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MOOR HEAD STATE COLLEGE



GRADUATE BULLETIN 1967-1969





LEGEND

- McLean Hall
- 2 Hagen Hall 3 Weld Hall
- Weld Hall Addition

- Campus School
 Livingston Lord Library
 Kise Commons
 Comstock Memorial Union
 Dahl Hall—Women's Residence
- & Placement Office 10 Grantham Hall—Women's
- 10 Grantham Hall—Women's
 Residence
 11 Nelson Hall—Men's Residence
 12 Special Office Building
 13 Maintenance
 14 Health Center
 15 Heat Plant
 16 Nemzek Hall
 17 Football Field
 18 Baseball Field

- 19 Tennis Courts
 20 Snarr Residence Complex
 21 Women's Residence Hall
 22 Ballard Hall—Men's Residenc
 23 Tennis Courts
 24 Center For The Arts
 25 Grier Hall
 26 Flora Frick Hall
 27 Classroom Buildings
 (Parking Lots)
 A, B, C, D, H, K, M, N, S, T.

CATALOGUE OF GRADUATE STUDIES

1967 - 1969

DECEMBER 1967



MOORHEAD

STATE .

COLLEGE

MOORHEAD

MINNESOTA

56560

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SUMMER SESSIONS CALENDAR 1968-1969

FALL QUARTER

Fri., Sept. 15 Mon., Sept. 18 Mon.-Sat., Sept. 18-23 Wed.-Fri., Sept. 20-22 Mon., Sept. 25 Wed., Oct. 25 Tues., Nov. 21 Mon., Nov. 27 Thurs., Dec. 7 Fri., Dec. 8 Mon.-Thurs., Dec. 11-14 Thurs., Dec. 14

New Faculty Orientation
Faculty Meeting
Welcome Week
Registration and Payment of Fees
Classes Begin
Midterm
Thanksgiving Recess begins at close of classes
Classes Resume
Preparation Day
Final Examinations
Final Examinations
Fall Quarter closes at 5:00 p.m.
Holiday Recess through Tuesday, January 2

WINTER QUARTER

Wed., Jan. 3 Thurs., Jan. 4 Wed., Feb. 7 Thurs., Mar. 14 Fri.-Sat., Mar. 15-16 Mon.-Wed., Mar. 18-20 Wed., Mar. 20 Registration and Payment of Fees Classes Begin Midterm Preparation Day Final Examinations Final Examinations Winter Quarter closes at 5:00 p.m. Spring Recess through Tuesday, March 26

SPRING QUARTER

Wed., March 27
Thurs., March 28
Fri., April 12
Thurs., May 2
Thurs., May 30
Thurs., June 6
Fri.-Sat., June 7-8
Mon.-Wed., June 10-12
Wed., June 12
Wed., June 12

Registration and Payment of Fees Classes Begin Holiday: Good Friday Midterm Holiday: Memorial Day Preparation Day Final Examinations Final Examinations Spring Quarter closes at 5:00 p.m. Commencement

SUMMER SESSIONS 1968

FIRST SUMMER SESSION

Mon., June 17 Tues., June 18 Sat., June 22 Thurs.-Fri., July 4-5 Sat., July 20 Sat., July 20 Registration and Payment of Fees Classes Begin Classes in session in lieu of July 5 Holiday: Independence Day Final Examinations First Summer Session closes 5:00 p.m.

SECOND SUMMER SESSION

Mon., July 22 Tues., July 23 Fri., August 23 Fri., August 23 Fri., August 23

Registration and Payment of Fees Classes Begin Final Examinations Second Summer Session closes 5:00 p.m. Summer Commencement

SUMMER SESSIONS 1969

FIRST SUMMER SESSION

Mon., June 16 Tues., June 17 Fri., July 4 Sat., July 19 Sat., July 19 Registration and Payment of Fees Classes Begin Classes in session in lieu of July 5 Holiday: Independence Day Final Examinations First Summer Session closes 5:00 p.m.

SECOND SUMMER SESSION

Mon., July 21 Tues., July 22 Friday, August 22 Friday, August 22 Friday, August 22

Registration and Payment of Fees Classes Begin Final Examinations Second Summer Session closes 5:00 p.m. Summer Commencement

FALL QUARTER

Fri., Sept. 13 Mon., Sept. 16 Mon.-Sat., Sept. 16-21 Wed.-Fri., Sept. 18-20 Mon., Sept. 23 Mon., October 28 Tues., Nov. 26 Mon., Dec. 2 Thurs., Dec. 5 Fri., Dec. 6 Mon.-Thurs., Dec. 9-12 Thurs., Dec. 12 New Faculty Orientation
Faculty Meeting
Welcome Week
Registration and Payment of Fees
Classes Begin
Midterm
Thanksgiving Recess begins at close of classes
Classes Resume
Preparation Day
Final Examinations
Final Examinations
Fall Quarter closes at 5:00 p.m.
Holiday Recess through Wednesday, January 1

WINTER QUARTER

Thurs., Jan. 2 Fri., Jan. 3 Fri., Feb. 7 Thurs., March 13 Fri.-Sat., March 14-15 Mon.-Wed., March 17-19 Wed., March 19 Registration and Payment of Fees Classes Begin Midterm Preparation Day Final Examinations Final Examinations Winter Quarter closes at 5:00 p.m. Spring Recess through Tuesday, March 25

SPRING QUARTER

Wed., March 26 Thurs., March 27 Fri., April 4 Thurs., May 1 Fri., May 30 Thurs., June 5 Fri.-Sat., June 6-7 Mon.-Wed., June 9-11 Wed., June 11 Registration and Payment of Fees Classes Begin Holiday: Good Friday Midterm Holiday: Memorial Day Preparation Day Final Examinations Final Examinations Spring Quarter closes at 5:00 p.m. Commencement

GRADUATE FACULTY

OFFICERS OF ADMINISTRATION

JOHN J. NEUMAIER, 1958 President B.A., Ph.D., University of Minnesota

ROLAND DILLE, 1963 Academic Dean B.A., Ph.D., University of Minnesota

ROBERT A. HANSON, 1959 Associate Academic Dean B.S., M.S., Ph.D., University of Minnesota I. KENNETH SMEMO, 1961 Dean of Graduate Studies B.S., Wisconsin State College M.A., Ph.D., University of Minnesota

VINCENT C. DiPASQUALE, 1963 Director of Fifth Year Program B.A., University of Michigan M.A., University of Dayton

DEPARTMENT OF ART

PHILIP R. SZEITZ, 1966 Chairman and Associate Professor B.F.A., Layton School of Art, Milwaukee M.S.F.A., M.F.A., University of Wisconsin

JOHN B. HOLLAND, 1966 Assistant Professor B.F.A., Texas Christian University M.A., Harvard University

NELS N. JOHNSON, 1939 Professor B.A., M.A., State University of Iowa Ed.D., Pennsylvania State University LYLE E. LASKE, 1965
Assistant Professor
B.S., Wisconsin State University
M.F.A., M.S., University of Wisconsin

MARCEL D. STRATTON, 1955 Assistant Professor B.F.A., University of Nebraska M.A., University of Chicago

JOHN YOUNGQUIST, 1961 Assistant Professor B.A., University of Minnesota M.F.A., State University of Iowa

DEPARTMENT OF BIOLOGY

KENNETH SKJEGSTAD, 1966 Chairman and Associate Professor B.S., Moorhead State College Ph.D., University of California, Los Angeles

MONROE BARTEL, 1963 Associate Professor B.A., Tabor College M.S., Ph.D., Kansas State University THOMAS COLLINS, 1962 Associate Professor B.S., Southern Illinois University Ph.D., University of Minnesota

YVONNE CONDELL, 1965 Associate Professor B.S., Florida A.M. College M.A., Ph.D., University of Connecticut

GRADUATE FACULTY

DEPARTMENT OF BIOLOGY (continued)

OSCAR W. JOHNSON, 1965 Associate Professor B.S., Michigan State University M.S., Ph.D., Washington State University

GENEVIEVE N. KING, 1947 Professor B.A., M.S., West Virginia University Ph.D., State University of Iowa MARY SHIMABUKURO, 1965 Assistant Professor B.S., University of Wisconsin M.S., Ph.D., University of Minnesota

ROBERT TOLBERT, 1963 Professor B.S., B.A., Moorhead State College Ph.D., Rutgers University

DEPARTMENT OF BUSINESS

HOWARD P. LYSNE, 1957 Chairman and Professor B.S., Minot State Teachers College M.S., Montana State University Ed.D., University of North Dakota PAUL HEATON, 1943 Professor B.A., M.A., University of Minnesota Ph.D., University of Chicago

DEPARTMENT OF CHEMISTRY

SOL SHULMAN, 1965 Chairman and Professor B.S., University of Washington M.S., University of Wisconsin Ph.D., North Dakota State University

DEWEY O. BRUMMOND, 1966 Professor B.S., North Dakota State University M.S., Ph.D., University of Wisconsin

EDWARD D. HOGANSON, 1965 Assistant Professor B.S., Gustavus Adolphus College M.S., Ph.D., Iowa State University

DENNIS KRZYZANIAK, 1962 Associate Professor B.S., M.S., North Dakota State University DENNIS R. MATHIASON, 1966 Assistant Professor B.S., Mankato State College Ph.D., University of South Dakota

B. SPENCER MEEKS, JR., 1962 Professor B.S., University of South Carolina Ph.D., Cornell University

JANET M. PAULSEN, 1966 Assistant Professor B.S., Moorhead State College M.S., Ph.D., Virginia Polytechnic Institute

WILLIAM B. TREUMANN, 1960 Professor B.S., University of North Dakota M.S., Ph.D., University of Illinois

DEPARTMENT OF EDUCATION

GLAYDON D. ROBBINS, 1949 Dean of Education and Professor B.S., M.A., Ph.D., University of Minnesota

GERHARD HAUKEBO, 1967 Chairman and Associate Professor Director of Student Teaching B.S., M.A., Ph.D., University of Minnesota

HERBERT J. ABRAHAM, 1964 Professor B.A., M.A., Oxford University, England Ph.D., Ohio State University

WERNER E. BRAND, 1943 Professor B.A., Concordia College M.S., University of North Dakota Ed.D., Colorado State College

GLENN G. DAHLEM, 1967 Assistant Professor and Campus School Counselor B.S., University of Wisconsin M.S., Winona State College

FRANCES H. DILLON, 1949 Professor B.A., College of Wooster M.S., University of Wisconsin Ph.D., University of Chicago

VINCENT C. DiPASQUALE, 1963 Assistant Professor B.A., University of Michigan M.A., University of Dayton ALLEN G. ERICKSON, 1946 Professor B.Ed., Moorhead State College M.A., University of Minnesota Ed.D., University of Oregon

ROBERT A. HANSON, 1959 Professor B.S., M.S., Ph.D., University of Minnesota

JOHN M. JENKINS, 1945 Professor B.S., North Dakota State University M.A., State University of Iowa Ed.D., University of North Dakota

JANE JOHNSTON, 1945 Professor B.A., M.A., Ph.D., University of Minnesota

RONALD L. LITHERLAND, 1966 Assistant Professor and Counselor College and Campus School B.S., Iowa State University M.A., Ph.D., State University of Iowa

ROBERT MacLEOD, 1965 Associate Professor B.S., M.A., University of Minnesota Ph.D., University of Minnesota

RICHARD Y. REED, 1964
Director of Counseling Service
and Professor of Education and Psychology
B.S., Drury College
M.A., Washington University
Ph.D. University of Chicago

MARTIN H. TONN, 1957 Director and Associate Professor of Special Education B.A., M.A., Ph.D., State University of Iowa

GRADUATE FACULTY

DEPARTMENT OF ENGLISH

CLARENCE A. GLASRUD, 1947 Chairman and Professor B.S., Moorhead State College M.A., Ph.D., Harvard University

RUFUS T. BELLAMY, 1964 Assistant Professor B.S., M.A., Yale University

MARJORIE CORNER, 1966
Assistant Professor
B.A., Hamline University
M.A., Washington State University

ROLAND DILLE, 1963 Professor B.A., Ph.D., University of Minnesota

VERLE DENNIS FLOOD, 1962 Professor B.A., M.A., Ph.D., State University of Iowa ALLAN HANNA, 1960 Associate Professor B.A., M.A., University of Michigan

BERNARD HERINGMAN, 1966 Associate Professor A.B., John Hopkins University A.M., Ph.D., Columbia University

ROBERT PENDER, 1966 Assistant Professor B.S., M.A., Memphis State University

MARY ANNE PRYOR, 1965
Assistant Professor
B.A., Grinell College
M.N., Yale University School of Nursing
M.A., Ph.D., University of Nebraska

WILLIAM WOOLWINE, 1966 Instructor B.A., University of Richmond M.A., University of Arizona

DEPARTMENT OF FOREIGN LANGUAGES

JAMES STEVENS, 1966 Chairman Designate Assistant Professor B.A., McGill University M.A., McGill University WALTER STOTZER, 1965
Professor
B.A., Teacher College, Erfurt, Germany
M.A., University of Jena
Ph.D., Schiller University at Jena

DEPARTMENT OF GEOGRAPHY

E. FRANK KOLLER, 1965 Chairman and Professor B.A., University of Utah M.A., Brigham Young University Ph.D., Pennsylvania State University HAROLD B. ADDICOTT, 1944 Associate Professor B.A., Ohio University M.A., Clark University

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION

DONALD N. ANDERSON, 1941 Chairman and Assistant Professor B.S., Moorhead State College M.Ed., University of Minnesota

LOEL D. FREDERICKSON, 1956 Baseball Coach and Assistant Professor B.S., M.Ed., University of Minnesota

LAURENCE R. MacLEOD, 1954
Assistant Professor
B.S., Mayville State Teachers College
A.M., Colorado State College of Education

MARY V. MONTGOMERY, 1958 Assistant Professor B.S., Slippery Rock State College M.A., George Peabody College for Teachers

T. E. SMITH, 1949 Professor B.S., Moorhead State College M.Ed., University of Minnesota Ed.D., University of North Dakota

WILLIAM THOMAS, 1966 Assistant Professor B.S., Valley City State Teachers College M.A., Colorado State College

DEPARTMENT OF HISTORY

VICTOR J. PETERS, 1961 Chairman and Professor B.A., M.A., University of Manitoba D.Phil., University of Goettingen

F. BENJAMIN CARR, 1966
Assistant Professor
B.A., Cornell University
B.D., Union Theological Seminary
M.S.T., Andover Newton Theological School
Ph.D., University of London

ROBERT DAVIES, 1966
Assistant Professor
B.A., College of Wooster
M.A., Rutgers University
Ph.D., University of Wisconsin

LYSLE E. MEYER, JR., 1966 Assistant Professor B.A., Western Reserve University M.A., Ohio State University

WILLIAM RAAT, 1966 Assistant Professor B.S., Ph.D., University of Utah

I. KENNETH SMEMO, 1961 Associate Professor B.S., Wisconsin State College M.A., Ph.D., University of Minnesota

GRADUATE FACULTY

DEPARTMENT OF INDUSTRIAL ARTS

MARLOWE E. WEGNER, 1947 Chairman and Professor B.S., Moorhead State College M.A., University of Minnesota Ed.D., University of North Dakota

ALBERT G. MUDGETT, 1957 Associate Professor of Engineering Graphics B.S., M.A., Ph.D., University of Minnesota OTTO E. URSIN, 1946 Professor B.S., Bemidji State College M.S., University of Minnesota Ed.D., Bradley University

LELAND W. WHITE, 1966
Associate Professor
B.S., University of North Dakota,
Ellendale
M.E., Colorado State University
D.Ed., Texas A & M University

DEPARTMENT OF MATHEMATICS

WARREN J. THOMSEN, 1965 Chairman and Professor B.A., Iowa State Teachers College M.S., Ph.D., State University of Iowa MARION V. SMITH, 1945 Associate Professor B.A., Macalester College M.A., University of Minnesota

DEPARTMENT OF MUSIC

EARNEST N. HARRIS, 1962 Chairman and Associate Professor B.A., Concordia College M.A., Hamline University

ALBERT NOICE, 1965 Professor B.M., M.M., MacPhail College of Music Ed.D., Colorado State College IRWIN SONNENFIELD, 1965 Associate Professor M.M., Florida State University, Tallahassee Ph.D., University of Wisconsin

MAUDE H. WENCK, 1929 Professor B.M.E., M.M., Northwestern University Ed.D., Teachers College, Columbia University

DEPARTMENT OF PHILOSOPHY

CHARLES R. MAGEL, 1962 Chairman and Professor B.S.C., Northwestern University Ph.D., University of Minnesota ARNOLD JOHANSON, 1966 Assistant Professor B.A., University of Minnesota M.A., Yale University

DEPARTMENT OF PHYSICS

WILLIAM R. ALLING, 1965 Chairman and Associate Professor B.S., LeMoyne College Ph.D., University of Notre Dame

EMIL KOCHIS, 1959 Assistant Professor B.S., St. Cloud State College M.A., Ohio State University HSIN-YANG YEH, 1966 Associate Professor B.S., National Taiwan University M.S., Kyushu University, Japan Ph.D., University of North Carolina

DEPARTMENT OF POLITICAL SCIENCE

ANOUSHIRAVAN KHOSHKISH, 1966 Chairman and Associate Professor M.A., University of Geneva Ph.D., Graduate Institute of International Studies at Geneva

FRANK KENDRICK, 1963 Associate Professor B.A., Grinnell College M.A., Ph.D., University of Chicago EDWARD ESTES, 1965 Associate Professor B.S., M.A., Emory University Ph.D., University of Florida

DEPARTMENT OF PSYCHOLOGY

JAMES F. CONDELL, 1965 Chairman and Associate Professor B.A., Kentucky State College M.A., Teachers College, Columbia University, New York Ed.D., University of Nebraska

DAVID D. HARSHBARGER, 1965 Assistant Professor B.S., M.A., West Virginia University RICHARD Y. REED, 1964
Director of Counseling Services and
Professor of Education and Psychology
B.S., Drury College
M.A., Washington University
Ph.D., University of Chicago

ABBOTT SCHULMAN, 1966 Assistant Professor B.A., Duke University M.A., East Carolina State College Ph.D., Florida State University

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

MAX N. BURCHARD, 1964 Chairman and Associate Professor B.A., San Jose State College M.A., Ph.D., University of Nebraska

DEPARTMENT OF SPEECH

DELMAR J. HANSEN, 1958 Chairman and Professor B.S., University of Omaha M.S., Florida State University Ph.D., State University of Iowa DAVIS A. SCOTT Assistant Professor A.B., Grinnell College A.M., Ph.D., Indiana University







PROGRAMS OFFERED

MASTER'S DEGREE PROGRAMS

MASTER OF ARTS English History

MASTER OF MUSIC

MASTER OF SCIENCE Biology Chemistry

MASTER OF SCIENCE IN EDUCATION
Elementary Education
Elementary Administration and Supervision
Guidance and Counseling
Remedial Reading on Secondary Level
Remedial Reading on Elementary Level
Secondary Education
Art
Biology
Business Education
Chemistry
English
Health & Physical Education
Industrial Arts
Mathematics
Music
Physics
Social Studies
Speech

POST-BACCALAUREATE PROGRAMS

QUEEN THAN MASTER'S DECREE PROGRAM

FIFTH YEAR PROGRAM
PROGRAMS FOR MINNESOTA CERTIFICATION IN SPECIAL TEACHING FIELDS
Audio-Visual
Remedial Reading
School Librarianship
Special Education
POST-BACCALAUREATE SPECIAL STUDENTS

GENERAL INFORMATION

MOORHEAD STATE COLLEGE

Moorhead State College has become a cultural and intellectual center of Western Minnesota. Moorhead and adjacent Fargo, North Dakota, have a population of about 80,000, who, through many organizations and projects, support and supplement the programs in education and the arts offered by Moorhead State College and its neighboring institutions, Concordia College and North Dakota State University.

