1972

Graduate Academic Catalog (1972-1973)

University of Nebraska at Omaha

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OFFICIAL CALENDAR

SUMMER 1972

June 9-10
Regular Registration.

June 12-July 14
First Session.

June 12-Aug. 3
Evening Session.

June 17
Last day for submitting all admission credentials for admission to second summer session.

July 4
Holiday (University closed—day and evening.)

July 17-Aug. 18
Second Session.

July 24
Last day for filing applications for degrees to be conferred August 31, 1972.

Aug. 15
Signed and Approved Theses due in the Graduate Office.

FIRST SEMESTER 1972-73

July 15
Last day for submitting all admissions credentials for admission to the First Semester 1972-73.

Aug. 28-30-31
Final registration and changes.

Aug. 31
Official beginning of first semester at 0730. (Day and evening classes begin.)

Sept. 4
Labor Day. University closed. No day or evening classes.

Sept. 7
Last day up to 1800 for registering for a class, adding a class to a schedule, changing a class from “audit” to “credit,” or changing a “CR/NC” class registration to a grade registration.

Sept. 23
Band Day

Oct. 6
Homecoming. No day classes after 1230. (Evening classes meet as usual.)

Oct. 7
Homecoming Football Game.

Oct. 8
Founders’ Day.

Oct. 16
Six-week reports on first-semester Freshmen due in Academic Deans’ Offices by 1600.

Oct. 21
Parents’ Day.

Oct. 26
Last day a class may be dropped in order to receive a “W.” Last day a class may be changed from “credit” to “audit,” or changed from a grade registration to “CR/NC.”

Nov. 20
Last day for filing applications for degrees to be conferred December 18, 1972.

Nov. 22
(Wednesday) Thanksgiving recess begins at 2140.

Nov. 27
(Monday) Classes resume at 0730.

Nov. 29
Signed and Approved Theses due in the Graduate Office.

Dec. 14
“Dead” Day. No day classes nor student activities. (Evening classes meet as usual.)

SECOND SEMESTER 1972-73

Dec. 15
Last day for filing admissions credentials for admission to the Second Semester 1972-73.

Dec. 15-22
Final Examinations.

Dec. 16
Mid-Year Commencement. (Ceremony only)

Dec. 22
Official end of first semester.

Jan. 15-16-17
First Session.

Jan. 18
Evening Session.

Jan. 25
Last day for filing applications for degrees to be conferred August 31, 1972.

March 15
Last day a class may be dropped in order to receive a “W.” Last day for changing a class from “credit” to “audit,” or changing a “CR/NC” class registration to a graded one.

March 24
Spring vacation begins at noon.

April 2
Classes resume at 0730

April 13
Last day for filing applications for degrees to be conferred May 19, 1973.

May 2
Signed and approved theses due in the Graduate Office.

May 4
Student Holiday. No day classes. (Evening classes meet as usual.)

May 7
“Dead” Day. No day classes nor student activities. (Evening classes meet as usual.)

May 15
Last day for filing admissions credentials for admission to the First Summer Session 1973.

May 19
Final examinations.

May 26
Official end of second semester.

May 28
Sixty-fourth Commencement. Saturday.

Alumni Achievement Day.

Legal Holiday. University closed. (Memorial Day)

SUMMER SESSIONS 1973

June 8-9
Regular Registration.

June 11-July 13
First Session.

June 11-Aug. 2
Evening Session.

June 22
Last day for filing admissions credentials for admission to the Second Summer Session 1973.

July 4
Holiday. (University closed—day and evening.)

Second Session.

July 16-Aug. 17
Last day for filing applications for degrees to be conferred August 31, 1973 (No ceremony).

Aug. 15
Signed and approved theses due in the Graduate Office.
UNIVERSITY OF NEBRASKA AT OMAHA

The Board of Regents

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J. G. Elliott, Scottsbluff
Kermit Hansen, Omaha
Robert Koehoot, M.D., Grand Island
Kermit Wagner, Schuyler
Gene A. Budig, Ed.D., Acting Corporation Secretary

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University of Nebraska at Omaha
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Robert C. O'Reilly, Ed.D., Director of Grants Development and Institutional Research
Donald J. Pflasterer, M.Ed., Dean of Student Personnel
Virgil V. Sharpe, B.A., Registrar
Jay W. Cox, M.A., Director of Admissions
Harold D. Keefer, B.S., Director of Business and Finance

THE UNDERGRADUATE COLLEGES

Richard L. Lane, Ph.D., Interim Dean, The College of Arts and Sciences
Bartholomew Dennethy, Ph.D., Interim Dean, The College of Engineering and Technology
Paul C. Kennedy, Ed.D., Dean, The College of Education
George T. Harris, Ph.D., Interim Dean, The College of Business Administration
William T. Utley, M.A., Dean, The College of Continuing Studies
Elroy J. Steele, Ph.D., Interim Dean, School of Public Affairs and Community Service

THE GRADUATE COLLEGE

Elton S. Carter, Ph.D., Dean and Chairman of the Graduate Faculty

THE GRADUATE COLLEGE

Elton S. Carter, Ph.D., Dean and Chairman of the Graduate Faculty
EVAN BROWN
Ph.D., University of Washington, 1960; Assistant Professor

WILLIAM M. BROWN
Ph.D., University of Pittsburgh, 1957; Professor

BARBARA E. BUCHALTER
Ph.D., University of Arizona, 1968; Associate Professor

SIDNEY BUCHANAN
M.S., New Mexico Highlands University, 1963; Associate Professor

CHARLES M. BULL
Ph.D., University of Nebraska—Lincoln, 1962; The Frederick W. Kayser Professor of Marketing

DALE M. BUNSEN
Ed.D., University of Nebraska—Lincoln, 1968; Associate Professor

KARL H. D. BUSCH
Ph.D., Ohio State University, 1949; Professor

ROBERT R. BUTLER
Ph.D., University of Nebraska, 1965; Associate Professor

WILLIAM T. CLUTE
Ph.D., University of Minnesota, 1969; Assistant Professor

H. CARL CAMP
Ph.D., Washington University, 1965; Associate Professor

*JO ANN CARRIGAN
Ph.D., Louisiana State University, 1961; Professor

*ELTON S. CARTER
Ph.D., Northwestern University, 1950; Professor and Dean, Graduate College; Chairman, Graduate Faculty; Ex officio member, Graduate Council, University of Nebraska System

EDWIN L. CLARK
Ph.D., State University of Iowa, 1951; Professor; Director, University Theater

WILLIAM T. CLUTE
Ph.D., University of Minnesota, 1969; Assistant Professor

JAMES J. CONWAY
Ph.D., Texas Tech University, 1970; Professor

*HARRY J. CROCKETT, JR.
Ph.D., University of Texas, 1969; Associate Professor

*DONALD CUSHENBERY
Ph.D., University of Michigan, 1964; Foundations Professor; Director, Reading Clinic

*HARL A. DALSTROM
Ph.D., University of Nebraska—Lincoln, 1985; Associate Professor and Chairman of Department

*KENNETH A. DEFFENBACHER
Ph.D., University of Washington, 1968; Associate Professor

BARTHOLOMEO DENNEHY
Ph.D., Texas A. and M. University, 1976; Registered Professional Engineer; Associate Professor and Interim Dean, The College of Engineering and Technology; Director, Continuing Engineering Education

J. SCOTT DOWNING
Ph.D., Michigan State University, 1969; Assistant Professor
SCOTT HARRINGTON  Counseling and Guidance
Ph.D., University of Colorado, 1971; Assistant Professor

GEORGE T. HARRIS  Business Administration (Finance)
Ph.D., State University of Iowa, 1953; The Frederick W. Kayser Professor of Finance, Interim Dean, College of Business Administration

ROGER R. HARVEY  Special Education
( Teaching the Mentally Retarded)
Ph.D., East Texas State University, 1970; Assistant Professor

GEORGE HEATHER  Business Administration
Ph.D., State University of Iowa, 1946; Professor

*SHELTON HENDRICKS  Psychology
Ph.D., Tulane University, 1967; Associate Professor

ELAINE HESS  Sociology
Ph.D., University of Nebraska—Lincoln, 1971; Assistant Professor

WAYNE M. HIGLEY  Business Administration
(Accounting and Quantitative Methods)
Ph.D., University of Illinois, 1962, C.P.A.; Professor

*JACK A. HILL  Business Administration (Management)
Ph.D., University of Texas, 1961; Professor

*PETER W. HILL  Art
M.F.A., Cranbrook Academy of Art, 1958; Professor and Chairman of Department

ROGER HOBURG  Chemistry
Ph.D., University of Nebraska—Lincoln, 1957; Assistant Professor

WILLIAM C. HOCKETT  Business Administration (Accounting)
M.B.A., Denver, 1949; C.P.A.; Professor

MERLIN I. HOFSTETTER  Sociology
Ph.D., University of Oregon, 1976; Assistant Professor

LETA F. HOLLEY  Business Education
Ed.D., University of Colorado, 1969; Professor Emeritus and Acting Chairman of Department

IRENE HOOVER  Elementary Education
Ed.D., University of Arizona, 1971; Assistant Professor

JAMES Q. HOSSACK  Civil Engineering
M.S.C.E., University of Nebraska—Lincoln, 1969; Registered Professional Engineer; Professor

HELEN HOWELL  Elementary Education
Ed.D., University of Colorado, 1969; Associate Professor

FRANCIS M. HURST  Psychology
Ed.D., Indiana University, 1954; Professor

CHARLES O. INGHAM  Biology
Ph.D., University of Utah, 1963; Associate Professor

ROBERT INNES  Psychology
Ph.D., University of Nebraska—Lincoln, 1967; Assistant Professor of Medical Psychology, College of Medicine (Joint Appointment)

ORIGEN J. JAMES, JR.  Business Administration
(Accounting and Computers in Business)
D.B.A., Texas Tech University, 1958; Associate Professor

HARL R. JARMIN  Counseling and Guidance
Ph.D., University of Missouri, Kansas City, 1969; Assistant Professor

JAMES L. JOY  Economics
Ph.D., University of Denver, 1971; Assistant Professor

DOUGLAS K. KELLAMS  Educational Administration
Ed.D., University of Kansas, 1962; Associate Professor

ERNEST J. KEMNITZ  Chemistry
Ph.D., University of Nebraska—Lincoln, 1962; Assistant Professor

PETER KEPPEN  Educational Administration and Educational Foundations
Ed.D., University of Kansas, 1955; Professor and Dean, College of Education

*CLEM KESSLER III  Psychology
Ph.D., Western Reserve University, 1957; Associate Professor

BRUCE A. KIRCHHOFF  Business Administration (Management)
Ph.D., University of Utah, 1971; Assistant Professor

RANDALL T. KLEMM  Economics
Ph.D., Iowa State College, 1954; Graduate Lecturer

RICHARD G. KOHLAN  Psychology
Ph.D., University of Minnesota, 1968; Assistant Professor

BERNARD D. KOLASA  Political Science
Ph.D., University of Nebraska—Lincoln, 1969; Assistant Professor

YOUSSEF I. KOULY  Business Administration (Insurance)
Ph.D., University of Pennsylvania, 1971; Associate Professor

EDWARD LA CROSSE  (Teaching the Mentally Retarded)
Ed.D., Teachers College, Columbia University, 1961; Graduate Lecturer

W. C. LAMBERT  Political Science
Ph.D., Washington University, 1956; Professor

RICHARD L. LANE  English
Ph.D., University of Arkansas, 1960; Professor and Interim Dean, The College of Arts and Sciences

JOSEPH C. LAVOIE  Psychology
Ph.D., University of Wisconsin, 1970; Assistant Professor

WILLIAM B. LE MAR  Engineering
M.E., Yale University, 1947; Registered Professional Engineer; Associate Professor

WALTER W. LINSTROMBERG  Chemistry
Ph.D., University of Missouri, 1955; Professor

WILFRED LOGAN  Sociology
Ph.D., University of Michigan, 1958; Graduate Lecturer

JOHN W. LUCAS  Business Administration (Marketing)
M.B.A., Ohio State University, 1958; LL.D., University of Omaha, 1968; Professor

NORMAN J. LUNA  Foreign Languages
Ph.D., University of Colorado, 1938; Assistant Professor

STEVE L. LUNT  Biology
Ph.D., University of Utah, 1984; Associate Professor

THOMAS MAJESKI  Art
M.F.A., University of Iowa, 1963; Associate Professor

JOHN P. MALONEY  Mathematics
Ph.D., George Washington University, 1965; Associate Professor

DONALD D. MANSON  Speech
Ph.D., Pennsylvania State University, 1966; Associate Professor
D. N. MARQUARDT ... Chemistry
Ph.D., State University of Iowa, 1946; Professor and Chairman of Department

ROBERT P. MCCUNE ... Economics
Ph.D., Ball State University, 1971; Assistant Professor

KATHLEEN A. MCKENNY ... Special Education (Education of the Deaf)
M.S., University of Wisconsin, 1965; Assistant Professor

JOHN G. McMILLAN ... Physics
M.A., University of Nebraska—Lincoln, 1942; Professor and Chairman of Department

*ORVILLE D. MENARD ... Political Science
Ph.D., University of Nebraska—Lincoln, 1964; Associate Professor

*C. RAYMOND MILLIMET ... Psychology
Ph.D., Oklahoma State University, 1968; Assistant Professor

JOYCE MINTEER ... Business Administration (Communications)
Ph.D., Indiana University, 1967; Professor

ROBERT B. MOORE ... Speech (Theatre)
Ph.D., University of Denver, 1971; Assistant Professor

WOODROW L. MOST ... Foreign Language
Ph.D., Laval University, 1953; Professor and Chairman of Department

KIRK E. NAYLOR ... Educational Administration
Ed.D., University of Kansas, 1962; Professor

THOMAS NENNEMAN ... Elementary Education
Ed.D., University of Nebraska—Lincoln, 1970; Assistant Professor

GLEN A. NEWKIRK ... English
Ph.D., University of Denver, 1956; Professor

*JOHN M. NEWTON ... Psychology
Ph.D., Ohio State University, 1955; Associate Professor

JOHN R. NYE ... Sociology
Ph.D., Iowa State University, 1968; Associate Professor

B. GALE OLESON ... Counseling and Guidance
Ph.D., University of Wisconsin, 1963; Professor; Director, University Testing and Counseling Center

*ROBERT C. O'REILLY ... Educational Administration
Ed.D., University of Kansas, 1962; Professor; Director of Institutional Research and Grants Coordinator

RICHARD F. ORTMAN ... Business Administration (Accounting)
Ph.D., University of Wisconsin, 1971; Assistant Professor

RICHARD A. OVERFIELD ... History
Ph.D., University of Maryland, 1960; Associate Professor

RUSSELL W. PALMER ... Religion
Ph.D., University of Iowa, 1966; Associate Professor

*D. T. PEDRINI ... Psychology
Ph.D., University of Texas, 1958; Professor

JAMES B. PETERSON ... Music
Ph.D., State University of Iowa, 1932; Professor and Chairman of Department

*WILLIAM PETROWSKI ... History
Ph.D., University of Wisconsin, 1966; Associate Professor

DONALD J. PIPLASTER ... Counseling and Guidance
M.Ed., University of Nebraska, 1953; Associate Professor; Dean of Student Personnel

ROSS A. PILKINGTON ... Counseling and Guidance
Ed.D., University of Nebraska—Lincoln, 1971; Assistant Professor

*WILLIAM C. PRATT ... History
Ph.D., Emory University, 1969; Assistant Professor

———

LEONARD W. FRESTWICH ... Business Administration (Marketing)
Ph.D., Ohio State University, 1957; Professor; Director Retail Management Program

*PAUL V. PRIOR ... Biology
Ph.D., University of Iowa, 1950; Professor and Chairman of Department

GEORGE R. RACHFORD ... Educational Administration
Ed.D., Indiana University, 1955; Professor

EDITH RASMUSSEN ... Biology
Ph.D., Cornell University, 1941; Associate Professor

M. N. REDDY ... Civil Engineering
Ph.D., Oklahoma State University, 1968; Associate Professor

HAROLD J. RETALLICK ... Geography
Ph.D., Clark University, 1950; Professor

*HARRY W. REYNOLDS, JR. ... Political Science
Ph.D., University of Pennsylvania, 1954; Professor

*ROY M. ROBBINS ... History
Ph.D., University of Wisconsin, 1929; Professor Emeritus

WILBUR F. ROGERS ... Civil Engineering
Ph.D., Pennsylvania State University, 1979; Associate Professor

*WILLIS P. ROKES ... Business Administration (Business Law and Society)
J.D., University of Utah, 1931; Ph.D., Ohio State University, 1939; C.F.C.U.; Professor

MARK O. ROUSEAU ... Sociology
Ph.D., University of North Carolina, 1971; Assistant Professor

EDWARD J. SADLER ... Secondary Education
Ed.D., University of Nebraska—Lincoln, 1969; Associate Professor

HARRY L. SASLOW ... Psychology
Ph.D., University of Pittsburgh, 1959; Associate Professor of Child Health (Pediatrics), College of Medicine (Joint Appointment)

*GORDON SCHILZ ... Geography
Ph.D., Clark University, 1948; Professor and Chairman of Department

DAVID C. SCOTT ... Political Science
Ph.D., State University of Iowa, 1953; Professor and Chairman of Department

JAMES W. SELEE ... Educational Experimentation and Development
Ed.D., University of Colorado, 1964; Professor

ROGER S. SHARPE ... Biology
Ph.D., University of Nebraska—Lincoln, 1990; Assistant Professor

JOHN F. SHRRODER ... Geography
Ph.D., Washington University, 1979; Assistant Professor

ROBERT B. SIMPSON ... Sociology
Ph.D., Washington University, 1979; Assistant Professor

DAVID SIROTA ... Business Administration (Real Estate)
Ph.D., University of Arizona, 1971; Associate Professor

*KEITH P. SMITH ... Mathematics
Ph.D., Iowa State University, 1969; Associate Professor

PAUL J. STAGEMAN ... Chemistry
Ph.D., University of Nebraska—Lincoln, 1963; Professor

ELROY J. STEELE ... Economics
Ph.D., State University of Iowa, 1957; The Frederick W. Kayser Professor and Chairman of Department; Acting Director, Urban Affairs; Interim Dean, School of Public Affairs and Community Service

JACQUELINE D. ST. JOHN ... History
Ph.D., University of Oklahoma, 1969; Assistant Professor
### DEPARTMENTS OFFERING GRADUATE INSTRUCTION

Departments or areas which have been approved to offer courses for graduate credit and the degrees available in each department are as follows:

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<th>Master of Science</th>
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*Member, Graduate Faculty, University of Nebraska System*
**EXAMINATIONS FOR GRADUATE STUDENTS**

Graduate students are required to take either the Graduate Record Examination (GRE) or the Admission Test for Graduate Study in Business (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 Graduate College. Neither examination is used to exclude admission at the Masters level.

These examinations, which require no special preparation or review, give valuable evidence of a student's qualifications for graduate work and are 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.

A Graduate College applicant already holding a Master's degree in the field in which he wishes to pursue further study and not enrolling into a degree program is not required to take the Graduate Record Examination.

All testing at UN-O in the two categories below is under the supervision of Dr. Gale Oleson, Director, Academic Testing Bureau. Registration deadlines and testing dates are available from the Office of the Academic Testing Bureau, Administration Building 213.

**Graduate Record Examination**

(Both General Aptitude and Advanced Area Selection are Required)

<table>
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<th>Registration Deadlines</th>
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**Admission Test For Graduate Study In Business**

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.

**ACREDITED STANDING**

The University of Nebraska at Omaha is fully accredited by the North Central Association of College and Secondary Schools, the National Council for Accreditation of Teacher Education and the American Association of Collegiate Schools of Business. It has programs approved by the American Chemical Society, The Council on Social Work Education, and the International Reading Association. It is a member of the National Commission on Accrediting (not an accrediting agency), the American Association of Colleges for Teacher Education, the Association of Urban Universities, the Association of American Colleges, the National University Extension Association, the American Association of University Women, the Council of Graduate Schools in the United States, the Midwest Conference on Graduate Study and Research, the Association of University Evening Colleges, the Adult Education Association of the United States, Association of Governing Boards, and the American Council on Education. Its courses are accepted, for purposes of teacher certification, by the Nebraska State Department of Public Instruction.

