course is designed for graduate students in education who wish to become better informed about the recently developed programs for elementary science; the methods, materials, philosophy, and emphasis in instruction, which are characteristic of these programs.

521 Improvement of Instruction in Elementary Mathematics (III) 3 hours
An examination of the philosophy, content, methods, and materials of mathematics programs for the elementary school. The needs and backgrounds of the students enrolled during the semester are given special consideration.

522 Innovations and Trends in Elementary Education (III) 3 hours
Designed as an advanced study for the purpose of exploring current trends and developments within the various subject matter areas of the elementary school.

523 Introduction to Curriculum Planning - Elementary (II.S) 3 hours
A study of the history, philosophy and current developments in the elementary curriculum with an emphasis on appropriate content and methods of curriculum reorganization.

544 Seminar in Elementary Education (I.II.S) 3 hours
A study of educational problems as they relate to the elementary school to be taken in the last nine hours in the program for the Master of Science degree.

545 Seminar in Supervision of Student Teachers - Elementary (I.II.S) 3 hours
Designed for experienced teachers who are or may be serving as cooperating teachers, and who desire to study student teaching its aims, objectives, trends and developments.

PREREQ: 2 years of teaching experience

SECONaARY

480 Principles of Vocational Education (I.I.S) 3 hours
A study of the basic philosophy underlying vocational education and the principles and practices in the various fields.

485 Coordination Techniques for Vocational Education (I.I.S) 3 hours
Reviews responsibilities and techniques of coordination for the vocational teacher-coordinator, with special emphasis upon local administration of the part-time cooperative program and analysis of the laws and regulations governing this program.

530 Secondary School Curriculum (I.II.S) 3 hours
Designed to provide the student with understanding of the nature and trends in secondary school curriculum development, and the principles and practices in curriculum planning.

532 The Junior High School (I.II.S) 3 hours
This course is designed to acquaint the graduate student with the philosophy, objectives and functions of the junior high school program.

534 Co-operating Teachers Seminar - Secondary (I.II.S) 3 hours
A study of principles and procedures in student teaching programs intended for certified teachers who are, or wish to be, working with student teachers in secondary schools.

537 Vocational Curriculum Construction (S.II.S) 3 hours
A course designed for teachers, supervisors, coordinators, and administrators of vocational education. The course includes principles, needs, factors, and trends that should be considered in developing a vocational education curriculum.
**COUNSELING AND GUIDANCE**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td>Principles of Guidance</td>
<td>(I,I,S) 3 hours</td>
<td>Basic principles underlying guidance and counseling practices in the United States. This course is a prerequisite for all other courses in the Guidance and Counseling Department. It is the recommended course for students in other departments who wish to have some understanding of professional guidance and counseling.</td>
</tr>
<tr>
<td>454</td>
<td>Introduction to Counseling Theories</td>
<td>(I,S) 3 hours</td>
<td>Study of contemporary theories of counseling, the counseling process and methods.</td>
</tr>
<tr>
<td>521</td>
<td>Organization and Administration of Guidance Services</td>
<td>(I) 3 hours</td>
<td>Selection and training of guidance personnel; organization and administration of the guidance program; adjustment to changing conditions.</td>
</tr>
<tr>
<td>522</td>
<td>Occupational and Educational Information</td>
<td>(I,S) 3 hours</td>
<td>The nature and use of occupational and educational information. The process of vocational choice.</td>
</tr>
<tr>
<td>523</td>
<td>Individual Analysis</td>
<td>(I,S 3 hours)</td>
<td>Methods and procedures of identifying each person as a unique individual.</td>
</tr>
<tr>
<td>524</td>
<td>Counseling Practices</td>
<td>(ILS) 3 hours</td>
<td>An analysis of the theories and practices of counseling.</td>
</tr>
<tr>
<td>525</td>
<td>Counseling Practicum</td>
<td>(I,I,S) 2-3 hours</td>
<td>Counseling in an approved program under the supervision of a qualified counselor and a guidance professor of the University.</td>
</tr>
<tr>
<td>526</td>
<td>Guidance Internship</td>
<td>(I,I) 2-3 hours</td>
<td>Field experiences in an approved guidance program under the supervision of a qualified counselor and a guidance professor of the University.</td>
</tr>
<tr>
<td>527</td>
<td>Group Techniques in Guidance</td>
<td>(I,S) 2-3 hours</td>
<td>Group procedures in guidance. The implementation and evaluation of group procedures.</td>
</tr>
<tr>
<td>530</td>
<td>Guidance in the Elementary School</td>
<td>(I,I) 3 hours</td>
<td>A study of the principles, practices and dimensions of elementary school guidance.</td>
</tr>
<tr>
<td>562</td>
<td>Foundations of Educational Administration and Supervision</td>
<td>3 hours</td>
<td>A study of the nature and functioning of effective school organization and administration, including the inter-relationship between the federal, state, and local responsibilities.</td>
</tr>
<tr>
<td>563</td>
<td>School Plant Planning and Operation</td>
<td>3 hours</td>
<td>Includes steps in planning the modern school building: site selection, building construction and design; school furniture and equipment; maintenance and operation; rehabilitation; scheduling of work; and custodial care.</td>
</tr>
<tr>
<td>564</td>
<td>School Law</td>
<td>3 hours</td>
<td>Considers legal principles and practices which are applicable to public education for public school teachers and administrators.</td>
</tr>
<tr>
<td>565</td>
<td>School Business Management</td>
<td>3 hours</td>
<td>An analysis of the functions of business management; budgetary procedures; financial accounting, auditing and reporting; management of funds, purchasing procedures and inventory; administration and protection of property; and administration of transportation.</td>
</tr>
<tr>
<td>566</td>
<td>Administration and Supervision in Elementary Schools</td>
<td>3 hours</td>
<td>The nature, principles and functions of modern administrative and supervisory practices as they relate to the elementary school.</td>
</tr>
</tbody>
</table>