While Moorhead State College is primarily a four-year liberal arts college, it has added, in the past several years, as faculties have developed and research facilities have been made available, a number of graduate programs. These programs, developed and taught by scholars educated at the major universities of this country and Europe, are designed to meet professional demands for greater preparation and to prepare students for more advanced graduate work. In addition, non-graduate post-baccalaureate programs have been developed, most recently the fifth-year program for in-service teachers.

The programs offered at Moorhead State College are accredited by the North Central Association of Colleges and Secondary Schools. The College is also accredited by the National Council for Accreditation of Teacher Education.

Moorhead State College is a member of the American Council of Education, of the North Central Association of Colleges and Secondary Schools, and of the American Association of Colleges for Teacher Education.

ASSISTANTSHIPS AND SCHOLARSHIPS

Graduate assistantships are available to highly qualified students in all departments in which graduate programs are offered. Since nominations are made by departments, applicants should submit requests for assistantships to the appropriate department chairman, or to the Dean of Graduate Studies. Stipends of up to \$2,000 are available for the academic year.

Residence Hall Assistants help supervise on-campus housing units in return for room and board in the dormitories where they assist. Resident Hall Counseling Assistantships, which also provide room and board, are available to students in the Guidance and Counseling Program. Applications for these positions should be made to the Dean of Students.

Graduate students in Special Education are eligible for Summer Traineeships, provided by the Minnesota Department of Education. The stipend is \$75.00 per week plus tuition and fees. Application should be made to the Director of Special Education.

A limited number of graduate scholarships is available to highly qualified students. These grants average about \$500.00 per year. Part-time employment services, National Defense Student Loans, and other loan services are available. Information is available from the Financial Aid Office.

Moorhead State College participates in the Work-Study Program which is a part of the Economic Opportunity Act of 1964. Under this program, qualified students are offered part-time employment on the campus or in the community. The college also offers some students an opportunity to work full-time during the summer under this program. Further information and application forms may be obtained by writing to the Financial Aid Office. The Financial Aid Office also provides information and assistance for veterans covered by the 1966 "G.I." Bill. (P.L. 89-358).

COLLEGE SERVICES

The Moorhead State College Placement Bureau assists students in locating appropriate positions in education, business, industry, and government service. It offers a convenient and efficient means of providing employers with the credentials of applicants. A registration fee of \$6.00 entitles an individual to recommendation services for one year. A graduate may reactivate his file at any time by paying the \$6.00 fee. Every graduate is advised to have a permanent confidential file on record in the Placement Bureau. Current students who expect to graduate in either June or August are requested to activate their files by the preceding Deecmber. The Placement Bureau holds membership in the Minnesota Institutional Teacher Placement Association, and the Association for School, College, and University Staffing.

Accommodations in five residence halls are available to graduate students, who should apply to the Dean of Students at least two months in advance of matriculation. Cost of room and board is \$269.00 per quarter for a shared double room. There are a limited number of single rooms. Room and board in a single room is \$288.00. The Office of Student Personnel Services also provides assistance in arranging housing in the Fargo-Moorhead area. The college food service operates a cafeteria in Kise Commons, where meals are served under the provisions of the room and board contracts. Off-campus students, faculty members, college visitors, and guests are invited to use the dining facilities at a moderate cost. Off-campus students may contract for meals on a quarterly basis.

The College Health Service, located at 706 South 16th Street provides the full-time services of a registered nurse for all students, and arranges for the services of a physician when necessary. Medical consultation service is available to students during established office hours. Temporary infirmary care for full-time students is provided without cost, but students who do not live in one of the college residence halls are required to pay board during their stay in the infirmary. Upon a physician's orders, students who are seriously ill are transferred to a local hospital.

A group health and accident insurance program is available to students. The College urges all students to have some form of insurance protection against costs of accident and illness.

The Office of Student Personnel Services provides professional counseling without charge to students with academic, personal, vocational and social problems. Tests of aptitude, interest and personality are administered and interpreted through this office. Students interested in such assistance should contact the Director of Counseling Services.

SUMMER SCHOOL AND EVENING CLASSES

The academic year at Moorhead State College runs from September to June and is divided into three quarters. In addition, two five-week sessions are offered each summer. By attending both sessions, a student may complete a full quarter of course work. Special institutes and workshops, carrying appropriate credit, are also offered during the summer.

Besides the daytime schedule of classes, Moorhead State College offers evening classes on the campus during the academic year. They are part of the regular campus program, and are open to full-time as well as part-time students. Most of the evening classes meet once a week, with sessions lasting from two or four hours depending on the number of quarter hours of credit offered.

Evening classes are also offered at off-campus centers in communities within a radius of approximately one hundred miles of Moorhead. All of these meet only once a week. Because of the limited opportunity of students in off-campus courses to confer with their instructors and because of the distance of off-campus centers from the college library and other facilities, off-campus courses can be used to satisfy only part of the course requirements of either undergraduate or graduate programs. Course requirements for most post-baccalaureate programs, including graduate study, can be met by courses offered in summer school and on-campus evening classes. Information is available from the Office of Academic Affairs.

GENERAL INFORMATION

TUITION AND FEES

APPLICATION FEE

All students applying for admission to Moorhead State College for the first time must submit with their application a check or money order for \$10.00. This Application Fee is non-refundable.

All students enrolled for graduate credit pay the following fees which are subject to change by the Minnesota State College Board:

TUITION

Minnesota residents Non-residents	per credit hour	\$ 7.00 10.00
Off-Campus courses	per credit hour	10.00

STUDENT ACTIVITY AND STUDENT UNION FEE

Full-time in the academic year	per quarter 20.00
Part-time in the academic year	(6 quarter hours or less) 10.00
Full-time in each summer session	10.00
Part-time in each summer session	(4 hours or less) 5.00

Post-baccalaureate Students enrolling for undergraduate courses pay the current undergraduate course fees. See the general catalogue (Moorhead State College Bulletin).

Students who register late are assessed a flat registration fee of \$5.00 for the first day late and \$2.00 additional for each day up to ten days. A fee of \$1.00 is charged for each change of program after classes begin.







REGULATIONS FOR GRADUATE STUDY

ADMISSION TO GRADUATE STUDY

Admission to graduate study is granted to graduates of colleges and universities of approved standing who meet the standards described below. (An undergraduate student enrolled at Moorhead State College who has 12 quarter hours or fewer to complete for graduation may be permitted by the Graduate Dean to enroll in graduate courses. This permission must be obtained in advance of registration.)

An applicant will be admitted if he meets the following requirements:

- 1. an overall grade-point average of at least 3.0 ("B") in undergraduate work;
- scores of at least 500 in the aptitude test of the Graduate Record Examination and in the GRE advanced test required by the major department.

An applicant with at least a 3.0 undergraduate grade-point average will be admitted even though his test scores fail to meet the minimum standards, if letters of recommendation and an interview with the Dean of Graduate Studies and a member of the Graduate Faculty of his major department indicate a reasonable probability of success. Such an admission may be conditional.

An applicant with less than a 3.0 undergraduate grade-point average will be admitted conditionally if his test scores, letters of recommendation, and an interview indicate a reasonable probability of success.

A student admitted conditionally must earn a minimum grade-point average of 3.0 in the first 15 hours of graduate credit (of which at least six hours must be in the major field) in order to continue in graduate study.

An applicant may appeal a decision denying him admission to graduate study to the Graduate Studies Committee; its decision shall be final.

A student who does not apply for admission to graduate study or the fifth year program but who wishes to enroll in graduate courses may, if his undergraduate gradepoint average or test scores show evidence of reasonable probability of success in graduate work, be admitted as a Post-Baccalaureate Special Student by the Graduate Dean Such a student may not complete more than 9 credit hours of graduate work without a review of his status by the Graduate Dean.

Admission to graduate study does not insure admission to any department's graduate program. A department may set more exacting standards than those described in the above regulations. Denial of admission to a department's graduate program may be appealed by the applicant to the Graduate Faculty of the department; its decision shall be final.

Admission to graduate study or to the graduate program of a department does not insure admission to candidacy for a degree.

Because the deadlines for the completion of the applicant process are August 15 (for students entering fall quarter), December 1 (for students entering winter quarter), and March 1 (for students entering spring quarter) applicants should begin the admission process at least two months before beginning course work. To complete the application process, an applicant must submit to the Graduate Studies Office (1) official transcripts of all his undergraduate and graduate credits (2 copies), (2) a completed application form and (3) his scores in the Graduate Record Examination aptitude and advanced test. (College regulations require that all full-time students have on file in the College Health Service the report of a recent physical examination.)

For admission to the full-time, on-campus graduate program, the application must be completed before the deadline date. An applicant unable to take one of the examinations before the deadline date may be given provisional admission if there is reasonable evidence of his success. If a student begins his graduate work in evening classes, off-campus classes, or summer school and is unable to meet the application deadline he may be given provisional admission, with the understanding that he complete his application for admission to graduate study, to the fifth-year program, or to Special Post-Baccalaureate status within two weeks after registration. Failure to complete such application will result in the cancellation of the student's registration. The provisionally admitted student will be notified concerning his eligibility for further registration as soon as his application is processed.

GRADUATE CREDITS

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

Courses whose numbers are followed by "g" are open to graduate students as well as advanced undergraduate students; a higher level of achievement is required of graduate students in these courses. Courses numbered in the 500 series are open only to graduate students. A minimum of 15 quarter hours in the 500 series is required for a master's degree.

Grades given in graduate courses include A, B, C, D, F, and S (Satisfactory). In a continuing research course a student may be given a grade of X until the course is completed. W signifies withdrawal from the course. Only those credits which were completed with a grade of A, B, or S (or C in some programs) may be applied towards a master's degree.

REGULATIONS FOR GRADUATE STUDY

The mark of I (Incomplete) is given in cases where a student is unable to complete his course requirements for reasons beyond his control. Arrangements for this must be made with the instructor before the end of the quarter. An Incomplete must be made up by the end of the next quarter in which a student is registered. It is the responsibility of the student to make arrangements for removing an Incomplete.

A student's grade point average is computed from credits earned in courses in which the grades of A, B, C, D and F are given. A grade of A earns 4 grade points per credit hour; B, 3 grade points; C, 2 grade points; D, 1 grade point and F, 0 grade points. An Incomplete (I) is counted as an F until it is made up.

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

Moorhead State College will allow the transfer to a master's degree program of a maximum of nine quarter hours of graduate work completed at other accredited institutions or in off-campus credit at this college. Only courses in which a grade of B or better was earned will be accepted for such transfer credit. Summer institute courses can be applied only with the approval of the appropriate department and the Dean of Graduate Studies.



REQUIREMENTS FOR MASTER'S DEGREE

ADMISSION TO CANDIDACY

In the quarter following completion of 15 quarter hours of graduate work, a student must apply for admission to candidacy in his degree program. Appropriate forms for application are available in the Graduate Studies Office. If the student fails to apply, credit accumulated beyond 15 hours may not be accepted toward a degree.

Admission to candidacy will be determined by the Graduate Studies Committee after evaluating the student's ability to do satisfactory graduate work as evidenced by his undergraduate and graduate academic records, his scores on required examinations, and other pertinent information. All academic deficiencies must have been removed before the student is eligible for candidacy, and he must have at least a "B" average in all graduate courses.

A student seeking a master's degree may begin his course work up to one year after admission to graduate study. Most departments allow a student seven years to complete his work; however, a few programs require completion within five years. In certain cases the Graduate Studies Committee may approve a student's petition for an extension of time.

A candidate for a master's degree must earn a minimum of 45 credits in graduate level courses (indicated by "g" or numbered in the 500's), 36 of which must be earned in on-campus courses at Moorhead State College. At least 12 credits must be earned in one quarter during the academic year or in two summer sessions of 6 credits each. These summer sessions need not be consecutive.

A candidate for a master's degree must maintain an overall grade point average of "B" in his graduate studies. The Graduate Studies Committee may refuse further registration to any student who fails to maintain at least a "B" average. A degree candidate shall be placed on probation at the conclusion of his first 30 quarter hours, should his over-all grade point average fall below "B." His probational status will be removed if at the end of 15 additional quarter hours he has achieved a "B" over-all grade point average; otherwise he will lose his graduate status.

EXAMINATION COMMITTEE

When the candidate for the master's degree has selected a thesis topic or upon notification of the approval of his candidacy (for programs not requiring a thesis) he should petition the Graduate Studies Office for the appointment of his Examination Committee. This committee will consist of at least three faculty members, including his adviser serving as chairman.

REQUIREMENTS FOR MASTER'S DEGREE

WRITTEN COMPREHENSIVE EXAMINATION

At least three weeks before a master's degree is to be awarded (two weeks in summer sessions) the candidate must demonstrate his competence in his major field in a written comprehensive examination. The student's Examination Committee is in charge of the examination, which must be satisfactorily completed before the oral examination can be held. A student who fails to pass the examination may appeal through his committee to repeat it during a subsequent quarter. A second failure will result in termination of his candidacy for a degree.

THESIS OR EQUIVALENT REQUIREMENT

A part of the program of every master's degree candidate is the demonstration of his ability to do individual, independent work of a creative or investigative kind in an area related to his major field. Such ability may be demonstrated in a thesis, in starred papers, or in other independent study or projects as required by the major department.

Standards for the preparation of a research thesis or a starred paper may be found in William G. Campbell: Form and Style in Thesis Writing or in Kate L. Turabian: Manual for Writers of Term Papers, Theses and Dissertations. Departments may modify style requirements to suit the specific need in their field. The student must work closely in regular and frequent consultation with his adviser in the selection of a thesis topic, in the development of the research project and in the writing of his thesis.

At least two weeks before the oral examination is held the student must submit to the Graduate Studies Office three typewritten copies of his thesis. After the oral examination has been successfully completed the student must submit at least three copies of the thesis, with all the corrections and additions required by his Examination Committee, to the college librarian who will arrange for binding. His thesis copy must be accompanied by a Thesis Approval form signed by his adviser verifying that the final copy has been approved by his Examination Committee. The librarian will countersign and return to the Graduate Studies Office the Thesis Approval form. This notification must be received by the Graduate Studies Office before the student can be cleared for graduation. The student must, at the time of submission of his copy, also pay the current binding charge.

The thesis must be typewritten on sixteen or twenty pound rag-content bond paper. Multigraph, multilith, Xerox and carbon methods of reproduction of the second and third copies may be accepted. Suitable reproduction processes may be used for charts, graphs, etc. A left hand margin of one and one-half inches, a right hand margin of one inch, and top and bottom margins of about one and one-quarter inches, each, are required. Either pica or elite type may be used.

The librarian will negotiate an agreement with a local bindery for the binding of

REQUIREMENTS FOR MASTER'S DEGREE

theses. These theses shall be staple-bound in red buckram with gold lettering. The approximate current cost for binding per volume is \$3.50.

Students enrolled in a Plan B master's degree program must submit three starred papers in lieu of the thesis requirement. These starred papers must represent the quality but not the range of the master's thesis. They shall be prepared in conjunction with three graduate courses, approved by the department and identified as such in the catalog, under the direction of the course instructors. The student must receive prior approval of both his adviser and the instructor of the course.

The three Plan B starred papers must be submitted in typewritten form in triplicate to the Graduate Studies Office at least two weeks before his oral examination. After the oral examination one corrected copy of each of the papers must be submitted to the Graduate Studies Office and will be kept on file there.

Some programs may require recitals or showings in lieu of written research.

ORAL EXAMINATION

Upon successful completion of the written comprehensive examination and the thesis or equivalent requirement, the candidate must petition the Graduate Studies Office for an oral examination. The oral examination will be conducted by the Examination Committee and the Graduate Dean principally on the material in the thesis or starred papers, but it may require the candidate to deal with material covered in any of his course work. Failure to pass the oral examination may result in termination of the student's candidacy.





SEQUENCE OF PROCEDURES FOR THE MASTER'S DEGREE

Pro	cedure	Office	Date		
1.	Application for admission to graduate study, together with official transcript of college work, and other material described under "Admission to Graduate Study"	Graduate Studies Office	Initiate at least two months prior to first course work		
2.	Appointment of Adviser	Graduate Studies Office in con- sultation with appropriate department	Prior to enrollment		
3.	Compliance with any departmental admission requirements	Adviser	Prior to enrollment		
4.	Preparation of Extended Study Plan	Adviser	Prior to enrollment		
5.	Registration	Adviser	See Calendar		
6.	Qualifying Examination	Adviser	If required, during first quarter or summer session		
7.	Application for Candidacy for Master's Degree	Adviser and Graduate Studies Office	After 15 hours of graduate work		
8.	Selection of topic for thesis or starred papers, or planning the Major Recital in the Master of Music program	Adviser	After acceptance as a candidate for the Master's Degree		
9.	Appointment of Examination Committee	Graduate Studies Office	After selection of thesis topic		
10.	Completion of language requirements, as set by department	Adviser	Before Written Comprehensive Examination		
11.	Written Comprehensive Examination	Examination Committee	After completion of course work or during term in which it is being completed		
12.	Application for Graduation	Adviser and Office of Admissions and Records	The quarter prior to the date the candidate expects to complete all requirements for the degree		
13.	Submission of thesis or starred papers or certification of satisfactory Major Recital	Graduate Studies Office	At least two weeks before Oral Examination		
14.	Oral Examination	Dean of Graduate Studies and Student's Examina- tion Committee	After completion of Written Comprehensive Examination and after submission of the thesis, starred papers, or evidence of satisfactory Major Recital. At least two weeks before Commencement		
15.	Commencement		End of Spring Quarter or end of Summer Session. All candidates are required to attend unless otherwise excused.		

The regulations covered in the preceding pages apply to all master's degree programs. Additional requirements set by the various departments for their specific programs are discussed in the following section.

MASTER'S DEGREES IN ENGLISH

Graduate students may earn either of two degrees in English: (1) Master of Arts in English or (2) Master of Science in Education with a major in English. The course requirements for each degree are summarized below; the number and kinds of examinations, which are the same for each degree, are described in some detail; and the difference between a thesis and a symposium is defined.