Course credits from the University of Nebraska at Omaha 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.

In the Graduate College, requirements may be made retroactive only for those students who do not maintain a continuity of enrollment. "Continuity" means that the student is enrolled in both semesters of every academic year or in at least one session every summer until all requirements for the degree have been satisfied.
The Graduate Bulletin

GRADUATE COLLEGE
Elton S. Carter, Dean

The first Master's degrees were awarded in 1919 by a special vote of the Board of Trustees of the "old" University of Omaha. In 1943, after the University became the Municipal University of Omaha, a Graduate Committee was organized to supervise graduate education. In 1942, the Graduate Committee was replaced by the Committee on Graduate Studies. The degree Master of Science in Education was approved in 1948. In 1954, the Committee on Graduate Studies became the Graduate Council and the Chairman became the Director of the Graduate Division. In 1960, the Board of Regents authorized a year of graduate study in education beyond the Master's degree. The Master of Business Administration was authorized in 1965 and the Master of Public Administration was authorized in 1970.

Recognizing the growing importance of graduate education, the term "Graduate Division" was authorized in 1949. In October, 1962, the Board of Regents 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 provides the opportunity for more advanced education than the undergraduate work upon which all graduate programs are founded.

The Graduate College at the University of Omaha* was established in 1859 to provide an opportunity for advanced study and independent investigation in a limited number of fields of learning for qualified students: 1. To work toward these degrees: Master of Arts, Master of Science, Master of Business Administration, Master of Public Administration, Specialist in Education; 2. To earn graduate credit for the issuance or renewal of certificates for teachers, administrators and educational psychologists; 3. To provide for scholarly and professional advancement.

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.

Any member of the Graduate Faculty may make nominations for appointment to the Graduate Faculty. In addition, such nominations require the recommendation of a Department Chairman, the cognizant Dean and the concurrence of the Dean of the Graduate College. Typically, the Department Chairman will be the Chairman of the department in which the nominated person holds academic rank. In other cases (persons who do not hold departmental academic rank, inter-departmental pro-

University of Nebraska at Omaha

grams, etc.) the Chairman of the department in which the person will be involved in graduate instruction or advising shall recommend. (Standard nominating forms are available in the Graduate College Office.)

The Academic Standards and Curriculum Committee shall review these nominations and recommend for election by the voting members of the Graduate Faculty those persons who meet the qualifications for membership. Qualifications for membership are:

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 creative work.
3. He has one year of teaching experience at the college level (other than graduate assistantships or part-time instructing) or equivalent experience, plus research publication or creative production with evidence of peer acceptance, or
He has two years of teaching experience at the college or university level (other than graduate assistantships or part-time instruction) or equivalent experience.
4. He holds a full-time appointment in the University System with faculty rank of assistant professor or higher, or is qualified as a graduate lecturer.

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.

Approval to teach for persons who are not members of the UN-O Graduate Faculty may be secured by recommendation from the department head for approval on behalf of the faculty by the Graduate Dean.

ACADEMIC STANDARDS AND CURRICULUM COMMITTEE

The Academic Standards and Curriculum Committee of the Graduate Faculty is an eleven-member group. This group considers graduate policies, procedures and academic offerings and makes its recommendations to the Graduate Faculty. The current members of the Academic Standards and Curriculum Committee are: Dr. Frederick W. Adrian; Dr. James C. Aitken; Dr. Dale M. Bunsen; Dr. Kenneth A. Deffenbacher; Dr. Lawrence E. Ehlers; Dr. Raymond A. Guenther; Dr. Elaine Hess; Dr. Kirk Nayler; Dr. Leonard W. Prestwich; Dean Elton S. Carter, Chairman; and Mr. Jack Lee Hohensee, graduate students' representative.

SENATE RESEARCH COMMITTEE

The objectives of this committee are: (1) to foster fruitful research as an adjunct to teaching excellence, (2) to recommend allocation of the available funds for research toward these ends, (3) and to encourage solicitation of monies for research. Requests for various research activities will be solicited, evaluated, and recommended for approval or disapproval in keeping with the objectives of the Committee's area of responsibility and concern.

Standing members of the Committee are the University Grants Coordinator and the Dean of the Graduate College. The current elected members are Dr. Willis Rokes, Chairman; Dr. Shelton Hendricks; Dr. William C. Pratt; Dr. M. N. Reddy; and Mr. Barry Timanus, graduate students' representative.
GRADUATE PROGRAM COMMITTEES

Each department (or area) offering a graduate degree has a Graduate Program Committee of at least three members. This committee and its chairman are chosen annually by the graduate faculty members of the department. In its department the Graduate Program Committee has the responsibility for the planning of the graduate program, the general supervising of the candidates for graduate degrees and the examining of students by means of the qualifying examination and the final comprehensive examination when these examinations are not given by a student's thesis or field project supervisory committee.

Each new graduate student, in conference with the chairman of the Graduate Program Committee of his major department, shall select his major adviser. For the student who has a supervisory or advisory committee, the composition of the committee shall be recommended to the Graduate Dean by the chairman of the student's Graduate Program Committee after consultation with the student and his major adviser. At the master's level, committees of three members are usually sufficient. The chairman should be a member of the Graduate Faculty and, whenever feasible, the student's adviser and thesis director. The representative from a department other than the major must be a member of the Graduate Faculty. In addition to at least three voting members, faculty members in the university system may be appointed to serve ex officio (without vote) as consultants (or to gain experiences as special representatives of the Graduate Dean). The Graduate Program Committees at UN-L represent both the Graduate Faculty and the student's field of study. The word program denotes all kinds of academic requirements which must be satisfied by the graduate student in order to qualify for a particular degree (or in the case of a non-degree student—the requirements of graduate-level certification or recognized stages of professional development). Every degree candidate's plan of study must be designed to fulfill the requirements of a program which has been approved by the Graduate Faculty. Both major and minor requirements, together with quality-of-work standards, are included under programs; also included are transfer credits and those electives which are not major or minor courses.

Faculty members involved in graduate education, and in research (or any kind of further faculty development involving graduate students), should have ample opportunity to participate in decisions affecting these responsibilities. Provisions for appropriate participation by graduate students is equally important.

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 upward from $2520. 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 adviser recommends the abnormally high work load to the Graduate Dean for his approval.

University of Nebraska at Omaha

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 Chairman of the Department in which the assistantship is desired.

TUITION WAIVERS FOR GRADUATE STUDENTS

Several tuition waivers are available for qualified students who have been admitted to the Graduate College. Eligibility is based on academic qualifications and financial need.

Graduate assistantships and tuition waivers cannot be awarded simultaneously to anyone.

The selection of applicants to be awarded graduate tuition waivers is decided by the UN-O Graduate Fellowship Committee: Dr. Robert Benecke, Dr. Barbara Brilhart; Dr. Norman Hamm; Assistant Dean (College of Education) Tom Norwood; Dr. John Shrader; and Dean Elton Carter, Chairman.

Information and application forms are available in the Graduate Office. Allow at least two months for processing applications.

SCHOLARSHIPS

Phi Delta Gamma, a national sorority for women, offers an annual scholarship of $200 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.

ORGANIZATIONS

Phi Delta Gamma is a national sorority for graduate women in all fields. Membership is by invitation.

Phi Delta Kappa is a national fraternity for men who are graduate students in Education. Membership is by invitation.

Beta Gamma Sigma is a national honorary society for students in Business Administration. Membership is by invitation.

Psi Chi is a national honorary association for graduate students in Psychology. Membership is by invitation.

Omicron Delta Epsilon is a national honorary association for graduate students in Economics. Membership is by invitation.

PROCEDURES AND REGULATIONS

Admission and Transcripts

The student admitted to graduate study is advised to familiarize himself with the academic regulations of the University and the Graduate College, and the student is expected to assume full responsibility for knowing the particular requirements of his own academic program. The student is responsible for complying with all regulations of the University, the Graduate College, and the departments of instruction, and for meeting all requirements for his degree. The student should consult with his adviser whenever he has any question concerning the requirements for his degree.
New students should correspond with, or go directly to, the Director of Admissions in order to apply for admission. Each new student will be required to file with the Director of Admissions:

(1) An application for graduate study at the University of Nebraska at Omaha.

(2) Two (2) official transcripts of all undergraduate (and graduate, if any) college work previously taken. Transcripts and all other materials submitted in support of an application become the permanent property of the University and will not be returned. (Graduates of the University of Nebraska at Omaha need not submit transcripts.)

(3) Pay a transcript evaluation fee of $5 in the Cashier's Office and have the receipt validated by the Director of Admissions.

NOTE: For consideration for the Fall, Spring, or First Summer term, only by those students desiring to work for a degree, but also by students of Admissions in order to apply for admission. Each new student will be required to file with the Director of Admissions:

(a) A transcript evaluation fee of $5 at the Cashier's Office and have the receipt validated by the Director of Admissions, when applying by mail, enclose a check payable to the University for the transcript evaluation fee.

(b) Pay a transcript evaluation fee of $5 at the Cashier's Office and have the receipt validated by the Director of Admissions.

NOTE: For consideration for the Fall, Spring, First Summer term, or the Second Summer term, above credentials must be on file by July 15, December 15, May 15, or June 15 respectively.

(4) Scores of the Graduate Record Examination or Admission Test for Graduate Study in Business should be filed in the Graduate Office.

Applications for admission, together with transcripts, must be filed not only by those students desiring to work for a degree, but also by students desiring graduate credit for a renewal of a teacher's certificate, for English language, the baccalaureate degree must have been received from an institution accredited by the proper accrediting agencies.

Admission to the Graduate College does not admit the student to candidacy for any graduate degree. (See "Admission to Candidacy for Graduate Degrees.")

AUDIT

A student wishing to audit a course must secure the permission of his advisor, register for the course to audit, and must secure the approval of the instructor of the course whose prerequisite it will be to determine privileges including examinations connected with the course. An audit study may not change credit registration after the first week of a course. (A credit student may change to audit registration during the first eight weeks of a semester, or during the first half of a class if it runs longer or shorter than a semester.)

CLASSIFICATION OF ADMISSION

Unconditional admission 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 or the Admission Test for Graduate Study in Business must be supplied to the Graduate Dean.

Provisional

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.

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 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.

Applicants to the Graduate College who have been graduated from unaccredited colleges may be admitted provisionally. Unconditional status may be attained upon completion of twelve semester hours of graduate courses with at least a B average.

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.

Acceptance of Senior Credits: Seniors in this University who have obtained in advance the approval of the Dean of the Graduate College may receive up to twelve hours credit for graduate courses taken in addition to the courses necessary to complete their undergraduate work, provided that such credits are earned within the twelve month period prior to receipt of the baccalaureate. With permission of the department or departments offering the courses, students may be permitted to enroll in 800-level courses during either semester of their senior year. However, courses taken during the senior year may be carried for graduate credit only if approved in advance by the Dean of the Graduate College.
Seniors in this University needing not more than nine hours of undergraduate credit to complete the bachelor's degree and wishing to register for graduate credit may be granted provisional admission to the Graduate College subject to receiving their baccalaureates within the twelve-month period immediately following such registration. They must file application for admission to the Graduate College and, if admitted, will register on Graduate College Registration forms. Such registration may count as residence in the Graduate College.

Course work taken prior to receipt of the baccalaureate may not always be accepted for transfer to other institutions as graduate work.

Admission to Teacher Education Programs

Students who plan to work for the Master's degree with a major in one of the fields of education must hold a valid teaching certificate or be eligible for such a certificate at the undergraduate level before entering the program. For certification requirements, communicate with the Dean's Office in the College of Education.

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). 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. graduate students taking courses for teacher certification
2. graduate students taking courses for professional growth
3. graduate students taking courses for cultural advancement
4. 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.")

ADMINISTRATIVE CERTIFICATE

Students who are preparing to meet the requirements for an Administrative or Supervisory Certificate must submit to the Office of the Dean of the College at the time of application, the names of two persons who can vouch for their personal and professional qualifications as a prospective school administrator.

ADMISSION TO 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.

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 plan of study should be filed in the Graduate Office and copies should be provided for the major adviser, the minor adviser, and the student.

Plans of study should be planned with acceptable alternatives included. Once approved, any modification of a plan 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.

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. (See Calendar for date.)

THESIS

Except in one English program, 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 first-hand 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. 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 requested by the department, are required. The original must be a typewritten copy on permanent bond paper of 20-pound weight. Copies should be on paper of at least 16-pound weight. Except for the original, the required number of additional copies may be reproduced by the xerography method or any other comparable process, providing the process produces permanent copy and is approved by the chairman of the thesis committee. Either pica or elite type may be used in typing. It is the responsibility of the student to be familiar with the "Instructions for the Preparation of Theses," a copy of which may be obtained in the Graduate College Office. The thesis must be approved by the student's thesis committee and submitted to the Graduate Office in final form with the signatures of the committee members on the approval sheets of all copies no later than twelve working days prior to the conferral of the degree.

Thesis Manual: 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 three 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 the student's expense. The fees are payable in the Cashier's Office.

**ORAL EXAMINATION ON THESIS**

The composition of a committee to approve the thesis proposal and to conduct the oral examination over the thesis and thesis field is recommended by the department and submitted to the Dean of the Graduate College for his approval and appointment. 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 may be devoted to the thesis and one-half to the graduate courses taken by the candidate.

Final comprehensive oral examinations are arranged by the department, and it is the student's responsibility to deposit the proper number of copies of the corrected and approved thesis in the Graduate Office together with the signed approval sheets at least twelve working days prior to the commencement of the examination.

Oral examinations may not 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 candidates not writing a thesis, the examination is a written one. For those candidates writing a thesis, 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 comprehensive 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 may 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 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 to the student's committee 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 in the major department for the comprehensive examination at the time of their final enrollment. (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

*No comprehensive examination is required on one alternate program in English.

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**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 COGNIZANT GRADUATE PROGRAM COMMITTEE before the student is allowed to count further work toward the degree. A grade of "C" in each of three courses will result in AUTOMATIC dismissal from the degree program unless the student has a "B" average or higher.

A grade of "D" or below in either the major or minor area is considered a failing grade and the student receiving such a grade will AUTOMATICALLY be dropped from the degree program. The student thus dropped must secure the approval of the COGNIZANT GRADUATE PROGRAM COMMITTEE or his adviser as the spokesman for the committee in order to take course work as a non-degree student and he may NOT be a candidate for the degree unless reinstated by the Academic Standards and Curriculum Committee when recommended by the Graduate Dean.

A student, upon consent of his adviser, may repeat a course in which he has previously received the grade of C, D, or F. Both grades will appear on the transcript but only the second grade will be counted in determining the grade point average.

**INC** The grade "I" is to be used by an instructor at the end of a term to designate incomplete work in a course. It should be used when a student, due to extenuating circumstances such as illness, military service, hardship, or death in the immediate family, is unable to complete the requirements of the course in the term in which he is registered for credit. Incompletes should only be given if the student has already substantially completed the major requirements of the course.

Each instructor must judge each situation. The instructor must also indicate by a departmental record, with a copy to the student, how the Incomplete is to be removed, and if he is at the University at the time of the removal, supervise the makeup work and report the permanent grade.

In the event that the instructor is not available at the time of the student's application for removal of an Incomplete, the department chairman shall supervise the removal of the Incomplete and turn in the permanent grade for the student.

A student to receive credit in a course for which he has received a grade "I" must re-register and take the course again unless he removes the Incomplete within two years from the date he received the "I." In the meantime the "I" is not computed in the student's GPA.

**CLASS ATTENDANCE**

Students are expected to attend all meetings of classes for which they are registered. 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 graduate student is twelve hours of course work. The minimum load required for classification as full-time graduate student is nine hours of course work. Graduate assistants are considered full-time students if they carry a minimum of 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 800V, 800U and 900 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 Administration degrees), is required for granting of the Master's degree, except as provision is made for the transfer of credit. No credit will be allowed for correspondence work.

TRANSFER OF CREDIT

Students who have completed graduate courses at other approved graduate schools (including extension schools) may petition to transfer as much as six hours of credit, provided the courses considered are pertinent to the student's graduate program. Courses for which transfer is requested 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 approval of the Graduate Dean, enroll in the eight 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 or at the Medical Center for transfer to UNO should secure the Interuniversity Graduate Student Exchange form from the Graduate College office. Transfer of graduate credit from all schools in the University system will be accepted to the extent approved by the student's committee with at least one-half of the minimum degree requirements to be taken at the UNL or UNO campus, whichever is to grant the degree. Only grades of "B" or better may be transferred from other schools in the University System to apply toward degree requirements here.

WITHDRAWAL FROM A COURSE OR FROM THE UNIVERSITY

A student who wishes to drop all classes and withdraw from the University 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 withdraws, his record will be marked "W" indicating that he withdrew.

A student may not drop a course with any grade other than "F" after the eighth week of the semester.

REQUIRED PROCEDURE FOR GRADUATE STUDENTS

1. File two official transcripts of undergraduate credits (including 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 Graduate 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 213, 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. Apply for the degree in the Office of the Registrar during the semester or session in which the degree is to be conferred. (See Calendar for exact date.)
6. Inform your adviser at least three weeks in advance of the comprehensive examination that you wish to sit for the examination. This applies to all degree candidates whose work requires written comprehensives.
7. Notify the Graduate Office at least three weeks in advance of the oral examination (Master of Arts) or of the written comprehensive examination (Master of Science) that you are planning to sit for the examination so that your graduate record may be compiled.
8. Make arrangements with your department for the oral examination (Master of Arts) to be given with ample time to have the oral examination approved and approved theses deposited in the Graduate Office at least two working days prior to the examination. Theses examinations may not be scheduled during the second summer session.
9. Order the cap and gown from the Book Store.

TUITION, FEES, DEPOSITS AND REFUNDS

The University reserves the right to change the amount of tuition or fees at any time, and to assess charges for breakage, lost property, fines, penalties, parking, books, supplies, food, or special services not listed in this schedule.
Tuition and related fees are payable in full at the time of registration. Students in need of financial aid must consult the Student Financial Aid Officer in room Administration 240 at least two weeks prior to the start of classes.

Registration is not complete until cleared by the Cashier. Failure to pay tuition or fees when due, or to meet payments on loans when due, may result in cancellation of registration.

**Application Fee:**
The application fee is payable at the time the application for admission form is filed. This fee is non-refundable, and does not apply towards tuition, or any other fee. Residency is determined by the status of the applicant at the time the application form is filed.
- Resident of Nebraska: $10.00
- Non-resident: $25.00

**Tuition, Undergraduate and Graduate:**
Tuition is assessed on the basis of credit hours taken. Charges are made for each credit hour from one credit hour through twelve credit hours, and for each credit hour in excess of sixteen credit hours. This means that no charge for tuition is assessed for the first, second, third, or fourth full credit hours. It also means that no refund will be made for dropped courses within this "no additional charge" span.
- Resident of Nebraska: $18.00
- Non-resident: $25.00

**Audit Fee:**
The Audit (not for credit) fee is set at one-half of the Resident tuition rate, $6.00 per hour. Registration for audit requires the permission of the instructor, and is subject to available class space after credit registration ends.

**Special Instructional Fees:**
- Applied Music: Voice and all instruments except percussion and harp. (Fee may be waived by the Head of the Music Department for any full-time students who are music majors or minors)
  - One semester credit hour: $5.00
  - Two semester credit hours: $10.00
  - Three semester credit hours: $15.00
  - Non-credit, 8 lessons: $45.00
  - Non-credit, 16 lessons: $65.00

- TV Classroom (3 credit hours and materials): $75.00

**Conference, non-credit, and off-campus contract course fees are determined for each offering based upon the cost factors and peculiar circumstances involved:**

**General Fees:**
- Full-time students (12 credit hours or more) per semester: $30.00
- Part-time students (less than 12 hours) per semester: $15.00
- Summer Session (per session): $12.00

General fees are assessed to every student each semester, except that summer sessions 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.

A portion of the general fee has been earmarked by the Board of Regents for the support of the Student Activities. The Chancellor and the Division of Business and Finance of the University, with the advice and recommendations of the Student Activities Committee, will establish budget authorization and administer expenditure practices in accordance with Regents' policies which apply to all funds collected by the University of Nebraska.
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 Admin. 150) within 30 days after date of issue.