**EDUCATIONAL ADMINISTRATION AND SUPERVISION**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>567</td>
<td>Administration and Supervision in Secondary Schools</td>
<td>3 hours</td>
<td>The modern principles and functions of modern administrative and supervisory practices as they relate to the secondary school.</td>
</tr>
<tr>
<td>568</td>
<td>School Finance</td>
<td>3 hours</td>
<td>A study of the sources of school financing: local, state and national. In addition to covering this area from a historical point of view, emphasis is placed on current problems in school finance.</td>
</tr>
<tr>
<td>569</td>
<td>Administration and Staff Personnel</td>
<td>3 hours</td>
<td>This course deals with personnel policies, problems, and issues in the following areas: teacher recruitment, orientation, evaluation, promotion, tenure, retirement, professional organizations, and legal status. Emphasis will be placed on the techniques of democratic administration.</td>
</tr>
<tr>
<td>570</td>
<td>Practicum in Educational Administration and Supervision</td>
<td>3 hours</td>
<td>Designed to provide guided study and practice in elementary, secondary or general administration and supervision as the interests and needs of the student require.</td>
</tr>
<tr>
<td>575</td>
<td>Administration of Higher Education</td>
<td>3 hours</td>
<td>A study of the major functions of higher education, with emphasis on the principles involved in organizing and directing the academic program and of maintaining the facilities of the institution, including faculty and staff, policies, financial planning, the operating budget, and conducting the public relations program.</td>
</tr>
<tr>
<td>576</td>
<td>College Business Management</td>
<td>2-4 hours</td>
<td>Designed for intensive study of problems of college business management, including such phases as: public relations, personnel, accounting and reporting, physical plant, law, auxiliary enterprises.</td>
</tr>
<tr>
<td>578</td>
<td>Administration and Supervision of Vocational Education</td>
<td>3 hours</td>
<td>Basic concepts for administration and supervision of vocational education, as related to the needs of the superintendent, principal and supervisor.</td>
</tr>
<tr>
<td>611</td>
<td>Field Project in Educational Administration</td>
<td>3 hours</td>
<td>The study of a problem in the area of school administration, and employs the techniques of research.</td>
</tr>
<tr>
<td>650</td>
<td>Seminar in Educational Administration</td>
<td>3 hours</td>
<td>Selected individuals enrolled. Designed as an intensive study of problems of college business management, including such phases as: public relations, personnel, accounting and reporting, physical plant, law, auxiliary enterprises.</td>
</tr>
<tr>
<td>681</td>
<td>Advanced Seminar in Educational Administration</td>
<td>3 hours</td>
<td>Participation is limited to individuals who have been admitted to candidacy for the Specialist in Education degree with a minor in school administration. Emphasis will be placed upon the theory and techniques of administration.</td>
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</tbody>
</table>

**SPECIAL EDUCATION**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>420</td>
<td>History: Education and Guidance of the Deaf</td>
<td>(I) 2 hours</td>
<td>History of trends in deaf education elucidating in current problems, practices and attitudes; survey of teaching and guidance opportunities; psychological problems of the deaf child.</td>
</tr>
<tr>
<td>421</td>
<td>Teaching of Speech to the Deaf I</td>
<td>(I) 2 hours</td>
<td>Methods and practicum in teaching speech to the deaf child; special emphasis on tactual, visual and auditory techniques.</td>
</tr>
<tr>
<td>422</td>
<td>Teaching of Speech to the Deaf II</td>
<td>(II) 2 hours</td>
<td>Continuation of Special Education 421; focus on various types of speech learning problems found in a population of deaf children.</td>
</tr>
</tbody>
</table>
423 Teaching of Language to the Deaf I (I) 3 hours
Philosophy of development of functional language for the deaf child; methods and materials for developing English-language skills and comprehension.

424 Teaching of Language to the Deaf II (II) 2 hours
Continuation of Special Education 423 with further consideration of criteria for selection and utilization of teaching materials; special emphasis on reading problems.

425 Observations and Student Teaching (II) 3-6 hours
Arrangements with schools and classes for the deaf for qualified students to complete student teaching during the school year; co-curricular as well as classroom experiences encouraged.

426 Teaching School Subjects to the Deaf I (II) 2 hours
Philosophy underlying formal education of the deaf; methods and adaptations used in presenting school subjects, preparing lesson plans for deaf classes.

427 Teaching School Subjects to the Deaf II (II) 2 hours
Consideration of problems in deaf education; approaches to elementary school subjects considered in detail.

428 Basic Audiology (II) 3-6 hours
Brief history of hearing evaluation techniques; methods and procedures in basic and audiological assessment; types of hearing losses; auditory training techniques.

429 Auditory and Speech Mechanisms (II) 3-6 hours
Basic structure and function of organs of hearing and speech; theories of cortical involvement; central and peripheral nervous systems.

430 Learning Disabilities (II) 3-6 hours
Study of developmental patterns in speech and language; causation factors of delayed speech and language development; evaluative techniques for identification of problem; therapy techniques for rehabilitation and/or remediating of children with delayed language development.

431 Speech Development and Correction (I.II.III) 3 hours
Development of voice and speech proficiency of common problems of articulation, voice, rhythm and symbolization; found in the classroom; demonstration of individual and group correction procedures and materials.

432 Psychology of Speech (I) 3 hours
Psychological processes basic to speech; theories of language learning; semantics, psychology of hearing and deafness; interrelationships between speech and personality.

433 Speech Pathology I: Voice and Articulation (I) 3 hours
Types and causes of voice and articulation disorders; classroom demonstration; speech emphasis on rehabilitation procedures and methods associated with individual involvement.

434 Speech Pathology II: Rhythm and Symbolization (I) 3 hours
Types and causes of rhythm and language symbolization disorders; classroom demonstration; special emphasis on rehabilitation programs and methods associated with stuttering, aphasia and delayed language development.

435 Phonics of American Speech (I) 3 hours
Introduction to International Phonetic Alphabet; analysis of phonetic and phonemic elements in major American English dialects; practice in transcription of standard and defective speech.

436 Speech Evaluation: Methods and Practicum (II) 3 hours
Tests and procedures for evaluating individuals with speech disorders; principles in differential diagnosis and report writing; observation during evaluation periods in speech and hearing centers.

437 Neurophysiology of the Speech Handicapped (I) 3 hours
Basic structure and function of the organs of hearing and speech; theories of cortical involvement; central and peripheral nervous systems; as they affect communication; individual projects.

438 Measurement of Hearing (I) 3 hours
Brief history of hearing evaluation techniques; methods and practicum in basic audiological assessment; types of hearing losses; auditory training techniques; individual reports.

439 Advanced Measurement of Hearing (II) 3 hours
Hearing evaluation problems associated with pre-school children, recruitment, functional hearing losses, etc., education and rehabilitation problems associated with electronically-assisted hearing.

440 Speech Correction in Elementary and Secondary Schools (II) 2 hours
Speech correction programs as related to goals of public education for school age children; role and responsibilities of speech clinician; current practices in evaluation, case load selection and selection of special emphasis on methods and materials appropriate to a variety of facilities.

441 Basic Practicum in Speech Correction (II) 1-2 hours
Minimum total of 48-60 clock hours per credit hour; supervised observation and practice in speech and hearing center; diagnostic interviews, therapy sessions, lesson plans, weekly practicum summaries.