COURSE REQUIREMENTS

MASTER OF ARTS IN ENGLISH:

English 300(g)-, 400(g)-, or 500- series	30 hours
English 500 Literary Scholarship	3
English 502-514, 598: one course	3
English 516 Studies in Modern Literary Theory	3
English 599 Thesis or Symposium	6
	Total 45 hours

MASTER OF SCIENCE IN EDUCATION WITH A MAJOR IN ENGLISH:

Professional Educ. Courses (see M. S. in Ed. section)	9 hours
English 300(g)-, 400(g)-, or 500- series	21
English 500 Literary Scholarship	3
English 502-514, 540, 598; one course	3
English 516 Studies in Modern Literary Theory	3
English 599 Thesis or Symposium	6
	Total 45 hours

UNDERGRADUATE DEFICIENCY

If his undergraduate transcript does not show individual courses in Chaucer, Shake-speare, and Milton, and in linguistics or the history of the English language, the student must make up the deficiency by taking the appropriate course(s) in his graduate program. Upon formal petition to the Graduate Faculty in English, a candidate for the master's degree may be permitted to take as many as 9 hours in a related area instead of 9 hours in English; but he may not omit any of the required hours of English in the 500- series.

EXAMINATIONS

MASTER'S QUALIFYING EXAMINATION: Before the student has completed more than 9 hours of graduate credit, he must write an examination requiring (1) the identification of various authors, works, and significant literary terms and ideas; (2) the identification of certain representative and typical passages of prose and verse, the student being expected to assign them to particular literary periods — and to authors if possible — and to give reasons in support of his judgments; (3) the writing of two or three essays on works chosen from a short list announced in advance by the Department. This examination, given in two 3-hour sessions, is intended to discover the student's knowledge of English and American (and some relevant European) literary history, his sense of literary form and the style characteristic of certain authors and periods, and his ability to write competent criticism. Upon passing the examination, the student is formally admitted to the graduate program in English; but his adviser will consider the results of the examination in directing a proper course of study.

MASTER'S COMPREHENSIVE EXAMINATION: After the student has been formally admitted to candidacy by the Graduate Studies Committee and has completed most of the course work required for the degree (including English 500), he must pass a 3-hour essay examination in the field in which he proposes to write the thesis or at least two of the three papers comprising the symposium. On this examination, one of the questions will deal specifically with bibliographical problems in the chosen field.

Final Oral Examination: After he has made any revisions that have been required and his Examination Committee has accepted the thesis or symposium, the candidate should schedule the 1-hour oral examination. This examination may take the form of a traditional "defense of the thesis" or be concerned with a variety of topics suggested by the candidate's research or course work. In any case, it will be the candidate's performance on the examination — and not the thesis or symposium — that is judged.

Graduate Language Examination: Under the direction of an examiner appointed by the Department, a candidate for the M. A. degree must take a reading examination in French, German, Latin, or another language approved by the Graduate Faculty in English. He must pass this examination before taking the Master's Comprehensive Examination. No student may satisfy the requirement by taking a reading examination in his native language.

THESIS OR SYMPOSIUM

A candidate for the master's degree may satisfy the research requirement by writing either (1) a thesis of moderate length (usually under 100 pages) on a subject approved by his adviser, or (2) a symposium, likewise on subjects approved by his adviser. The word "symposium" is used here in the unconventional and special sense of "a collection of papers, of a critical or scholarly nature, written by one person." The symposium in English requires three substantial papers, two of them falling in the same field, which are equal in their quality to an acceptable thesis and have been undertaken with the same degree of independence that one brings to the writing of a thesis. In other words, the papers of a symposium are not a part of the student's course work, although they may be based on such work.

The first task of the candidate is to get the thesis or symposium into respectable first-draft shape under the general direction of his adviser. At this point the candidate must submit the draft to his Examination Committee and then make whatever revisions, either slight or extensive, are required by its members, of whom the adviser is one. All graduate students are put on notice that they must meet the expectations of the whole Committee, not the adviser alone. The adviser, although he will be as helpful as he can, is not expected to defend a candidate's work categorically against the criticism of other members of the Committee. The candidate is the champion of his own work and should know that it will be judged on its intrinsic merits by every professor concerned.

MASTER OF ARTS DEGREE IN HISTORY

Prospective candidates for the Master of Arts degree in history must have an undergraduate history major equivalent to the B.A. degree in history offered at Moorhead State College. In addition to the completion of the required and elective courses listed below, this program requires two years of college credit in a foreign language or demonstration of an equivalent reading skill in a foreign language approved by the department.

A candidate may carry no more than 12 credit hours in any quarter and no more than 6 in any summer session. All grades in the M.A. program in history must be A or B; C is considered a failing grade. If a student receive more than one C, he is automatically suspended from the program for one quarter.

A candidate must successfully write a comprehensive examination in history and pass an oral examination conducted principally on the subject of his thesis.

COURSE REQUIREMENTS

History 501 — Development of the Discipline of History (2 credit hours) History 599 — M.A. Thesis (12 credit hours maximum) Graduate electives in History (31 credit hours minimum)

THESIS

The thesis for the M.A. in History will not exceed more than 12 credit hours and will be a contribution to knowledge as well as a demonstration of the student's ability to do independent work and to use the methods and techniques of historical research.

Before beginning his thesis, the student shall submit a proposal for his thesis to his Graduate Committee for its approval; the proposal will consist of a brief description of the topic to be investigated, the resources (with their location) which the student will be needed to complete the work, and the contribution to knowledge which

The advisory committee shall be the student's graduate committee. The advisor for the

student shall be assigned by the Director of Graduate Studies in consultation with the Chairman of the Department of History. The advisor and the student, working together, shall select a Graduate Committee which shall consist of the advisor (Chairman), two members of the Graduate Faculty of History (or such other members of the Faculty of History as shall be selected) and one member of the Graduate Faculty from one of the other Departments of the College.

FOREIGN LANGUAGE REQUIREMENT:

The graduate student working toward the M.A. degree in History shall meet all requirements of the B.A. degree in History as listed in the current catalog. These include two years in a foreign language in a program acceptable to the Department, or equivalent reading skill demonstrated to the satisfaction of the Department. If the student does not meet this requirement it shall be considered a deficiency which must be eliminated before proceeding toward the M.A. degree in History.

FINAL EXAMINATIONS:

- a. When the student has completed his course work, and before his thesis is formally accepted by his Graduate Committee, he must successfully write a comprehensive examination in history. The examination shall be composed, administered and evaluated by the History Department in conjunction with the Graduate Studies Office.
- b. Upon completion of his thesis, the student shall present himself for an oral examination. The examination shall be conducted by the student's Graduate Committee (see above) and such other members of the Graduate Faculty who may wish to attend and such other members of the Faculty who may be invited to attend by the student's Graduate Committee.

Approval of the student's performance shall be determined by his Graduate Committee. The examination will be conducted principally on, but need not be restricted to, the defense of the thesis.

OTHER SPECIAL REQUIREMENTS.

- 1. The graduate student in the M.A. program in History may carry a maximum of 12 quarter hours of credit in any one regular academic quarter and may carry a maximum of 6 quarter hours of credit in any one summer session. In no case will the student be allowed to exceed these maximums.
- 2. All grades for courses in the M.A. degree program in History must be either B or A. C is not acceptable as a graudate grade; it is failing for purposes of this program. Required graduate courses in which a grade of C is received must be repeated, but no course may be repeated more than one. Receipt of two C's by a student shall automatically suspend him from enrollment in the M.A. program in History for one quarter. A student thus suspended may petition, in writing, to the Graduate Faculty of History and to the Graduate Studies Office for readmission to the program.

MASTER OF MUSIC DEGREE

A student who desires admission to the Master of Music (in Music Performance) degree and is judged acceptable for graduate study by the Music Department will, with the help of his adviser, develop a graduate program of 45 quarter credit hours to include a minimum of 32 credits in music in the areas listed below.

In lieu of a written thesis, the candidate will present a major recital which will count for no more than 2, nor less than 1, credit hours. The remaining credits may be taken in music or in other departments.

COURSE REQUIREMENTS

APPLIED INSTRUMENT

(10-18 crs.) 550 Piano	555 Organ 560 Voice		565 Br 566 W	ass . 567 Strings oodwind	
Music Theory					
(9-15 crs.)					
313(g) Form and		2	430(g)	Techniques of Contemporary	
314(g) Form and	d Analysis II	2		Composition	3
316(g) Composit	ion	3 3 3	441(g)	Piano Pedagogy	2
410(g) Orchestra	tion	3	442(g)	String Methods and	_
411(g) Band Ar	ranging	3		Materials	2
413(g) 16th Cen		3		Pedagogy of Theory	3
414(g) Techniqu			510	Directed Study in Music	
Inter	pretation	3		Theory	3
RECITAL					
	Recitals at 1 to 2 per recital				
MUSIC HISTORY A	ND LITERATURE				_
(9-21 crs.)			372(g)	Impressionism and 20th	
369(g) Medieval	Renaissance		.07	Čentury	4
and Ba	roque periods	4	373(g)	American Music	3
370(g) Classic as	nd Romantic		570	Introduction to Musicology	3
periods		4	571	Music in the Middle Ages	3
SEMINARS:					
572 Music in	the Renaissance	3	575	Music in the Romantic Era	3
573 Music in	the Baroque	3	576	Music in the 20th Century	3
	the Classic Era	3		,	

MASTER OF MUSIC DEGREE (cont.)

CHOICE

(2-8 crs.)		383(g) Solo & Ensemble Literature	
343(g) Instrumental Conducting	2	for Woodwinds	1
347(g) Choral Conducting	2	400(g)-404(g) Small Ensemble	1
382(g) Solo & Ensemble Literature		406(g) Opera	2
for Brass	1	409(g) Psychology of Music	3
		442(g) String Methods & Materials	2

RECOMMENDED GRADUATE ELECTIVES

Graduate electives may be taken, with the approval of the student's adviser, in such departments as English, Art, Foreign Languages, Philosophy, and Psychology.

MASTER OF SCIENCE DEGREE IN BIOLOGY

A prospective candidate for the M.S. in biology should have completed an undergraduate major or minor in biology. Deficiencies in the student's undergraduate background as ascertained by the graduate faculty in biology may be removed by completing appropriate courses for which no graduate credit will be allowed.

The student should consult with the graduate faculty in biology prior to or at the time of filing application for admission to graduate study.

REQUIREMENTS

- 1. A minimum of 45 graduate credits in biology and related areas, as approved by the graduate faculty in biology. This must include at least 15 credits in courses numbered in the 500 series.
- 2. A balanced program of courses in the areas of botany and zoology.
- 3. Participation in seminar.
- 4. A thesis based upon original research, for which a maximum of 9 graduate credits may be allowed.
- 5. Successful completion of a written comprehensive examination and a final oral examination.

The maximum time allowed to complete the requirements for the M.S. in biology is 5 years from the date of admission to graduate study.

MASTER OF SCIENCE DEGREE IN CHEMISTRY

The Department of Chemistry offers the Master of Science degree in chemistry with a major in one of the following areas: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry.

In addition to the institutional requirements for admission to graduate study, a prospective M.S. in chemistry candidate should have an undergraduate major in chemistry. Upon admission to the department, the student is required to take qualifying examinations covering undergraduate work in inorganic, organic, analytical and physical chemistry. The purpose of these examinations is to determine major deficiencies in these fields. Failure to perform satisfactorily in these examinations will make it necessary for the student to take undergraduate courses without graduate credit and to remove any deficiency either by getting a "B" or better in the appropriate course or courses or by satisfactorily passing the qualifying examination no later than at the end of the third quarter in residence. Under no circumstances will a student be permitted to register in advanced courses in an area of chemistry in which a deficiency exists.

COURSE REQUIREMENTS

- 1. A minimum of 45 graduate credits of work approved by the Department, of which a maximum of 15 credits may be granted for research (in Chemistry 598) leading towards a thesis that must be based on original research contributing to the knowledge of chemistry.
- 2. A balanced study within the field of chemistry as approved by the student's adviser.
- 3. A minimum of 15 graduate credits of course work in his major area in chemistry. (A student may choose to minor in another area of chemistry, or in mathematics, physics, biology or a combination of the preceding.)

A student is required to pass a comprehensive written examination in the major field of study. The maximum time allowed to complete the degree is five years.

MASTER OF SCIENCE IN EDUCATION

The program is designed for persons who are qualified for certification as teachers in the state of Minnesota and requires a minimum of 45 graduate credits. If a person is admitted to any Master of Science in Education program without the necessary background for certification on the secondary or elementary level, he must complete such requirements before enrolling for the required nine hours of graduate courses in education.

COURSE REQUIREMENTS

Group I - Professional Education (minimum 9 hours)

*Ed. 500 Introduction to Research (3) *Ed. 501 Psychological Foundations (3) One additional Professional Education course (3)

Group II - Major field of Concentration (minimum 24 hours)

Group III - Related Area courses (minimum 9 hours)

Remaining 3 hours for the required 45 may be taken in any group.

Before taking graduate courses in Professional Education, students must have completed at least 24 quarter credits of satisfactory undergraduate courses in Professional Education as judged by the Dean of Education.

A candidate for a Master of Science in Education degree may choose to fulfill the research requirement in either of the following ways:

Plan A: The candidate writes a thesis for which he is granted 6 credit hours to be included in the 24 credit hours required in his major field.

Plan B: The candidate writes a non-credit starred paper for each of three courses in which he is enrolled. Two of these papers should be written in connection with courses in his major field and one in a related area. The Professional Education courses required of all candidates for the Master of Science in Education degree may not be chosen for these papers.

MASTER OF SCIENCE DEGREES IN EDUCATION ARE AVAILABLE IN FIVE MAJOR FIELDS: (1) Elementary Education, 2) Elementary Administration and Supervision, (3) Counseling and Guidance, (4) Secondary Education, and (5) Remedial Reading.

ELEMENTARY EDUCATION

Candidates for a Master of Science in Education degree in elementary education must have completed a satisfactory undergraduate program in elementary education.

COURSE REQUIREMENTS

GROUP I - PROFESSIONAL EDUCATION (MINIMUM 9 HOURS)

Ed. 495(g) *Ed. 500	Comparative Education (3) Introduction to	*Ed. 5	501	Psychological Foundations of Education (3)
7 Ed. 500	Research (3)	Ed. 5		Statistics in Research (3) The School and Society (3)
* Required			405(g)	Philosophy of Education (3)

GROUP II - ELEMENTARY SCHOOL TEACHING MAJOR (MINIMUM 24 HOURS)

M.C. 340g	Instructional Com- munication (4)	Ed. 546 Reading Clinic: Diagnosis (2)
M.C. 445g	Preparation of Instruction-	Ed. 574 Appraisal Techniques (3)
	al Materials (3)	Ed. 592 Adm. and Supervision
Ed. 411g	Introduction to Guidance (3)	Remedial Reading (3)
Ed. 512	Study of the Individual (3)	Ed. 599 Thesis (6)
*Ed. 540	Studies Affecting Elementary	Eng. 390 Spec. Methods Lang. Art in
	Education (3)	Elem. School (3)
*Ed. 541	Seminar Elementary School	Math 390g Spec. Methods Mathematics
	Teaching Problems (3)	in Elem. School (3)
*Ed. 542	Elementary School Cur-	Science 390g Spec. Methods Science in
	riculum (3)	Elem. School (3)
Ed. 545	Diag. and Correction of	Soc. St. 390g Spec. Methods Social
	Reading Difficulties (3)	Studies in Elem. School (3)
	neading Dimenties (5)	Studies in Elem. School (5)

GROUP III - RELATED AREAS (MINIMUM 9 HOURS)

All students are required to complete a minimum of nine quarter hours in fields other than professional education and the major area.

ELEMENTARY SCHOOL ADMINISTRATION AND SUPERVISION

Candidates in this program must have completed a satisfactory undergraduate major in Elementary Education and have three years experience in elementary schools.

COURSE REQUIREMENTS

GROUP I - PROFESSIONAL EDUCATION (MINIMUM 9 HOURS)

Ed. 495g	Comparative Education (3)	Ed. 502 Statistics in Research (3)
*Ed. 500	Introduction to Research (3)	Ed. 504 The School and Society (3)
*Ed. 501	Psychological Foundations	Phil. 450g Philosophy of Education (3)
	of Education (3)	

Group II — ELEMENTARY SCHOOL ADMINISTRATION AND SUPERVISION MAJOR (MINIMUM 24 HOURS)

M.C. 420g	Administration of Instruc-	Ed.	522	Supervision in the
	tional Materials (4)			Elementary School (3)
Ed. 411g	Introduction to Guidance (3)	Ed.	540	Studies in Elementary
Ed. 520	Principles of			Education (3)
	Administration (3)	Ed.	541	Seminar, Elementary School
Ed. 521	Administration of the			Teaching Problems (3)
	Elementary School (3)			0

* Required

COURSE REQUIREMENTS (cont.)

* Ed. 542	Elementary School Cur-	Ed. 574	Appraisal Techniques (3)
Ed. 550	riculum (3) School Law (3)	Ed. 590	Seminar in Elementary School Administration
		Ed. 599	and Supervision (3) Thesis (6)

GROUP III - RELATED AREAS (MINIMUM 9 HOURS)

All students are required to complete a minimum of nine graduate credits in fields other than professional education and the major area.

Accreditation of a Specialist in Education degree program is presently pending.

GUIDANCE AND COUNSELING

The Guidance and Counseling Program is an interdepartmental program involving the departments of Education and Psychology and the counseling staff. The Dean of Education, Chairman of the Education Department, Chairman of the Psychology Department, Director of Counseling Services, and Director of Counselor Education form the Guidance and Counseling Admissions and Program Committee.

An applicant for admission to this program must have completed at least one year's successful teaching experience in an elementary or secondary school. After admission to graduate study, a student wishing to apply for admission to the program must:

- 1. Have successfully completed (grade of B or better) 12 hours of pertinent course work described below.
- 2. Arrange with the Counseling Office to take a battery of tests prescribed by the Admissions and Program Committee, including the Minnesota Multiphasic examination.
- 3. Provide the Admissions and Program Committee with at least three written recommendations concerning professional and personal qualifications including one or more from a person in a position to evaluate the required teaching experience.
- 4. Request the Director of Counselor Education for a personal interview with the Admissions and Program Committee when all other qualifications have been met.

COURSE REQUIREMENTS

GROUP I - PROFESSIONAL EDUCATION (9 CREDITS REQUIRED)

- *Ed. 500 Introduction to Research (3)
- *Ed. 501 Psychological Foundations (3)
- *Ed. 502 Statistics in Research (3)
- * Required.

GROUP II - GUIDANCE AND COUNSELING MAJOR (28 CREDITS REQUIRED)

*Ed.	411(g)	Introduction to	Ed. 576	Clinical Practice - Stanford
		Guidance (3)		Binet (3)
	512	Study of the Individual (3)	*Ed. 579	Organization and Adminis-
*Ed.	525	Occupational and Educa-		tration of Guidance
		tional Information (3)		Services (3)
*Ed.	526	Principles and Techniques	*Ed. 591	Guidance Practicum (6)
		of Counseling (3)	Psych. 581	Readings in Psychology
	550	School Law (3)		(2-6)
*Ed.	574	Appraisal Technique (3)	Sp. Ed. 420	(g) Education of the
Ed.	575	Clinical Practice -	•	Handicapped (3)
		Wechsler Bellevue (3)	Sp. Ed. 421	(g) The Gifted Child (3)

GROUP III - RELATED AREA - PSYCHOLOGY (12 CREDITS REQUIRED)

*Psych. 460(g) Abnormal Psychology (4) *Psych. 465(g) Clinical Psychology (4)

*Psych. 476(g) Theories of Personality (4)

Note:

Students who do not have undergraduate credit in Psych. 103-104-105, Introduction to Psychology, will be required to take these courses without graduate credit. Credit in these courses does not count toward the 45 graduate credits required to complete this program.