A student must file notice of withdrawal from class, accompanied by written approval of the advisor 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.

Refunds for withdrawals are figured from the official beginning of the semester as stated in the University's academic calendar, not from the beginning of students' individual class schedules.

<table>
<thead>
<tr>
<th>Regular Semester</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Withdrawal before first official day of the semester</td>
<td>100%</td>
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<tr>
<td>Withdrawal before 2 weeks elapsed</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal before 3 weeks elapsed</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal before 4 weeks elapsed</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after 5 weeks elapsed</td>
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<table>
<thead>
<tr>
<th>Summer Sessions (3 Week Session)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal before first official day of each session</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal during first three days</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal during remainder of first week</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal during 2nd week</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after 2nd week</td>
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<table>
<thead>
<tr>
<th>Credit Courses (8 Week Session)</th>
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</thead>
<tbody>
<tr>
<td>Withdrawal before first official day of each session</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal before 1st week elapsed</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal before 2nd week elapsed</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal before 3rd week elapsed</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after 3rd week elapsed</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Credit and Special Courses (10 Weeks or More)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal before classes started</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal before 1st week elapsed</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal before 2nd week elapsed</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal before 3rd week elapsed</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after 3rd week elapsed</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>(Less than 10 Weeks)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal before classes start</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal before 1st week elapsed</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal before 2nd week elapsed</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal after 2nd week elapsed</td>
<td>0</td>
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</tbody>
</table>

RESIDENT STUDENTS

A student's right to classification as a resident for the purposes of registration in a state educational institution must be determined under the provisions of Nebraska Revised Statutes of 1943, Sec. 35-502 (R.S. Supp., 1965). See General Catalog. Any student who has been classified as a nonresident who believes he can qualify as a resident should contact the Registrar's Office.

DEGREE PROGRAMS

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.

Master of Arts or Master of Science Degree

A departmental or interdepartmental program for either the Master of Arts or Master of Science degree as approved by the Graduate Faculty will normally be arranged to conform to one of the following patterns:

Option I: A 30 semester-hour program (maximum of 6-hour thesis credit included) as determined by the cognizant Graduate Program Committee.

Option II: A 36 semester-hour non-thesis program as determined by the cognizant Graduate Program Committee.

Master of Business Administration Degree

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

Master of Public Administration Degree

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

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 offer additional study for professional educators.

COURSE DESCRIPTIONS

Key to Symbols:

I—I-offered in the first semester of each year
II—offered in the second semester of each year
S—offered in the summer session

Courses numbered 800V, 800U and 900 are open to graduate students only. Some courses numbered 800M are open to both seniors and graduates; the same is true of a selected few 800L numbered courses. It is expected as a rule that graduate students enrolled in those courses numbered 800L-800M 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 (ART)

Graduate Faculty Members:

Professors John V. Blackwell, Peter W. Hill (Chairman); Associate Professors Sidney Buchanan, Thomas Majeski.

Graduate art courses are offered to fulfill requirements for a minor field or as a cognate or selected course on a plan of study.
The Graduate Bulletin

Master of Science

A student may become a candidate for this degree only upon the recommendation of his faculty committee.

To complete the degree the candidate must present 36 hours of graduate work in biology to include at least 2 semesters of Biology 801V, 1 semester of Biology 802V, and other appropriate courses to be determined by the student and his faculty committee.

The candidate must pass a final written comprehensive examination.

Course Descriptions

834L Ecology
PREREQ: Biology 145, 175
The study of the behavior of whole organisms and groups of organisms in relation to their total living and non-living environment.

844L Morphology of Lower Plants
PREREQ: Biology 145
A lecture and laboratory course which covers the ecology, morphology, and evolutionary trends of algae, fungi, and bryophytes.

855L Flora of the Great Plains
PREREQ: Biology 145
The classification, identification, and recognition of common vascular plants, including weeds, ornamentals, and indigenous plants, found in the Great Plains.

856L Morphology of Higher Plants
PREREQ: Biology 145
A lecture and laboratory course covering the living and fossil vascular plants with emphasis on morphology, ecology, and evolutionary trends.

863L Plant Anatomy
PREREQ: Biology 145
A study of cells, tissues, and organs of vascular plants with particular emphasis on internal structure of seed plants.

873L Fauna of the Great Plains
PREREQ: Biology 145, 175
A survey of the common animal groups found in the Great Plains, including their evolution, ecology, distribution and specific adaptations to the environment of the temperate North American grasslands.

874L Histology
PREREQ: Biology 175, and a course in vertebrate anatomy, or permission of instructor
Analysis of the microscopic anatomy of tissues and organs, their adaptations and functional significance.

884L Embryology
PREREQ: Biology 175 and a course in vertebrate anatomy
An intensive study of the embryology and development of the vertebrate animal, particularly the human, from gastroncyliths through organogenesis as revealed by a study of selected vertebrate embryos and fetuses.

844M Cellular Biology
PREREQ: Biology 145 and 173, organic chemistry, or permission of the instructor
This course is a comprehensive study of the structure and function of plant and animal cells.

858M Limnology
PREREQ: Biology 145, 175, and organic chemistry
A study of the physical, chemical, and biological relationships that serve to establish and maintain plant and animal communities in a fresh water environment.

852M Organic Evolution
PREREQ: Biology 214, Lecture and discussion only
A study of organic evolution in terms of evidence which support the theory and the mechanisms involved in the process.

BIOLOGY (BIOL)

Graduate Faculty Members:
Professors Merle E. Brooks, Karl H. D. Busch, Paul V. Prior (Chairman);
Associate Professors Charles O. Ingham, Steele R. Lunt, Edith Rasmussen, David M. Sutherland;
Assistant Professor Roger S. Sharpe

To enter a degree program with a major in biology the student must present approximately 24 semester hours of credit in the biological sciences including general botany, general zoology, and genetics plus adequate preparation in the supporting sciences of inorganic and organic chemistry, general physics, and mathematics. Students with inadequate backgrounds may be admitted provisionally.

Master of Arts

It is anticipated that initially every student will become a candidate for this degree. Only under appropriate circumstances will a student be allowed to become a candidate for the Master of Science degree.

To complete the Master of Arts degree with a major in biology the candidate must present 30 hours of graduate work in biology to include credit in thesis (a maximum of 6 hours), a minimum of 2 hours in seminar, and at least 22 hours of appropriate courses to be determined by the student and his faculty committee. The present research interests of the faculty members include animal behavior, animal physiology, botany, ecology, embryology, entomology, fresh water biology, histology, ichthyology, invertebrate zoology, microbiology, ornithology, plant anatomy, plant biosystematics, plant morphology, plant physiology, and vertebrate systematics.

The candidate must pass a final oral examination.

Course Descriptions

831M Advanced Sculpture
PREREQ: Art 361 and permission
Advanced work in area of student's choice, with facilities for oxy-acetylene, arc welding, and general metal working.

841M Advanced Painting
PREREQ: Art 361 and permission
Practical instruction in oil painting and related media. The course gives the student the time and environment to work and develop individually. A strong emphasis is placed on a complete knowledge of contemporary art.

851M Advanced Printmaking
PREREQ: Art 361 and permission
Intaglio process stressing technical proficiency in the various media.

834L Morphology of Lower Plants
PREREQ: Biology 175
A lecture and laboratory course which covers the ecology, morphology, and evolutionary trends of algae, fungi, and bryophytes.

855L Flora of the Great Plains
PREREQ: Biology 145
The classification, identification, and recognition of common vascular plants, including weeds, ornamentals, and indigenous plants, found in the Great Plains.

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A lecture and laboratory course covering the living and fossil vascular plants with emphasis on morphology, ecology, and evolutionary trends.

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A study of cells, tissues, and organs of vascular plants with particular emphasis on internal structure of seed plants.

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Analysis of the microscopic anatomy of tissues and organs, their adaptations and functional significance.

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An intensive study of the embryology and development of the vertebrate animal, particularly the human, from gastroncyliths through organogenesis as revealed by a study of selected vertebrate embryos and fetuses.

844M Cellular Biology
PREREQ: Biology 145 and 173, organic chemistry, or permission of the instructor
This course is a comprehensive study of the structure and function of plant and animal cells.

858M Limnology
PREREQ: Biology 145, 175, and organic chemistry
A study of the physical, chemical, and biological relationships that serve to establish and maintain plant and animal communities in a fresh water environment.

852M Organic Evolution
PREREQ: Biology 214, Lecture and discussion only
A study of organic evolution in terms of evidence which support the theory and the mechanisms involved in the process.
### 827M Animal Behavior (same as Psychology 327M)
**PREREQ:** Biology 175 and Psychology 101 or permission. Lecture only. Behavior of diverse animals for understanding the relationships between nervous integration and the behavior manifested by the organism, as well as the evolution and adaptive significance of behavior as a functional unit.

**3 hours**

### 823M Bryology
**PREREQ:** Biology 344 or permission of the instructor.
A course in the identification, classification, ecology, and distribution of bryophytes.

**3 hours**

### 834M Ichthyology
**PREREQ:** Biology 175
A course in the study of fish, including their morphology, anatomy, physiology, ecology, distribution, classification and identification with emphasis on North American freshwater fishes.

**4 hours**

### 844M Plant Physiology
**PREREQ:** Biology 175, organic chemistry, or permission of the instructor.
A study of plant processes and functions with emphasis on photosynthesis, growth and development, metabolism, and mineral nutrition.

**4 hours**

### 854M Taxonomy of Vascular Plants
**PREREQ:** Biology 175
Classification of vascular plants with particular emphasis on the evolution and adaptations of selected families with discussion of experimental techniques used by the taxonomist.

**4 hours**

### 864M General Bacteriology
**PREREQ:** Biology 175, organic chemistry, or permission of the instructor.
The nature of microorganisms, their life processes, their biological and economical significance.

**4 hours**

### 877M Experimental Endocrinology
**PREREQ:** Course in endocrinology or concurrent registration in Biology 873M, or permission of instructor; graduate standing.
Laboratory studies of the functions of the endocrine system emphasizing experimental techniques and laboratory experience.

**2 hours**

### 873M Endocrinology
**PREREQ:** Organic Chemistry, Vertebrate Anatomy, and Physiology or permission of the instructor.
A survey of endocrine physiology stressing the regulatory and integrative roles of hormones, the control of hormone secretion, and mechanisms of hormone action.

**3 hours**

### 874M Animal Physiology
**PREREQ:** Biology 175, vertebrate anatomy, organic chemistry, and physics, or permission of instructor.
A comprehensive study of animal function emphasizing mechanisms of regulation and control.

**4 hours**

### 874M Vertebrate Zoology
**PREREQ:** Biology 175
A study of the general biology of the subphyllum Vertebrata including the morphology, anatomy, physiology, and ecology of vertebrate representatives.

**4 hours**

### 888M Invertebrate Zoology
**PREREQ:** Biology 175
A field-oriented course emphasizing the taxonomy and natural history of the invertebrate animals.

**4 hours**

### 894M Entomology
**PREREQ:** Biology 175
The study of insects, their classification, morphology, physiology, behavior, life histories, ecology, and evolution.

**4 hours**

### 898M Ornithology
**PREREQ:** Biology 175
An introduction to the general biology of birds, including their anatomy, physiology, behavior, ecology, classification, and identification with emphasis on North American groups.

**4 hours**

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**University of Nebraska at Omaha**

### 801V Seminar in Biology
A study of current research in any of the divisions of biology. Graduate students in biology must complete this course twice for credit.

**1 hour**

### 802V Problems in Biology
**PREREQ:** Sufficient work in biology and the ancillary sciences necessary to pursue adequately the area of investigation involved. Research investigation in various areas of biology.

**2 hours**

### 819V Environmental Biology
**PREREQ:** Graduate standing in Biology and/or permission of instructor.
A study of the recent advances in environmental biology, concentrating on the areas of population dynamics, community interation and ecosystems theory. Readings, discussion, laboratory, and a written report.

**3 hours**

### 816V Experimental Genetics
**PREREQ:** Biology 214
Lecture and laboratory involving experimentation with organisms such as Drosophila spp., Neurospora spp., E. coli and T4 phage.

**3 hours**

### 818V Biosystematics
**PREREQ:** Graduate standing in Biology and permission of the instructor.
A study of principles and techniques in animal and plant systematics. The course will focus on the subject of the species problem and upon the experimental investigation of the problem. Readings, discussions, laboratory, and a written report.

**3 hours**

### 823V Biromorphology
**PREREQ:** Graduate standing in Biology. Permission of the instructor.
A study of the morphology and anatomy of organisms in relation to support, circulation, response, excretion and reproduction. Lecture, laboratory, selected readings, and a written report.

**3 hours**

### 825V Advanced Topics in General Physiology
**PREREQ:** A course in endocrinology or concurrent registration in Biology 873M, or permission of instructor; graduate standing.
Studies in general physiology including such topics as physiological, endocrinology, and neuroendocrine physiology. Lecture, laboratory, and written report.

**3 hours**

### 872V General Physiology
**PREREQ:** General physics, algebra, animal physiology, or permission of instructor. Graduate.
A detailed study of selected dynamic environmental factors and mechanisms of physiological adaptation by organisms of various taxa.

**1-6 hours**

**899 Thesis**
Independent research project written under the supervision of a faculty committee.

### Business Administration (BA)

Graduate Faculty Members:
- Associate Professors Origen J. James, Youssef I. Kouatly, David Sirota;
- Assistant Professors Bruce A. Kirchhoff, Richard F. Ortmann, R. Wayne Wilson

The Master of Business Administration Degree

The M.B.A. 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 the students an understanding of the principles of management, marketing and finance and a proficiency in the use of accounting, computers, and statistics as tools for analysis of business activities. 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 core: A student should have completed basic courses in the following areas before enrolling in certain courses required for the graduate degree. Special graduate courses are available to students to remove deficiencies in the foundation core. These courses include BA 811L, BA 812L, BA 813L, BA 814L, BA 815L and BA 816L; the foundation courses cannot be used to meet the 36 semester hours required for the M.B.A. degree.

<table>
<thead>
<tr>
<th>Economics</th>
<th>Corporation Finance</th>
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<tbody>
<tr>
<td>Accounting (2 courses)</td>
<td>Statistics</td>
</tr>
<tr>
<td>Marketing</td>
<td>Legal Environment of Business</td>
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</tbody>
</table>

The Admission Test for Graduate Study in Business is required. The test preferably should 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 must be in the following required courses:

- **Econ. 821V Micro-Economic Theory** 3 hours
- **Econ. 823V Macroeconomic Theory** 3 hours
- **BA 801V Marketing Policies** 3 hours
- **BA 830V The Environment of Management** 3 hours
- **BA 850V Financial Management** 3 hours
- **BA 820V Accounting for Management Control** 3 hours
- **BA 821V Contemporary Accounting** 3 hours
- **BA 800V Quantitative Analysis** 3 hours
- **BA 811V Business and Society** 3 hours
- **BA 831V Human Behavior in Organization** 3 hours

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:

- **BA 802V Research Methods in Business** 3 hours
- **BA 803V Business Information Systems** 3 hours
- **BA 805V Business Conditions Analysis** 3 hours
- **BA 825V Seminar in Accounting** 3 hours
- **BA 833V Seminar in Management** 3 hours
- **BA 841V Promotional Policies** 3 hours
- **BA 845V Seminar in Marketing** 3 hours
- **BA 851V Security Analysis** 3 hours
- **BA 852V Seminar in Investment Management** 3 hours
- **BA 855V Seminar in Finance** 3 hours
- **BA 850V Independent Research** 3 hours

A thesis is not required for the degree. A written comprehensive final examination will be required when the student has completed his course work or is in his final semester.

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**Course Descriptions**

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<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>811L</td>
<td>Survey of Accounting</td>
<td>3 hours</td>
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<tr>
<td>812L</td>
<td>The Legal Environment of Business</td>
<td>3 hours</td>
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<tr>
<td>813L</td>
<td>Business Finance</td>
<td>3 hours</td>
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<tr>
<td>814L</td>
<td>Survey of Management</td>
<td>3 hours</td>
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<tr>
<td>815L</td>
<td>Statistics for Business Decisions</td>
<td>3 hours</td>
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<tr>
<td>816L</td>
<td>Quantitative Analysis</td>
<td>3 hours</td>
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<tr>
<td>821V</td>
<td>Business and Society</td>
<td>3 hours</td>
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<tr>
<td>823V</td>
<td>Business Conditions Analysis</td>
<td>3 hours</td>
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<tr>
<td>825V</td>
<td>Accounting for Management Control</td>
<td>3 hours</td>
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<tr>
<td>821V</td>
<td>Contemporary Accounting</td>
<td>3 hours</td>
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<tr>
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<td>Seminar in Accounting</td>
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<tr>
<td>825V</td>
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<td>841V</td>
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<td>800V</td>
<td>Quantitative Analysis</td>
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<tr>
<td>811L</td>
<td>Research Methods in Business</td>
<td>3 hours</td>
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<td>821V</td>
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</tbody>
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THE GRADUATE BULLETIN

830V The Environment of Management
PREREQ: MGT 340 or BA 815L
A classical and behavioral study of the organizational environment in
which decision-making occurs to accomplish the economic and efficient
operation of organized endeavor.

831V Human Behavior in Organization
PREREQ: BA 340 or BA 814L
An interdisciplinary study concerned with the problems of combining
and utilizing human resources to satisfy the objectives of management
and workers.

835V Seminar in Management
PREREQ: BA 840V and BA 831V
A student participation course emphasizing current issues and problems
in the areas of management theory and operation.

839V Executive Development Program for Medical Clinic Managers
PREREQ: BA 840V
A seminar combined with workshop sessions covering problems associ-
ated with the management of medical clinics.

840V Marketing Policies
PREREQ: MKT 331 or BA 815L
A marketing management approach to the determination of policies
employed in solving problems in marketing.

841V Promotional Policies
PREREQ: MKT 331 or BA 815L
Analysis of the methods and policies needed to develop and administer
an effective promotional program.

845V Seminar in Marketing
PREREQ: BA 840V
Exploration, study and critical analysis of contemporary marketing prob-
lems, trends, methods and approaches for seminar discussion and written
report.

850V Financial Management
PREREQ: FIN 325 or BA 813L
Examines the problems of managing the financial operations of an enter-
prise with emphasis on analysis and resolution of long and short-term
problems pertaining to policy decisions.

851V Security Analysis
PREREQ: FIN 325 or BA 813L
A study in the techniques of analysis of marketable securities. Statistical
and financial ratio methods of analysis are examined as well as broader
bases for appraisal of values of securities.

852V Seminar in Investment Management
PREREQ: FIN 325 or BA 813L
The theory of investment management and its application in formu-
lation of policies for different types of investors.

855V Seminar in Finance
PREREQ: BA 880V
Selected topics from areas of business finance.

860V Independent Research
Individual research in the field of accounting, finance, management, mar-
keting, quantitative analysis or the environment of business. Maximum
of nine hours in three different fields.

CHEMISTRY (CHEM)

Graduate Faculty Members:
Professors C. Robert Keppel, Walter W. Linstromberg, D. N. Marquardt
(Chairman), Paul J. Stageman;
Assistant Professors Roger Hoburg, Ernest J. Kemnitz, James K. Wood.

Graduate chemistry courses are offered to fulfill requirements for a
minor field or as cognate or selected courses on a plan of study.

655L Physical Chemistry
PREREQ: Chemistry 220, 220L, 240, 240L; Physics 212; Math 196
A presentation of selected topics from the areas of quantum mechanics,
classical mechanics, statistical mechanics and chemical kinetics.

656L Physical Chemistry Laboratory
PREREQ: Chemistry 220, 220L, 240, 240L; Physics 212; Math 196
Chemistry 220L should be taken concurrently with Chemistry 356.

657L Physical Chemistry
PREREQ: Chemistry 220, 220L, 240, 240L; Physics 212; Math 196
A presentation of selected topics from the areas of quantum mechanics,
classical mechanics, statistical mechanics and chemical kinetics.

658L Physical Chemistry Laboratory
PREREQ: Chemistry 220, 220L, 240, 240L; Physics 212; Math 196
Chemistry 220L should be taken concurrently with Chemistry 356.