442 Advanced Practicum in Speech Correction (II.I) 2 hours
Continuation of Special Education 441; student is expected to participate more actively in corrective and diagnostic programs, and initiate and follow through corrective programs with selected individual and/or groups.

443 Introduction to the Mentally Subnormal (II) 3 hours
Nature and educational needs of children and youth who are mentally subnormal; definitions; prevalence and types of children in educational programs; history; trends.

444 Teaching the Exceptional Child (I.II) 3 hours
Required course for all Special Education majors.

445 Curriculum for Mentally Retarded Children (II) 3 hours
A course for advanced students in reading which will provide the student with the essential information for the diagnosis and remediation of reading disabilities.
514 Individual Analysis of Reading Difficulties (I) 3 hours
A course for advanced students in reading which will provide the student with the necessary training for establishing and operating a reading clinic (i.e., initiating and accepting referrals, forming evaluation procedures, administering appropriate evaluation devices, writing case reports and establishing follow-up sessions).

515 Clinical Practice in Reading (IIS) 3 hours
A laboratory-oriented course for advanced students in reading which will provide them with practice training in the use of proper remedial reading techniques in order that they might qualify as specialists in remedial reading.
PREREQ: Permission

516 Reading Problems of the Disadvantaged 3 hours
Investigation relating to causes of reading difficulties of the culturally disadvantaged; demonstration of individual and group remediation procedures.

517 Seminar in Organization and Administration of Reading Programs 3 hours
Participation in the seminar is limited to individuals who have completed at least one graduate reading course (or equivalent) and who are professional workers who are charged with the total or partial responsibility for organizing and administering reading programs. Familiarity with the philosophy, organization, and major research related to different reading programs will be emphasized. Local and area reading authorities will conduct panels and lectures on topics chosen by the students. PREREQ: 1 graduate reading course (or equivalent) and permission of instructor

533 Advanced Problems in Speech Pathology (II) 3 hours
Student selects and investigates three different areas of current concern in Speech Pathology: initial survey, annotated bibliography, presentation of observations and conclusions, seminar discussions of findings. Instructors will base their lectures on topics chosen by students for clinical demonstrations of selected voice, speech and language problems. PREREQ: Graduate standing with six semester hours in Speech Pathology or Correction.

551 Aural Speech Rehabilitation 2 or 3 hours
Problems of speech and voice rehabilitation for the individual without a functional larynx; social, emotional, and medical consideration; as well as clinical procedures for esophageal, pharyngeal and buccal speech: implications for use of artificial larynx, current research pertinent to this area. PREREQ: 6 hours of speech pathology including voice problems.

556 Speech Problems of Cerebral Palsied Children 2 or 3 hours
Identification of types of Cerebral Palsy by a location of lesion, motor symptomology, and additional handicaps; the role of the speech clinician on the team; types of speech therapy, with special emphasis on the Bobath approach; current research and controversial issues will be discussed. PREREQ: 6 hours of speech pathology

570 Seminar in Special Education (II) 3 hours
Graduate course primarily for Special Education majors and professional workers in the fields of speech and hearing, teaching the deaf, teaching the mentally retarded, remedial reading and teaching the physically handicapped. Familiarity with philosophy, major literature and practices in each area; student will research and present a paper reflecting his personal professional interests. Discussions, forums, and panels; visiting experts.

ENGINEERING

512 Hydraulic Engineering 3 hours
PREREQ: CE 431—Fluid Mechanics

514 Theory of Structures III 3 hours
PREREQ: CE 452
Theory and application of analytic methods in the consideration and design of industrial buildings, multi-story buildings, space frames and arches.

545 Engineering Systems and Analogies 3 hours
PREREQ: Math 225—Advanced Math for Engineers; Engg 403—Engineering Analysis
The formulation and solution of the mathematical model and engineering analogies for applications to system analysis.

549 Soil Mechanics 1 hour
PREREQ: Senior standing and permission of instructor
Incorporation of properties and classification systems of soils, permeability, frost action, compaction, stress-strain characteristics, consolidation, shearing, resistance, drainage and stabilization, bearing capacity and settlement, surface investigations, characteristics of natural deposits.

570 Pre-Stress Concrete 3 hours
PREREQ: CE 447
Materials for prestressing, systems, economic considerations, loss of prestress, friction effects, analysis and design of sections for flexure, shear and bond, beam deflections on numerical analysis, partial prestress and non-prestress reinforcement, control of stresses, load balancing method, posttressed slab design, composite construction.

593 Matrix Methods of Structural Analysis 3 hours
PREREQ: CE 443 or Permission
Matrix methods and Computer Applications for analysis of structures, including Beams, Frames, Trusses, Space forms.

581 Plastic Design 3 hours
PREREQ: CE 443 or permission

582 Limit Design 3 hours
PREREQ: CE 443
Criteria for the plastic collapse of structures. Limit design applied to continuous beams, rigid frames, and component parts. Introduction to dynamic resistance of structures.

593 Advanced Strength of Materials 3 hours
PREREQ: Engg 421—Strength of Materials; Engg 444—Laboratory
Strength and deformation at a point; Theories of failure; Torsion of thin-walled vessels; Character of material behavior; Analysis of stress and strain; Cross-sections; Shear and shear center. Curved beams. Introduction to elastic energy methods.

595 Structural Design for Dynamic Loads 3 hours
PREREQ: Graduate standing and permission
Design of structures, materials and systems under dynamic loads. Analysis and design for dynamic loads. Computational techniques.

599 Special Engineering Problems 1-6 hours
PREREQ: Graduate standing and permission from the instructor.
The identification and application of the accumulative knowledge from undergraduate and graduate course work to a special problem of particular interest to the student and in his field of interest. These problems should extend the knowledge and understanding of the student in the field of his specialty beyond the limits of his course work.

592 Thin Shell Structures 3 hours
PREREQ: Graduate standing and permission
General theory of thin shells: analysis and design of hyperbolic paraboloids, folded plates, cylindrical shells, shell walls, and domes.

592 Foundation Engineering (II) 3-6 hours
PREREQ: Graduate standing and permission of instructor
Evaluation of subsurface conditions as they affect the behavior of soil, proportion of foundation elements; character of natural soil deposits: bearing capacity and settlement analysis; geophysical surveys; stability of slopes and earth-retaining structures.