Ed. 411(g) must be satisfactorily completed as a prerequisite to all other Group II courses. Ed. 591 may not be taken until all other required Group II courses have been satisfactorily completed.

If a thesis is done instead of 3 starred papers, these 6 thesis credits must be taken in addition to the basic 45. Starred papers may be done in any course in the program except Ed. 591, Practicum, provided the instructor consents and provided all requirements for starred papers of the Graduate Studies Committee are met.

REMEDIAL READING ON THE SECONDARY LEVEL

Candidates in this program must have completed a satisfactory undergraduate teacher education program at the secondary level.

* Required

	RS
Reading Clinic: Correction	2
Reading in the Secondary School	
Adolescent Literature	3
Introduction to Research	3
Psychological Foundations	3
Introduction to Guidance	3
Study of the Individual	3
Principles and Techniques of Counseling	333333333333333333333333333333333333333
Diagnostic and Remedial Reading	3
	2
	3
Administration and Supervision of Remedial Reading	3
Independent Study (Thesis) Plan A only used for Plan "B" papers.	6
	3 3
used for Plan "B" papers. FIELDS, SELECT AT LEAST TWO: Education of the Handicapped	3
used for Plan "B" papers. FIELDS, SELECT AT LEAST TWO: Education of the Handicapped Abnormal Psychology Theories of Personality Social Organizations (prerequisites)	3
used for Plan "B" papers. FIELDS, SELECT AT LEAST TWO: Education of the Handicapped Abnormal Psychology Theories of Personality Social Organizations (prerequisites) Sociology of Education (prerequisites)	3 3 3 3 3
used for Plan "B" papers. FIELDS, SELECT AT LEAST TWO: Education of the Handicapped Abnormal Psychology Theories of Personality Social Organizations (prerequisites)	3
	Reading in the Secondary School Adolescent Literature Introduction to Research Psychological Foundations Introduction to Guidance Study of the Individual Principles and Techniques of Counseling Diagnostic and Remedial Reading Reading Clinic: Diagnosis Appraisal Techniques

Candidates in this program must have completed a satisfactory undergraduate teacher education program at the elementary level.

REQUIRED COURSES:	HOU	RS
Lang. Arts 445(g)*	Problems in Teaching Reading	3
Lang. Arts 446(g)*	Reading Clinic: Correction	2
Ed. 500	Introduction to Research	3
Ed. 501	Psychological Foundations	3
Ed. 411(g)	Introduction to Guidance	3
Ed. 512	Study of the Individual	3
Ed. 526	Principles and Techniques of Counseling	3
Ed. 545*	Diagnosis and Remedial Reading	3
Ed. 546*	Reading Clinic: Diagnosis	2
Ed. 574*	Appraisal Techniques	3
Ed. 592*	Administration and Supervision of Remedial Reading	3
Ed. 599	Independent Study (Thesis) Plan A only	6
*Courses starred may be use	d for Plan "B" papers.	

COURSES IN RELATED FIELDS, SELECT AT LEAST THREE:

Lang. Arts 449(g)	Reading for the Disadvantaged (TV)	2
Eng. 392(g)	Adolescent Literature	3
Eng. 400(g)	English Language Studies	3
Psy. 460(g)	Abnormal Psychology	3
Psy. 476(g)	Theories of Personality	3
Soc. 415(g)	Social Organization (prerequisites)	3
Soc. 418(g)	Sociology of Education (prerequisites)	3
Sp. Ed. 420(g)	Education of the Handicapped	3
Ed. 575	Clinical Practice: Wechsler	3

SECONDARY EDUCATION

High school teachers who meet the qualifications for certification in Minnesota may apply for admission to programs leading to the Master of Science in Education degree in secondary education with a major in one of the following fields:

Tondandal Auto

AIT	industrial Arts
Biology	Mathematics (See note below)
Business Education	Music
Chemistry	Physics
English	Remedial Reading
Health, Physical Education	Social Studies, with a concentration in History, Political
and Recreation	Science, or Sociology and Anthropology.
	Speech, with a concentration in Theatre.

Except for the nine credit hours in Professional Education required of all candidates for the Master of Science in Education degree, these programs are under the direction of the student's major department.

After he is admitted to graduate study, and to the department, the student will, in consultation with his departmental adviser, develop an Extended Study Plan which will meet the specific standards of the department as well as the general requirements for all master's degrees.

SPECIAL REQUIREMENTS FOR M.S. IN ED. — ART MAJOR

A prospective candidate for the Master of Science in Education with an art major must have a bachelor's degree with a major in art equivalent to the B.S. in Art offered at Moorhead State College. Deficiencies may be removed by taking courses for which no graduate credit will be allowed.

Prospective candidates must make intial application to the Art Department for graduate study at least three months prior to the date they intend to begin their graduate work.

- The candidate is required to submit concurrently with his application a portfolio of examples of art work to be evaluated by a jury of the members of the Art Department chaired by the professor of the medium elected by the student as his area of concentration.
- 2. If the candidate shows only a small deficiency he will be granted conditional admission for the first quarter of his residence during which time he should make up his undergraduate deficiencies. After making up these deficiencies he should again petition the Art Department for admission.
- 3. The applicant is required before the beginning of the second quarter of his studies to pass a qualifying examination for admission to the department program.

COURSE REQUIREMENTS FOR M.S. IN ED. - ART:

The student must complete a minimum of 45 graduate credits. This must include Education 500, Education 541 and one additional elective professional education course, for three credits each. The required nine credits of related area courses are recommended by the department to be taken in the field of art history. The minimum of twenty-four hours of professional art courses can be chosen in various fields, but has to include Graduate Seminar 580. The selection of an area of concentration is encouraged by the department.

A candidate for a Master of Science in Education degree is advised to follow Plan B; the candidate writes a non-credit starred paper in connection with a three credit graduate seminar, 580g or 581g. In lieu of the other two papers, the candidate must prepare and hold an exhibit of his art work as a partial fulfillment of requirements for his MS degree.

The program can be completed during one academic year and a summer session which would require twelve credits to be taken each of the three quarters, and six credits during the summer.

SUGGESTED PROGRAM

	WINTER QUARTER	
3	Education 541	3
3	Art History	3
3	Art Concentration	3
3	Art 580	3
	SUMMER SESSION	
3	Art Concentration	3
3	Art Elective	6
3		
3		
	3 3 3	3 Education 541 3 Art History 3 Art Concentration 3 Art 580 SUMMER SESSION 3 Art Concentration

SPECIAL REQUIREMENTS IN M.S. IN ED. — MATHEMATICS MAJOR

Candidates for the M.S. in Ed. degrees with a major in mathematics are expected to provide evidence of proficiency in undergraduate mathematics courses, including one year of calculus.

The degree requires, in addition to satisfactory completion of a planned program of courses, a thesis (Plan A) and written comprehensive examinations in two areas selected from the following list by the candidate and his advisor: algebra, analysis, geometry, statistics, and applied mathematics.

It is anticipated that a Master of Science degree in mathematics will be available in the near future.

SPECIAL REQUIREMENTS IN M.S. IN ED. — SOCIAL STUDIES MAJOR

This degree is intended for teachers of secondary social studies. A student may elect to devote the major share of his graduate work (about 27 quarter hours) in the areas of History, Political Science, or Sociology and Anthropology. The department of concentration shall determine if there are undergraduate deficiencies in that area which the candidate must make up at the undergraduate level. He may elect to do a Thesis for 6 credits in his major area of concentration (Plan A) or three-starred papers (Plan B).

At least 9 hours must be taken in Professional Education and 9 more in related social science and history areas outside his major concentration.



POST-BACCALAUREATE PROGRAMS

FIFTH YEAR PROGRAM

The Fifth Year Program in teacher education at Moorhead State College is a post-baccalaureate program leading to a statement of completion provided by transcript but not involving candidacy for a degree. In general, the program is designed to strengthen the academic and intellectual competence of the student.

The Fifth Year Program is individualized to fit the needs of the classroom teacher. It comprises a varying mixture of substantive courses taken at the undergraduate and graduate level. All courses, however, must fit into a purposeful, related pattern.

Students planning to enter the Fifth Year Program are required to confer initially with the Director of the Program.

The purposes of the Fifth Year Program at Moorhead State College are as follows:

- (1) To strengthen the in-service teacher's preparation in the field in which he is teaching (for secondary teachers, usually the academic major; for the elementary teachers, the area of concentration.)
- (2) To broaden the teacher's background and eliminate deficiencies in his undergraduate preparation.
- (3) To add depth and understanding to an academic major or area of concentration,
- (4) To allow a degree of specialization in some professional field.
- (5) To enable the student to take some graduate work in his academic major or area of concentration.

The Fifth Year Program requires the completion of 45 quarter credit hours of courses open to juniors, seniors and graduate students and requires a cumulative grade point average of 2.5.

Admission to the Fifth Year Program requires a bachelor's degree in teacher education from an appropriately accredited institution and a teacher's certificate valid in the state where the applicant teaches. Applicants are required to take the Graduate Record Examination.

An applicant should have completed one year of successful teaching experience; in no instance is a student allowed to complete more than one-half of the work in a Fifth Year program before he has taught one year.

A maximum of 15 quarter credit hours of course work may be accepted in transfer from other accredited colleges and universities.

A minimum one-third of the work in secondary programs must be taken in courses open to graduate students only — i.e. 500 courses. In elementary programs at least one-third of the work must be taken at the graduate level (i.e.) in 300 or 400 "g" courses or in 500 courses) Courses in which a D is earned are not credited toward completion of the Fifth Year program.

Before he has completed more than 12 credit hours, including transfer credits, the Fifth Year student must submit to the Director of the Fifth Year Program an Extended Study Plan, approved by his adviser, which indicates the courses he plans to take to meet the requirements of the program. Advisers are selected by the Director of the Fifth Year Program after consultation with the department in which the student will be taking most of his work.

Prior to enrolling in any course for graduate credit, a Fifth Year student must secure the approval of his adviser and the instructor of the course. A student with an undergraduate grade point average of less than 2.5 is required to take at least 15 credit hours on the undergraduate level and attain a GPA of 2.5 or better before he will be allowed to take graduate courses. Exceptions to this regulation may be made if a student obtains the permission of his adviser, the Graduate Studies Office, and the instructor of the graduate course he wishes to take.

If a student falls below the required 2.5 cumulative grade point average, he may be dropped from the program. A student may request that such a decision be reviewed by an Appeals Committee consisting of the Director of the Program and three members of the Fifth Year Committee.

The normal load for Fifth Year students is 12-16 credit hours per quarter during the regular academic year and 6-8 credit hours for a summer session. All credits used in completing the Fifth Year program must have been earned within ten years of the student's enrollment in the program.

Completion of the Fifth Year Program is officially recognized by a statement on the student's transcript and permanent record.

FIFTH YEAR PROGRAM FOR SPECIALIST IN READING

SUGGESTED COURSES:

FIFTEEN HOURS MUST BE IN GRADUATE LEVEL COURSES:

Lang. Arts 445(g) Lang. Arts 446(g) Ed. 545 Ed. 546 Ed. 574	Problems in Teaching Reading Reading Clinic: Correction Diagnostic and Remedial Reading Reading Clinic: Diagnosis Appraisal Techniques	HOURS 3 2 3 2 3 2
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POST-BACCALAUREATE PROGRAMS

Courses in related fields, select thirty-two hours:

		HOURS
Eng. 201-202-203	Introduction to Literature	4
Eng. 392(g)	Adolescent Literature	3
Eng. 394(g)	Modern American Literature	4
Eng. 400(g)	English Language Studies	3
Lang. Arts 449(g)	Reading for the Disadvantaged (TV)	2
Anthro. 210	Cultural Patterns	4
Psy. 215	Development Psychology	4
Psy. 217	Personality	4
Psy. 320 or Soc. 305	Social Psychology	4
Psy. 460(g)	Abnormal Psychology	4
Psy. 476(g)	Personality Theory	4
Soc. 310	Minority Group Relations	3
Ed. 411(g)	Introduction to Guidance	3
Ed. 512	Study of the Individual	3
Ed. 526	Principles and Techniques of Counseling	3
Ed. 575	Clinical Practice: Wechsler	3
Sp. Ed. 420(g)	Education of the Handicapped	3

CERTIFICATION IN SPECIAL FIELDS

Five programs leading to certification in special areas of teaching are offered within the Fifth Year Program at Moorhead State College:

Instructional Communication (Audio-Visual Education) Remedial Reading School Librarianship

Special Education (Teaching of the Mentally Retarded) Speech Pathology and Audiology

Students who meet the qualifications will be recommended for certification in the state of Minnesota in the appropriate field.

Frequently students combine certification work with a Master of Science in Education degree. In any case, students in these programs must meet the requirements for admission to graduate study.

A student seeking certification in any of these four areas should consult an appropriate adviser before planning his program. Teachers who already hold a bachelor's degree and a valid teaching certificate are often able to complete certification requirements with courses offering graduate credit in all of these fields except Speech Pathology and Audiology.

AUDIOVISUAL COMMUNICATIONS

AUDIOVISUAL EDUCATION DIRECTOR OR COORDINATOR'S CERTIFICATE

- A Director of Audiovisual Education is a teacher in charge of the Audiovisual Program in the entire school system. To qualify for a Director's certificate in the state of Minnesota a person must meet the following requirements:
- 1. Have a valid teaching certificate based on a four-year degree.
- 2. Have earned credit in each of the following: Educational Administration, Elementary School Curriculum, High School Curriculum and Supervision, and Improvement of Instruction.
- 3. Have earned at least 10 semester hours in audiovisual education courses.
- 4. Have at least 2 years of successful teaching experience.
- A Coordinator of Audiovisual Education is a teacher in charge of the Audiovisual program in any single building of a school system or a school system having only one attendance unit. To qualify for a Coordinator's Certificate in the state of Minnesota a person must meet the following requirements:
- 1. Have a valid teaching certificate.
- Have earned credits in at least two of the areas of Education Administration, Elementary School Curriculum, High School Curriculum, and Supervision and Improvement of Instruction.
- 3. Have at least one course in audiovisual methods and one course in audiovisual administration.

REMEDIAL READING

ELEMENTARY REMEDIAL READING TEACHERS

Certification requirements as an elementary remedial reading teacher include:

- 1. An elementary school teacher's certificate, based on a bachelor's degree.
- 2. Two years of successful elementary teaching experience.
- 3. The following courses:
- a. Language Arts 342, Reading and Language Arts in the Elementary School
- b. Ed. 545, Diagnosis and Correction of Reading Difficulties
- c. Ed. 574, Appraisal Techniques
- d. Language Arts 446g, Reading Clinic: Correction
- e. Ed. 546, Reading Clinic: Diagnosis

SECONDARY REMEDIAL READING TEACHERS

- 1. An elementary or secondary school teacher's certificate, based on a bachelor's degree.
- 2. Two years of successful elementary or secondary teaching experience.
- 3. The following courses:
- a. Language Arts 342, Reading and Language Arts in the Elementary School
- b. Language Arts 448g, Teaching Reading in the Secondary School
- c. Ed. 545, Diagnosis and Correction of Reading Difficulties.
- d. Ed. 574, Appraisal Techniques.
- e. Language Arts 446g, Reading Clinic: Correction
- f. Ed. 546, Reading Clinic: Diagnosis

SECONDARY DEVELOPMENT READING TEACHERS

- 1. An elementary or secondary (grades 7-9) school teacher's certificate based on a bachelor's degree.
- 2. Two years of successful elementary or secondary teaching experience.
- 3. The following courses:
- a. Language Arts 342, Reading and Language Arts in the Elementary School.
- b. Language Arts 448g, Teaching Reading in the Secondary School.
- c. Ed. 545, Diagnosis and Correction of Reading Difficulties.
- d. Eng. 392, Adolescent Literature.

READING CONSULTANTS AND SUPERVISORS

- 1. An elementary or secondary school teacher's certificate.
- 2. A master's degree.
- 3. Three years of teaching experience including one year as a reading teacher.
- 4. The following courses:
- a. Language Arts' 342, Reading and Language Arts in the Elementary School.
- b. Language Arts 448g, Teaching Reading in the Secondary School.
- c. Education 574, Appraisal Techniques.
- d. Education 545, Diagnosis and Correction of Reading Difficulties.
- e. Education 546, Reading Clinic: Diagnosis.
- f. Language Arts 446g, Reading Clinic: Correction.
- g. Special Education 420g, Education of the Handicapped Child.
- h. Education 592, Administration and Supervision of Remedial Reading.

POST-BACCALAUREATE PROGRAMS

READING CONSULTANTS AND SUPERVISORS (cont.)

Not less than three courses to be chosen from the following:

Lang. Art 390g, Special Methods in Language Arts in the Elementary School.

Ed. 500, Introduction to Research.

Math. 100, Introduction to Modern Mathematics.

Psych. 217, Psychology of Personality.

Clinical Practice: Wechsler Tests. Ed. 575.

Clinical Practice: Binet Tests. Ed. 576,

Introduction to Guidance. Ed. 411g,

Ed. 416g, Mental Retardation.

Lang. Arts 340, Literature in the Elementary School.

Eng. 392g, Adolescent Literature.

SCHOOL LIBRARIANSHIP

Students who wish to qualify for certification as school librarians in the state of Minnesota must meet the following requirements:

- 1. Have a valid teaching certificate based on a four-year degree
- 2. Complete 24 quarter hours in library science, consisting of the following courses:
- a. Lib. Sci. 321 Function of the School Library (5)
- b. Lib. Sci. 331 Selection of Library Materials (3)
- c. Lib. Sci. 341 The Elementary School Library;
- Materials Selection and Guidance d. Lib. Sci. 421 Cataloging and Classification (3)
- e. Lib. Sci. 431 Introduction to Reference Materials (3)
- f. Lib. Sci. 441 The High School Library; Matreials Selection and Guidance
- 3. Successful teaching experience, while not required, is a valuable asset.

The library certification program requires no graduate courses. However, students who undertake this plan on the fifth year program should consult with advisors in the Library Science Department in regard to selection of appropriate elective courses.

SPECIAL EDUCATION

Students who wish to qualify for certification to teach special classes for the mentally retarded child may apply for admission to the program through the Coordinator of Special Education. Regular certification requires the completion of a minor of 24 credit hours in Special Education, of which at least 15 must be earned at Moorhead State College:

COURSE REQUIREMENTS

- Sp. Ed. 420g, Education of the Handicapped (3) Sp. Ed. 416g, Mental Retardation (3)
- Sp. Ed. 440g, Meth. in Teaching the Mentally Retarded (3) Sp. Ed. 450g, Student Teaching of Mentally Retarded (5-8)
- Sp. Ed. 435g, Seminar Mental Retardation (3)

COURSE OFFERINGS

ELECTIVE COURSES (7-10 HOURS)

Introduction to Guidance (3) Ed. 411g, Ed. 574, Appraisal Techniques (3)

Speech 468g, Speech Correction for Classroom Teachers (3)

L.A. 445g, Remedial Reading (3)

Reading Clinic: Correction (2) Abnormal Psychology (4) L.A. 446g,

Psych. 460g,

Sp. Ed. 417g, Orientation to Physically Handicapped (3) Sp. Ed. 430g, I.A. for Special Education Teachers (3)

Sp. Ed. 436g, Special Problems in Special Education (1-3)

Sp. Ed. 437g, Workshop in Special Education (4)

Applicants must have graduated from an accredited four-year teacher training institution and must hold a certificate to teach in regular elementary or secondary school classes. Candidates for certification must complete 5-8 quarter credit hours of student teaching. Special Education 416 and 440 are prerequisites for student teaching.