640L Instrumental Analysis
PREREQ: Chemistry 336 (may be taken concurrently)
Instrumental methods of quantitative analysis. Normally taken con-
currently with Chemistry 441L Lab.

641L Instrumental Analysis Laboratory
PREREQ: Chemistry 440L (may be taken concurrently)
Lab to accompany Chemistry 440L. Normally taken concurrently
with Chemistry 440L.

622M Advanced Organic Chemistry
PREREQ: Chemistry 226, 226L
An advanced lecture course in modern theories and special topics in
organic chemistry.

624M Advanced Organic Chemistry
PREREQ: Chemistry 226, 228
An advanced lecture course in Organic Chemical Reactions.

650M Advanced Inorganic Chemistry
PREREQ: Chemistry 336 (may be taken concurrently)
A presentation of selected topics from the areas of quantum mechanics,
classical mechanics, statistical mechanics and chemical kinetics.

651M Advanced Inorganic Preparations
PREREQ: Chemistry 450 (may be taken concurrently)
Laboratory preparation of representative types of inorganic compounds
by various standard and special experimental techniques.

655M Biochemistry
PREREQ: Chemistry 226, 226L, 236, 236L
Chemistry and biochemistry of protein, carbohydrates and lipids. En-
zymes and energetics. Biological oxidation. Not open to students with
credits in 365 or 366. Chemistry 655M must be taken concurrently with
Chemistry 656M.

656M Biochemistry Laboratory
PREREQ: Chemistry 655M, 656M Lab
Biochemistry Laboratory for Chemistry 655M. Chemistry 656M and 656M
Lab must be taken concurrently.

656N Biochemistry
PREREQ: Chemistry 655M, 656M Lab
Biochemistry Laboratory for Chemistry 656M.

657M Biochemistry
PREREQ: Chemistry 655M, 656M Lab
Biochemistry Laboratory for Chemistry 657M.

659M Biochemistry Laboratory
PREREQ: Permission of Instructor
Independent student research.

699V Research in Chemistry
PREREQ: Permission of the instructor, graduate standing and an under-
graduate chemistry major (not less than 60 hours)
Provides the student with an opportunity for experience in the solving
of an actual research problem in the field of chemistry.
CIVIL ENGINEERING (C.E.)

Graduate Faculty Members:
Professors Richard E. Gibson, James Q. Hossack;
Associate Professors Joseph V. Benak, Bart Denney, Lawrence E. Ebers, William B. LaMar, M. N. Reddy, Wilbur F. Rogers

Master of Science

This is a professional graduate degree designed to provide a broad educational background for students who wish to gain greater proficiency and assume positions of greater responsibility in the field of Civil Engineering.

Courses in the program give students a better understanding of the basic principles and methodology used in the design of civil engineering projects. Emphasis is placed on Systems Analysis, Decision Making, and Problem Solving.

Foundation Courses: Applicants for admission to the M.S. degree program with a major in Civil Engineering must have completed the following foundation courses with a satisfactory grade:
- Fluid Mechanics
- Soil Mechanics
- Structural Analysis

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

Degree Requirements: The degree requires a minimum of 36 semester hours for completion. A minimum of one-half of the required hours must be taken at the 800V level. Nine semester hours may be in a related minor field, such as business administration, mathematics, physics, chemistry, and biology.

A student may elect to submit a thesis for a maximum of six semester hours which is applicable toward the degree requirements. 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.

Course Descriptions

Civil Engineering

532M Open Channel Flow
PREREQ: Graduate standing and permission of instructor
Open channel flow; energy and momentum principles of flow; critical, uniform, and unsteady flow; flow resistance; uniform and irregular channels; channel controls and transitions.

533M Hydrology
PREREQ: GE 331
The hydrologic cycle, precipitation, infiltration and soil moisture, run-off, rainfall-runoff relationships, factors affect the utilization and conservation of water resources.

534M Ground Water Hydrology I
PREREQ: GE 331
The occurrence, distribution, and movement of ground water; formulation and solution of differential equations pertaining to boundary conditions of steady and unsteady state.

542M Construction Management
PREREQ: Permission
Estimating and bidding, scheduling (CPM, PERT), contracts and insurance cost control systems, equipment utilization, codes and zoning.

544M Structural Analysis III
PREREQ: CE 344
Analytic methods in the design of industrial buildings, tall buildings and space frames.

550M Soil Mechanics II
PREREQ: CE 440 or equivalent
Complex problems in soil mechanics; the interrelationship of theory, sampling and testing; performance studies.

565M Construction Cost and Controls
PREREQ: Permission
Construction estimating, accounting, cost control; construction scheduling, computer applications.

577M Form Design and Steel Erection
PREREQ: CE 360
Design of concrete forms; design of temporary structures for steel erection.

579M Prestressed Concrete
PREREQ: CE 360
Design and prestressed members, continuous beams, slabs, and circular prestressing. Load factors. ACI code.

579M Matrix Methods of Structural Analysis
PREREQ: CE 344
Computer applications for beams, frames, trusses, grids, and space frames using flexibility and stiffness methods.

581M Plastic Analysis
PREREQ: CE 344

588M Urban Systems I
PREREQ: Graduate standing and permission of the instructor
Concepts of the urban complex as a system which involves interplay between engineering systems and physical works on one hand, and sociological and economic factors on the other; influence of related disciplines on comprehensive plans for urban systems; environmental inputs to urban planning; engineering role in preparation and implementation of comprehensive urban plans.

590V Structural Design for Dynamic Loads
PREREQ: Graduate standing and permission
Behavior of structural materials and systems under dynamic loads. Analysis and design for dynamic loads. Computational techniques.

591V Special Engineering Problems
PREREQ: Graduate standing and permission
The theory 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 formal course work. The problems will be agreed upon by the faculty member and the student involved. The problem will be at a level to warrant graduate credit.

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

593V Foundation Engineering
PREREQ: Graduate standing and permission of instructor
Evaluation of subsoil conditions as they affect the behavior, proportions, and selection of foundation elements; character of natural soil deposits; bearing capacity and settlement analysis; seepage problems; stability of slopes and earth-retaining structures.

594V Bridge Design
PREREQ: CE 470, permission
The design and analysis of slab, T-beam, box girder, prestressed, welded girders, composite, orthotropic and suspension bridges.
Advanced Structures

A 61V Advanced Structural Engineering
3 hours
PREREQ: Graduate standing and permission
Contemporary developments in the analysis and design of space-spanning and space-enveloping structures, including appropriate mathematical and mechanical methods of analysis.

A 616V Advanced Hydraulics
3-12 hours
PREREQ: Graduate standing and permission
Advanced studies in hydraulics including hydrodynamics, similarity, urban hydrology, and boundary layer theory.

A 617V Advanced Sanitary Engineering
3-6 hours
PREREQ: Six hours of undergraduate-level courses in Sanitary Engineering
Advanced study of biological and chemical processes in sanitary engineering; activated sludge and trickling filter processes; anaerobic digestion, ion exchange and electrodialysis, wet and dry combustion; introduction to industrial waste treatment processes; and special problems in unit processes of waste treatment.

A 630V Sedimentation and Erosion
3 hours
PREREQ: Graduate standing and permission of instructor
A study of sediment movement in streams and channels. Transport of sediment on stream beds and by suspension. Evaluation of total sediment load and application to canal design.

A 631V River Mechanics
3 hours
A study in concepts of river flow and river control; concepts in channel form, bed forms, ripples and bars; scour and fill; meanders; stream power; and channel stabilization structures.

A 686V Simulation and Optimization of Control Systems
3 hours
PREREQ: Graduate standing and permission of instructor
Introduction to the application of advanced analytical and/or experimental techniques in its completion.

A 699 Graduate Research (Thesis)
3-6 hours

Industrial Engineering

A 890M Operation Research I
3 hours
PREREQ: IE 364 or Math 353
Probability models; programming decision theory; queuing theory; optimal cost solutions.

A 896M Operation Research II
3 hours
PREREQ: IE 490
Queuing theory for infinite populations; optimum-cost queuing solutions; inventory theory and control; Markov chains; computer simulation of stochastic chains; integer programming; non-linear programming.

A 895M Advanced Mechanics of Materials
3 hours
PREREQ: GE 246, Math 225
Stresses and strains at a point; theories of failure; pressure vessels and spinning disks; torsion, bending and shear; elastic energy methods.

A 894M Advanced Dynamics
3 hours
PREREQ: GE 246, Math 225
Euler's equations of motion, gyroscopic motion, theory of vibrations; Lagrange's equation and Hamilton's principle; motion of a variable mass; central force problems.

A 895M Advanced Fluid Mechanics
3 hours
PREREQ: GE 331, Math 225
Ideal and real fluid flow; Eulerian and Lagrangian equations of motion; potential theory; conformal transformations; turbulent flow; boundary layer theory.

A 584V Experimental Stress Analysis
3 hours
PREREQ: GE 430 or permission
Investigation of the basic theories and techniques associated with the analysis of stress using mechanical strain gages, electric strain gages, laser, photoelasticity and membrane analogy.

University of Nebraska at Omaha

A 810V Applied Elasticity
3 hours
PREREQ: GE 423, GE 433, Math 225
Stresses, strains, Hook's law and displacements, formulation of problems in elasticity, various methods of solution of two and three dimensional problems, thermal stresses, comparison with approximate solutions.

A 812V Theory of Plates and Shells
3-6 hours
PREREQ: GE 445, Math 225
Plates: Governing equations for the bending and stretching of thin plates with small deformations; solution of rectangular and circular plates and plates of various shapes with different boundary conditions by means of classical, energy and numerical methods; large deflection theory of plates. Shells: Membrane Theory of barrel shells, domes, translation shells of double curvature; bending theory of domes, cylindrical shells; general theory of thin shells; analysis of thin folded plates.

A 813V Theory of Elastic Stability
3 hours
PREREQ: GE 493, Math 335
Beam columns, elastic buckling of bars and frames, inelastic buckling of bars torsional buckling, laterally buckling of beams, buckling of rings, curved bars and arches.

A 814V Similitude
3 hours
PREREQ: Permission
The principles and illustrations of dimensional methods, similarity and model testing, distorted and dissimilar models. Applications to structures, fluid flow, heat transmission, electromagnetic theory, acoustics and chemical engineering, differential equations and similarity.

A 815V Engineering Vibrations
3 hours
PREREQ: Math 225, Advanced Math for Engineers
Systems with One Degree of Freedom; Systems with Non-Linear and Variable Spring Characteristics; Systems with Several Degrees of Freedom; Vibrations of Elastic Bodies.

Other Engineering Courses

Two graduate industrial technology courses are offered to fulfill requirements as cognate or selected courses on a plan of study for industrial education teachers.

A 821M Contemporary Trends in Industrial Education for the World of Construction
3 hours
PREREQ: Graduate standing
Introduction to a new program development in industrial education, with major emphasis placed upon the World of Construction curriculum. Emphasis on the development and implementation of basic construction operations and management practices utilized in industry and curricular adaptation of learning units for the junior high industrial laboratory.

A 822M Contemporary Trends in Industrial Education for the World of Manufacturing
3 hours
PREREQ: Graduate standing
Introduction to a new program development in industrial education, with major emphasis placed upon the World of Manufacturing curriculum. Emphasis on the development and implementation of basic manufacturing operations and management practices utilized in industry and curricular adaptation of learning units for the junior high industrial laboratory.

ECONOMICS (ECON)

Graduate Faculty Members:
The Frederick W. Kayser Professor Elroy J. Steele (Chairman);
Associate Professors Justin D. Stollen, Keith K. Turner;
Assistant Professors James L. Joy, Robert McCune;
Graduate Lecturer Randall T. Klemme
Master of Arts

An applicant for admission to the program for the Master of Arts degree with a major 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 15 hours of the required 30 hours, including thesis, must be courses numbered at the 800V-level or above. Students must also satisfactorily complete Economics 820V, 822V, 829V, and 845V.

As part of the required 30 hours, graduate course work in related fields may be taken, up to a total of not more than 9 semester hours.

Master of Science

An applicant for admission to the program for the Master of Science degree with a major 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 18 hours of the required 36 hours must be approved at the 800V-level or above. In lieu of a thesis, Economics 898V and 899V are included in the 36 hours total required. Students must also satisfactorily complete Economics 820V, 820V, 829V and 829V.

It is expected that the candidate for the Master of Science degree with a major in economics will concentrate required research on matters of concern in the Omaha metropolitan region. This is also a degree where teachers K-12 grades may concentrate on research concerning economic education in the schools.

As part of the required 36 hours, graduate course work in related fields may be taken, up to a total of not more than 12 semester hours.

Course Descriptions

811M Government and Labor

PREREQ: Econ 315

Provides a background of knowledge and understanding of the development of public policy, the regulation of labor by government and the relationship of the various levels of government to labor.

812M Urban Geography (Same as Geography 812M)

3 hours

813M Collective Bargaining

PREREQ: Econ 315

A study of the issues, structures and procedures involved in collective bargaining, and the settlement of disputes, as centered around the labor-management contract.

815M Advanced Firm and Industry Theory

PREREQ: Econ 320

The effects of changes in conditions of supply and demand under alternative market situations affecting the firm and industry are examined. General equilibrium and welfare economics are introduced.

823M Advanced Macro-Theory

PREREQ: Econ 322

A study of the level of income, production, employment, and growth. Classical and Keynesian systems are contrasted with recent theoretical paths being explored.

825M History of Economic Thought

PREREQ: Econ 301, 205

From Mercantilism to the modern period. Focus is on the interactions of intellectual milieu, thought and economic doctrine.
820V Seminar in Micro Theory
PREREQ: Econ 320
This seminar develops modern micro-economic theory with emphasis on utility functions and demand, production functions and cost, price, and non-price policy of the firm, market and multi-market equilibrium. Emphasizes theoretical methods and techniques as well as specific content.

821V Micro-economic Theory
PREREQ: Graduate standing in the College of Business Administration Microeconomics for graduate students of Business. Economic analysis of the business firm and its environment with emphasis on market structure, production possibilities, and cost factors. Recent developments in the theory of the firm and operations research will be investigated.

822V Seminar in Macro Theory
PREREQ: Econ 320
A brief review of the standard national income accounting and the more recent developments of the flow-of-funds analysis. A study of the evolution and establishment of the Keynesian economics, its relationship to the classical macro-theory and the many refinements of the Keynesian model. To learn some extensions of the Keynesian theory, especially in connection with inflation, investment, and economic growth. A development of understanding of recent work in fiscal and monetary theory.

823V Macro-economic Theory
PREREQ: Graduate standing in the College of Business Administration
A study of modern income theory and policy. The development of modern aggregate theory is reviewed. Recent fiscal and monetary policies regarding employment, inflation, investment, and economic growth are examined. Problems of applying policy in a dynamic economic environment are emphasized.

824V Research Methods
PREREQ: Permission of Instructor
The application of specific mathematical and statistical procedures to business and economic research.

830V Econometrics
PREREQ: Permission of Instructor
The study of the underlying assumptions, techniques, and applications of single and multiple regression analysis in economics.

845V Seminar in Money and Banking
PREREQ: Six hours in undergraduate monetary courses or permission of the instructor
Original research and writing of papers on basic problems in the area of money and banking. Required of all Economics majors.

855V Seminar in International Economics
PREREQ: Econ 365 or 465 or permission of instructor
Original research and critique of current issues in international economic theory, policy and institutions.

880V Independent Study in Topics on Urbanism
PREREQ: Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences
Graduate student research on an individual basis under faculty supervision in topics pertaining to urbanism. (Also listed under Geography, Political Science, and Sociology.)

881V Urban Seminar in Metropolitan Planning and Development
(See Geography 881V)

883V Interdisciplinary Seminar on the Urban Community
PREREQ: Undergraduate major in one of the social sciences plus 6 hours of graduate work in one of the social sciences
An interdisciplinary course on the metropolitan community in which various departmental and college offerings concerned with urban problems are put in broad interrelated focus. (Also listed under Geography, Political Science, and Sociology.)

885V Seminar in Urban Economics
PREREQ: At least 6 hours of upper division course work in economics or permission of the instructor
An examination of the theoretical basis for the analysis of urban economic problems with emphasis upon the policy alternatives applicable toward their possible solution.

887V Seminar in Regional Economics
PREREQ: At least 6 hours of upper division course work in economics or permission of the instructor
An examination of the current developments and issues involving regional economic development and planning. These courses provide the theoretical basis for understanding and analyzing economic problems of a regional nature. In addition, policy alternatives, decision making, and measurement techniques are examined.

890V Urban-Regional Research
PREREQ: Permission of graduate adviser
For Master of Science Degree candidates in Economics only, in lieu of thesis. Consists of a study in Urban Economic problems, employing research techniques. Students do independent research consulting with adviser, and submitting completed reports to a departmental committee.

899 Thesis
PREREQ: Permission of graduate adviser
An independent research project, written under the supervision of a graduate adviser in the department of Economics. Approval of the topic and the completed project by the student's departmental committee is required.

940 Seminar in American Economic History to 1865 (See History)
PREREQ: At least 6 hours of upper division course work in economics or permission of the instructor
For Master of Science Degree candidates in Economics only, in lieu of thesis. Consists of a study in American Economic problems, employing research techniques. Students do independent research consulting with adviser, and submitting completed reports to a departmental committee.

941 Seminar in American Economic History Since 1865 (See History)
PREREQ: At least 6 hours of upper division course work in economics or permission of the instructor
For Master of Science Degree candidates in Economics only, in lieu of thesis. Consists of a study in American Economic problems, employing research techniques. Students do independent research consulting with adviser, and submitting completed reports to a departmental committee.

EDUCATIONAL FOUNDATIONS (FED)

Graduate Faculty Members:
G. Wayne Glidden (Chairman);
Professor Joseph G. Dunn;
Associate Professors Eugene Freund, Richard Flynn;
Assistant Professor Blaine Ward

Graduate courses in educational foundations are offered to fulfill requirements of departments offering graduate degrees in education or as cognate or selected courses on a plan of study.

Course Descriptions

913M Mental Health
PREREQ: At least 6 hours of upper division course work in economics or permission of instructor
A general survey of principles of mental health; a study of social and emotional adjustments.

924M Organization and Administration of Recreation
PREREQ: At least 9 hours of upper division courses in recreation or permission
Designed to provide a background of information on community recreation with special attention to organization, promotion, and development of recreational programs.

931M Kinesiology
PREREQ: At least 6 hours of upper division course work in economics or permission of instructor
A study of the gross musculo-skeletal system and its function in human movement. Application of basic mechanical principles to human motion.

931M Principles of Adult Education
PREREQ: At least 6 hours of upper division course work in economics or permission of instructor
An introduction to the study of adult education as a major development in contemporary America. The course surveys the major forms and problems of adult education and the foremost agencies providing programs.
898M Adult Group Leadership
A study of adult groups in modern society and the characteristics of effective leadership in all types of groups.

899M Audio-Visual Materials in Education
The selection, care, organization, and utilization of materials and equipment of instruction.

900M Preparation of Instructional Material
A basic course in the production of inexpensive audio-visual materials for the classroom. Graphic, photographic and auditory materials are considered, including such instructional materials as slides, filmstrips, dramatizations and exhibits.

901M Administration of the Instructional Materials Center
A course designed for students who wish to prepare themselves for the administration of an educational media program within an elementary and/or secondary school.

902M Measurement and Evaluation in Physical Education
Analysis of tests, measurement apparatus and testing procedures used in physical education. Includes a study of basic statistical practices and experience in test administration in the schools.

903M Physiology of Exercise
The response of human systems to exercise and physical conditioning programs. Includes a study of the physiological basis of muscular strength, endurance, and cardiovascular stress; the effects of nutritive aids on physical performance; and physiological principles of conditioning and fitness programs.

904M Growth and Learning Problems of Disadvantaged Children
A course designed to help students develop a basic understanding of child growth and development and learning problems of disadvantaged children and youth.

905M Special Studies
A series of intensive courses especially for teachers in service—scheduled as regular seminars, or workshops, according to purpose.

906V Introduction to Research
To acquaint the beginning graduate student with the nature and significance of research; to enable the student to read, evaluate and apply research results and techniques; to give some understanding of the meaning and spirit of research: to give some experience in studying and preparing research reports.