596 Applied Elasticity 3 hours
PREREQ: Engg 493, Engg 443, Math 226
Stresses, strains, Hooks law and displacements, formulation of problems in elasticity, various methods of solution of two- and three-dimensional problems, thermal stresses, comparison with approximate solutions.
ENGLISH

433 Sixteenth Century Literature 3 hours
Poetry and prose of the English Renaissance, from its continental origins to the end of the Elizabethan Age.
PREREQ: Eng 231

434 Chaucer 3 hours
A study of the language and writing of Chaucer, with emphasis on *The Canterbury Tales.*
PREREQ: Eng 231

440 Eighteenth Century Literature 3 hours
Readings in the major authors of the Age of Pope and the Age of Johnson.
PREREQ: Eng 231 or 232

448 Seventeenth Century Literature 3 hours
A study of the English poetry and prose of the seventeenth century (with emphasis on Milton), and the drama of the Restoration.
PREREQ: Eng 232

450 English Drama before 1642 3 hours
A study of the development of the English drama, exclusive of Shakespeare, from the beginnings to 1642.
PREREQ: Eng 231

458 Structural Linguistics 3 hours
An analysis of the English language as it is spoken, with the end view of gaining better understanding of the language and how it work most effectively.
PREREQ: Graduate or permission

465 The English Novel 3 hours
The development of the English novel from the beginning to the end of the Victorian period.

468 History of the English Language 3 hours
A study of the internal and external forces which have influenced the development of the English language.
PREREQ: Eng 350 or permission

472 Medieval English Literature 3 hours
A survey of the principal writings in English, excluding those of Chaucer, from 1100 to 1500.
PREREQ: Eng 311

481 Literature of the Romanic Period 3 hours
Poetry and prose (excluding the novel) of England from 1780 to 1830.

482 Literature of the Victorian Period 3 hours
Poetry and prose (excluding the novel) of England from 1830 to 1900.

497 The American Novel 3 hours
The major American novelists from Hawthorne to the present.

498 The American Drama 3 hours
A general view of the history of the drama and theatre in the United States, especially as related to the main currents of American thought.

The following are all seminar courses:

501 Introduction to Literary Research 3 hours
A survey of the techniques of literary research, history and interpretation, with a primary emphasis on methods of scholarship currently useful to the study of English and American literature.

504 Literary Criticism 3 hours
Literary criticism from the beginnings to the present, with emphasis on the criticism of ancient Greece and Rome, nineteenth century England and twentieth century America.

506 Seminar in American Literature 3 hours
An analytical study of the major literary movements in nineteenth and twentieth century America as they are expressed in poetry, fiction, drama, and criticism.

508 Seminar in the English Renaissance 6 hours
Analysis of selected literary figures of the English Renaissance.
## GEOGRAPHY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>412</td>
<td>Urban Geography</td>
<td>3</td>
</tr>
<tr>
<td>423</td>
<td>Great Plains and Nebraska</td>
<td>3</td>
</tr>
<tr>
<td>432</td>
<td>Climates of the World</td>
<td>3</td>
</tr>
<tr>
<td>433</td>
<td>Climatic Geography</td>
<td>3</td>
</tr>
<tr>
<td>434</td>
<td>Historical Geography of the United States</td>
<td>3</td>
</tr>
<tr>
<td>501</td>
<td>Geography Concepts</td>
<td>3</td>
</tr>
<tr>
<td>502</td>
<td>Development of a systematic fields and regional approach to area inventory and planning; introduction to visualizing data and introduction of authorities in each field.</td>
<td>3</td>
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<tr>
<td>503</td>
<td>Investigating the Earth</td>
<td>3</td>
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<tr>
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<tr>
<td>505</td>
<td>Physical and Cultural Geography for Teachers</td>
<td>6</td>
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</tbody>
</table>

## SPANISH

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>355</td>
<td>Modern Drama of Spain</td>
<td>(I) 3</td>
</tr>
<tr>
<td>356</td>
<td>Modern Novel of Spain</td>
<td>(I) 3</td>
</tr>
<tr>
<td>416</td>
<td>Spanish American Literature of the 20th Century</td>
<td>(I) 3</td>
</tr>
<tr>
<td>420</td>
<td>Spanish American Novel</td>
<td>(I) 3</td>
</tr>
<tr>
<td>424</td>
<td>Generation of 1898</td>
<td>(II) 3</td>
</tr>
<tr>
<td>460</td>
<td>Pro-Seminar</td>
<td>(I) 1-3</td>
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<tbody>
<tr>
<td>351</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>353</td>
<td>Geography of Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>354</td>
<td>Geomorphology</td>
<td>3</td>
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<tr>
<td>355</td>
<td>Physiography of North America</td>
<td>3</td>
</tr>
<tr>
<td>358</td>
<td>Soils</td>
<td>3</td>
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<tr>
<td>361</td>
<td>Field Geography</td>
<td>3</td>
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<tr>
<td>365</td>
<td>Land Use</td>
<td>3</td>
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<tr>
<td>367</td>
<td>Cartographic Methods</td>
<td>3</td>
</tr>
<tr>
<td>371</td>
<td>Population Seminar</td>
<td>3</td>
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<tr>
<td>380</td>
<td>Independent Study on Topics on Urbanism</td>
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<tr>
<td>381</td>
<td>Urban Seminar in Metropolitan Planning and Developement</td>
<td>3</td>
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<tr>
<td>383</td>
<td>Interdisciplinary Seminar on the Urban Community</td>
<td>3</td>
</tr>
<tr>
<td>401</td>
<td>History of Science to 1700</td>
<td>(I) 3</td>
</tr>
<tr>
<td>402</td>
<td>History of Science since 1700</td>
<td>(II) 3</td>
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## HISTORY

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</tr>
<tr>
<td>402</td>
<td>History of Science since 1700</td>
<td>(II) 3</td>
</tr>
</tbody>
</table>

**Notes:**
- **PREREQ:** Prerequisites are required for each course.
- **COURSE:** Descriptions and course details are provided for each course.
- **HOURS:** The number of hours each course is offered is specified.
MATHMATICS

353 Probability and Statistics I
PREREQ: Math 106 and junior standing
Each 3 hours

354 Probability and Statistics II
PREREQ: Math 106 and junior standing
Each 3 hours

371 Complex Variables
PREREQ: Math 212 or Advanced Calculus
Each 3 hours

429 Theory of Ordinary Differential Equations
PREREQ: Math 311 or equivalent
Each 3 hours

430 Operational Mathematics
PREREQ: Math 311
Each 3 hours

511 Advanced Topics in Algebra I
PREREQ: Math 411 or equivalent
Each 3 hours

512 Advanced Topics in Algebra II
PREREQ: Math 411
Each 3 hours

523 Theory of Functions of Real Variables
PREREQ: Math 412 or equivalent
Each 3 hours

524 Theory of Functions of Real Variables
PREREQ: Math 412 or equivalent
Each 3 hours

532 Partial Differential Equations
PREREQ: Math 423
Each 3 hours

COMPUTER SCIENCES

505 Great American Historians
PREREQ: Acceptance as a graduate major or minor in history or permission of the department head and the instructor (not open for credit to students who have taken Hist. 496, or the equivalent).
A survey of the history of American historical writing from colonial times to the present. Reports on selected readings.
Each 3 hours