An elementary or secondary teacher with two years of successful teaching experience may be provisionally certificated to teach special education classes by taking Special Education 420, 416, and 440. Six of these credit hours must be taken at Moorhead State College. Provisional certification is valid for two years.

SPEECH PATHOLOGY AND AUDIOLOGY

An individual may receive Minnesota state certification in speech pathology and audiology if he holds a baccalaureate degree with a major in this area of study. At present, however, the requirements for state certification are being revised and it is anticipated that the new regulations will entail graduate study. A master's degree with a major in speech pathology and audiology, or the equivalent, is required for membership in and certification from the American Speech and Hearing Association.

Moorhead State College offers a major in speech pathology and audiology at the undergraduate level (see The Moorhead State College Bulletin. Several courses may be taken for graduate credit. A proposal for a Master of Science degree in speech pathology and audiology has been prepared and submitted to the college for approval.

POST-BACCALAUREATE SPECIAL STUDENT STATUS

If not admitted to a Master's Degree program or the Fifth Year Program, a student admitted to graduated study is a Post-Baccalaureate Special Student. These students must meet the general requirements for admission to graduate study, and their courses must have the approval of an adviser. Post-Baccalaureate Special Students must bear in mind that some of the courses taken in that status may not be acceptable as part of graduate degree or Fifth Year programs.

Admission as a Post-Baccalaureate Special Student does not entail admission to any other status. The student's progress is checked by the Dean of Graduate Studies after he has completed 9 credit hours; if the quality of his work is not acceptable, he can be refused further registration.

STARRED COURSES: Plan B papers may be prepared in conjunction with courses offering graduate credit identified by an asterisk(*). Such papers must represent the quality but not the range of the master's thesis and the student must receive PRIOR APPROVAL of both his adviser and the instructor of the course.

ART

400(g). ADVANCED DRAWING Investigation with broad and fine drawing media into creative expression. Using macriscopic and microscopic data from landscape, biology, figure and mechanical world, the stress is on personal creativity and experimental approaches. Prerequisite: Art 204 and 116 or equivalent.*

426(g)-427(g)-428(g). COMMERCIAL ART IV, V, VI. 3 HOURS EACH Exploration of contemporary methods in graphic design as it applies in commercial art work. Prerequisite: Junior standing in art.*

430(g). MODERN ART I. Painting, sculpture and related arts in Europe from the latter part of the eighteenth century to the present day. Neo-classicism to the emergence of Impressionism. Prerequisite: Junior standing or consent of instructor.*

431(g). MODERN ART II. 3 HOURS Impressionism to the First World War - "isms" and movements through expressionism. Prerequisite: Junior standing or consent of instructor.*

432(g). MODERN ART III. 3 HOURS Art in Europe after the Great War. Abstractionist, Fantastic and experimental trends. Prerequisite: Junior standing or consent of instructor.*

434(g)-435(g)-436(g). ART IN THE UNITED STATES I, II, III. 3 HOURS EACH A Survey of architecture, painting and sculpture from the colonial period to the present day. 434(g): Colonial beginnings to 1850. 435(g): Mid-nineteenth century to World War I. 436(g): The twentieth century. Prerequisite: Junior standing or consent of instructor. *

444(g). SPECIAL STUDIES IN ELEMENTARY SCHOOL ART. 2 HOURS A practical delineation of creative art activities, materials, and guidance applicable to the elementary curriculum. Prerequisite: Art 340 or consent of instructor.*

COURSE OFFERINGS

445(g). SPECIAL STUDIES IN SECONDARY SCHOOL ART. 2 HOURS A practical delineation of creative art activities, materials, and guidance applicable to the secondary curriculum. Prerequisite: Art 440 or consent of instructor.*

455(g). RENAISSANCE AND BAROQUE ART I.

3 HOURS Early Renaissance Art. The emergence of modern ideas and methods studied in the works of the major painters, sculptors and architects of the fourteenth and fifteenth century Italy. Prerequisite: Junior standing or consent of instructor.*

456(g). RENAISSANCE AND BAROQUE ART II.

3 HOURS High Renaissance Art. The Renaissance in its later phases with particular emphasis on the works of Leonardo da Vinci, Michelangelo, Raphael and the Venetian masters. Prerequisite: Junior standing or consent of the instructor.*

457(g). RENAISSANCE AND BAROQUE ART III.

3 HOURS Baroque Art. The artistic achievements of the seventeenth century in the Romance countries and the Netherlands. Emphasis on Caravaggio, Bernini, and Borromini in Italy, Poussin in France, Velasquez in Spain, Rubens. Prerequisite: Junior standing or consent of instructor.*

465(g). THE ART OF NORWAY.

A survey of Norwegian Art from the Viking Period to the present day. Key works and monuments presented in their cultural context. Prerequisite: Junior standing or consent of instructor.*

467(g). MODERN ARCHITECTURE.

3 Hours Architecture of the late nineteenth and twentieth centuries. The pioneers of modern design, the materials, techniques and forms of the new architectural conceptions. Prerequisite: Junior standing or consent of instructor.*

532. STUDIES IN ART HISTORY.

3 HOURS Individual directed study in particular problems in the history of art. Selected subject treated on the basis of its iconographical and iconological background. Course may be repeated for 3 additional credits. Prerequisite: Art 335 or consent of instructor.*

540. CURRENT PRACTICES IN ART EDUCATION.

Development of a philosophy; basic reading; city and state course of study.

Prerequisite: Consent of instructor.*

542. STUDIES IN ART EDUCATION.

3 HOURS Individual directed study in selected phase of Art Education agreed upon by instructor and student. Course may be repeated for 3 additional hours.*

552 a, b, c, d, e, f. STUDIES IN PAINTING.

3 HOURS EACH Individual directed studies in particular problems in painting agreed upon by instructor and student. Painting may involve oil, watercolor, and other media. Prerequisite: Art 423 or consent of instructor.*

554 a, b, c, d, e, f. STUDIES IN SCULPTURE.

3 HOURS EACH Individual directed studies in sculpture agreed upon by instructor and student. Sculpture may involve use of clay, plaster, wood, stone, metal, and other sculptural materials. Prerequisite: Art 420 or consent of instructor.*

560 a, b, c, d, e, f. STUDIES IN CERAMICS.

3 HOURS EACH Individual directed studies in ceramics, agreed by instructor and student. Prerequisite: Art 416 or consent of instructor.*

574 a, b, c, d, e, f. STUDIES IN GRAPHICS.

3 HOURS EACH Advanced individual studies in printmaking. Specialization in various processes. Prerequisite: 3 consecutive course sequence in any of the graphic media.*

580. SEMINAR IN ART EDUCATION.

3 HOURS
The identication of problems in art education at various curriculum levels; examinations of related research with possible implications for practice. Prerequisite: Art 340 and Art 440 or consent of instructor.*

599. THESIS IN ART.

6 HOURS

BIOLOGY

301(g). VERTEBRATE EMBRYOLOGY.

5 HOURS Embryogenesis, from the formation of the germ layers through development of the organ systems of vertebrate animals. Prerequisite: Biol. 113.*

302(g). HISTOLOGY.

Microscopic characteristics of animal tissues, and description of histogenesis.

Prerequisite: Biol. 113.*

343(g). MICROTECHNIQUE.

Basic procedures in tissue preparations for histological study and preservation, including microphotography, micrometry, plastic embedding, etc. Prerequisite: Biol. 113, (Chem. 113 or 123 desirable) or consent of instructor.*

COURSE OFFERINGS

350(g). MICROBIOLOGY.

4 HOURS Fundamental principles, based on laboratory study of bacteria and allied microorganisms. Prerequisite: Biol. 113, or Biol. 123. Prerequisite or corequisite: Chem. 113 or 123.*

355(g). PRINCIPLES OF WILDLIFE MANAGEMENT. 4 HOURS The application of ecological principles to the management of wildlife populations. The dynamic nature of the population is stressed, and important field techniques for measuring population phenomena are discussed and demonstrated. Prerequisite: Biol. 245.*

401(g). ENDOCRINOLOGY.

4 HOURS Introductory study of biochemical influences of hormones on the whole animal, specific tissues, and biochemical phenomena. Prerequisite: Biol. 306 and Chem. 113 or 123. Chem. 233 is recommended.*

410(g). HELMINTHOLOGY.

Biological principles of parasitic helminths with emphasis on the platyhelminthes. Prerequisite: Biol. 113 and consent of instructor.*

414(g). PROTOZOOLOGY.

A study of the protozoa, including the nonparasitic forms as to their taxonomy, reproduction, physiology, growth and significance to man and animal. Prerequisite: Biol. 113.*

417(g). ORNITHOLOGY.

4 HOURS
The basic features of avian anatomy, physiology and behavior combined with field and laboratory observations or regional birds. Prerequisite: Biol. 113.*

423(g). PLANT ANATOMY.

A study of the structure of vascular plants, with special emphasis on developmental stages, from seedling through transition from root to stem, and from vegetative to reproductive. Prerequisite: Biol. 123.*

424-425(g). PLANT PHYSIOLOGY I AND II.

A study of the metabolic processes, germination, growth, and reproduction of plants.

Prerequisite: Biol. 123.*

433(g). PLANT MORPHOLOGY; THE LOWER FORMS.

A study of the structure, development, life cycles, and relationships of the algae, fungi, and bryophytes. Prerequisite: Biol. 123 or consent of instructor. *

434(g). PLANT MORPHOLOGY; THE VASCULAR PLANTS. 4 HOURS A study of the structure development, evolution, life cycles, and relationships of the vascular plants. Prerequisite: Biol. 123 or consent of instructor.*

441(g). PRINCIPLES OF HUMAN GENETICS.

Lecture-discussion course in genetics as applied to man with emphasis on clinical genetics. Prerequisite: Biol. 341 or consent of instructor.*

445(g). ADVANCED ECOLOGY.

Study of major plant and animal communities of western Minnesota. Prerequiste: Biol. 245.*

450(g). CELL PHYSIOLOGY I.

A study of plant and animal cells with an emphasis on the relationship between structure and metabolic function, including pathways for energy production. Prerequisite: Chem. 231-232 (organic).*

451(g). CELL PHYSIOLOGY II.

A study of intracellular metabolism including biosynthesis and degradation of macromolecules, such as polynucleotides, proteins and carbohydrates, as related to structural organelles of plant and animal cells. Prerequisite: Biol. 450.*

455(g). RECENT DEVELOPMENTS IN THE BIOLOGICAL SCIENCES. 2 HOURS A series of lectures and discussions based upon recent research designed to acquaint students with advances in modern biology. Prerequisite: 30 quarter hours of biology or consent of instructor.*

461(g). VIROLOGY.

A study of virus disease in plants. Methods of transmission, isolation, identification and multiplication in plant cells. Prerequisites: Biol. 123 and Chem. 239 or Chem. 233,*

501. COMPARATIVE EMBRYOLOGY.

A comparative study of gametes, cleavage and gastrulation, and organogenesis of representative vertebrates with occasional comparisons to invertebrates.*

502. COMPARATIVE HISTOLOGY.

A survey of tissue and organ miscrostructure in representatives from varied animal phyla. Prerequisites: Biol. 302 and graduate status.*

511. PARASITIC ARTHROPODA.

Study of the parastic arthropoda and parasitic forms in other minor phyla. Pre-requisite: Biol. 113 and consent of instructor.*

523. ADVANCED PLANT ANATOMY.

4 rhours A concentration on the development, growth, and differentiation of vascular plants with the major emphasis on the meristems and their derivatives. Prerequisite: Biol. 423(g).*

525. ADVANCED PLANT TAXONOMY.

4 HOURS
Study and identification of plant groups selected by the student. Prerequisite: Biol.
325 and the consent of the instructor.*

526. EXPERIMENTAL PLANT PHYSIOLOGY.

An advanced laboratory emphasizing the application of modern techniques to the study of physiological processes. Prerequisite: Graduate standing and consent of the instructor.*

545. LIMNOLOGY.

An analysis of the dynamics of various physical, chemical, and biotic factors that interrelate in lakes, ponds, and streams. Prerequisites: 30 quarter hours of college biology and 1 year college chemistry.*

555. MOLECULAR BIOLOGY OF DEVELOPMENT.

A study of the genetic control of cell differentiation, enzyme regulation, RNA synthesis, macromolecules as the basis of structure, and biochemical induction. Prerequisites: Biol. 301 or Biol. 423 and organic chemistry.*

580. GRADUATE SEMINAR.

Presentation of papers based upon topics developed from graduate courses, laboratory research and/or literature research. Prerequisite: Candidacy status for M.S. in Biology degree.

599. THESIS IN BIOLOGY. 6-9 HOURS Original investigation for the master's thesis, requiring extensive library and laboratory work.

BUSINESS EDUCATION ACCOUNTING

330-331-332(g). INTERMEDIATE ACCOUNTING I, II, AND III. 3 HOURS EACH 330: Nature and content of Balance Sheet, Income Statement, and Retained Earnings Statement. Reviewing of the accounting process. Analysis and methods of valuation and statement presentation of the working capital accounts. 331: Analysis and methods

of valuation and statement presentation of non-current accounts. 332: Analysis and methods of valuation and statement presentation of corporate capital. Preparation of statements from incomplete records, errors and their correction, financial statement analysis, and statement of application of funds. Prerequisite: Acctg. 231. Must be taken in sequence.

355(g). GOVERMENT ACCOUNTING.

3 HOURS Basic principles underlying governmental and institutional accounting. Prerequisite: Acctg. 231.

430-431(g). ADVANCED ACCOUNTING I, II. 3 HOURS EACH Special accounting problems. 430: Partnerships and joint ventures, installment and consignment sales, receiverships, liquidations, estates, and trusts. 431: Branch accounting and mergers and consolidations of corporations. Acctg. 332.

450-451-452(g). FEDERAL AND STATE TAX I, II, III. 3 HOURS EACH Federal and state income tax laws and other special federal and state taxes applied to individuals, partnerships, and corporations. Prerequisite: Acctg. 331. Must be taken in sequence.

470(g). ACCOUNTING SYSTEMS.

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

480(g). CPA REVIEW.

A review of accounting theory, accounting practice, auditing, business law and taxation to assist the C.P.A. candidate in preparing for the Uniform C.P.A. examination. Prerequisite: Accounting 461.

530. MANAGERIAL ACCOUNTING.

4 HOURS
Accounting reports, interpretation of accounting reports, using accounting information
for budgetary planning, using accounting information for control of operation and
decision making.

BUSINESS MANAGEMENT

358(g). PRINCIPLES OF INVESTMENTS.

4 HOURS
The different types of investments, and the policies and practices of the different types of investors.

360(g). PERSONNEL MANAGEMENT.

Human Relations in industry; mechanisms and practices of manpower management policy determination; development and use of personnel records and reports. Prerequisite: Econ. 416 or consent of instructor.

400(g). ELEMENTS OF BUSINESS MANAGEMENT. 4 HOURS Modern methods of control in business, from organization to sales; production theory. Prerequisite: Econ. 112.

401(g). CASE STUDIES IN BUSINESS MANAGEMENT. Problem solving, field trips. Prerequisite: Bus. Mgt. 400.

4 HOURS

405(g). SMALL BUSINESS MANAGEMENT. 4 HOURS Analysis management problems confronting owners in the operation of a small retail, wholesale or manufacturing enterprise. Prerequisite: Bus. Mgt. 400(g).

408(g). INDUSTRIAL MANAGEMENT.

Industrial management is occupied primarily with the problems faced by the industrial manager and techniques he uses in solving them. (Prerequisite: Elements of Business Management).

498(g). PROBLEMS IN BUSINESS ADMINISTRATION. 1-4 HOURS An individual inquiry into some aspect of business administration and management which is not dealt with in the regular curriculum.

510. MANAGERIAL ECONOMICS. Techniques in dealing with business problems. 4 Hours

550. BUSINESS AND PUBLIC POLICY.

4 HOURS Social and political implication of business decisions and the impact of society and government on the business firm.

599. SEMINAR IN BUSINESS MANAGEMENT.

A capstone course in business management requiring the student to demonstrate analytical approaches to business problems.

MARKETING

402(g). TRAFFIC AND PHYSICAL DISTRIBUTION.

4 HOURS Interrelationship of traffic management, warehousing, material handling and packaging oriented with a total cost approach with emphasis upon alternates or trade-offs. Prerequisite: Marketing 410.

408(g). SALES MANAGEMENT.

4 HOURS
The role of the sales manager in modern marketing with emphasis on the line and staff responsibilities, organization and control of the field sales force, and the selection, supervision, compensation and motivation of the sales force. Prerequisite: Marketing 324.

430(g). PROBLEMS IN CREDIT AND COLLECTION.

4 HOURS
This course follows the recommendations of the National Institute of Credit. Prerequisite: Mktg. 330.

CHEMISTRY

consent of instructor.

511. CHEMICAL BONDING AND MOLECULAR STRUCTURE. 3 HOURS Nature of covalent and ionic bonds. Theories of Chemical Bonding. Valence Bond Theory, Crystal Field Theory, Molecular Orbital Theory. Prerequisites: Chem. 343, Chem. 452, and consent of instructor.

531-532. ORGANIC REACTION MECHANISMS AND
STEREOCHEMISTRY I, II.
Consideration of mechanisms of ionic and free radical reactions. Stereochemistry including stereospecific reactions, conformational analysis. Prerequisites: Chem. 343, and

537-538-539. TOPICS IN ORGANIC CHEMISTRY I, II, III. 3 HOURS EACH Selected topics in organic chemistry such as hetorocyclics, steroids, alkaloids, photochemistry, etc. Prerequisite: Consent of instructor.

541-542. CHEMICAL THERMODYNAMICS I, II.

3 HOURS EACH Fundamental laws of thermodynamics and their application to chemical problems. Prerequisite: Chemistry 343 and consent of instructor.

546. CHEMICAL KINETICS. 3 HOURS Consideration of theories of rates and mechanisms of chemical reactions. Prerequisite: Chemistry 343 and consent of instructor.

547-548-549. TOPICS IN PHYSICAL CHEMISTRY I, II, III. 3 HOURS EACH Selected topics in physical chemistry such as electrochemistry, colloids, phase rule, catalysis, spectroscopy, x-ray crystallography. Prerequisite: Chem. 343 and consent of instructor.

557-558-559. TOPIC IN INORGANIC CHEMISTRY I, II, III. 3 HOURS EACH Selected topics in inorganic chemistry such as: Coordination chemistry, Acid-base theories, Nonaqueous solvents, Nuclear chemistry, Stereo-chemistry. Prerequisite: Consent of instructor.