907V General Education
An intensive survey of the historical and philosophical foundations of American education; special emphasis is placed on the economic, industrial, cultural, and social conditions that have shaped or are influencing American education.

908V Communication for Teachers of the Disadvantaged
An interdisciplinary course dealing with the nature of the disadvantaged pupil, communication skills for teachers, and group interaction for the instructional teams working with low-income pupils.

909V Comparative Education
An intensive study of the educational systems of selected nations found in Europe, Asia, Latin America, and Africa; particular emphasis is placed on a total study of the society selected and its resulting educational adaptations and future educational directions.

910V Seminar in Education
Systematic study of the problems and developments which have current significance to American or foreign education; individual student and group analysis emphasized.

911V Education and Society
An interdisciplinary study of the problems that modern society is confronted with and the role(s) that education has in helping society meet its challenges; particular emphasis on education policy and decision making processes.

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Graduate Faculty Members:
Professors Robert L. Ackerman, Hollie B. Bethel (Chairman);
Associate Professor Helen Howell
Assistant Professor Thomas Nenneman

Master of Arts
Programs for the Master of Arts degree with a major in elementary education will be determined by the major adviser upon request.
## Master of Science

Students pursuing a Master of Science degree with a major in elementary education shall be expected to take selected courses in areas outside the field of elementary education as indicated in the following program outline.

### I. Selected Cognate Courses
- **6-9 hours**

### II. Required Courses
- **827M** Introduction to Research
- **FED 801V** History and Philosophy of Education
- **FED 810V** Diagnosis and Corrective Instruction
- **FED 820V** Innovations and Trends in Elementary Education
- **FED 830V** Introduction to Curriculum Planning—Elementary
- **FED 840V** Seminar in Elementary Education
- **EDAD 840V** Administration and Supervision in Elementary Schools

### III. Selected Courses
- **6-9 hours**

To be determined by student and his advisor.

### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>827M</td>
<td>Literature for Children and Youth</td>
<td>(1, II, S) 3 hours</td>
</tr>
<tr>
<td>830V</td>
<td>Current Trends in Early Childhood Education</td>
<td>3 hours</td>
</tr>
<tr>
<td>831V</td>
<td>Special Studies</td>
<td>(1, II, S) 3 hours</td>
</tr>
<tr>
<td>832V</td>
<td>Research Projects</td>
<td>(I, II, S) 1-3 hours</td>
</tr>
<tr>
<td>833V</td>
<td>Diagnostic and Corrective Instruction</td>
<td>(I, S) 3 hours</td>
</tr>
<tr>
<td>834V</td>
<td>Improvement of Instruction in Elementary Science</td>
<td>3 hours</td>
</tr>
<tr>
<td>835V</td>
<td>Innovations and Trends in Elementary Education</td>
<td>3 hours</td>
</tr>
<tr>
<td>836V</td>
<td>Introduction to Curriculum Planning—Elementary</td>
<td>(I, S) 3 hours</td>
</tr>
<tr>
<td>837V</td>
<td>Seminar in Elementary Education</td>
<td>3 hours</td>
</tr>
<tr>
<td>838V</td>
<td>Seminar in Supervision of Student Teachers—Elementary</td>
<td>(I, III) 3 hours</td>
</tr>
</tbody>
</table>

**PREREQ:** FED 801V

### Thesis

Independent research project required of all students taking Master of Arts degree. See major adviser.

### SECONDARY EDUCATION (SED)

Graduate Faculty Members:
- Professors Paul B. Ackerson, Leta Holley (Emeritus), Raymond A. Ziebarth (Chairman);
- Associate Professors M. Jean Bressler, Barbara L. Brillhart, Dale M. Bunsen, Donald J. Grandgenett, Edward J. Sadler

### Master of Arts

Programs for the Master of Arts degree with a major in secondary education will be determined by the major adviser upon request.

### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>840V</td>
<td>Principles of Vocational Education</td>
<td>3 hours</td>
</tr>
<tr>
<td>841V</td>
<td>Coordination Techniques for Vocational Education</td>
<td>3 hours</td>
</tr>
<tr>
<td>842V</td>
<td>Special Studies</td>
<td>(I, II, S) 3 hours</td>
</tr>
<tr>
<td>843V</td>
<td>Research Project</td>
<td>(I, II, S) 1-3 hours</td>
</tr>
</tbody>
</table>
Seminar in Secondary Education
Intensive study of problems of secondary education. Critical analysis of current research and related literatures, group and individual work on problems of group interest and relevance to secondary education.

Emerging School Curriculum
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.

The Junior High School
This course is designed to acquaint the graduate student with the philosophy, objectives and functions of the junior high school program.

Analysis of Teacher Behavior
Emphasis is placed upon current observational systems for Analysis of Teacher Behavior in a classroom setting. Specific topics include in-depth instruction in Interaction Analysis, Micro-teaching, Non-verbal Behavior and Simulation. Student proficiency in these observational systems using video-tape equipment is stressed.

Improve ment of Instruction of Secondary School Speech
Improvement of Instruction of Secondary School Science
Improve ment of Instruction of Secondary School Social Studies
Improve ment of Instruction of Secondary School Mathematics

Foundation in Business Education
Designed to develop a deeper and broader understanding of business education; to identify and define business education and to examine its past, present, and future role in the total education pattern of our country in today's world.

Improvement of Instruction of Secondary School Science
Improvement of Instruction of Secondary School Foreign Language
Improvement of Instruction of Secondary School English
Improvement of Instruction of Secondary School English—Literature and Rhetoric

Improvement of Instruction of Secondary School Social Studies
Improvement of Instruction of Secondary School Mathematics

Science Education Seminar
A graduate seminar in K-12 science education emphasizing research, newly-developed science curricula, curriculum planning, science supervision and treatment of one or more localized science education issues.

Improvement of Instruction in Science, Harvard Project Physics
Improvement of Instruction in Science, Harvard Project Physics

Problems of Vocational Business Education
Designed for teachers of business education to develop a better understanding of the purposes, philosophy, current practices and trends in business education.

Vocational Curriculum Construction
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.

Thesis
Required of all students taking Master of Arts degree, see major adviser for information.
III. Counseling and Guidance Courses

-**COUN 820M, Principles of Guidance and Counseling**
-**COUN 825V, Introduction to Counseling Theories**
-**COUN 832V, Occupational and Educational Information**
-**COUN 833V, Counseling Practices**
-**COUN 834V, Counseling Practicum**

Selected additional courses in the department.

**Specialization in School Counseling—Elementary Level**

I. Foundation Course

- FED 801V, Introduction to Research

6 hours

II. Selected Cognate Courses

- PSYCH 851V, Educational Psychology

6-15 hours

These are most often selected from offerings of the Psychology, Sociology, and Education departments.

III. Counseling and Guidance Courses

- COUN 820M, Principles of Guidance and Counseling
- COUN 825V, Introduction to Counseling Theories
- COUN 831V, Child Assessment in Elementary School Guidance
- COUN 832V, Counseling Elementary School Children Practices or Internship

(4-6 hours)

Selected additional courses in the department.

**Specialization in College Student Personnel Services**

I. Foundation Course

- FED 801V, Introduction to Research

3 hours

II. Selected Cognate Courses

- PSYCH 851V, Educational Psychology

6-15 hours

These courses are selected in accordance with the student's particular area of interest. Most often, these courses are taken in the departments of Sociology and Psychology.

III. Counseling and Guidance Courses

- COUN 820M, Principles of Guidance and Counseling
- COUN 833V, Counseling Practices

21-27 hours

The pattern of coursework is individually designed to prepare the student for specific roles within the field of student personnel services, i.e., admissions and registrations, counseling, housing, financial aid, and student activities.

**Course Descriptions**

**COUN 820M Principles of Guidance**

Basic principles underlying guidance and counseling practices in the United States. It is a recommended course for students in other departments who wish to have some understanding of professional guidance and counseling.

**COUN 825V Group Evaluation Techniques**

A survey course dealing with types of measurement and evaluation of instructional programs of elementary and secondary schools. Utilization of standardized group tests, construction of classroom tests, use of the cumulative record, the basic sociometric and projective techniques are included in this course.

**COUN 831V Guidance in the Elementary School**

A study of the principles, practices, and dimensions of elementary school guidance. No credit for guidance majors.

**COUN 832V Special Studies in Counseling and Guidance**

PREREQ: Permission of department.

Intensive courses scheduled as regular seminars or workshops, according to purpose.

**COUN 833V Research Project in Counseling and Guidance**

PREREQ: Permission of instructor.

Individual or group study and analysis of specific problems in counseling and guidance.

**COUN 834V Introduction to Counseling Theories**

PREREQ: Permission of department.

Study of contemporary theories of counseling, the counseling process and methods.
Advanced Studies in Counseling
PREREQ: Coun 820V and 835V or 833V
An intensive study of selected counseling theories, methods and research.

Counseling With Parents
PREREQ: Coun 834V or 833V
A course emphasizing techniques used in working with parents. Also recommended for other departments who may wish to have greater understanding in working with parents.

Advanced Counseling Practicum
PREREQ: Coun 825V or 826V and permission of department
Continuation of Practicum in Counseling.

Guidance and Counseling Seminar
PREREQ: Permission of department
The consideration of topics having current relevance to guidance and counseling.

Research Project in Counseling and Guidance
PREREQ: Permission of department
Research study on a problem in the area of guidance and counseling.

SPECIAL EDUCATION (SPED)

Graduate Faculty Members:
Professor Donald Cushenbery;
Associate Professors Aaron Armfield (Chairman), James M. Wood;
Assistant Professors James Akers, Roger R. Harvey, Kathleen McKenney;
Graduate Lecturers Craig Fullerton, Edward LaCrosse

Master of Arts

With A Major in Speech Pathology

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

1. Pass an examination to determine adequate personal voice and speech proficiency and adequate hearing acuity for speech. (Administered by the Speech and Hearing Clinic of the University.)
2. Have successfully completed a minimum of twenty-six semester hours of work preparatory to admittance to the major. These hours are to include the following courses or their equivalents: SPED 341, Introduction to Communication Disorders; SPED 437, Basic Audiology; SPED 438, Auditory and Speech Mechanisms; SPED 442, Psychology of Speech; SPED 443, Speech Pathology II: Rhythm and Symbolization; SPED 445, Phonetics; SPED 450, Speech Correction in the Elementary and Secondary Schools.
3. For those students who wish to work toward special state certification in the schools, adviser consultation should be sought early since additional coursework is required (this does not apply to those already holding state certificates in elementary or secondary teaching or a special services certificate in another field.)
4. Twenty-four semester hours of course work and practicum. These hours may be taken from the following:

I. Required Courses
   FED 801V Introduction to Research
   SPED 853V Advanced Problems
   SPED 870V Seminar in Special Education
   SPED 846V Speech Evaluation
   SPED 848V Advanced Audiology

II. Elective Courses
   Students may choose any of the courses in the area numbered 800V or above.

5. Thesis:
   Students must present a thesis representing six semester hours of work and which is deemed satisfactory to the members of his committee.

With a Major in Mental Retardation

The Master of Arts degree with a major in mental retardation is a program primarily designed for persons certified or have near certification in special education. It involves a concentrated course of study designed to improve and advance competencies in the area of mental retardation and to provide investigative approaches to problems associated with children who are mentally retarded. Requirements include:

1. Applicants to the M.A. degree program with a major in Mental Retardation must be approved by the Graduate Dean and the major adviser.
2. Applicants should hold a teaching certificate in special education or be within 15 credit hours of certification.
3. Students may undergo course work which will lead to:
   a. a major of 24 hours in mental retardation.
   b. a thesis not to exceed six semester hours.
   OR:
   a. a major of 15 semester hours in mental retardation.
   b. a minor of nine semester hours in a related field of interest.
   c. a thesis not to exceed six semester hours.
4. To be admitted as a candidate for the M.A. degree in Mental Retardation the student must have successfully completed twelve hours of course work and passed a comprehensive written examination covering these first twelve hours.
5. Each candidate will submit a thesis proposal to his committee for approval. A thesis will represent six semester hours in independent study under the direction of the major adviser.
6. Subject to review of the applicants transcripts and related experiences with retarded children, required courses may be selected from the following:
   a. Required Courses:
      FED 801V Introduction to Research
      SPED 670V Seminar in Special Education
      SPED 670U Practicum in Special Education
      SPED 889 Thesis
   b. Elective courses may be chosen from any of the 800V level courses within the major and minor area of study.

Master of Science

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.
I. Required Courses

- FED 801V, Introduction to Research
- SPED 811V, History of Education and Guidance of the Deaf
- SPED 821M, Teaching Speech to the Deaf I
- SPED 822M, Teaching Speech to the Deaf II
- SPED 823M, Teaching Language to the Deaf II
- SPED 824M, Teaching School Subjects to the Deaf I
- SPED 825M, Teaching School Subjects to the Deaf II
- SPED 826M, Basic Audiology
- SPED 827M, Auditory and Speech Mechanisms
- SPED 828M, Introduction to Research
- SPED 829M, Teaching the Exceptional Child
- SPED 870V, Seminar in Special Education (or FED 802V, History and Philosophy of Education)
- SPED 872V, Basic Observation and Student Teaching in Special Education
- SPED 873V, Advanced Observation and Student Teaching in Special Education

II. Elective Courses

- SPED 881V, Current Practice in Speech Pathology
- SPED 882V, Basic Practicum Speech
- SPED 883V, Alaryngeal Speech Rehabilitation
- SPED 884V, Speech Problems of Cerebral Palsied Children
- SPED 885M, Learning Disabilities
- SPED 886M, Teaching Speech to the Deaf I
- SPED 887V, Teaching Speech to the Deaf II
- SPED 888M, Teaching Language to the Deaf I
- SPED 889V, Teaching Language to the Deaf II
- SPED 890M, Introduction to the Mentally Subnormal Child

*Student is responsible for prerequisites in any elective areas.

**Substitutions possible where student has taken equivalent courses on the undergraduate or graduate levels.
SPED 870V, Seminar in Special Education
One course surveying language difficulties (or other equivalent course)

SPED 807V, Introduction to Speech and Hearing Disorder

SPED 875V, Language Development of Exceptional Children
One course concerning evaluation techniques (or other equivalent course)

SPED 856V, Diagnosis of Learning Disabilities
Psych 822V, Testing and Measurement
Psych 831M, Psychological and Educational Testing

II. Electives

SPED 840M, Learning Disabilities
SPED 860M, Emotional Development
SPED 885M, Introduction to the Physically Handicapped
SPED 890V, Vocational Training of the Mentally Retarded
SPED 817V, Parent-Professional Relationship in Special Education
SPED 885V, Methods and Materials for Teaching Crippled
SPED 889U, Administration and Supervision of Special Education

Major in Teaching the Emotionally Disturbed**

I. Required Courses

SPED 8541V, Introduction to Research
SPED 890V, Teaching the Exceptional Child
SPED 899M, Emotional Development of Children and Youth
SPED 881M, Classroom Techniques for Behavior Control
SPED 870V, Seminar in Special Education
SPED 872V, Basic Observation and Student Teaching of Special Education
SPED 874V, Advanced Observation and Student Teaching of Special Education

II. Electives

SPED 871V, Parent-Professional Relationship in Special Education
SPED 895M, Clinical Observation of the Multi-Handicapped
SPED 890M, Learning Disabilities
Psych 842M, Personality Theories
Psych 851V, Advanced Educational Psychology
Psych 857V, Behavior Modification
(NP) 851, Developmental Psychology
(NP) 852, Group Dynamics

Course Description

812M Reading Diagnosis and Remediation for the Elementary Classroom Teacher
3 hours

PREREQ: TEO 450 or permission of instructor

This course is designed for future elementary classroom teachers and graduate students who wish to develop a better understanding of reading problems, their assessment and their remediation.

820M History: Education and Guidance of the Deaf
1 hour

History of trends in deaf education culminating in current problems, practices and attitudes; survey of teaching and guidance opportunities; psychological problems of the deaf child.

812M Teaching of Speech to the Deaf I
1 hour

Methods and practice in teaching speech to the deaf child; special emphasis on tactual, visual and auditory techniques.

812M Teaching of Speech to the Deaf II
1 hour

Continuation of Special Education 421; focus on various topics of speech learning problems found in a population of deaf children.

823M Teaching of Language to the Deaf I
1 hour

Philosophy of development of functional language for the deaf child; methods and materials for developing English language skills and comprehension.

**The Master of Science degree with a major in teaching the emotionally disturbed includes courses that lead to certification. Prerequisites include a course in child development and state certification in at least one teaching field. The number of candidates for the degree will be restricted.

824M Teaching of Language to the Deaf II
1 hour

Continuation of Special Education 423 with further consideration of criteria for selection and utilization of teaching materials; special emphasis on language principles for the older deaf pupil.

825M Speech Reading and Auditory Training
1 hour

History of development of speech (lip) reading; methods and practice in teaching speech reading for various ages and degrees of hearing impairment.

824M Teaching School Subjects to the Deaf I
1 hour

Philosophy underlying formal education of the deaf; methods and special adaptations used in presenting school subjects; special emphasis on reading.

825M Teaching School Subjects to the Deaf II
1 hour

Consideration of problems in deaf education; special instructional techniques for junior and senior high school subjects.

827M Basic Audiologic Procedures
1 hour

History of the field of audiology, types of hearing losses, basic audiologic assessment including the case history, tuning fork tests, and pure tone air and bone conduction testing. An overview of the basic audiologic components of this course, including further consideration of the effects of hearing loss on hearing conservation, medical referral, and remediation.

828M Auditory and Speech Mechanisms
1 hour

Basic structure and function of organs of hearing and speech.

829M Learning Disabilities
1 hour

Study of developmental patterns in speech and language; casual factors of delayed speech and language development; evaluative techniques for identification of problem; therapy techniques for habilitation and rehabilitation of children with deviant language development.

822M Psychology of Speech
1 hour

Psychological processes basic to speech, theories of language learning, speech perception, semantics; interrelationships between speech and personality.

823M Speech Pathology I: Voice and Articulation
1 hour

Introduction to phonetics and phonology; speech sounds of English; phonetic notations; classification of voice and articulation disorders; classroom demonstrations; special emphasis on articulation and phonology; strategies, methods and techniques associated with stuttering, aphasia, and delayed language development.

824M Phonetics
1 hour

Introduction to International Phonetic Alphabet; analysis of phonetic and phonemic elements in major American English dialects; practice in transcription of standard and defective speech.

825M Speech Correction in the Elementary and Secondary Schools
1 hour

PREREQ: Graduate Standing and 6 hours Speech Pathology courses

Speech correction programs as related to goals of public education for school-aged children; role and responsibilities of the speech clinician; current practices in evaluation, case load selection and scheduling; special emphases on methods and materials appropriate to a variety of facilities.

826M Basic Clinical Practicum in Speech Pathology
1 hour

PREREQ: Graduate Standing and permission

Minimum of 45-60 clock hours per credit hour; supervised observation and participation in speech and hearing center; diagnostic interviews, therapy sessions, lesson plans, weekly practicum summaries.

827M Introduction to the Mentally Subnormal Child
1 hour

Nature and educational needs of children and youth who are mentally subnormal; definitions, prevalence, and types of children in educational programs; history; trends.

828M Curriculum for the Mentally Retarded
1 hour

The mentally retarded child as an educable or trainable individual; an investigation of the practices and problems in curriculum development for the mentally subnormal child; preschool through vocational; identification of needs and goals and determination of content.
815M Clinical Practice in Reading (I, II, S) 3 hours
This course provides the student with an "externship" experience for clinical practice in either a school or a medical setting. A minimum of 45 clock hours of work is required for each credit hour per semester.

815V Clinical Practice in Reading (I, II, S) 3 hours
This course provides the student with an "externship" experience for clinical practice in either a school or a medical setting. A minimum of 45 clock hours of work is required for each credit hour per semester.
852V Advanced Clinical Practicum in Speech Pathology ............................................ (I, II, S) 3 hours
PREREQ: 55
The second semester of advanced clinical practicum. The student is placed in a "clinical internship" setting with a cooperating master clinician. A minimum of 45 clock hours of work is required for each credit hour per semester.