507 Great American Historians
PREREQ: Acceptance as a graduate major or minor in history or permission of the department head and the instructor (not open for credit to students who have taken Hist. 497, or equivalent).
A survey of the history of European historical writing from the Renaissance to the present. Reports based on selected readings.
Each 3 hours

512 Seminar in American History: The Jacksonian Era
Each 3 hours

517 Seminar in American History: The Frontier
Each 3 hours

537 Seminar in American History: Civil War and Reconstruction
Each 3 hours

539 Seminar in Recent American History
Each 3 hours

540 Seminar in Twentieth Century American Diplomatic History
Each 3 hours

541 Seminar in American Economic History
Each 3 hours

542 Seminar in United States Public Land Policy and Conservation
Each 3 hours

543 Seminar in Early Modern European History
Each 3 hours

544 Seminar in European History: The Revolutionary Age
Each 3 hours

545 Seminar in European History: The Napoleonic Era, 1800-1815
Each 3 hours

546 Seminar in Nineteenth Century European History
Each 3 hours

547 Seminar in Twentieth Century European Diplomatic History
Each 3 hours

548 Seminar in World History: Military History and Policy
Each 3 hours

549 Seminar in Eighteenth Century British History
Each 3 hours

550 Seminar in Second World History: The Era of Reform
Each 3 hours

551 Seminar in Contemporary British History
Each 3 hours

601 Thesis
Each 3 hours

602 Independent research project written under the supervision of an adviser.

The 300 level courses listed are open for graduate credit to students who do not seek an advanced degree in mathematics.

MATHEMATICS

300 Numerical Methods
PREREQ: Math 152 and Computer Language
Each 3 hours

320 Introduction to the Theory of Information Storage and Retrieval
PREREQ: Math 101, 111 and CS 250
Each 3 hours

430 Linear Programming
PREREQ: CS 322 or equivalent
Each 3 hours

432 Introduction to System Programming
PREREQ: CS 322 or equivalent
Each 3 hours

470 Introduction to the Theory of Compilers
PREREQ: CS 322 or equivalent
Each 3 hours

Assemblers, interpreters, compilers, particular languages studied include: a) sim, b) snobol, c) algol.
526 Functional Analysis (3 hours each)
527 PREREQ: Math 259, 563, or permission of instructor.
560 Differential Geometry (1) 3 hours
PREREQ: Math 423.
Differential manifolds, integral calculus on manifolds, Lie groups, differential geometry of Euclidean space.
562 Introductory Topology 3 hours each
563 PREREQ: Permission of Instructor.
Set Theory, topological spaces, convergences, continuity, measure spaces and metrization, simplicial homology theory.
590 Graduate Seminar (L/I) 3-4 hours
PREREQ: Permission of instructor.
A graduate seminar in mathematics.
601 Thesis 3 hours each
602 Thesis (L/I) Each 3 hours
PREREQ: Permission of Department Head.

PHYSICS
301 Elements of Electronics 4 hours
The background of theory, operation, and practice of electronic devices and circuits particularly as they apply to scientific instrumentation. Both solid state and vacuum tube principles and circuits are involved.
302 Optics 4 hours
The nature of light as disclosed through studies of geometrical optics, physical optics and quantum optics.
375 Electricity and Magnetism 4 hours
A course giving more complete and advanced treatment of electrical and magnetic principles from standpoint of both A.C. and D.C. phenomena.
395 Experimental Mechanics and Thermodynamics 3-4 hours
412 Modern Physics 4 hours
Recent developments concerning the nature of matter, radiation, and space including relativistic effects and the dualistic behavior of particles and waves.
414 Nuclear Physics 4 hours
Methodology and principles of nuclear science, nuclear structure, artificial nuclear radioactivity, isotopes, tracer techniques, radiation health physics, reactor theory.
492 Modern Developments in Physics 3 hours
A resume of the most important discoveries, changes, and new concepts gleaned from the last decade of research in physics. Supercconductivity, lasers, masers, superfluidity, ultra large magnetic fields, space plasmas, nuclear fusion power, etc. Designed for updating physical science concepts for science majors and for science teachers.
493 Modern Developments in Physics 3 hours
A resume of the most important discoveries, changes, and new concepts gleaned from the last decade of research in physics. Supercconductivity, lasers, masers, superfluidity, ultra large magnetic fields, space plasmas, nuclear fusion power, etc. Designed for updating physical science concepts for science majors and for science teachers. Physics 493 covers material not covered in Physics 492.
458 Problems in Physics 1-3 hours
460 Individual laboratory and/or library work in some field of energy.

POLITICAL SCIENCE
463 The Presidency (L/S) 3 hours
The rise of the institution from Washington to the present, to the position and prestige it holds and how the President uses this power to influence Congress, the courts, and the public.
PREREQ: 110, 111

401 The Legislative Process (L/S) 3 hours
A comprehensive study of the legislative process of the Congress and state legislatures. The major emphasis is on legislative institutions, processes, and behavior.
PREREQ: 110, 111

405 The Judicial Process (L/S) 3 hours
This is a course in the administration of justice. It examines the Federal and State Courts with respect to their powers, judicial selection, the bar, and the recent movements in the most basic of all of man's objectives, "The pursuit of justice."

413 Comparative Governments: Emerging Areas (L/S) 3 hours
An examination and comparative analysis of the problems, structures, and functions of government in the emerging states with special attention given to the political environment of these states within which the institutions of government operate. Since certain areas will be covered on a semester basis, the course may be repeated for credit when the area of study changes.

410 Constitutional Law I (L/S) 3 hours
The first semester of a two semester course in American Constitutional Law. It seeks to familiarize the student with the background of the American Constitutional system, the nature of the judicial process, and the role of the United States Supreme Court in the development of the institutions and powers of the American Federal System.

419 Constitutional Law II (L/S) 3 hours
The second semester of the American Constitutional Law course. It focuses on the role of the United States Supreme Court in delineating and defining the political and civil rights guaranteed by the United States Constitution.
PREREQ: 110, 111

423 National Security Policy (L/S) 3 hours
The processes and the machinery of formulating national security policy and the machinery involved. Special emphasis is given to demonstrating the interrelationships among political, military, technological, and international factors.

426 Law of Peace (L/S) 3 hours
A basic course in the field of international law. It seeks to introduce the student to the international law and the role of the United States in the international community and according to the needs of the times to function in its relations as a sovereign state. The aspects of the Law of War are excluded from this treatment.