561. INTERMEDIARY METABOLISM.

3 HOURS
The major pathways of intermediary metabolism and factors which influence them.
Prerequisite: Chem. 463.

562. ENZYMES.

3 HOURS
Isolation, purification, and study of the kinetics of enzyme action: a study of the mechanisms of enzyme action and enzyme biosynthesis and control. Prerequisite: Chem. 561.

563. SPECIAL TECHNIQUES IN BIOCHEMISTRY. 2 TO 3 CREDITS Special techniques used in biochemical research. Prerequisite: Chemistry 463.

598. RESEARCH.

Original investigation in any area of chemistry. Registration only after consultation with the research adviser.

599. THESIS.

Registration only after consultation with major professor.

361-362(g). INTRODUCTION TO BIOCHEMISTRY I, II. 3 HOURS EACH A brief survey of the chemistry of carbohydrates, lipids, protein, nucleic acids, vitamins, enzymes, coenzymes and intermediary metabolism. Not open for graduate credit to chemistry majors. Prerequisite: Chem. 238 or Chem. 232.

405(g). CHEMICAL LITERATURE.

Introduction to chemical literature in journals, handbooks, abstracts, monographs, and patents, instruction in the use of these sources. Prerequisite: Senior standing or consent of instructor.

411(g). SCIENTIFIC GLASS APPARATUS FABRICATION. 2 HOURS Techniques of construction of specialized glass apparatus. Prerequisite: Instructor's approval.

427-428-429(g). TOPICS IN ANALYTICAL CHEMISTRY I, II, III. 1 to 3 hours each Selected topics in analytical chemistry such as, polarography, infrared spectrophotometry, ultra-violet spectrophotometry, nuclear magnetic resonance spectrophotometry, optical rotatory dispersion, electrometric techniques, chromatography. Prerequisite: Chem. 421 and consent of instructor.

430(g). ORGANIC PREPARATIONS.

Preparation of organic compounds (selected to illustrate a variety of reaction types and particularly a variety of laboratory techniques) with emphasis on the use of original literature, and of techniques and equipment not available in Chem. 231-233. Prerequisite: Chem. 233. Credit arranged.

431(g). ORGANIC QUALITATIVE ANALYSIS. 5 HOURS The laboratory identification of organic compounds and separation of mixtures, with emphasis on the relationship of structure to physical and chemical properties. Prerequisites: Chem. 233.

432(g). ORGANIC SYNTHETIC REACTIONS.

Consideration of synthetic reactions used in organic chemistry. Prerequisite: Chem. 233 or 239.

436(g). HIGH POLYMERS.

Polymerization reaction mechanisms and techniques, and the structure and properties of natural and synthetic high polymers. Prerequisite: Chem. 233.

450(g). INORGANIC PREPARATIONS.

1 то 3 ноив Preparation of selected inorganic compounds to illustrate laboratory techniques and theoretical principles. Prerequisite: Chem. 342 and consent of instructor.

461-462-463(g). GENERAL BIOCHEMISTRY I, II, III. 3 HOURS EACH A survey of the chemistry of carbohydrates, lipids, proteins, nucleic acids, vitamins, enzymes, coenzymes and intermediary metabolism. Prerequisite: Chemistry 233 or Chemistry 239.

464-465-466(g). GENERAL BIOCHEMISTRY LABORATORY I, II, III. 2 HOURS EACH Some representative experiments in the isolation quantitation and metabolism of naturally occurring substances. Prerequisite: Chem. 461, 462, 463 or concurrent registration.

467(g). NUTRITION.

Essential metabolites including vitamins, amino acids, fatty acids, etc. as related to nutrition. Prerequisite: Chem. 362 or Chem. 463.

480-481-482(g). SEMINAR. 1 HOUR EACH Prerequisite: Senior standing and/or consent of instructor.

ECONOMICS

415(g). GOVERNMENT AND BUSINESS.

Growth of modern business organization and resultant government regulations. Prerequisite: Econ. 112.*

416(g). LABOR PROBLEMS.

Wage and employment theory, and the institutions associated with labor (unions, collective bargaining, social legislation). Prerequisite: Econ. 112.*

420(g). COMPARATIVE ECONOMIC SYSTEMS.

A comparison of alternative solutions to the fundamental economic problem as manifested in capitalism, socialism, communism, and fascism and the modifications and combinations of these ideologies practiced in existing economic systems around the world. Prerequisite: Econ. 112.*

425(g). INTERNATIONAL ECONOMIC RELATIONS. 3 HOURS Exchange and trade, economic analysis, commercial policy. Prerequisite: Econ. 112.*

EDUCATION

Courses are listed numerically under the headings Education and Special Education

405(g). PHILOSOPHY OF EDUCATION. Same as Philosophy 405(g).

3 Hours

411(g). INTRODUCTION TO GUIDANCE.

Basic concepts and principles of guidance and counseling are introduced and related to the particular services of guidance.*

456(g). SEMINAR IN SUPERVISION OF STUDENT TEACHING. 3 HOURS Methods and procedures for effective supervision of student teachers. Prerequisites: teaching experience and consent of instructor.

490(g). FOUNDATIONS OF EDUCATION.

The concluding course in the required sequence of education courses; historical, philosophical, social and professional foundations of American education. Prerequisites: Ed. 200 or 201, 202 or 204, 300 or 301 and Student Teaching. Each quarter.

495(g). COMPARATIVE EDUCATION.

A study of foreign educational systems to promote international understanding and cooperation by relating problems to the professional interests of the students and to introduce them to other systems and the work of the UN agencies in the field of
education.*

COURSE OFFERINGS

500. INTRODUCTION TO RESEARCH.

3 ноив Methodology of design of research studies. Preparation of effective technical reports.

501. PSYCHOLOGICAL FOUNDATIONS OF EDUCATION. 3 HOURS Schools and systems of psychology; principles underlying learning and instruction.

502. STATISTICS IN RESEARCH. 3 HOURS Basic statistical theory, techniques, and application in educational research.

504. THE SCHOOL AND SOCIETY.

Ніstory and development of social structures in America; relationship between social structures and the school.*

505-510. JUNIOR COLLEGE-COMMUNITY COLLEGE INSTITUTE. 2 HOURS EACH For administrators, teachers, and graduate students already employed in junior college positions, or preparing for employment in junior or community colleges. Summer only.

512. STUDY OF THE INDIVIDUAL.

Case study methods, practical application, laboratory experience.

520. PRINCIPLES OF ADMINISTRATION.

3 HOURS
The theory and principles of administration and organization as a social process.

521. ADMINISTRATION OF THE ELEMENTARY SCHOOL. 3 HOURS The process, organizational, functional, and behavioral contexts of elementary school administration.

522. SUPERVISION IN THE ELEMENTARY SCHOOL.

3 HOURS
The evaluation and improvement of the educational program through processes of democratic educational leadership.

525. OCCUPATIONAL AND EDUCATIONAL INFORMATION.

3 HOURS Vocational and educational materials are selected and evaluated which can be used for occupational guidance in educational settings. They will be kept current and added to as changes warrant.

526. PRINCIPLES AND TECHNIQUES OF COUNSELING.

This course examines instruments and techniques used in counseling, including all of those which may be considered directive and non-directive. Case studies and role playing are a significant part of this course.*

540. STUDIES AFFECTING ELEMENTARY EDUCATION. 3 HOURS Survey of published research.*

541. SEMINAR IN ELEMENTARY SCHOOL TEACHING PROBLEMS. 3 HOURS Individual problems, problems common to the group. Admission upon approval of instructor.

542. ELEMENTARY SCHOOL CURRICULUM.
History, development, evaluation, and revision of the curriculum.*

3 HOURS

545. DIAGNOSIS AND CORRECTION OF READING DIFFICULTIES. 3 HOURS Advanced study of reading difficulties.*

546. READING CLINIC: DIAGNOSIS.

2 HOURS Individual case studies. Prerequisites: Ed. 545 and consent of instructor.

550. SCHOOL LAW.

3 HOURS
Legal relationships of the schools to state and federal government are examined. The following major topics are included: School and Church; School District Organization and Control; Authority, Procedure, and Liability of School Officers; Laws relating to School Finance; Legal Relationships of the School to Teacher and Pupil.*

574. APPRAISAL TECHNIQUES.

Many types of test instruments, formal and informal, are examined. It is to be understood that this is a course which deals both with theory and practice. Each student will have experience in designing a limited number of tests and questionnaires which he will administer and upon which he will develop statistics. In addition it is to be expected that each student will take at least one paper and pencil test in each of the five following areas: intelligence, aptitude, achievement, personality, interest.*

575. CLINICAL PRACTICE: WECHSLER.

3 HOURS Prerequisites: A Major in Counseling and Guidance or Special Education, or Certification in Reading, and consent of the instructor.*

576. CLINICAL PRACTICE: STANFORD-BINET.

3 HOURS
Prerequisites: A Major in Counseling and Guidance or Special Education, or Certification in Reading, and consent of the instructor.*

579. ORGANIZATION AND ADMINISTRATION OF
GUIDANCE SERVICES.

Various problems and principles of organization and administration both of the school
guidance program and its particular services are examined extensively. Evaluation of
a school guidance program is a summary requirement of this course.*

590. SEMINAR IN ADMINISTRATION AND SUPERVISION IN THE ELEMENTARY SCHOOL.

3 HOURS

591. PRACTICUM IN GUIDANCE.

This course has been designed to give the graduate student with a major in guidance and counseling practical experience in guidance activities. The program is worked out on an individual basis for each student. Prerequisite: Ed. 411(g), 524, consent of instructor.*

592. ADMINISTRATION AND SUPERVISION OF REMEDIAL READING. 3 HOURS The administration and supervision of remedial reading programs in elementary and secondary schools and in colleges. Course conducted as a seminar. Prerequisites: Six hours of remedial reading courses.

599. THESIS IN EDUCATION.

Major study in chosen problem area. Open only to candidates for the master's degree.

Project must be approved by the student's advisory committee.

SPECIAL EDUCATION

416(g). MENTAL RETARDATION.

3 ноив Incidence and description of mental retardation. Methods of diagnosis and educational organization. Prerequisites: Ed. 200 or 201, 202 or Psych. 210, or permission of instructor. Same as Psych. 416(g).

417(g). ORIENTATION TO THE PHYSICALLY HANDICAPPED. 3 HOURS Finding and determining psychological and medical needs of children with physical handicaps.

420(g). EDUCATION OF THE HANDICAPPED CHILD.

An introductory course in the recognition, incidence, and needs of children with physical, mental, or psychological handicaps. Prerequisites: Ed. 200 or 201, 202 or Psych. 210, or permission of instructor. Same as Psych. 420(g).*

421(g). THE GIFTED CHILD.

Definition, identification, and current school program for the mentally superior or specially talented child.*

430(g). INDUSTRIAL ARTS FOR SPECIAL EDUCATION TEACHERS. 3 HOURS Projects and experiences in industrial arts and crafts designed for teachers of the mentally retarded.

435(g). SEMINAR IN MENTAL RETARDATION.

3 HOURS Special problems of brain injured; behavior problems; occupational education; review of research in mental retardation; laboratory work. Prerequisite: consent of instructor.

436(g). PROBLEMS IN SPECIAL EDUCATION. Directed reading and/or research in Special Education.

1-3 HOURS

437(g). WORKSHOP IN SPECIAL EDUCATION.

4 HOURS Organization and curriculum of programs in the area of mental retardation. Includes parental counseling and occupational programs. Problems of children with cerebral dysfunction. Prerequisite: Sp. Ed. 416.

440(g). METHODS IN TEACHING THE MENTALLY RETARDED. 3 HOURS Methods of teaching the mentally retarded child. Curriculum and materials. Prerequisite: Spec. Ed. 416(g).

450(g). STUDENT TEACHING OF THE MENTALLY. 5-8 HOURS; 450g: 5 HOURS Experience under qualified supervising teacher in classroom for mentally retarded. Prerequisite: consent of instructor.

ENGLISH

Courses are listed numerically under the headings English and Language Arts.

301-302-303(g). EARLY ENGLISH LITERATURE.

4 HOURS PER QUARTER 301: The Anglo-Saxon period and the beginnings of Middle English literature: the Venerable Bede, King Alfred, Beowulf, and other Anglo-Saxon documents in modern English translation, with a glance at selected passages in the original; the Ancrene Riwle and Piers Plowman; medieval romance generally and Arthurian romance: Sir Gawain and the Green Knight and Malory's Le Morte d'Arthur; specimens of lyric and alliterative verse, in Middle English. 302: Chaucer I: Troilus and Criseyde and the other more important poems apart from The Canterbury Tales. 303: Chaucer II: The Canterbury Tales. The first two quarters are offered occasionally, the third quarter regularly.

311-312-312(g). ENGLISH LITERATURE OF THE 16TH CENTURY.

4 HOURS PER QUARTER 311: More and Elyot; the drama through Kyd; Skelton, Wyatt, and Surrey; the Elizabethan translators. 312: Prose narrative through Deloney; the University Wits; later Elizabethan poetry: Sidney and the sonneteers, Marlowe and Ovidian romance, and the patsoral. 313: Spenser.

321-322-323(g). ENGLISH LITERATURE OF THE 17TH CENTURY.

4 HOURS PER QUARTER

321: Prose drama, and poety of Jonson and his contemporaries, principally the King James translators of the Bible, Bacon, Donne, and Herbert. 322: Later Caroline writers: Herrick, Marvell, Crashaw, Vaughan, and Sir Thomas Browne; Cowley and Hobbes. 323: Milton.

331-332-333(g). ENGLISH LITERATURE OF THE RESTORATION AND 18TH CENTURY.

4 HOURS PER QUARTER 331: Restoration comedy and heroic tragedy; Dryden and his lesser contemporaries; Bunyan. 332: Early 18th-century literature, especially Pope, Swift, Addison and Steele, and Defoe. 333: Boswell and Dr. Johnson; mid-century and later poets: Collins, Gray, and Cowper; Fielding and the rise of the novel; Goldsmith and Sheridan.

341-342-343(g). ENGLISH LITERATURE OF THE ROMANTIC MOVEMENT.

4 HOURS PER QUARTER.

341: Crabbe, Burns, and Blake; Jane Austen; the Gothic novel; Scott. 342: Southey, Landor, Wordsworth and Coleridge, Hazlitt, De Quincey, and Lamb. 343: Byron, Shelley, and Keats.

351-352-353(g). ENGLISH LITERATURE OF THE VICTORIAN PERIOD.

HOURS PER OUAL

351: Cobbett and the literature of social reform; Carlyle and Macaulay; Tennyson and Browning; the Brontes and Dickens. 352: Newman, Mill, and Huxley; Arnold, Clough, and FitzGerald; Thackeray, George Eliot, and Trollope, 353: Ruskin and Pater; the Pre-Raphaelites, Swinburne, and Morris; Meredith and Hardy.

361-362-363(g). ENGLISH AND AMERICAN LITERATURE OF THE 20TH CENTURY.

4 HOURS PER QUARTER 361: From the Nineties to World War I: the Aesthetic Movement, the Rhymers, Wilde, and Gissing; Shaw; the naturalistic novel; Robinson and Frost; Edwardian and Georgian poetry; James, Conrad, Forster, and Joyce. 362: The literature of World War I and the 1920s: the Imagists; Lawrence and Woolf; Eliot and the modernist poets; Huxley, Fitzgerald, and Hemingway; the later Yeats. 363: From the Thirties to mid-century: the Auden group, Waugh and Orwell, Faulkner and Steinbeck, Dylan Thomas and poets of the Forties, Mailer and Cozzens, and Greene.

376-377-378(g). DEVELOPMENT OF THE DRAMA. 4 HOUR PER QUARTER. Representative readings in dramatic literature from the Greek theater to the present day. 376: From Aeschylus to Shakespeare. 377: From Shakespeare to Ibsen. 378: From Ibsen to the present. Same as Speech 322-324-326(g).

381(g). WORLD LITERATURE I: GREECE.

4 HOURS
Greek literature: the study, in translation, of the beginnings and models of Western
literature — especially of Homer and the Greek tragedians — with some consideration of
other modes in writers such as Pindar, Aristophanes, Thucydides, and Plato.

382(g). WORLD LITERATURE II: ROME. 4 HOURS.

Roman literature: the study, in translation, of major Roman authors of the later Republic and the Empire: Cicero, Caesar, Livy, and Tacitus; Seneca; Catullus, Vergil, Horace, Ovid, Martial, and Juvenal; with some consideration of lesser writers from Plautus and Terence to Marcus Aurelius.

383(g). WORLD LITERATURE III: THE HEBRAIC-CHRISTIAN TRADITION.

4 HOURS.

Study of selected portions of the Old and New Testaments, with emphasis upon the various types of literature; survey of the influence of the King James Bible upon English and American thought.

384(g). WORLD LITERATURE V: THE MIDDLE AGES AND

THE RENAISSANCE.

4 HOURS
Major authors and literary modes of Europe from the twelfth century to the sixteenth, represented by selected works in translation; for example, those of Gottfried (Tristan), Dante, Petrarch, Villon, Rabelais, Montaigne, and Cervantes.

385(g). WORLD LITERATURE V: RATIONALISM AND ROMANTICISM. 4 HOURS. Voltaire's Candide, Pope's Essay on Man, Rousseau's Confessions and Emile, Goethe's Faust Part I, Byron's Manfred, Pushkin's Eugene Onyegin, Emerson's Nature, and Thoreau's Walden.

386(g). WORLD LITERATURE VI: THE MODERN AGE.

4 HOURS.
The literature of continental Europe from Baudelaire and Dostoevsky through Kafka and more recent writers.

391(g). TEACHING ENGLISH IN THE SECONDARY SCHOOL. 4 HOURS. An examination of current practices in teaching high school English: observation of high school English classes; discussion of curriculum and materials in language and literature; analysis of typical approaches; and preparation of materials for use in student teaching. To be taken immediately before student teaching in English. Fall and Spring.

392(g). ADOLESCENT LITERATURE.

3 HOURS.

The teaching of literature in junior and senior high schools; literature written for adolescents; organization of school literature programs; teaching the various genres; the relation of literature to other aspects of the English program.

393(g). LANGUAGE AND COMPOSITION IN THE SECONDARY SCHOOL

3 HOURS

Special study of the teaching of the English language and composition in junior and senior high schools: comparison of traditional and recent descriptions of the language; implications of recent language study for the teaching of English; organization of English language study in high schools; the role of language study in the teaching of writing; organization of school composition programs.

COURSE OFFERINGS

397-398-399(g). HISTORY OF THE ENGLISH LANGUAGE. 4 HOURS PER QUARTER A historical and linguistic approach to the phonological and morphological development of the English language. 397: The language from Primitive Germanic to 1100, with occasional readings in Old English. 398: The language from 1100 to the Modern period, with occasional readings in Middle English. 399: The development and present status of American English.

400(g). GENERAL LANGUAGE STUDIES.

A survey of current thought on the characteristics, functions, and potentialities of language.

401(g). TRANSFORMATIONAL GRAMMAR.