853V Advanced Problems in Speech Pathology ......................................................... (II) 3 hours
PREREQ: Twelve-four-hour Speech Pathology and Graduate Standing
Students select and investigates three different areas of current concern in Speech Pathology: initial annotated bibliography, presentation of observation and conclusions of a case, and a specific review of the literature. Instructor will base his lectures on topics chosen by students for study; clinical demonstrations of selected voice, speech and language problems.

855V Alaryngeal Speech Rehabilitation ................................................................. (I) 2 hours
PREREQ: Graduate Standing and 6 hours Speech Pathology courses including voice problems
Problems of voice and speech rehabilitations for the individual without a functional larynx; social, emotional, and medical considerations as well as clinical procedures for esophageal, pharyngeal and buccal speech; implications for use of artificial larynx; current research pertinent to this area.

856V Speech Problems of Cerebral Palsied Children ................................................ (I) 2 hours
PREREQ: SPE 847V
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.

866V Vocational Training of the Mentally Retarded ............................................... (II) 3 hours
Consideration of the following aspects of treatment of the mentally retarded: pre-vocational training and evaluation, on the job training, vocational placement, working with relevant disciplines, follow-up services.

870V Seminar in Special Education ............................................................................ (I, II, S) 3 hours
Graduate course primarily for Special Education majors and professionals working 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 trends in each area; student will research and present a paper reflecting his personal professional interests, discussions, forums, and panels; visiting experts.

871V Parent-Professional Relationships in Special Education ................................... (I) 3 hours
PREREQ: SPE 847V
Professionals dealing with handicapped children became aware that a child's handicap affects the family unit and the community. Conversely, the family and the community influences the child's adjustment to his handicap. This course deals with the development of positive relationships between parents and professionals.

872V Basic Theories and Student Teaching in Special Education ............................. (I, II, S) 3 or 5 hours
PREREQ: 551
A second semester of classroom experience with exceptional children for graduate students who have had other professional experiences. Students will participate in observation, participation, teaching, and a weekly seminar.

873V Advanced Observation and Student Teaching in Special Education .................. (I, II, S) 3 or 5 hours
PREREQ: 551
A second semester of classroom experience with exceptional children for graduate students who have had other professional experiences. Students will participate in observation, participation, teaching, and a weekly seminar.

883V Methods and Materials for Teaching the Physically Handicapped .................. (II) 3 hours
PREREQ: 866V and Intro. to the Education of the Physically Handicapped
Consideration of the physically handicapped child as his unique exceptionalities require the development of specialized methods and materials designed to meet his learning needs; an investigation of practices and problems involved in methodology and materials; application of methods; development and evaluation of materials; practices in design and implementation of methods and materials; selected observation of programs.
Admission to the Program

1. Applicants must furnish all credentials requested in the standard application for admission to the Graduate College.
2. Applicants must hold a Master's degree from a regionally accredited institution. All graduate work taken by the applicant prior to admission to the program must have a grade point average of 3.25.
3. Applicants must hold full certification in educational administration and show evidence of having completed at least one year of successful practice as an educational administrator.
4. Scores of the Graduate Record Examination—verbal, quantitative, and advanced (Education) must total at least 1200.
5. A recommendation for study for the Ed.S. degree must be made by the adviser. This recommendation must be made prior to a second registration. Usually, it will precede the initial registration.

Residency Requirement

Candidates are required to pursue a portion of their work in residence. It may be fulfilled in one of the following ways:

1. As a full-time student (12-hour load) during one semester of the academic year.
2. As a full-time student (12-hour load) during two consecutive summer terms of the same summer session.

Program Design

The program has been designed to include the flexibility needed by at least two groups of students: (1) those preparing to become school principals; (2) those preparing to become school superintendents. The capstones of this Ed.S. program are the administration seminars (EdAd 800U and 801U) and the field project (EdAd 811U).

I. Core Professional Courses ................................................................. 42-48 hours
   - Including work in school finance, school business management, supervision, school law, administration seminars, and field work.

II. Related Professional Courses ......................................................... 12-13 hours
    - Including selected work in such areas as curriculum, guidance, reading, foundations, and special education.

III. Related Cognate Courses ............................................................... 2-15 hours
     - Including selected work in such areas as economics, English, psychology, business administration, sociology, geography, history, speech, mathematics.

Procedures in the Program

Upon inquiry about the program in the Graduate Office, students are assigned an adviser by the Chairman of the Department. This adviser will conduct a screening interview, the results of which become a part of the student's permanent record. In questionable cases, the adviser may ask for the assistance of a committee.

Assuming a satisfactory interview, the student will be notified of acceptance, and his committee appointed by the Graduate Dean. The committee will meet to consider the student's planned program and preliminary coursework, at which time the student should apply for degree candidacy. Upon acceptance into candidacy, the tentative program shall become the permanent planned program.

Specialist in Education

This outline of program includes the work which might typically constitute the fifth and sixth years of collegiate work. The total coursework for both M.S. and Ed.S. would accumulate to not less than 66 graduate hours. The program reflects the philosophy which supports graduate education at the University that each student should be able to design a portion of his program to best harmonize his needs and ambitions. Each program will be designed with the aid of the student's adviser and must be approved by the candidate's committee.

*Admission into the department requires that a person must have at least two years of teaching experience. Only students with three years of teaching experience will receive institutional endorsement to serve as school administrators.
After notification of acceptance to candidacy, the Ed. S. student should commence background work on his field project. The outline should be presented to the committee; the members will evaluate, then accept, modify, or reject the project. A final committee-approved outline shall then be filed in the student's cumulative record. At least one committee meeting will be devoted to the field project, while it is in progress. At that time, committee members will have an opportunity to pose questions and make suggestions. The oral final examination for the student shall center on the field topic. The examining group shall be the committee and the Graduate Dean or his representative.

Course Descriptions

800V Special Studies in Educational Administration and Supervision (1, II, S) 3 hours
A series of intensive courses especially designed for educational administrators and supervisors—scheduled as regular seminars or workshops, according to purpose.

810V Research Project in Educational Administration (I, II, S) 1-3 hours
Individual or group study and analysis of specific problems in educational administration and supervision.

825V Data Processing in Educational Administration 3 hours
A study of the role of electronic data processing and systems procedures in educational administration.

830V Seminar in Educational Administration 3 hours
A study of educational problems and their relationship to and implications for educational administration. (Course should be taken in last nine hours of the Master of Science Degree.)

835V Foundations of Educational Administration and Supervision 3 hours
A study of the nature and functioning of effective school organization and administration, including the inter-relationship between the federal, state, and local responsibilities.

840V Practicum in Educational Administration and Supervision 3 hours
PREREQ: Fed 801V and approval
Designed to provide guided study and practice in elementary, secondary and general administration and supervision as the interests and needs of the student requires.

841V Advanced Practicum in Educational Administration and Supervision 3 hours
PREREQ: EDAD 840V
Continuation of Education 890V. Advanced study and practice under guidance in elementary, secondary, or general administration and supervision as the needs of the student requires.

846V Administration and Supervision in Elementary Schools 3 hours
PREREQ: Fed 801V
The nature, principles and functions of modern administrative and supervisory practices as they relate to the elementary school.

847V Administration and Supervision in Secondary Schools 3 hours
PREREQ: Fed 801V and EDAD 835V
The nature, principles and functions of modern administrative and supervisory practices as they relate to the secondary school.

848V Administration and Supervision in Junior High School 3 hours
PREREQ: Fed 801V and EDAD 835V
This course is designed to acquaint the graduate student with the nature of administration and supervision of the junior high school program.

855V School Business Management 3 hours
PREREQ: FED 801V and EDAD 835V
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.

856V School Finance 3 hours
PREREQ: FED 801V and EDAD 835V
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.

860V School Plant Planning and Operation 3 hours
PREREQ: FED 801V and EDAD 835V
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.

861V Organization and Administration of the Physical Plant 3 hours
PREREQ: EDAD 860V
Designed to give the school administrator competence in organizing the maintenance and operation program of the school plant; includes rolling and range maintenance, rehabilitation and remodeling, financing, scheduling work and custodial care.

870V Administration and Staff Personnel 3 hours
PREREQ: FED 801V and EDAD 835V
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 upon the techniques of democratic administration.

871V Interpersonal Relationships in Educational Administration 3 hours
This course is designed specifically with interpersonal and group relations. It should be useful to those administrators who recognize the need to increase their knowledge and skills in human relations.

880V Administration and Supervision of Vocational Education 3 hours
Basic concepts for administration of vocational education, as related to the needs of the superintendent, principal, supervisor.

881V Urban School Administration 3 hours
This course is designed to acquaint students of educational administration with urban problems and issues which most significantly affect the administration of city schools.

890V Administration of Higher Education 3 hours
A study of the major functions of higher education, with emphasis on the principles involved in organizing and directing the academic program, the activities of the student body, the faculty and staff, personnel policies, financial programs, operating the buildings and grounds and conducting the public relations program.

884U Seminar in Educational Administration 3 hours
PREREQ: Admission to Education Specialist Program
Participation in the Seminar is limited to individuals who have a Master's degree with a major in school administration and will include current educational problems and procedures.

891U Advanced Seminar in Educational Administration 3 hours
PREREQ: Admission to Education Specialist Program
Participation in the Seminar is limited to individuals who have been admitted to candidacy for the Specialist in Education degree with a major in school administration. Emphasis will be placed upon the theory and techniques of administration.

894U Field Project in Educational Administration 3 hours
PREREQ: Admission to Education Specialist Program and Approval, Department Chairman
The study of a problem in the area of school administration, and employs the techniques of research.

895U School Law 3 hours
PREREQ: FED 801V and EDAD 835V
Considers legal principles and practices which are applicable to public education for public school teachers and administrators. (O'Reilly)
EDUCATIONAL EXPERIMENTATION AND DEVELOPMENT

Graduate Faculty Members:
Professors James W. Selee, Floyd Waterman (Chairman);
Assistant Professor Walter M. Calinger

The Master of Science degree with a major in urban education is for previously certified teachers at either the elementary or secondary levels.

**Major in Urban Education**

The Master of Science degree with a major in Urban Education is designed for teachers (secondary and elementary) who are already certified and who have an interest in working with low-income area students. Candidates must hold either a B.S. or B.A. degree and a valid teaching certificate. He must be personally interviewed by a faculty member associated with Urban Education.

The program is designed to help students identify key agencies in the community and to identify the relevant social economic, and teaching problems of low-income area students.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>FED 801V</td>
<td>Introduction to Research</td>
</tr>
<tr>
<td>FED 806V</td>
<td>Education and Society</td>
</tr>
<tr>
<td>FED 805V</td>
<td>The Urban School</td>
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</tbody>
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**Recommended Professional Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>COUN 850M</td>
<td>Principles of Guidance</td>
</tr>
<tr>
<td>COUN 852M</td>
<td>Guidance in the Elementary School</td>
</tr>
<tr>
<td>COUN 822V</td>
<td>Occupational Guidance</td>
</tr>
<tr>
<td>COUN 823V</td>
<td>Individual Analysis</td>
</tr>
<tr>
<td>FED 818M</td>
<td>Mental Health in the School</td>
</tr>
<tr>
<td>FED 886M</td>
<td>Meeting the Needs of the Disadvantaged Child</td>
</tr>
<tr>
<td>FED 888V</td>
<td>Growth &amp; Learning Problems of the Disadvantaged</td>
</tr>
<tr>
<td>FED 800V</td>
<td>Special Problems in Urban Education</td>
</tr>
<tr>
<td>FED 802V</td>
<td>Seminar in Education</td>
</tr>
<tr>
<td>SPED 911</td>
<td>Problems in Teaching Reading, Elementary</td>
</tr>
<tr>
<td>SPED 912</td>
<td>Problems in Teaching Reading, Secondary</td>
</tr>
<tr>
<td>SPED 812V</td>
<td>Reading Diagnosis</td>
</tr>
<tr>
<td>SPED 866V</td>
<td>Teaching the Exceptional Child</td>
</tr>
<tr>
<td>SPED 816V</td>
<td>Problems of the Disadvantaged</td>
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</tbody>
</table>

**Selected Supporting Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>Psychology 815M</td>
<td>Psychological and Educational Testing</td>
</tr>
<tr>
<td>Psychology 835M</td>
<td>Individual Differences</td>
</tr>
<tr>
<td>Psychology 850M</td>
<td>Theories of Developmental Psychology</td>
</tr>
<tr>
<td>Psychology 835M</td>
<td>Behavioral Psychology</td>
</tr>
<tr>
<td>Geography 812M</td>
<td>Urban Geography</td>
</tr>
<tr>
<td>Geography 831V</td>
<td>Cultural Geography</td>
</tr>
<tr>
<td>Geography 826V</td>
<td>Land Use</td>
</tr>
<tr>
<td>Geography 817V</td>
<td>Population Seminar</td>
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<tr>
<td>Geography 861V</td>
<td>Urban Seminar</td>
</tr>
<tr>
<td>Economics 806V</td>
<td>Economics for Teachers I</td>
</tr>
<tr>
<td>Economics 807V</td>
<td>Economics for Teachers II</td>
</tr>
<tr>
<td>Economics 811M</td>
<td>Government and Labor</td>
</tr>
<tr>
<td>Sociology 802M</td>
<td>Collective Behavior</td>
</tr>
<tr>
<td>Sociology 803M</td>
<td>Advanced General Sociology</td>
</tr>
<tr>
<td>Sociology 814M</td>
<td>Urban Sociology</td>
</tr>
<tr>
<td>Sociology 815M</td>
<td>American Family Problems</td>
</tr>
<tr>
<td>Sociology 810V</td>
<td>Seminar</td>
</tr>
<tr>
<td>Sociology 811V</td>
<td>Social Prob., esp. of Disadvantaged</td>
</tr>
<tr>
<td>Pol. Sci 840M</td>
<td>Public Budgeting</td>
</tr>
<tr>
<td>Pol. Sci 841M</td>
<td>Municipal Administration</td>
</tr>
</tbody>
</table>

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**University of Nebraska at Omaha**

**Course Description**

800V Special Studies in Desegregation 6 hours
An Institute to deal with educational problems occasioned by desegregation and the need for multi-cultural education.

**ENGLISH (ENG)**

Graduate Faculty Members:
Professors Bruce Baker (Chairman), Robert D. Harper, Richard L. Lane, Glen A. Newkirk, Ralph Wardle

**Master of Arts**

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 of Arts degrees with majors in English are required to take English 801V (Introduction to Literary Research) and to complete one of the following plans of study:

**Plan A:** Successful completion of 24 credit hours in course work, including at least 12 hours in 800V- or 900-level courses; plus a thesis (6 credit hours) on an approved topic accepted after oral defense before a faculty committee; plus a written examination prepared and judged by a faculty committee.

**Plan B:** Successful completion of 36 credit hours in course work, including at least 18 hours in 800V- or 900-level courses; plus a written examination prepared and judged by a faculty committee.

The following English seminars in major periods vary in emphasis and may be repeated for an additional three hours of credit: English 806V, 808V, 810V, 820V, 825V, 912, 915.

**Course Descriptions**

815M Contemporary French and German Novel 3 hours
**PREREQ:** Permission
Comparative study of selected contemporary French and German novels in translation. Cross-listed as French 815M and German 815M.

833M Sixteenth Century Literature 3 hours
**PREREQ:** Graduate
A study of the English poetry and prose of the English Renaissance, from its continental origins to the end of the Elizabethan Age.

814M Chaucer 3 hours
**PREREQ:** Eng. 231
A study of the language and writing of Chaucer, with emphasis on The Canterbury Tales.

843M English Literature in the Age of Pope and Swift 3 hours
**PREREQ:** Graduate
A detailed study of selected authors and works of the Augustan Age of English Literature, with emphasis on Pope and Swift.

841M The Age of Johnson 3 hours
**PREREQ:** Graduate
Poetry, prose (exclusive of the novel) and drama of England during the second half of the eighteenth century.

845M Seventeenth Century Literature 3 hours
A study of the English poetry and prose of the seventeenth century in the Restoration with emphasis on Milton.

850M English Drama before 1642 3 hours
**PREREQ:** Eng. 231 or permission
A study of the development of the English drama, exclusive of Shakespeare, from the beginnings to 1642.
804L Eighteenth Century French Literature 3 hours
PREREQ: French 212
Study of the Enlightenment, emphasizing the works of Voltaire, Rousseau and Diderot.

851L Nineteenth Century French Literature 3 hours
PREREQ: French 212 for either 851L or 852L
851L: 1789 to 1848, Lamartine to Michelet, Stendhal, Mérimée, Balzac, Hugo. 852L: 1840-1885, Realism, Naturalism, Parnassian, Symbolism.

50M Independent Study 1-3 hours
PREREQ: Permission of the instructor
Guided independent study and research under tutorial supervision.

81M Contemporary French and German Novel 3 hours
PREREQ: Permission
Comparative study of selected contemporary French and German novels. Cross-listed as German 810M and English 810M.

821M Sixteenth Century French Literature 2 hours
PREREQ: Any 300 course in French literature
Literature of the Renaissance, Rabelais, Ronsard, Montaigne.

831M Seventeenth Century French Literature 3 hours
PREREQ: Any 300 course in French literature
The Classical School Descartes, Pascal, Corneille, Molière, Racine, LaFontaine.

851M Nineteenth Century French Literature 3 hours
PREREQ: For either 851M or 852M, any French 300 course in literature or permission of instructor
851M: Main currents of nineteenth century literature from the beginning to 1830. 852M: Continuation to current literary production.

860M Pro-Seminar 3 hours
PREREQ: Permission of instructor
A detailed study of narrower phases of French literature, language or culture.
THE GRADUATE BULLETIN

German (GERM)

GEOGRAPHY AND GEOLOGY (GEOG-GEOL)

Graduate Faculty Members:

Professors Harold J. Retallack, Gordon B. Schilz (Chairman), Philip E. Vogel;
Associate Professor Nicholas Bariss;
Assistant Professor John F. Shroder, Jr.

The department offers the following degrees with a major in geography: the Master of Arts degree and the Master of Science degree.