431 Political Theory I (L/S) 3 hours
Reviews and analyzes the leading political theories of Western Man from the Hebrews and Greeks to the mid-19th Century.

432 Political Theory II (L/S) 3 hours
Continues the review and analysis of the leading political theories of Western Man begun in Pol.Sc. 431, bringing the study down to the present day.

433 American Political Thought (L/S) 3 hours
An over-view and analysis of the dominant political thoughts and ideas that have been present in American thinking from the days of the Puritans to today and the individuals who held them.

440 Public Budgeting (L/S) 3 hours
A study of the processes and procedures involved in making budgets for governmental institutions.

414 Public Personnel Management (L/S) 3 hours
A study of the personnel process in American governmental administrations. The processes and problems of recruiting, structuring, and operating public bureaucracies are examined as well as problems in personnel leadership, neutrality, accountability and performance.
PREREQ: 317

561 Comparative Politics: Theories and Literature of the Field (L/S) 3 hours
An examination of the purpose, theories and literature of the field of comparative politics, with evaluation of the theories by application to contemporary political systems.
PREREQ: Graduate standing or senior standing with permission of the instructor and the department head.
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>551</td>
<td>Theories and Literature of International Relations</td>
<td>(L,S) 3 hours</td>
<td>Graduate standing or senior, with permission of instructor and department head.</td>
</tr>
<tr>
<td>589</td>
<td>Independent Study on Topics on Urbanism</td>
<td>1 hour per semester to 3</td>
<td>Graduate student research on an individual basis under faculty supervision in topics pertaining to urbanism.</td>
</tr>
<tr>
<td>581</td>
<td>Urban Seminar in Metropolitan Planning and Development (see Geography 591)</td>
<td>3 hours</td>
<td>Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences. Cross listed under economics, geography, and sociology.</td>
</tr>
<tr>
<td>583-584</td>
<td>Interdisciplinary Seminar on the Urban Community</td>
<td>3 hours</td>
<td>Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences. Cross listed under economics, geography, and sociology.</td>
</tr>
</tbody>
</table>

**PSYCHOLOGY**

<table>
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<tr>
<th>Course Number</th>
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<tbody>
<tr>
<td>403</td>
<td>Motivation</td>
<td>(II) 3 hours</td>
<td>Psychology 313 and 401.</td>
</tr>
<tr>
<td>405</td>
<td>Computer Concepts in Psychology and the Behavioral Sciences</td>
<td>(II,S) 3 hours</td>
<td>An introductory course emphasizing the applications of computers in the areas of psychology, sociology, and education. Includes a functional description of computers and a discussion of programming languages as well as specific uses.</td>
</tr>
<tr>
<td>407</td>
<td>Cognitive Processes</td>
<td>3 hours</td>
<td>An introduction to historical and contemporary research and theory concerned with higher cognitive processes including concept formation, problem solving, creativity, memory, and symbolic behavior.</td>
</tr>
<tr>
<td>414</td>
<td>Non-parametric Statistics</td>
<td>(I) 2 hours</td>
<td>Basic Statistics.</td>
</tr>
<tr>
<td>415</td>
<td>Multiple Regression and Factor Analysis</td>
<td>(I) 3 hours</td>
<td>Advanced problems and techniques of correlation and regression are discussed, including: special simple correlation methods, multiple correlation, multiple regression, and factor analysis.</td>
</tr>
<tr>
<td>416</td>
<td>Analysis of Variance</td>
<td>(II) 3 hours</td>
<td>Advanced laboratory techniques and methods in the field of sensation, perception, and learning are presented, and the student is given an opportunity to conduct supervised research on several laboratory projects.</td>
</tr>
<tr>
<td>421</td>
<td>Experimental Psychology of Sensation and Perception</td>
<td>(L,I) 3-4 hours</td>
<td>The relation of the structure and functions of the nervous system of the organism to its behavior. Research will be emphasized throughout the course.</td>
</tr>
<tr>
<td>423</td>
<td>Physiological Psychology</td>
<td>(L,I) 3 hours</td>
<td>Advanced laboratory techniques and methods in the field of sensation, perception, and learning are presented, and the student is given an opportunity to conduct supervised research on several laboratory projects.</td>
</tr>
<tr>
<td>427</td>
<td>Comparative Psychology</td>
<td>(I) 3 hours</td>
<td>Graduate standing or senior, with permission of instructor.</td>
</tr>
<tr>
<td>431</td>
<td>Psychological and Educational Testing</td>
<td>(II,S) 3 hours</td>
<td>Research techniques applicable to behavioral studies with various animal species will be emphasized.</td>
</tr>
<tr>
<td>433</td>
<td>Psychoanalytic Theories of Personality</td>
<td>(I,S) 3 hours</td>
<td>An integrative course designed to acquaint the student with the Freudian and psychoanalytic viewpoints. Research in anxiety, defense mechanisms, sleep, and dreams is emphasized.</td>
</tr>
<tr>
<td>444</td>
<td>Abnormal Psychology</td>
<td>(I) 3 hours</td>
<td>The purpose is to become familiar with theories (psychological, psychiatric, psychoanalytic) of normalcy and abnormalcy. The symptoms, dynamics, therapy, and prognosis of individuals and groups in the syndromes will be considered.</td>
</tr>
<tr>
<td>445</td>
<td>Personality Theories</td>
<td>(II) 3 hours</td>
<td>This course is designed to familiarize the student with personality theories, which are much more inclusive than learning or perception, personality, and role. They are intended to provide insights into the behavior of individuals. A research approach is emphasized.</td>
</tr>
<tr>
<td>447</td>
<td>Advanced Counseling Theory</td>
<td>(I) 3 hours</td>
<td>This course emphasizes the role of diagnosis and treatment of the patient in the counseling process. Topics include diagnostic techniques and the development of specific counseling techniques.</td>
</tr>
<tr>
<td>450</td>
<td>Retardation</td>
<td>(II) 3 hours</td>
<td>This course considers significantly sub-average intellectual functioning originating during the developmental period and associated with impairments in adaptive behavior. Research is emphasized.</td>
</tr>
<tr>
<td>459</td>
<td>Psychology of Exceptioned Children</td>
<td>(I) 3 hours</td>
<td>A systematic review of the research literature related to the biological, social, and cognitive development of children from conception to adolescence.</td>
</tr>
<tr>
<td>461</td>
<td>Engineering Psychology</td>
<td>(II) 3 hours</td>
<td>A study and application of the theory, techniques, and procedures involved in preparing individuals for their jobs through training programs.</td>
</tr>
<tr>
<td>463</td>
<td>Techniques of Programmed Instruction</td>
<td>(I,S) 3 hours</td>
<td>An introduction to methods and technology in construction and use of teaching machine programs, with special emphasis on computer assisted instruction.</td>
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</table>
490 Problems in Psychology (L,I,I,S) 1-3 hours
A faculty supervised research project, involving empirical or library work
and oral or written reports. 
PREREQ: 15 hours of psychology