4 HOURS. An introduction to the theory of generative grammar and its applications, with emphasis on a pedagogical approach to the teaching of grammar and literature.

402(g). LITERARY CRITICISM.

A study of the major essays in English from Sir Philip Sidney to T. S. Eliot, with consideration of Aristotle's *Poetics* and the pertinent classical and continental background.

404(g). ADVANCED SHAKESPEARE.

The great tragedies, the problem plays and the sonnets; Shakespearean criticism.

Prereq: English 374 or 375 or consent of the instructor.

406(g). DRYDEN AND POPE.

A study of neo-classical critical theory and dramatic and poetic practice as seen in the work of the two major Augustan poets.

408(g). THE 18TH-CENTURY NOVEL.

4 HOURS.

The development of the English novel from Defoe to Sterne, with some consideration of earlier prose narrative.

410(g). ARNOLD AND HIS MILIEU. 4 HOURS. An examination of the great controversies — literary, social, religious, and intellectual — of the Victorian Age, particularly as seen in the writings of Arnold, Huxley, Newman, Carlyle, Mill, Ruskin, and others.

412(g). THE 19TH-CENTURY NOVEL.

The work of major English novelists from Jane Austen to Thomas Hardy.

4 HOURS.

414(g). MODERN SYMBOLIST POETS.

4 HOURS.
The modernist movement in poetry from its origins in the French Symboliste writers and the Imagist group to the major work of Yeats and Eliot.

416(g). INDIVIDUAL ENGLISH AUTHORS.

4 HOURS.

Intensive study of one or two writers, or a small group of writers, whose work is important in itself or has had a significant influence on the development of English literature.

430(g). SIGNIFICANT BOOKS IN AMERICAN CULTURE. 4 HOURS. The history of ideas, in the study of books articulating major traditions in American culture.

432(g). HAWTHORNE, MELVILLE, AND POE.

4 HOURS. Extensive reading in major American authors: Hawthorne's Twice-Told Tales, Mosses from an Old Manse, and The House of Seven Gables; Melville's tales and Typee, Mardi, and Billy Budd; Poe's poetry, tales, and criticism.

434(g). EMERSON, THOREAU, AND WHITMAN.

4 HOURS. Extensive reading in major American authors: Emerson's essays and poetry; Thoreau's poetry and A Week on the Concord and Merrimack Rivers; Whitman's Leaves of Grass, Democratic Vistas, and Specimen Days.

436(g). TWAIN, HOWELLS, AND JAMES.

Extensive reading in major American authors: Twain's Connecticut Yankee and The Myterious Stranger; Howells' Criticism and Fiction and The Rise of Silas Lapham; James's critical prefaces, Daisy Miller and The Portrait of a Lady.

438(g). INDIVIDUAL AMERICAN AUTHORS.

4 HOURS.

Intensive study of one or two writers, or a small group of writers, whose work is important in itself or has had a significant influence on the development of American literature.

440(g). THE SOUTHERAN LITERARY RENAISSANCE.

4 HOURS. Faulkner's Yoknapatawpha cycle: experiment, tradition, and the myth of the South; the Fugitive poets and critics, especially Ransom, Tate, and Warren; such younger writers as Carson McCullers, Eudora Welty, and Shirley Ann Grau.

442(g). CONTEMPORARY FICTION.

4 HOURS.
The novel and short story since World War II: from Cozzens and Warren to such younger writers as Kingsley Amis and Iris Murdoch.

444(g). CONTEMPORARY POETRY.

4 HOURS.

Poetry since World War II: from the later Auden to such reeent poets as Philip Larkin and James Wright.

COURSE OFFERINGS

500. LITERARY SCHOLARSHIP. Problems and techniques of literary scholarship. 3 HOURS.

502. STUDIES IN SHAKESPEARE.

A survey of the classical, medieval, and contemporary sources of Shakespeare; study of the bibliographical and critical problems of the plays. Prereq.: consent of the instructor.

504. STUDIES IN 16TH-CENTURY LITERATURE.

3 HOURS.

506. STUDIES IN 17TH-CENTURY LITERATURE.

3 HOURS.

508. STUDIES IN 18TH-CENTURY LITERATURE.

3 HOURS.

510. STUDIES IN 19TH-CENTURY LITERATURE.

3 Hours.

512. STUDIES IN 20TH-CENTURY LITERATURE.

3 HOURS.

514. STUDIES IN AMERICAN LITERATURE.

3 HOURS.

516. STUDIES IN MODERN LITERARY THEORY.

3 HOURS.

The major modes in contemporary criticism: formal analysis, historical and biographical interests, and various psychological, ideological, cultural, and mythic approaches as related to the practice of contemporary schools and movements.

540. PROBLEMS IN SECONDARY SCHOOL ENGLISH. Individual and class problems.

3 HOURS.

598. DIRECTED READINGS IN ENGLISH.

3 HOURS.

599. THESIS OR SYMPOSIUM IN ENGLISH.

6 HOURS.

Research and the writing of the master's thesis or set of three papers.

LANGUAGE ARTS

390(g). SPECIAL METHODS IN LANGUAGE ARTS IN THE ELEMENTARY SCHOOL.

3 HOURS Areas determined by special needs and experience of those enrolled. On request.

445(g). PROBLEMS IN THE TEACHING OF READING. 3 HOURS. Critical analysis of trends in reading programs; plans for adjusting the reading program to individual differences; diagnostic and corrective work in reading; evaluation of pupils' progress. Prereq.: Languages Arts 342 and teaching experience.

446(g). READING CLINIC: CORRECTION.

2 ноив.
Supervised practice in teaching remedial reading, including diagnosis and correction.
Prereq.: Language Arts 342 and teaching experience.

448(g). READING IN THE SECONDARY SCHOOL. 3 HOURS. Emphasis is on the development of essential reading skills necessary for success in secondary school including vocabularly, comprehension, individual differences, rate, and word recognition. Prerequisite: Ed. 211 and 305.

449(g). READING FOR THE DISADVANTAGED.

2 HOURS. Educational television course titled *Children of the Dark*. Offered in the fall each year. Will substitute for Lang. Arts 446(g). but not for Education 546. Emphasis is on the reading problems of slum children, ethnic groups and the potential dropout. Call station KFME for information.

FOREIGN LANGUAGES

Courses are listed numerically under the headings French, German, Spanish.

FRENCH

401(g). THE NINETEENTH CENTURY NOVEL IN FRANCE. 3 HOURS. Romanticism, Realism, Naturalism in the writings of representative authors. Prerequisite: French 300-301-302, and consent of the instructor.*

402(g). NINETEENTH CENTURY FRENCH POETRY. 3 HOURS. The major French poets from Romanticism through Symbolism. Prerequisite: French 300-301-302, and consent of the instructor.*

403(g). CONTEMPORARY FRENCH DRAMA.

3 ноив. Representative readings in the dramatic literature of the 20th century. Prerequisite: French 300-301-302, and consent of the instructor.*

COURSE OFFERINGS

404(g). THE CONTEMPORARY NOVEL I.

The French novel after Naturalism, 1900-1939. Prerequisite: French 300-301-302, and consent of the instructor.*

405(g). THE CONTEMPORARY NOVEL II.

3 HOURS. The French Novel after 1939. Prerequisite: French 300-301-302, and consent of the instructor.*

406(g). CONTEMPORARY FRENCH POETRY. 3 HOURS. French Poetry of the 20th century. Prerequisite: French 300-301-302, or consent of the instructor.*

416-417(g). SEVENTEENTH CENTURY FRENCH DRAMA I, II. 3 HOURS EACH 416: Origins of the classical drama; Corneille and Racine. 417: The French Theatre; Moliere, Prerequisite: French 300-301-302.*

418(g). SEVENTEENTH CENTURY PROSE. 3 HOURS. Social life as mirrored in the letters, novels, maxims, and memoirs. Prerequisite: French 300-301-302.*

425(g). FRENCH CONVERSATION AND COMPOSITION III. 3 HOURS. An advanced course in syntax and stylistics. Prerequisite: French 325, or consent of the instructor.

599. THESIS.

6 HOURS.

GERMAN

420(g). FRIEDRICH VON SCHILLER.

Schiller's life and works. Prerequisite: German 300-301-302, or consent of the instructor.*

421(g). GOETHE. 3 HOURS. Goethe's life and works. Prerequisite: German 300-301-302, or consent of the instructor.*

422(g). GERMAN DRAMATIC LITERATURE.

Reading in representative German dramatic literature of the 19th century. Prerequisite: German 300-301-302, or consent of the instructor.*

434(g). THE GERMAN NOVEL OF THE 20TH CENTURY. 3 HOURS. Novels of representative authors of the 20th century. Prerequisite: German 300-301-302, or consent of the instructor.*

424(g). FAUST I. 3 HOURS. Critical analysis and interpretation of Goethe's Faust. Prerequisite: German 300-301-302, or consent of the instructor.*

425(g). GERMAN CONVERSATION AND COMPOSITION III. 3 HOURS. An advanced course in syntax and stylistics. Prerequisite: German 325, or consent of the instructor.

426(g). GERMAN POETRY.

Reading and discussion of the more important German poets from Klopstock to Rilke.

Prerequisite: German 300-301-302, or consent of the instructor.**

427, 427(g). THE CERMAN "NOVELLE."

3 HOURS. Readings in representative German Novelle of the 19th and 20th centuries. Prerequisite: German 300-301-302, or consent of the instructor.

428, 428(g). GOETHE'S POEMS.

Reading and discussion of Goethe's representative poems. Prerequisite: German 300-301-302, or consent of instructor.

SPANISH

425(g). SPANISH CONVERSATION AND COMPOSITION III. 3 HOURS. An advanced course in syntax and stylistics. Prerequisite: Spanish 325, or consent of the instructor.

434(g)-435(g). SPANISH AMERICAN PROSE FICTION I, II. 3 HOURS EACH Reading and analysis of outstanding and representative works, supplemented by study of the historical and cultural background. 434: Emphasis on the Regional and Realistic novels. 435: Emphasis on the more cosmopolitan contemporary trends in fiction. Conducted in Spanish. Prerequisite: Three years of college Spanish, or consent of the instructor.*

437(g). CERVANTES.

Principal aspects of the works of Cervantes: Don Quixote, Novelas Ejemplares, Entremeses. Prerequisite: Three years of college Spanish or consent of the instructor.*

431, 431(g). NINETEENTH CENTURY NOVEL OF SPAIN. 3 HOURS. The regional and realistic fiction of the second half of the nineteenth century, particularly Galdós, Alas and Pardo Bazán. Conducted in Spanish. Prerequisite: Spanish 301-302, or consent of the instructor.*

432, 432(g). TWENTIETH CENTURY NOVEL OF SPAIN. 3 ноив. Emphasis on the fiction of the Generation of '98 (Unamuno, Valle-inclán and Baroja) and on novels published since the end of the Spanish Civil War. Conducted in Spanish. Prerequisite: Spanish 301-302, or consent of instructor.*

433, 433(g). TWENTIETH CENTURY POETRY AND DRAMA OF SPAIN. 3 ноивь. Emphasis on the lyric poetry of the Generations of '98 and '27, and on post-Civil War drama. Conducted in Spanish. Prerequisite: Spanish 301-302, or consent of instructor.*

436, 436(g). LATIN-AMERICAN POETRY, 1890 TO PRESENT. 3 HOURS. The poetry of Latin America: Modernism, post-Modernism, and Contemporary trends. Prerequisite: Spanish 331-332, or consent of instructor.*

GEOGRAPHY

410(g). REGIONAL GEOGRAPHY.

4 HOURS.

A regional approach to countries of the world, global relations, and geo-politics.

411(g). THE GEOGRAPHIC FACTORS IN CULTURAL DEVELOPMENT. 3 HOURS. The role of geography in the development of cuttures.

422(g). CONSERVATION POLICIES.

3 HOURS. Importance of natural resources; conservation programs. On request.

502. CLIMATOLOGY.

Турея of climate, distribution, climate control. On request.

520. HISTORICAL GEOGRAPHY OF THE UNITED STATES. 3 HOURS. Selected periods in America history studied in relation to the geographical settings. On request.*

540.. PROBLEMS IN GEOGRAPHY EDUCATION.

3 HOURS. Objectives, materials, and procedures in teaching geography in the elementary and secondary schools; individual problems and projects. On request.*

HEALTH, PHYSICAL EDUCATION AND RECREATION

Courses are listed in numerical sequence under the headings Health, Physical Education, and Recreation.

HEALTH

412(g). MARRIAGE AND FAMILY LIFE EDUCATION. 4 HOURS. Discussion and study of the problems of courtship, marriage, and family relationships with special emphasis on the role of health as it affects children, parents, home, and society.*

465(g). ORGANIZATION AND ADMINISTRATION OF SCHOOL HEALTH EDUCATION.

3 HOURS.

Program in grades 1-12 with emphasis on the policies, procedure, and responsibilities of the school staff and administration.

474(g). WORKSHOP IN HEALTH EDUCATION. 2 HOURS. A course designed to meet the needs of teachers who are directly or indirectly responsible for health in the schools. Emphasis on practical solution of problems may be repeated for credit.

540. PROBLEMS IN HEALTH EDUCATION. 3 HOURS.* Study of individual problems and problems common to groups.

565. CORDINATION OF SCHOOL HEALTH EDUCATION. 3 HOURS. Coordination of the school health education program in grades 1-12. Emphasis on health guidance, coordination, administration, and evaluation. Prerequisite: H. 465 or 465g, or equivalent.*

599. THESIS IN HEALTH.

6 HOURS.

PHYSICAL EDUCATION

380(g). SUPERVISION OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.

4 HOURS.

Supervisory and teaching experience in the elementary school physical education program. Prerequisite: P.E. 240. Fall, Winter, Spring.*

452(g). ADAPTED PHYSICAL EDUCATION. 3 HOURS. A course designed to promote a knowledge and understanding of the problems, responsibilities, and procedures of physical education for the exceptional individual. The preventive, corrective and remedial aspects of physical education are included in the content of the course. Prerequisite: Physical Education major or minor with senior standing or consent of the instructor. Fall, Winter.*

475(g). ADMINISTRATION OF ATHLETICS.

Study of problems, policies, and procedures in the administration of the high school athletic program. Prerequisite: P.E. 110 and senior standing.

495(g). ADMINISTRATION OF PHYSICAL EDUCATION.

3 HOURS. Policies, procedures, and problems in administration of physical education. Prerequisite: P.E. 110, and senior standing.

505. HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION. 3 HOURS. (Required of all Health and Physical Education majors.)*

540. PROBLEMS IN PHYSICAL EDUCATION. 3 HOURS. Study of individual problems, and problems common to groups. (Required of all Health and Physical Education majors.)*

560. STUDIES IN ATHLETIC TRAINING.

3 HOURS.

Directed readings and discussions; special emphasis on research in athletics. Prerequisite: Playing and/or coaching experience in athletics. (Required of all male Health and Physical Education majors.)*

574. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION. 3 HOURS. Standardized tests, test construction and administration. (Required of all Health and Physical Education majors.)*

500. THESIS IN PHYSICAL EDUCATION.

6 HOURS.

RECREATION

465(g). ORGANIZATION AND ADMINISTRATION OF RECREATION. 3 HOURS. Policies, procedures, and problems in establishing and operating a municipal recreation program.*

540. PROBLEMS IN RECREATION.
Individual projects; problems common to the group.*

3 Hours.

599. THESIS IN RECREATION.

6 HOURS.

HISTORY

301-302-303(g). EAST ASIAN HISTORY I, II, III.

3 HOURS PER QUARTER The cultural, political, and economic growth of East Asia, with emphasis on China and Japan. 301: From earliest times to the 10th century. 302: From the 10th century to the eve of modern times. 303: The last century, with emphasis on Asian nationalism. Prerequisite: Hist. 101-203, or consent of the instructor. Must be taken in sequence.

323-324-325(g). HISTORY OF AFRICA I, II, III. 3 HOURS PER QUARTER. 323: Prehistory and the Pharaonic heritage. Syriac, Hellenic, and Christian intrusions. Early Sudanic kingdoms and the triumph of Islam. 324: Islam at high tide. Sudanic empires, eastern commercial states, and the Ethiopian enclave. Bantu culture before the Whites. 325: The Western intrusion and its consequences. Prerequisite: Hist. 101-203, or consent of the instructor. Must be taken in sequence.

326(g). MEDIEVAL EUROPE. 3 ноив. A study of European history from the decline of the Roman Empire to the Renaissance. Prerequisite: Hist. 101-203 or consent of the instructor.*

327(g). THE RENAISSANCE.

3 HOURS. The political, religious, cultural, economic and social evolution of Europe from the 14th Century to the 16th Century. Prerequisite: Hist. 101-203 or consent of the instructor.*

328(g). HISTORY OF THE REFORMATION.

3 HOURS. Sixteenth century Europe during the Reformation and Counter-Reformation period. The development of the modern state system; political, social and economic environment. Prerequisite: Hist. 101-203, or consent of the instructor.*

329-330(g). HISTORY OF GERMANY I, II.

3 HOURS EACH.

I. Survey of political, social and economic development of Central Europe from the 15th Century to the end of the 18th Century. II. Survey of political, social, economic and cultural development of Germany from the beginning of the 19th Century to the present. Prerequisite: History 101-203.*

331-332-333(g). HISTORY OF LATIN AMERICA I, II, III. 3 HOURS PER QUARTER. 331: A summary of pre-Spanish Indian culture, the Iberian background, and the Era of the Conquistadores. 332: The Spanish Empire and the Wars for Independence in Latin America. 333: The 19th and 20th centuries in Latin America. Prerequisite: Hist. 101-203, or consent of the instructor. Must be taken in sequence.

351-352-353(g). RUSSIAN HISTORY I, II, III. 3 HOURS PER QUARTER 351: A study of the development of Russia from earliest times to the 18th century. 352: A study of the development of Russia during the 19th century to the March Revo-

COURSE OFFERINGS

lution, 1917; an introduction to Russian achievements in literature, art, music, architecture, and science: 353: A study of the Soviet Union: its history, government, domestic and foreign policies, from 1917 to the present. Prerequisite: Hist. 101-203, or consent of the instructor. Must be taken in sequence.

354(g). NATIONAL HISTORIES.

4 HOURS. Short histories of various nations of interest to Foreign Language majors and others. A single nation each time, according to demand. Prerequisite: declared major in foreign language, or consent of the instructor. Recommended: reading knowledge of a foreign language.

355-356-357(g). HISTORY OF ENGLAND I, II, III. 3 HOURS PER QUARTER 355: Roman, Germanic, and Norman England. National character and institutions in the age of the Tudors. 356: From Elizabeth to the French Revolution: the emergence of modern England and the Pax Britannica. 357: from world leadership through two great wars to the England of today. Prerequisite: Hist. 101-203, or consent of the instructor. Must be taken in sequence.*

360, 360(g). THE AMERICAN WEST.

4 HOURS PER QUARTER The frontier movement as a factor responsible for U.S. character and institutions. Prerequisite: one year of college U.S. history, or consent of the instructor.*

401(g). ADVANCED STUDIES IN ASIAN HISTORY.

4 HOURS. Problems in Asian history for advanced students. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: Hist. 301-303, or consent of the instructor.