The Master of Arts with a major in geography is intended for those preparing themselves for areas in physical geography, whereas the Master of Science with a major in geography is intended for students electing to do major work in physical geography. Each degree has two options. Option I should be chosen by those preparing for careers in research and scholarly work or in college or university teaching. The option requires a minimum of 24 semester hours in geography courses numbered 800M-800V and 900, and thesis 6 hours. Permission is required for a student to take more than two 800M level courses to apply towards the degree. Option II may be chosen upon the advice and with the approval of the major adviser. This option requires a minimum of 36 semester hours in geography courses numbered 800M or 800V-800L, and selected cognate courses in other departments. No thesis is required for this option. Permission is required for a student to take more than two 800M level courses to apply towards the degree. Students who have taken the degree under Option II and later elected to continue in graduate work for the Ph.D., will not be encouraged by the department to continue unless evidence of ability to carry on independent research is presented.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>801M</td>
<td>Conservation of Natural Resources</td>
<td>3 hours</td>
<td>A study of physical, cultural, and human resources of nations with emphasis on the United States. Includes the history of conservation in the U.S., the philosophy behind the movement, current conservational practices and problems, and the direction in which resource use and conservation are proceeding.</td>
</tr>
<tr>
<td>812M</td>
<td>Urban Geography (Same as Econ. 612M and Soc. 612M)</td>
<td>3 hours</td>
<td>A geography of the city from the viewpoint of history, site and situation, external relations, internal relations, and the comparative study of cities.</td>
</tr>
<tr>
<td>823M</td>
<td>Great Plains and Nebraska</td>
<td>3 hours</td>
<td>This is a regional geography course intended for geography majors and Arts and Sciences students who may have an interest in this particular area. It is desirable to have had some previous study with regional geography.</td>
</tr>
<tr>
<td>832M</td>
<td>Geog. of Agric.</td>
<td>3 hours</td>
<td>A course which discusses methods of measurement and classification, as well as the function of manufacturing: major world manufacturing regions and industry analysis; location criteria and theory in the U.S.; and local community patterns.</td>
</tr>
<tr>
<td>854M</td>
<td>Historical Geography of the United States</td>
<td>3 hours</td>
<td>A course dealing with the geography of the past. Emphasis is placed on the present occupancy of regions in the United States or the geography of major divisions of the United States at selected times in the past.</td>
</tr>
<tr>
<td>855M</td>
<td>Independent Regional Research</td>
<td>1.2, or 3 hours</td>
<td>Permission of Department Chairman. Advanced study in the form of a major paper to give the senior or graduate student knowledge of and experience in using government documents, professional and primary materials, concerned with a region. Must be under the supervision of the instructor who is particularly qualified for the region chosen. Paper will be presented to the graduate General Seminar or the local chapter of GTO, National Honor Geography Fraternity.</td>
</tr>
<tr>
<td>861V</td>
<td>Geography of Agric.</td>
<td>3 hours</td>
<td>A systematic study of the characteristics of agriculture on a world-wide basis.</td>
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<tr>
<td>865V</td>
<td>Physiography of North America</td>
<td>3 hours</td>
<td>A study of the landforms regions of North America as related to the whole study of geography by means of a systematic analysis of geomorphic patterns.</td>
</tr>
<tr>
<td>865V</td>
<td>Soils</td>
<td>3 hours</td>
<td>An examination of the older geographical concepts of the distribution and morphology of soil and the new works concerned with soil forms on a regional, rather than zonal, basis.</td>
</tr>
<tr>
<td>861V</td>
<td>Field Geography</td>
<td>3 hours</td>
<td>A systematic discussion of techniques for studying and analyzing terrain features, land use characteristics, and the nature of their patterns as a part of the whole geographic environment.</td>
</tr>
<tr>
<td>865V</td>
<td>Land Use</td>
<td>3 hours</td>
<td>A field course designed to understand, by actual field investigation, land use patterns in urban areas through the comprehension of social, physical, and economic factors which tend to shape the land use of a given place. The major emphasis will be placed upon field investigations in the urban area, with the functional region receiving the major consideration.</td>
</tr>
<tr>
<td>867V</td>
<td>Cartographic Methods</td>
<td>3 hours</td>
<td>Teaches the student proper use of drawing instruments, effective map layout and exposure to the latest cartographic techniques, leading to a high level of competence in the design and interpretation of maps.</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Prerequisites</td>
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<tr>
<td>871V Population Seminar</td>
<td>3 hours</td>
<td>PREREQ: Permission</td>
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<td></td>
<td></td>
<td>The significance of differences from place to place in the number, kind, and qualities of human inhabitants and changes through time.</td>
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<tr>
<td>881V Independent Study in Topics on &quot;Urbanism&quot;</td>
<td>1 hour per semester to 3</td>
<td>PREREQ: Undergraduate major in one of the social sciences, plus six hours of graduate work in one of the Social Sciences</td>
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<td></td>
<td>Graduate student research on an individual basis under faculty supervision in topics pertaining to urbanism.</td>
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<tr>
<td><em>(Also listed under Economics, Political Science, and Sociology)</em></td>
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<tr>
<td>881V Urban Seminar in Metropolitan Planning and Development</td>
<td>3 hours</td>
<td>PREREQ: Geog. 812M or recommendation from Political Science, Sociology, or Economics Department</td>
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<tr>
<td></td>
<td></td>
<td>An overview of the present status of planning in metropolitan areas with special emphasis on structure of planning departments, comprehensive plans, and problems of annexation.</td>
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<tr>
<td><em>(Also listed under Economics, Political Science, and Sociology)</em></td>
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<tr>
<td>881V Seminar in Urban Economics</td>
<td>Each 3 hours</td>
<td>PREREQ: At least 6 hours of upper division course work in economics, or permission</td>
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<td>An examination of the theoretical basis for the analysis of urban economic problems with emphasis upon the policy alternatives available toward their possible solution. Separate credit may be received for each course.</td>
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<tr>
<td>887V Seminar in Regional Economics</td>
<td>Each 3 hours</td>
<td>PREREQ: At least 6 hours of upper division course work in economics, or permission of instructor</td>
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<tr>
<td><em>(Same as Econ 885V-886V)</em></td>
<td></td>
<td>An examination of the current developments and issues involving regional economic development and planning. These courses provide the theoretical basis for understanding and analyzing economic problems of a regional nature. In addition, policy alternatives, decision making, and measurements techniques are examined.</td>
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<tr>
<td><em>(Also listed under Economics, Political Science, and Sociology)</em></td>
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<tr>
<td>899V Urban Regional Research (Same as Econ 897V-898V)</td>
<td>1 to 6 hours</td>
<td>PREREQ: Graduate enrollment in the Master of Science in Economics program and acceptance by a graduate adviser</td>
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<tr>
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<td></td>
<td>Used in candidates for the Master of Science Degree in economics in lieu of a Master's thesis. A study consisting of urban economic problems, employing research techniques. Students do independent research, consulting with an adviser, and submitting completed report in a departmental committee.</td>
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<tr>
<td>993 Thesis</td>
<td>3 to 6 hours</td>
<td>Independent research project written under the supervision of an adviser.</td>
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<tr>
<td>541 Seminar in Problems of Political Geography</td>
<td>3 hours</td>
<td>PREREQ: Permission, and Geog. 305</td>
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<td></td>
<td>Case studies in land boundaries, territorial waters, and in population aspects of boundary problems. A review of important studies in Political Geography.</td>
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<tr>
<td>575 Seminar in Regional Geography</td>
<td>(3-6 credits, maximum 3 per semester, except foreign country field work.)</td>
<td>Professor Gordon B. Schiltz</td>
<td></td>
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<tr>
<td>991- General Seminar</td>
<td>Each 1 hour</td>
<td>Professor Gordon B. Schiltz</td>
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<tr>
<td>993 Review of current research by geographers including national and international associations and initial thesis proposal.</td>
<td></td>
<td>Professor Gordon B. Schiltz</td>
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</tbody>
</table>
32SL Diplomatic History of the United States to 1600
PREREQ: Graduate standing
A study of the foreign relations of the United States before 1600.

324L Diplomatic History of the United States Since 1600
PREREQ: Graduate standing
A study of the foreign relations of the United States since 1600.

341L History of Nebraska
PREREQ: Graduate standing
From the earliest known records to the present.

344L History of the South
PREREQ: Graduate standing
Economic, social and political development of the South as a region.

351L Economic History of Europe to 1760
PREREQ: Graduate standing
A survey of European economic development to 1760.

352L Economic History of Europe Since 1760
PREREQ: Graduate standing
A survey of European economic development from 1750 to the present.

353L Medieval Europe, 284-1095
PREREQ: Graduate standing
Establishment and development of the medieval church and feudal society from the declining years of the Roman Empire to the beginning of the Crusades.

354L Medieval Europe, 1095-1492
PREREQ: Graduate standing
Religious, social, economic, philosophic and institutional developments of the era extending from the Crusades and the investiture struggle through "the waning of the middle ages."

355L The Age of the Renaissance
PREREQ: Graduate standing
An introduction to the economic, social, political, religious, and intellectual changes to the principal thinkers, writers, and artists of the period extending roughly from 1500-1600.

364L History of the British Empire and Commonwealth
PREREQ: Graduate standing
Britain in America, Africa, India and the Pacific. The development of a dependent empire and the transformation of many dependencies to the status of independent members of the Commonwealth of Nations.

361M History of Science to 1700
PREREQ: Graduate standing
A survey of the development of scientific ideas and techniques from antiquity to the beginning of modern science.

362M History of Science Since 1700
PREREQ: Graduate standing
A survey of the historical and intellectual development of modern science and its relation to technology, society, and social thought.

311M American Social and Intellectual History to 1865
PREREQ: Graduate standing
A non-political approach to American History, this course will examine significant topics in American thought and society.

312M American Social and Intellectual History Since 1865
PREREQ: Graduate standing
Primarily a non-political approach to American History, this course will examine significant topics in American thought and society.

313M The Revolutionary Era, 1753-1789
PREREQ: Graduate standing
An analysis of the forces which led to the American Revolution and an examination of some of the problems which arose as a result of the separation from England.

314M Early Federal Period, 1789-1815
PREREQ: Graduate standing
A study of the growth and development of the American nation during the formative years under the Constitution.

615M The Jacksonian Era
PREREQ: Graduate standing
An interpretive study of the middle period of American history.

616M Civil War and Reconstruction
PREREQ: Graduate standing
The background of the conflict, the years of the war and the problems of reshaping the Union in the years that followed.

624M The Emergence of Modern America: 1877-1901
PREREQ: Graduate standing
A study of a transitional period in American history, this course considers the importance of industrialization, urbanization, immigration, and the emergence of the United States as a significant world power.

627M Twentieth Century America to 1932
PREREQ: Graduate standing
A study of the history of the United States from the end of the nineteenth Century to the election of Franklin D. Roosevelt to the Presidency in 1932.

628M Twentieth Century America, 1932 to Present
PREREQ: Graduate standing
A study of the history of the United States from the election of Franklin D. Roosevelt to the Presidency at the present.

625M Ideas in Twentieth Century America
PREREQ: Graduate standing
An analysis of some of the more important ideas which have had influence in recent America.

633M American Constitutional History to 1600
PREREQ: Graduate standing
A history of constitutional theory and practice in the continental North American colonies of England and in the United States prior to 1600.

634M American Constitutional History Since 1600
PREREQ: Graduate standing
A history of constitutional theory of practice in the United States from 1600 to the present.

632M History of American Science
PREREQ: Graduate standing
A study of the origins, development, and nature of American science and its relations with technology, social thought, and government.

635M American Urban History to 1970
PREREQ: Graduate standing
Historical survey of urban development in the United States from the colonial period through the 1860's; urban society, problems, institutions; role of cities in national history; American ambivalence toward cities.

644M American Urban History Since 1970
PREREQ: Graduate standing
American urbanization from 1870's to the present; influence of technology, transportation, industry, immigration; urban politics and reform movements; emergence of metropolitan America and problems of the contemporary super-city.

647M History of American Medicine and Public Health
PREREQ: Graduate standing
Analysis of the relationship and interaction of medical thought and practice, public health problems and institutional development, and the changes in American society and culture from the 17th to the 20th century.

851M Intellectual History of Modern Europe: Seventeenth and Eighteenth Centuries
PREREQ: Graduate standing
Intellectual History of Modern Europe from the beginning of the seventeenth century to the French Revolution.

855M Intellectual History of Modern Europe: The Revolutionary Age to the Present
PREREQ: Graduate standing
Intellectual History of Modern Europe from the French Revolution to the present.
89M Age of the Reformation ........................................... (I) 3 hours
PREREQ: Graduate standing
A study of European society during the critical years following the
Renaissance.

95M The Age of Absolutism ........................................... (I) 3 hours
PREREQ: Graduate standing
The emergence of new power relationships on the European Continent
after the religious wars of the sixteenth century with an emphasis upon
the political and cultural factors that led to the French hege-
mous and the secularization of European politics.

955M Age of the Enlightenment ...................................... (I) 3 hours
PREREQ: Graduate standing
A study of the politics, economics, and culture of eighteenth century
Europe and of the cause of the French Revolution.

956M The French Revolution and Napoleonic Era: 1789-1815 .. (I) 3 hours
PREREQ: Graduate standing
A study of Revolutionary France and the Napoleonic Empire as an inte-
gral part of the Age of Revolution with emphasis upon its causes,
development, contributions and reasons for the ultimate collapse of the
Empire.

507M Nineteenth Century Europe, 1815-1870 ....................... (I) 3 hours
PREREQ: Graduate standing
An advanced study of what has happened in Europe since 1815 with
a view to exposing the consequences of such events.

508M Nineteenth Century Europe 1848-1930 ...................... 3 hours
PREREQ: Graduate standing
An advanced interpretive analysis of the political and cultural develop-
ment of Europe from the Revolutions of 1848 to 1899.

861M Tudor and Stuart England .................................... (II) 3 hours
PREREQ: Graduate standing
A study of England under the Tudors, when the English people rose
magnificently and experienced a Golden Age, and the Stuarts then cost
off the last remnants of medieval things and formed new institutions
foreshadowing those of our world of today.

862M England in the Eighteenth and Nineteenth Centuries .. (II) 3 hours
PREREQ: Graduate standing
A study of the changes and development in Great Britain from 1714 to
1814.

863M English Constitutional History to 1485 ...................... (I) 3 hours
PREREQ: Graduate standing
The development of the legal and governmental institutions of the Eng-
lish-speaking people to 1485, including England's central and local gov-
ernments.

864M English Constitutional History Since 1485 ................. (II) 3 hours
PREREQ: Graduate standing
The development of the legal and governmental institutions of the Eng-
lish-speaking people since 1485, including British central and local
government and the governments of the member states of the Com-
mmonwealth and of the more important colonies.

874M Nineteenth-Century Intellectual History of Russia .......... 3 hours
PREREQ: Graduate standing
A study emphasizing the nineteenth-century revolutionary tradi-
tions, prototypes, ideology and impact upon Russian society.

877M Europe in Crisis: 1930-1952 .................................. 3 hours
PREREQ: Graduate standing
A study of the conditions and forces immediately preceding World
War I, the war itself, the peace following the war, and the rise of the
modern dictatorships.

879M Europe in the Global Age: 1933 to the Present .......... 3 hours
PREREQ: Graduate standing
A study of the ever increasing tensions between the fascist and com-
munist dictatorships and the Western democracies, World War II, the
inherent dislocation of power and the emergence of the "Balance of
Terror."
as an undergraduate. All courses must carry a number of 800M or above and at least 18 hours must carry a number of 800V or above. Mathematics courses 923, 924, and 862V are required in the program.

### Master of Science

The course requirements may be met by completing thirty-six semester hours of work, at least twenty-four of which must be in mathematics. At least eighteen semester hours of work in mathematics must be in courses numbered 920V or above. Courses in mathematics 811M, 812M, 823M, 824M, and 827M must be completed if not taken prior to entering graduate school. Math 922-924 and Math 862V are required. The student must pass a final written comprehensive examination.

### Course Descriptions

The 800L courses listed are open for graduate credit to students who do not seek an advanced degree in mathematics.

#### Computer Sciences

- **831L Numerical Methods**  
  **PREREQ:** Math 196, 211 and Computer Language.  
  Solution of equations, polynomial approximation difference calculus, interpolation, quadrature, initial value problems from ordinary differential equations and matrix inversion.

- **832L Data Structures**  
  **PREREQ:** Math 191, 211 and CS 230.  
  List processing languages, theories of file organization, theories of system design, information retrieval, applications.

- **833L Linear Programming**  
  **PREREQ:** Math 322 or equivalent.  
  An introduction to linear programming and applications.

- **834L Introduction to System Programming**  
  **PREREQ:** Math 322 or equivalent.  
  Input-output and storage systems, structures and transformations of data base, assembly and executive systems.

- **835L Introduction to the Theory of Compilers**  
  **PREREQ:** Math 322 or equivalent.  
  Assemblers, interpreters, compilers, particular languages studied include: a) sasms, b) shcommon, c) algol.

#### Mathematics

- **841L Differential Equations**  
  **PREREQ:** Math 196.  
  One year of calculus.  
  Methods of solving ordinary differential equations with applications to geometry and physics. The linear equations are emphasized.

- **843L Probability and Statistics I**  
  **PREREQ:** Math 197.  
  Events and probabilities, dependent and independent events, random, variables, discrete distributions, absolutely continuous distributions, expectation and limit theorems, point estimation, the multivariate normal distribution, testing of statistical hypotheses, confidence intervals.

- **844L Probability and Statistics II**  
  **PREREQ:** Math 197.  
  Each 3 hours

- **845L Theory of Numbers**  
  **PREREQ:** Math 311 or equivalent.  
  Congruences, quadratic reciprocity, diophantine equations, continued fractions, and prime number distribution.

- **846L Topology**  
  **PREREQ:** Math 423 and Math 311.  
  Introduction to the classical theory of sets, topological spaces, metric spaces, topological properties.

- **847L Projective Geometry**  
  **PREREQ:** Math 156 or equivalent.  
  Dualities, perspective, harmonic sets, double ratio, conics and projective coordinates dependence and independence of sets of points and sets of lines, matrices and determinants, pole and polar, polar reciprocation in respect to a conic, classical theorems.
Graduate Faculty Members:
Professor John G. McMillan (chairman)
Associate Professor Raymond A. Guenther;
Assistant Professor John W. Flocken
Graduate physics courses are offered to fulfill requirements for a minor field or as cognate or selected courses on a plan of study.

Course Descriptions

851L Elements of Electronics
PREREQ: Math thru Trig, and Physics 112 or 212
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.

Electronics Laboratory
PREREQ: Math 106 and Physics 112 or 212
The nature of light energy as disclosed through studies of geometrical optics, physical optics and quantum optics.

852L Optics
PREREQ: Math 196 and Physics 112 or 212
A discussion of topics including the wave and particle aspects of light, the optical principles of the mirror, the lens, and optical instruments, interferometry, coherence, and the results of the wave nature of light.

875L Electricity and Magnetism I
PREREQ: Calculus, Physics 225, or permission
An advanced discussion of electrostatics and magnetostatics as well as A.C. theory. Laboratory for Electricity and Magnetism I

876L Electricity and Magnetism II
PREREQ: Physics 375
A course in electrodynamics. Topics include Maxwell’s Equations and methods for their solution, boundary conditions, as well as energy, momentum, and transformations of the fields.

885L Heat and Thermodynamics
PREREQ: Calculus and Physics 112 or 212
**Master of Arts**

**Degree Requirements:** The course program must include twelve hours of the required thirty hours at the 800V level exclusive of thesis hours. The remaining course hours are elective but must be planned in conference with the student's academic adviser to meet individual interests and needs.

**Master of Science**

**Degree Requirements:** For the Master of Science with a major in Political Science, eighteen hours of the required thirty-six hours must be at the 800V level. The remaining hours are elective, but must be planned in conference with the student's academic adviser to meet individual interests and needs.

**MASTER OF PUBLIC ADMINISTRATION**

This is a professional graduate degree offered in the Department of Political Science which is designed: (1) to prepare students for careers in the public service—national, state, or local; (2) for research or teaching in this field; (3) for those already in the public service who are seeking professional training.

Administrators are required for a wide variety of governmental programs and students in the M.P.A. program will likely come from widely differing backgrounds. Some may come from current public employment while others may enter with degrees in the social sciences, engineering, business administration, or the humanities.

The principal prerequisite for admission to the M.P.A. program is a Bachelor of Arts or Bachelor of Science degree or equivalent.

For a student to be admitted unconditionally to the M.P.A. program he must have completed as prerequisites three semester credits in each of the following: Introduction to Public Administration, Urban Government, accounting, and statistics. In addition, if the student's undergraduate preparation in social sciences is insufficient, additional preliminary work may be prescribed which he must complete before he is accorded unconditional admission. These additional courses do not carry graduate credit, but other courses for graduate credit may be taken simultaneously.

**Degree Requirements**

Thirty semester hours of course work are required, plus six hours of internship in a public agency for 8 to 12 months. The internship may be waived and up to six hours credit granted for service in civilian public or semi-public agencies. Requests to waive the internship shall be submitted to a departmental committee for approval. In lieu of the internship in such cases the committee may require additional course work or a thesis.

A core of eight required courses shall be completed plus six credit hours from a specified list of optional courses. The required courses include, but are not necessarily restricted to, Political Science 800V, Public Administration 843M, 841M, 846V, 845V, 844V, 840V, and Economics 856M. The optional courses may be selected from Political Science 883M, 884M, 880M, 881M, 882M, 886V, 888V; Public Administration 843M, 845M, 844V, 848V, 881V; Economics 880M, 881V, 882V, 885V, 886V, 888V; Geography 812M, 890M, 865V. It is possible in exceptional circumstances for up to six credit hours of optional courses to be substituted for certain required courses. Such substitutions require approval of a student's adviser.

Eighteen hours of the course work must be at the 800V level.