491 Research Problems in Physiological Psychology (L,I,I,S) 3-6 hours
An individualized introduction to the techniques and methodology used in the physiological psychology laboratory.
PREREQ: Psych 453 and permission of instructor

501 Topical Seminar in Psychology (L,I,I,S) 1-3 hours
A discussion of specific advanced topics which will be announced when-
ever the course is offered.
PREREQ: Permission of instructor

595 Practicum in Psychology (L,I,I,S) 1-6 hours
Faculty-supervised experience in a real life educational agency, clinic,
or institutional setting designed to bridge the gap between the classroom
and a job by emphasizing use of previously acquired knowledge in deal-
ing with practical problems.
PREREQ: Permission of instructor

601-602 Thesis (L,I,I,S) Each 1-3 hours
Independent research project written under supervision of a faculty
committee.

SOCIOLOGY

401 Social Control of Behavior (L,I,I,S) 1-3 hours
The social processes by which the person's behavior is adapted to the
group. Emphasis on roles, social control, analysis, and measurement
of behavior in the context of social structure and interaction.
PREREQ: 9 hours sociology, including 101, 301 or 403

402 Collective and Exchange Behavior (L,I,I,S) 1-3 hours
The study of the processes of growth and change within unstable and
transitory groups including crowds and associated phenomena, diffuse
collectivities, advertising and propaganda aggregates in mass society,
publics, and social movements.
PREREQ: 9 hours sociology, including 101, 301 or 403

410 The Community (L,I,I,S) 1-3 hours
A basic course in community sociology. Sociological theory and the tech-
niques of empirical research are applied to published studies of com-
munities in the United States and elsewhere. The comparative social
science method is elaborated as it pertains to data derived from com-
unity investigation.
PREREQ: 9 hours sociology, including 101 or 403

412 Urban Geography (L,I,I,S) 1-6 hours
A geography of the city from the viewpoint of history, site, and situa-
tion, external relations, internal relations, and the comparative study of
cities.
PREREQ: 3 hours geography, including 101 or 103

413 Sociology of Deviant Behavior (L,I,I,S) 1-3 hours
A theoretical analysis of the relation between deviant behavior and sub-
cultures to community standards of conventional behavior as expressed
in law and norms.
PREREQ: 9 hours sociology, including 101 or 403

414 Urban Sociology (L,I,I,S) 1-3 hours
A course in the sociology of cities and the social characteristics of urban
life, stressing its historical, demographic, ecological, social, psychological,
and institutional aspects. The unique problems of the modern metropo-
lian complex both as to effective functioning and as an environment for
human beings are discussed.
PREREQ: 9 hours sociology, including 101 or 403

415 American Family Problems (L,I,I,S) 1-3 hours
(1) A theoretical treatment of the family as a social institution outlining
the essential functions it provides for its members and the society. (2) An
analysis of failures of function and attendant problems in a variety of
American families: parent-child relations, problems of sexual adjustment,
role conflicts, mid-career families, separation, divorce, others.
PREREQ: 9 hours sociology, including 101 or 403 or permission of the
instructor.

421 Cultural Anthropology (L,I,I,S) 1-3 hours
Family, art, war, maintenance, prestige, religion approached as parts of
an integrated whole, a way of life or patterned human society. Illustra-
tions from a number of simple societies, anthropological, ethnographic,
and historical approaches.
PREREQ: Soc 105 or permission of the instructor.
472 North American Archaeology 3 hours
American Indian culture history in North America, with emphasis on the peopling of the New World, origin and development of New World agriculture, development of Middle American Civilizations and their impact on core areas of village-farming in the continental United States; introduction to archaeological investigation techniques, dating methods and taxonomic concepts.
PREREQ: Soc 105 or 403

451 Methods of Social Research (LII) 3 hours
Relationships of theory, method, and the data in sociological investigations. Major techniques and instruments employed in social research, how developed, and where appropriately used. Formulation of research problems, use of statistics in analysis. Practical problems and limitations.
PREREQ: 12 hours sociology including 101 or 403 and 102

462 Complex Social Organizations (II) 3 hours
Analysis of social structure in complex organizations. Processes involved in the integration and disintegration of complex social organizations. An introduction to organizational analysis in medical, military, governmental, educational, and business settings. Implications of large scale bureaucratization for social functioning.
PREREQ: 5 hours sociology including 561

471 Development of Sociological Theory (I) 3 hours
An intellectual history of sociology as an academic discipline; surveying outstanding contributions to its body of theory. Stress is placed on the development of sociology as a science with illustrative materials drawn from the established works of recent decades although backgrounds to those are traced to their ancient and medieval antecedents where applicable.
PREREQ: 12 hours sociology and senior standing

472 Contemporary Sociological Theory (II) 3 hours
A thorough and detailed presentation of a major theoretical integration of contemporary sociological research and theory with particular emphases on presentations of alternative positions indicating similarities and differences. Principles of theory construction and a review of major sociological concepts and writers.
PREREQ: 12 hours sociology and senior standing

473 Social Change (II) 3 hours
A discussion of the theories and the basic models of social change illustrated by use of examples from contemporary and historical data. Emphasis is placed upon understanding causes and effects of social processes current in American society and the response of the individual to these.
PREREQ: Soc 101 or 403 and 6 hours sociology or history

491 Internship in Local Government (same as Political Science 491) (III) 3-6 hrs.
Internship in Local Government offices: Participation in the policymaking and administrative processes of Local Government; discussions and reports.
PREREQ: Pol. Sci. 110, 111, 301, 317 or their equivalents, and senior standing.
(Also listed under Economics, Geography, and History)

499 Independent Study 1 to 3 hours
Guided reading in special topics under the supervision of a faculty member.
PREREQ: Senior standing and permission of the instructor

501 Problems in Sociology, Seminar 3 hours
This seminar, required of departmental graduate students, gives a basic orientation to the profession, its leading figures, publications, organizations, and university departments. It emphasizes critical discussion of issues in the discipline and selected substantive problems of sociology.

505 Seminar in Social Psychology 3-6 hours
Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in social psychology selected by the instructor.

510 Seminar in Applications of Sociology 3-6 hours
Sociological theory and method applied to practical problems of relevance to social issues.

511 Social Problems of the Disadvantaged 3 hours
A survey of the social problems existing in disadvantaged communities. The effects upon individuals of such settings. The subculture of poverty.