A comprehensive final examination both written and oral is required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>832M</td>
<td>Political Theory II</td>
<td>3 hours</td>
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<tr>
<td>833M</td>
<td>Political Theory III</td>
<td>3 hours</td>
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<tr>
<td>84M</td>
<td>Political Theory IV</td>
<td>3 hours</td>
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<tr>
<td>85M</td>
<td>Democracy</td>
<td>3 hours</td>
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<td>86M</td>
<td>Dictatorship</td>
<td>3 hours</td>
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<tr>
<td>87M</td>
<td>Communism</td>
<td>3 hours</td>
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<tr>
<td>88M</td>
<td>Government and Politics of Great Britain</td>
<td>3 hours</td>
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<tr>
<td>89M</td>
<td>Government and Politics of France</td>
<td>3 hours</td>
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<tr>
<td>854M</td>
<td>Government and Politics of Africa</td>
<td>3 hours</td>
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<tr>
<td>855M</td>
<td>Government and Politics of the U.S.S.R.</td>
<td>3 hours</td>
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<tr>
<td>899V</td>
<td>Seminar in Political Research Methods</td>
<td>3 hours</td>
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<tr>
<td>804V</td>
<td>Seminar in American Government and Politics</td>
<td>3 hours</td>
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<tr>
<td>815V</td>
<td>Seminar in Public Law</td>
<td>3 hours</td>
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<tr>
<td>820V</td>
<td>Seminar in International Politics</td>
<td>3 hours</td>
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<tr>
<td>898</td>
<td>Thesis</td>
<td>1-6 hours</td>
</tr>
<tr>
<td>860M</td>
<td>Public Budgeting</td>
<td>3 hours</td>
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<tr>
<td>835V</td>
<td>Seminar in Political Theory</td>
<td>3 hours</td>
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<tr>
<td>850V</td>
<td>Seminar in Comparative Politics</td>
<td>3 hours</td>
</tr>
<tr>
<td>852V</td>
<td>Seminar in Comparative Politics: Emerging Areas</td>
<td>3 hours</td>
</tr>
<tr>
<td>860V</td>
<td>Independent Study in Topics on Urbanism</td>
<td>1 hour per sem. to 3</td>
</tr>
<tr>
<td>865V</td>
<td>Interdisciplinary Seminar on the Urban Community</td>
<td>3 hours per sem. to 6</td>
</tr>
<tr>
<td>854V-865V</td>
<td>Urban Economics</td>
<td>Each 3 hours</td>
</tr>
<tr>
<td>860V-870V</td>
<td>Regional Economics</td>
<td>Each 3 hours</td>
</tr>
<tr>
<td>859V</td>
<td>Readings in Political Science</td>
<td>3 hours</td>
</tr>
<tr>
<td>899</td>
<td>Thesis</td>
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<td>860M</td>
<td>Public Budgeting</td>
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</table>
PSYCHOLOGY (PSY)

Graduate Faculty Members:
Professors Robert Ellingson, Francis Hurst, John Newton (Chairman), D. T. Pedrini, James Williams;
Associate Professors Kenneth Deffenbacher, Norman Hamm, Shelton Hendricks, Clemm Kessler, Harry Saslow, Fred Strider, Richard Wikoff;
Assistant Professors Kenneth Berry, Evan Brown, Robert Innes, Richard Kohlan, Joseph LaVoie, C. Raymond Millimet

Admission Requirements: A minimum of 15 undergraduate semester hours of psychology courses including basic statistics and an upper level laboratory course emphasizing the experimental method, data collection, statistical analysis, and report writing. Students who do not meet the above requirements may be provisionally admitted following the Graduate College's policy.

Master of Arts

To complete the M.A. degree with a major 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. The student must choose one course from each of the following four groups. These courses must be completed within the first 16 hours of graduate work.

I. A. Psychology 904 (Proseminar in Learning)
II. A. Psychology 931 (Proseminar in Perception)
III. A. Psychology 810V (Proseminar in Analysis of Variance)
IV. A. Psychology 814 (Proseminar in Social Psychology)

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, physiological, industrial, quantitative, personality, social, or child psychology. Final determination of a student's plan of study always resides with his adviser and the department. However, to meet the graduate college requirements, a student must take at least half of his work in courses which are open only to graduate students.

Master of Science

To complete the M.S. with a major in industrial psychology or the M.S. with a major in educational psychology, the student must present 36 hours of graduate course work in psychology, or 24 hours in psychology plus 12 hours in a related minor field. The student must choose one course from each of the following four groups. These courses must be completed within the first 16 hours of graduate work.

I. A. Psychology 904 (Proseminar in Learning)
II. A. Psychology 931 (Proseminar in Perception)
III. A. Psychology 810V (Proseminar in Analysis of Variance)
IV. A. Psychology 814 (Proseminar in Social Psychology)

Additional required course work may be designated by the department. This will ordinarily include up to 3 hours of practicum credit. Final determination of a student's plan of study always resides with his adviser and the department. However, to meet the graduate college requirements a student must take at least half of his work in courses which are open only to graduate students.
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 professional work experience in the schools.

Filing of an acceptable plan of study with the graduate office will be required on admission to the program. Students will arrange their programs according to the subject matter areas below. Since individual students may have widely variant backgrounds, considerable flexibility is allowed in choice of specific courses. However, final decision on the appropriateness of a program rests with the Psychology Department.

I. Psychological Foundations
   Required: 2 or 3 courses
   These courses are to be a continuation of fundamental psychology courses in learning, experimental psychology, etc., taken during work toward the Master's degree.

II. Psychological Methods and Techniques
   Required Courses (other courses may be substituted for any of the courses below which may have been completed prior to entrance into the School Psychology program)
   - Psychology 831V, Individual Tests I
   - Psychology 831V, Individual Tests II
   - Psychology 885V, Practicum in Psychology
   - Psychology 855V, Introduction to Therapeutic Techniques with Children
   - Psychology 877V, Behavior Modification

III. Educational Foundations
   Required: 2 or 3 courses
   These courses will be selected from departments of special education, counseling and guidance, and/or elementary education. Approval for inclusion in the program must be obtained from the Psychology Department prior to registration.

Course Descriptions

401M History of Psychology
   PREREQ: Permission of instructor
   A study through reading and discussion of the significant individual contributors and contributions to the growth of psychology.

403M Psychology of Motivation
   PREREQ: Psychology 213, 301, or 804
   An exploration of the motivations of organisms including methods, concepts, issues, and theories deriving from historical and contemporary research.
OSSM

98

052M

062M

0 9 0 M Pr o b l e m i n P s y c h o l o g y .............. . .. .. ......... ..... .. .... .. .. .. .. ....

B11Y P ro ·emi nn r: Mu lt i p l e R e gress io n a nd F ac t or An a ly si s . •l hours

PR E REQ : Ps ycholo gy 83 1M or ba sic s tati s ti cs and P sy ch o logy

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PREREQ : Psy ch ology 1 01 and pe rmi ss i o n

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An Intro d u cti on t o

Engi n eering

Tech n iques o f Pr ogr ammed I n• tr uc t io n ... .......... ....... .. .. .. .. 3 ho u r s

Pu y c h ologica l

852V Tests and Measurements

PREREQ: Basic statistics

A study of the theoretical and practical problems related to the development and use of psychological tests covering such topics as measurement, test development, standardization, reliability, validity, and interpretation.

855V Seminar in Communication Theory (Speech 850V)

PREREQ: Basic statistics or permission of instructor

Analysis of current approaches to the study of communication with emphasis on theoretical models and their application to various professional interests.

851V Advanced Educational Psychology

PREREQ: Psychology 351

A study of the principles of learning and testing and their applications to problems of contemporary education, particularly to those problems existing in the classroom.

852V Individual Tests I

PREREQ: 16 graduate hours of psychology including completion of all required courses for the Master's degree and Psychology 831M or 832V Administration, scoring, standardization, and interpretation of individually administered tests with special emphasis upon intelligence testing.

854V Individual Tests II

PREREQ: Psychology 102 and 343, or permission of instructor

A course in the techniques, rationale, and research literature of changing behavior through reinforcement procedures. Particular attention will be paid to principles of learning and behavior problems in school and the behavior of the mentally disturbed.

856V Clinical Child Psychology for School Psychologists

PREREQ: Permission of instructor

(Cross-listed with Psychiatry 368 at the University of Nebraska College of Medicine)

An advanced course in child psychology, with emphasis upon diagnostic classification, refinement of approaches and techniques of assessment, and correction of problem behavior in the school age child.

857V Practicum in Psychology

PREREQ: Permission of instructor

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 dealing with practical problems.

859 Thesis

1-6 hours

Independent research project written under supervision of a faculty committee.

904 Proseminar: Learning (Newton)

PREREQ: Permission of instructor

A comprehensive and intensive coverage of the experimental literature on learning in humans and animals.

905 Advanced Seminar in Learning (Newton)

PREREQ: Permission of instructor

A course considering theorists who have most directly influenced the contemporary psychology of learning.

921 Proseminar: Perception (Deffenbacher)

PREREQ: Graduate standing and permission of instructor

A comprehensive and intensive coverage of the experimental literature on perception in humans and animals.
SOCIOLGY (SOC)

Graduate Faculty Members:
Professors George Barger (Chairman), Philip H. Vogt (Emeritus),
Wayne Wheeler;
Associate Professor John R. Nye;
Assistant Professors William T. Clute, Elaine Hess, Merlin I. Hofstetter,
Mark O. Rousseau, Robert B. Simpson, Lucille F. Zelinsky;
Graduate Lecturers Harry H. Crockett, Wilfred Logan

Applicants for admission to the graduate program in sociology must present a minimum of 15 undergraduate semester hours in sociology including a course in statistics. Those students lacking the statistics will be required to make up this deficiency during their first year of graduate study.

Examinations: Both the M.A. and M.S. (see below) degree programs with majors in sociology require the incoming student to complete an examination covering basic concepts and theorists of the field. The examination is used in counseling the student in his degree program. In addition the student must demonstrate proficiency in sociology through successful completion of four comprehensive examinations.

Two of these comprehensives—Social Theory, and Methodology and Statistics—are required of all graduate students; the two remaining examinations are selected by the student, in consultation with his graduate adviser, from a list available through the Sociology Office. The examinations are given a minimum of twice annually, and other times as required. Detailed explanations of graduate requirements should be secured through the Sociology Office.

The M.A. degree should be sought by students preparing for college-level teaching and continued academic work; the M.S. degree as preparation for field or action application of sociology.

Master of Arts
The student is expected to complete Sociology 801V and a minimum of 21 additional graduate semester hours, including at least nine semester hours of 800V-level work. A thesis is required.

Master of Science with a Major in Applied Sociology
A student contemplating this degree is expected to complete Sociology 801V and a minimum of 27 additional graduate semester hours, at least nine of which are from the 800V-level selection. In addition, the student must complete satisfactorily six semester-hour equivalents of 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 currently advised to apply for admission to the Graduate School of Social Work at the Lincoln campus).

Detailed requirements for the M.S. degree with a major in applied sociology should be secured through consultation with the Sociology Office.

Master of Social Work
The Graduate School of Social Work of the University of Nebraska—
Lincoln, in a cooperative program with the Social Welfare program at
the University of Nebraska at Omaha, is offering graduate courses on the Omaha campus. Further information may be obtained in consultation with the members of the Social Welfare faculty at the University of Nebraska at Omaha.

Course Descriptions

Anthropology

821M Cultural Anthropology (1) 3 hours

Family, art, war, maintenance, prestige, religion approached as parts of an integrated whole, a way of life of preliterate human society. Illustrations from a number of simple societies, anthropological theories, methods of study.
### 822M North American Archeology
- **PREREQ:** Graduate
- 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.
- **3 hours**

### 822M Introduction to General and Experimental Linguistics
- **PREREQ:** Graduate standing
- A broad survey of generative syntax, phonology, and pragmatics and of related material in linguistic and paralinguistic perception, memory, and communication. Designed primarily for students wishing to apply linguistic methods and thought in the behavioral and communication sciences. Laboratory to be arranged.
- **3 hours**

### 952M Seminar in Anthropological Problems
- **PREREQ:** Graduate
- A course designed to allow students to pursue individual interests in various aspects of anthropology. Work with the instructor in projects designed to increase the student's depth of knowledge in individual areas.
- **3 hours**

### Social Welfare

#### 844M Social Welfare Methods: Strategy
- **3 hours**

#### 894M Application of Social Theory to Social Practice
- **3 hours**

### Sociology

#### 801M Social Control of Behavior
- **PREREQ:** Graduate standing
- The social processes by which the person's behavior is adapted to the group. Emphasis is on analysis of social situations. Planning and evaluation of strategy and implementation of social change. The study of the processes of control and change within unstable and transitory groups, including crowds and associated phenomena, diffuse collectivities, advertising and propaganda in mass society, publics, and social movements.
- **3 hours**

#### 802M Collective and Exchange Behavior
- **PREREQ:** Graduate
- The study of the processes of growth and change within unstable and transitory groups, including crowds and associated phenomena, diffuse collectivities, advertising and propaganda in mass society, publics, and social movements.
- **3 hours**

#### 810M Advanced General Sociology
- **PREREQ:** Graduate. Not open to anyone who has recent credit in Sociology 101. (DOES NOT CARRY GRADUATE CREDIT IN SOCIOLOGY)
- A survey of the principles of sociology including interaction, groups, institutions, social organization, and change. Consideration is also given to sociological techniques, major specialties, and classes of data.
- **3 hours**

#### 810M The Community
- **PREREQ:** Graduate
- A basic course in community sociology. Sociological theory and the techniques of empirical research are applied in published studies of communities in the United States and elsewhere. The comparative social scientific method is elaborated as it pertains to data derived from community investigation.
- **3 hours**

#### 812M Urban Geography (Same as Geography 412)
- **PREREQ:** Graduate
- A geography of the city from the viewpoint of history, site, and situation, external relations, internal relations, and the comparative study of cities.
- **1, 2 hours**

#### 815M Sociology of Deviant Behavior
- **PREREQ:** Graduate
- A theoretical analysis of the relation of deviant group behavior and subcultures to community standards of conventional behavior as expressed in law and norms.
- **1, 2 hours**

#### 816M Urban Sociology
- **PREREQ:** Graduate
- A course in the sociology of cities and the social characteristics of urban life, including its historical, demographic, ecological, social psychological, and institutional aspects. The unique problems of the modern metropolitan complex, both as to effective functioning and as an environment for human beings, are discussed.
- **1, 2 hours**

#### 817M American Family Problems
- **PREREQ:** Graduate
- An analysis of failures of function and attendant problems in a variety of American families: parent-child tension, problems of sexual adjustment, role conflicts, multi-problem families, desertion, divorce, others.
- **1, 2 hours**

#### 818M Methods of Social Research
- **PREREQ:** Graduate
- An introduction to research methods in social science as applied to the study of social phenomena. Topics covered include survey sampling, error and reliability in research, normal and non-normal distributions, and statistical tests of significance. Emphasis will be upon the use of statistical techniques and their underlying assumptions.
- **1, 2 hours**

#### 852M Seminar in Cross Cultural Communication
- **PREREQ:** Admission to graduate study and permission of the instructor
- Directed towards understanding the components of cultural and sub-cultural misinterpretations, with the purpose of bringing to awareness those factors which disturb communication in cross-cultural situations.
- **1, 2 hours**

#### 860M Complex Social Organizations
- **PREREQ:** Graduate
- Analysis of complex organizations with emphasis on the development of sociological knowledge of complex organizations. The course will include an examination of complex organizations from the standpoint of social theo

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**For more information, please refer to the original document.**
899M Sociology of Religion
PREREQ: Graduate
Analysis of religious behaviors from a sociological and social-psychological perspective, and utilizing both theoretical and empirical materials. The class is designed as an introductory approach to the sociology of religion, and the first in a two-step sequence, undergraduate and graduate.

899M Independent Study
PREREQ: Graduate
Guided reading in special topics under the supervision of a faculty member.

885M Independent Study
PREREQ: Graduate
Guided reading in special topics under the supervision of a faculty member.

801V General Seminar in Sociology
PREREQ: Graduate
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.

805V Seminar in Social Psychology
PREREQ: Graduate
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.

810V Seminar in Applications of Sociology
PREREQ: Graduate
Sociological theory and method applied to a practical problem of relevance to general social issues.

811V Social Problems of the Disadvantaged
A survey of the social problems existing in disadvantaged communities. The effects upon individuals of such settings. The subculture of poverty.

812V Seminar in Social Gerontology
PREREQ: Graduate
An interdisciplinary, developmental study of the impact of aging upon individuals and society, including the subsequent reactions of individuals and society to aging with particular emphasis given to changes during the latter half of the life cycle (45-90 years). Both theoretical and programmatic implications of aging research are considered.

840V Seminar in Small Group Communication
(Same as Speech 840V)
PREREQ: Speech 801V, 830V or equivalent, or basic statistics, or permission of the instructor
Research and theory in the processes of group communication and leadership: research procedures: approaches to teaching a discussion course. (Cross-listed with Speech and Psychology)

880V Seminar in Research Methods
PREREQ: Graduate
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) test instruments, data gathering by methods such as interviewing and participant observation, and analysis.

885V Seminar in the Sociology of Religion
PREREQ: Graduate
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.

886V Seminar in Social Organization
PREREQ: Graduate
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.

890V Seminar in Sociological Theory
PREREQ: Graduate
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.

* As seminar topics change, these course numbers may be repeated in a student's program without implying duplication.
Course Descriptions

**801M** Advanced Projects in Speech  
(I, II) Each 1-3 hours

**802M** PREREQ: 7 hours of speech in the general area to be studied and permission of department chairman. Special projects in speech supplementing regular courses; individual research projects; combined study and practicum.

**810M** Rhetorical Criticism  
(P) 3 hours

**811M** Greek and Roman Rhetoric and Oratory  
3 hours

**812M** Oral Interpretation  
(P) 3 hours

**813M** History of the Theatre  
PREREQ: Speech 220  
3 hours

**814M** Stage and TV Lighting  
PREREQ: Speech 220 and 223  
3 hours

**815M** Costume History and Design  
PREREQ: Speech 220 and permission of instructor  
3 hours

**820M** Communication Workshop  
PREREQ: Speech 220, and permission of the instructor  
3 hours

**821M** Introduction to General Semantics  
PREREQ: 6 hours speech and 3 hours psychology or permission of instructor  
3 hours

**822M** Perception  
PREREQ: Speech 201 and 3 hours psychology or sociology or permission of instructor  
3 hours

**823M** Seminar in Cross Cultural Communication  
PREREQ: Admission to graduate study and permission of the instructor  
3 hours

**824M** History and Problems in Speech Education  
PREREQ: Speech 112 or permission  
3 hours

**825M** Directing Forensics  
PREREQ: Speech 112 or permission  
3 hours

**826M** Political Broadcasting  
PREREQ: Speech 220 or Journalism 101 or Political Science 150  
3 hours

**827M** Broadcast and the Public  
PREREQ: Speech 220 or permission of the instructor  
3 hours

**828M** News and TV Programming and Audience Analysis  
PREREQ: Speech 220 and/or permission of department chairman  
3 hours

**829M** Dramatic Theory and Criticism  
PREREQ: Speech 220 or permission of instructor  
3 hours
821V Seminar in Contemporary Theatre Aesthetics 3 hours
PREREQ: Speech 220, Speech 420, and English 252 or permission.
Research and dialogue in the aesthetic theories and movements in the
contemporary theatre. Emphasis on the sources, background, and con-
figuration of theatrical styles in this century.

825V Seminar in Play Direction 3 hours
PREREQ: Graduate standing and permission of instructor
An indepth study of the principles of play direction.

850V Seminar in Communication Theory 3 hours
PREREQ: Basic statistics or by permission of the instructor
Analysis of current approaches to the study of communication, with
emphasis on theoretical models and their application to various profes-
sional interests.

899 Thesis 1-6 hours
Independent research project written under the supervision of an
adviser.

940 Seminar in Small Group Communication 3 hours
PREREQ: Speech 201V or equivalent, or basic statistics, or permission of
the instructor
Research and theory in the processes of small group communication and
leadership; research procedures; approaches to teaching a discussion
course. (Brilhart, J.)

555 Seminar in Applications of Non-Verbal Communication Theory 3 hours
PREREQ: Course in research methods or permission of instructor
Theories and research on the development, facilitation and barriers of
human non-verbal communication. Analysis of non-verbal interaction
with specific applications to education, business, supervision, counseling,
therapy and interpersonal speech communication. (Crosslisted as Psy-
chology 936 and Sec. Ed. 936) (Brilhart, B.)
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