550 Topical Research Seminar 3-6 hours
A complete research project carried out under the supervision of an instructor particularly qualified in the area of concern. Students participate in the background work, question formulation, selection of or construction of research instruments, data gathering by methods such as interviewing and participant observation, and analysis.

555 Seminar in the Sociology of Religion 3-6 hours
A seminar dealing with religion as a social and cultural phenomenon. The study theme will vary from time to time in keeping with the special interests of the instructor.

560 Seminar in Social Organization 3-6 hours
Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in social organization selected by the instructor.

570 Seminar in Sociological Theory 3-6 hours
Assigned reading, discussion, specialized individual work leading to the writing and presentation of a paper applicable to a general topic in sociological theory selected by the instructor.

571 Population Seminar (same as Geography 571) (S) 3 hours
The Significance of differences from place to place in the number, kind, and qualities of human inhabitants and changes through time.
PREREQ: Permission

586 Independent Study in Topics on Urbanism 1-3 hours
Graduate student research on an individual basis under faculty supervision specific to topics pertaining to urbanism.
PREREQ: Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences. (Also listed under Economics, Geography, and Political Science)

591 Urban Seminar in Metropolitan Planning and Development (see Geography 591) 3 hours

593 Interdisciplinary Seminar on the Urban Community 3-6 hours
An interdisciplinary study on the metropolitan community in which various departmental and college offerings concerned with urban problems are put in broad interrelated focus.
PREREQ: Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences. (Also listed under Economics, Geography, and Political Science)

595 Urban Economics (see Economics 595) 3-6 hours

598 Practicum in Applied Sociology Each 3 hours
A practical work experience under supervision which provides opportunity for applying principles from the student's academic area of concentration.

601-602 Thesis Each 3 hours

SPEECH AND DRAMA

401 Advanced Projects in Speech 1-3 hours
(Also listed under Economics, Geography, and History)

402 Special projects in speech supplementing regular courses; individual research projects; combined study and practice.
PREREQ: 8 hours of speech in the general area to be studied and permission of department head.

410 Rhetorical Criticism 3 hours
Significant movements in the development of rhetorical criticism from antiquity to the present.
PREREQ: 4 hours of speech

411 Greek and Roman Rhetoric and Oratory 3 hours
The origin and development of rhetorical theory and practice in antiquity.
PREREQ: 9 hours of speech

413 Studies in American Public Address 3 hours
Study of representative American speakers from the Eighteenth Century to the present.
PREREQ: 9 hours of speech
420 History of the Theatre .......................... (1) 3 hours
A survey of the great periods of theatrical history, and the playwrights, producers and actors who were responsible for this growth and development.
PREREQ: Speech 220

421 Acting: Historical Periods and Styles .......................... (II) Each 3 hours
The fundamental theories and practices of major styles of acting from Ancient Greece to the present, including interpretation of outstanding dramatic literature.
PREREQ: Speech 331-332 or permission of instructor

423 Scene Design ................................................. (1) 3 hours
Principles of composition, perspective and color for the stage: the designer's approach to the play, production of ground plans, elevations and sketches.
PREREQ: Speech 220, 233, and Junior Standing.

424 Stage and TV Lighting ........................................... (II) 3 hours
Characteristics and control of light and color and their application to the theatre and television; elementary electricity; lens systems; reflectors; lamps; control systems.
PREREQ: Speech 220, 224, and Junior Standing.

425 Play Direction ................................................. (II) 3 hours
A practicum in play selection, analysis, casting, directing and performing.
PREREQ: Speech 220, 233, 231, 322 or permission of instructor

435 Broadcasting and the Public .................................. (II) 3 hours
A study of the effects of broadcasting and its relationships to other mass media: emphasis on the sociological, economic, and legislative aspects of the medium.
PREREQ: Speech 230 or permission of the instructor

459 Introduction to General Semantics .......................... (II) 3 hours
An introduction to the system of general semantics, considering both limitations and practical applications to perception, thinking, and communication.
PREREQ: 6 hours speech and 3 hours psychology or permission of instructor

461 History and Problems in Speech Education ................. (II) 3 hours
A study of the development of speech as an academic discipline; recent movements in speech and the contribution of quantitative methodology to speech research and education.
PREREQ: 6 hours speech

471 Advanced Oral Interpretation .................................. (II) 3 hours
Theories and forms of interpretation from antiquity to the present; preparation and presentation of a recital.
PREREQ: Speech 171

501 Introduction to Research in Speech .......................... (I) 3 hours
(2 credits if a 1 credit course in Introduction to Graduate Study is offered by the Dean of the Graduate College)
Basic components, functions, and spirit of research; research methods in the arts and sciences of oral communication; preparation of a thesis proposal.

511 Seminar: Modern Public Address ......................... (I) 3 hours
Studies in figures, movements and institutions prominent in modern public address.
PREREQ: Permission of the instructor

520 Dramatic Theory and Criticism .................................. (II) 3 hours
For advanced students of dramatic literature. The course will explore the important dramatic theories and criticism from Aristotle to contemporary drama.
PREREQ: Speech 220 or permission of instructor

501 Thesis .................................................. 1-3 hours each
Independent research project written under the supervision of an advisor.
INDEX—Continued

Mathematics, Master of Science, 30  
courses in, 60-62
Matriculation fee, 23
Mentally retarded, major, 34
Non-degree students, 16
Non-residents of Nebraska, 25
Officers of the University, 7
Organization of Graduate  
College, 13
Organizations, student, 14, 15
Physics, courses in, 62
Political Science minor  
courses in, 62-64
Procedures, Regulations, 15
Psychology, Master of Arts, 27
Master of Science Educational  
and Industrial Psychology, 30, 31  
courses in, 64-67
Quality of Work, 20
Reading, major, 31
Refunds, 24
Regents, Board of, 7
Registration, procedure, 17  
dates for, see calendar, 4, 5  
fees, 23, 24
Residence requirements, 21, 25
School Administration, 32  
courses in, 48-49
School Psychologists, 36
Scholarships, 14
Secondary Education, major, 31  
courses in, 44, 45
Sociology, Applied, 29
   courses in, 63-65
Spanish minor  
courses in, 56
Special Education, courses in, 49-52
Specialist in Education Degree,  
35-37
Speech Pathology, Master of  
Arts, 27
Master of Science, 34, 35  
courses in, 49
Speech & Drama, courses in, 69-70
Thesis,  
Submission date—see calendar  
4, 5
Binding fee, 23
Examination, 19
Time limit for Master's degree, 20
Transcripts of undergraduate &  
graduate credits for admission, 15
Transfer of credit, 21
Tuition, 23
University Regulations, 12
Withdrawal, 31
Workshops, in education, 22