402(g). ADVANCED STUDIES IN AFRICAN HISTORY.

4 HOURS.

Problems in African history for advanced students. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: Hist. 323-325, or consent of the instructor.

403(g). ADVANCED STUDIES IN LATIN AMERICAN HISTORY.

4 HOURS.

Problems in Latin American history for advanced students. Topics for analysis chosen to fit the capabilties of the class. Prerequisite: Hist: 331-333, or consent of the instructor.

404(g). ADVANCED STUDIES IN EUROPEAN HISTORY.

4 HOURS. Problems in European history for advanced students. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: Hist. 101-203. or consent of the instructor.

405(g). ADVANCED STUDIES IN NORTH AMERICAN HISTORY. 4 HOURS. Problems in North American history for advanced students. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: declared major in history and one year of college U.S. history, or consent of the instructor.

406-407-408(g). DIPLOMATIC HISTORY OF THE UNITED STATES I, II, III.

3 HOURS PER QUARTER.

406: The rejection of Europe. Expansion in North America. The Civil War and its aftermath. 407: The new imperialism, the Wilsonian adventure, and the second rejection of Europe. Darkening clouds in Asia. 408: Collapse of the Pax Britannica. Failure of the League Nations. The United States as a Western leader. Prerequisite: one year of college U.S. history, or consent of the instructor. Must be taken in sequence.*

411-412(g). ECONOMIC HISTORY OF THE UNITED STATES I, II.

4 HOURS PER QUARTER.

Analysis of economic forces and their effects upon American life. 411: from the colonial period to the eve of the industrial age. 412: The age of industry. Prerequisite: one year of college U.S. history, or consent of the instructor. Must be taken in sequence.*

415-416(g). CONSTITUTIONAL HISTORY OF THE UNITED STATES I, II.

4 HOURS PER QUARTER.

415: The origins and development of the American Constitution from colonial times to the beginning of the industrial age. 416: The American Constitutional system in its historic setting from early industrial times to the present. Prerequisite: one year of college U.S. history, or consent of the instructor. Must be taken in sequence.*

421-422(g). SOCIAL & INTELLECTUAL HISTORY OF THE UNITED STATES I, II.

4 HOURS PER QUARTER.

The social and intellectual evolution of the American nation. 421: From the beginnings to mid-19th century. 422: From Darwin to the present. Prerequisite: one year of college U.S. history, or consent of the instructor. Must be taken in sequence.*

425(g). COMPARATIVE HISTORY. Searching for meaning in history through comparative analysis of the grand phenomena. Prerequisite: Hist. 101-203, senior standing in the department, and consent of the instructor.*

427-428(g). INTELLECTUAL HISTORY OF WESTERN CIVILIZATION I, II.

4 HOURS EACH

I. European attitudes toward the fundamental problems of life. From early times to the triumph of 'Progress.' Prerequisite: History 101-203 or consent of instructor. II. European attitudes toward the fundamental problems of life. The 20th Century with special consideration of European societies overseas. Prerequisite: History 427 or consent of instructor.*

4 HOURS PER QUARTER. 429-430(g). COLONIAL AMERICA I, II. 429: The European background of American history; the transit of European civilization; the beginnings of the British Empire in America, 1607-1713. 430: The growth of the English colonies in the eighteenth century; the disruption of the British Empire; and the establishment of the new nation. Prerequisite: one year of college U.S. history, or the consent of the instructor. Must be taken in sequence.*

COURSE OFFERINGS

461(g). CANADIAN HISTORY. Discovery and exploration; the period of British rule and the Dominion; the British North American Act and the development of the commonwealth idea. Course terminates with the end of World War II. Prerequisite: background in European and American history.

501. DEVELOPMENT OF THE DISCIPLINE OF HISTORY. 2 HOURS. An examination of how the idea of history has grown from the time of the Hebrew chroniclers to the present day.

502. SEMINAR IN EUROPEAN HISTORY. 2 HOURS. Problems in European history for graduate students in history. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: Graduate standing in the Department of History,*

503. SEMINAR IN ASIAN HISTORY. 2 HOURS. Problems in Asian history for graduate students in history. Topics for analysis to fit the capabilities of the class. Prerequisite: Graduate standing in the Department of History.*

504. SEMINAR IN NORTH AMERICAN HISTORY. 2 HOURS. Problems in North American history for graduate students in history. Topics for analysis chosen to fit the capabilities of the class. Prerequisite: Graduate standing in the Department of History.*

560. TUTORIAL IN HISTORY: GRADUATE. 1 to 3 hours. Directed readings and discussion on particular problems in history agreed upon by the instructor and pupil. Prerequisite: Bachelor's degree in History and consent of both instructor and department chairman.

599. M.A. THESIS IN HISTORY. 12 HOURS MAXIMUM. Research and writing of the M.A. thesis. Prerequisite: Completion of the Comprehensive Examination for the M.A. degree in History.

INDUSTRIAL ARTS

420(g). WOOD TECHNOLOGY Advanced Study in Wood Technology; Wood processing principles (mechanical), wood utilization, wood structure and laboratory experimentation with woods, adhesive and finishes.*

441(g). TESTS AND EVALUATION IN INDUSTRIAL ARTS SUBJECTS. 3 HOURS. Study and application of principles of evaluation of shop and drawing subjects for the purpose of improving the instructional program. For Industrial Arts graduates, or with consent of the instructor.*

450(g). GRAPHIC ARTS TECHNOLOGY.

4 HOURS. Advanced study in the Graphic Arts. Historical backgrounds, the organization of the industry, production methods and techniques, new research and experimentation, and the future of the field. Prerequisite: 4 hours of printing, or consent of the instructor.*

460(g). THE GENERAL SHOP.

4 HOURS. Special problems in organizing and teaching industrial arts in the general shop. Current practices in equipment, selection of educational areas, objectives, layout of shop, organization of subject matter, and personnel organization.*

480(g). SPECIAL PROBLEMS IN I.A. Individual study of some phase of I.A. not offered in depth in the regular curriculum but of special interest to the student. Prerequisite: senior status, consent of instructor and Department Chairman. May be repeated for total of 6 credit hours.*

501. HISTORY AND PHILOSOPHY OF INDUSTRIAL ARTS EDUCATION. 3 HOURS. History of handwork instruction, and the developments leading to the industrial arts program. Consideration of various points of view necessary to form a workable philosophy.*

502. TRENDS AND DEVELOPMENTS IN INDUSTRIAL ARTS EDUCATION.

3 hours. A course to develop knowledge and appreciation of the changing concepts and achievements in industrial arts.*

503. LITERATURE OF INDUSTRIAL ARTS EDUCATION.

3 HOURS. Survey of periodicals, various types of books, bulletins, and special material from the field of Industiral Arts. Some emphasis on developing skills in locating materials through bibliographies, library service, etc.*

504. SCHOOL SHOP EQUIPMENT CARE AND MAINTENANCE. 1 ноив. Open only to graduate students with a major in Industrial Arts or Vocational Education. Care and maintenance of major machines in wood and metal areas; lectures, slides, cutaway models, drawings. Disassembly and reassembly of machines. Maintenance adjustments and repairs. Summer only.

542. CURRICULUM PLANNING IN INDUSTRIAL ARTS EDUCATION. 3 HOURS. Courses of study and broad general curriculums. Techniques for scientific analysis of industry, the community, and the nation as a basis for courses of study and the curriculum for one-shop schools, multi-shop schools, and community programs.*

COURSE OFFERINGS

590. ADMINISTRATION, ORGANIZATION, AND SUPERVISION OF THE INDUSTRIAL ARTS PROGRAM.

3 HOURS.
Objectives, programs, practices, laws, rulings, standards, and certification. Open to superintendents, principals, supervisors, and teachers.

599. THESIS IN INDUSTRIAL ARTS.

6 HOURS

MASS COMMUNICATIONS

MC 340(g). INSTRUCTIONAL COMMUNICATION. Types and effective use of audio-visual materials.

4 HOURS.

MC 420(g). ADMINISTRATION OF INDUSTRIAL MATERIALS. 4 HOURS. Solving educational problems with instructional materials; the role of the A-V Administrator. Prerequisite: MC 340.

MC 445(g). PREPARATON OF INSTRUCTIONAL MATERIALS. 3 HOURS. Basic techniques for preparation of inexpensive instructional materials. Laboratory experience. Prerequisite: MC 340 or consent of instructor.

MC 450(g). CINEMATOGRAPHY.

Techniques of pictorial continuity in the cinema. Educational film production. Practical experience in producing sound films. Prerequisites: MC 150 and MC 330.

MC 580. PROBLEMS IN MASS COMMUNICATIONS.

1-4 HOURS.

MATHEMATICS

Courses are listed numerically under the headings Mathematics and Astronomy.

341(g). SPECIAL METHODS IN MATHEMATICS IN THE ELEMENTARY SCHOOL.

3 HOURS. Adapted to the needs and experience of those enrolled. Prerequisite: Elementary school teaching experience. On request.

391(g). FOUNDATIONS OF MATHEMATICS.

Formerly Math. 401. Nature of Mathematics. Study of axiomatic systems; symbolic logic, sets, geometries, algebras. Prerequisite: Math. 233. Fall, Winter, Spring, Summer, 1968.

400(g). HISTORY OF MATHEMATICS.

3 HOURS.

Topical and chronological survey of the main branches of mathematics. Prerequisite: Math. 233 or consent of instructor. Spring, 1968, Summer, 1969; alternate years.

415(g). FOUNDATIONS OF GEOMETRY.

4 HOURS. Formerly Math. 420. Euclidean Geometry. Comparison of the postulates of Euclid and Hilbert. Transformations, cross-ratio, geometry of circles, constructions. Prerequisite: Math. 233. Fall, Winter, Summer, 1969.

416(g). MODERN GEOMETRY.

4 HOURS. Formerly Math. 419. Introduction to non-Euclidean geometries and projective geometry. Prerequisite: Math. 415. Spring, Summer, 1968.

423(g). FOUNDATIONS OF ALGEBRA.

3 HOURS
Formerly Math. 402. Development of the real number field from the Peano postulates.
Prerequisite: Math. 233 or consent of instructor. Fall, Winter, Spring.

424(g). ABSTRACT ALGEBRA.
4 ноив.
Formerly Math. 421. Development of abstract algebraic systems; groups, rings, fields.
Prerequisite: Math. 423 or consent of instructor. Spring, Summer, 1969.

427(g). LINEAR ALGEBRA I.

4 HOURS.

Formerly Math. 422. Vectors, matrices, linear systems, linear transformations. Prerequisite: Math. 233. Fall, Spring.

428(g). LINEAR ALGEBRA II.

4 HOURS.

A continuation of the theory of finite-dimensional vector spaces. Vector calculus, bilinear and quadratic forms, complex number field. Preerquisite: Math. 427. Winter, Summer, 1968.

431(g). NUMERICAL ANALYSIS.

4 HOURS.

Numerical solutions to equations and systems of equations. Finite differences, interpolation formulas, numerical calculus. Prerequisite: Math: 331. Spring, Summer, 1968.

433(g). ADVANCED CALCULUS I.

4 HOURS.

Formerly Math. 412. Partial differentiation, differential geometry, integration theory, and applications. Prerequisite: Math. 331. Winter, 1968.

434(g). ADVANCED CALCULUS II. 4 HOURS. Continuation of Math. 433. Spring, Summer, 1969.

435(g). COMPLEX VARIABLES.

Formerly Math. 413. Introduction to complex variables, analytic functions, integrations, conformal mapping. Prerequisite: Math. 331, Spring, Summer, 1968.

437(g). REAL VARIABLES.

4 HOURS.

Formerly Math. 543. Theory of functions, sequences, limits, continuity, differentiation, and integration. Prerequisite: Math. 233. Fall, Summer, 1969.

450(g). COMPUTER PROGRAMMING.

4 HOURS.

Formerly Math. 430. Machine language programming, symbolic programming systems, numerical methods of problem solving. Prerequisite: Math. 231. Winter, Spring, Summer.

465(g). APLIED MATHEMATICS.

4 HOURS.

Formerly Math. 405. Review of ordinary differential equations, circuit problems, Fourier series, Laplace transformations, partial differential equations. Prerequisite: Math. 331. On request.

474(g). PROBABILITY.

4 HOURS.

An introduction to mathematical probability. Prerequisite: Math. 233. Fall, Winter, Summer, 1968.

475(g). MATHEMATICAL STATISTICS I.

3 HOURS.

Mathematical derivations of statistical techniques and theories. Prerequisite: Math. 233. Winter.

476(g). MATHEMATICAL STATISTICS II.

3 HOURS.

Continuation of Math. 475. Prerequisite: Math. 475. Spring.

495(g). THEORY OF NUMBERS.

3 HOURS.

Formerly Math. 414. Fundamental theorems and problems in number theory. Prerequisite: Math. 233. Winter, Summer, 1969.

540. PROBLEMS OF SECONDARY SCHOOL MATHEMATICS.

3 HOURS.

Trends in methods and curriculum in secondary school mathematics. Prerequisite: Consent of instructor.

590. SPECIAL PROBLEMS IN MATHEMATICS.

1 to 4 hours.

See Math. 490.

599. THESIS.

6 HOURS.

Must have consent of adviser to register.

ASTRONOMY

Courses in astonomy may be used as electives in various curriculu.

411(g). DYNAMICS OF ASTRONOMY.

3 HOURS. Mathematical formulation of concepts and theories in astronomy. May be used as an elective in mathematics. Prerequisite: Math: 233 and a course in physics dealing with principles of mechanics. Spring.

MUSIC

313(g)-314(g). FORM AND ANALYSIS. 2 HOURS EACH QUARTER 313(g): The materials of musical structure and technical analysis of small and large forms, with emphasis upon Baroque and classical types. Prerequisite: Music 271 or 281. 314(g): More complex structures, including the romantic symphony and contemporary forms, including atonal and 12 tone structures. Prerequisite: Music 313(g).

316(g). COMPOSITION.

3 HOURS. Prerequisite: Music 372, 314, and consent of the instructor. May be repeated for credit. On request.

343(g). INSTRUMENTAL CONDUCTING. 2 Hours. Advanced conducting for instrumental students. Prerequisite: Music 342.

347(g). CHORAL CONDUCTING.

2 ноиль. Advanced choral conducting. Prerequisite: Music 346.

369(g)-370(g)-372(g). HISTORY OF MUSIC.

4 HOURS EACH QUARTER 369: Medieval, Renaissance, Baroque periods. Prerequisite: Music 271 or 281. 370: Classic and Romantic periods. Prerequisite: Music 369. 372: Impressionism and 20th Century music. Prerequisite: Music 370.

373(g). AMERICAN MUSIC.

History of music in the United States to include analysis of stylistic features, in the context of historic, cultural, and artistic developments. Prerequisite: Music 372. On request.

382(g). SOLO AND ENSEMBLE LITERATURE FOR BRASS.

A course in the repertoire for brass instruments. On request.

COURSE OFFERINGS

383(g). SOLO AND ENSEMBLE LITERATURE FOR WOODWINDS. A course in the repertoire for woodwind instruments. On request.

1 HOUR

400(g)-404(g). SMALL ENSEMBLE.

Preparation and performance of both instrumental and vocal chamber music. On request. May be repeated for credit. Areas as follows: 400(g) Vocal, 401(g) String, 402(g) Brass, 403(g) Woodwinds, 404(g) Piano.

406(g). OPERA. 2 ноив. Opera performance through small workshop ensembles as well as full scale productions. May be repeated for credit.

409(g). PSYCHOLOGY OF MUSIC.

3 HOURS.

410(g). ORCHESTRATION.

3 HOURS. The basic principles of orchestral writing. Prerequisite Tonal Counterpoint 272.

411(g). BAND ARRANGING.
Arranging for small ensembles and full band.

3 HOURS.

413(g). 16TH CENTURY POLYPHONY.

3 HOURS. 16th Century Polyphonic techniques. Prerequisite: Theory 271 or 281.

414(g). THE TECHNIQUES OF MUSICAL INTERPRETATION. 3 HOURS. Structural and rhythmic analysis as pertains to live sound. Basic interpretative techniques. Prerequisite: Music 272 Tonal Counterpoint. May be repeated for credit.

430(g). TECHNIQUES OF CONTEMPORARY COMPOSITION.

3 HOURS.

441(g). PIANO PEDAGOGY. Methods of piano instruction (consent of the instructor).

2 HOURS.

442(g). STRING METHODS AND MATERIALS.

2 HOURS.

443(g). PEDAGOGY OF THEORY.

Aims, methods, and materials in teaching music theory. Prerequisites: completion of basic undergraduate theory requirements and consent of the instructor.

505. GRADUATE RECITAL.

By arrangement. May be repeated for credit.

1 - 2 HOURS.

510. DIRECTED STUDY IN MUSIC THEORY.

Varied projects in the field of Music Theory. Course may be repeated for credit.

540. PROBLEMS IN TEACHING AND SUPERVISING MUSIC.

3 HOURS.

550-567. PRIVATE INSTRUCTION.

1 HOUR EACH COURSE Private lessons. One lesson a week. Extra fee. Each quarter. May be repeated for credit. Areas as follows: 550 Piano, 555 Organ, 560 Voice, 565 Brass, 566 Woodwinds, 567 Strings.

570. INTRODUCTION TO MUSICOLOGY.

An introduction to musical research, bibliography, acoustics, philosophy of music, psychology of music, aesthetics, theory, and pedagogy.

571. MUSIC IN THE MIDDLE AGES.

3 HOURS.

572. MUSIC IN THE RENAISSANCE SEMINAR.

3 HOURS.

573. MUSIC IN THE BAROQUE SEMINAR.

3 HOURS.

574. MUSIC IN THE CLASSIC ERA SEMINAR.

3 HOURS.

575. MUSIC IN THE ROMANTIC ERA SEMINAR.

3 HOURS.

576. MUSIC IN THE 20TH CENTURY SEMINAR.

3 Hours.

PHILOSOPHY

340(g). ADVANCED ETHICS.

4 HOURS. Epistemological analysis of fundamental moral concepts, judgments and arguments; consideration of major meta-ethical theories. Prerequisite: One course in philosophy or consent of instructor.*

380(g). PLATO.
A study of several major dialogues of Plato. Prerequisite: one course in philosophy or consent of instructor.*

381(g). ARISTOTLE.

A study of several major works of Aristotle. Prerequisite: One course in philosophy or consent of instructor.*

385(g). CONTINENTAL RATIONALISM.

Analysis of philosophical thought of Descartes, Spinoza and Leibniz. Prerequisite: One course in philosophy or consent of instructor.*

COURSE OFFERINGS

390(g). BRITISH EMPIRICISM.

4 HOURS.

Analysis of philosophical thought of Locke, Berkeley, and Hume. Prerequisite: One course in philosophy or consent of instructor.*

405(g). PHILOSOPHY OF EDUCATION.

4 HOURS. Historical and critical study of theories of education. Prerequisite: one course in philosophy or consent of instructor.*

410(g). NINETEENTH CENTURY PHILOSOPHY.

4 HOURS. Analysis of thought of major nineteenth century philosophers, typically selected from the following: Hegel, Marx, Schopenhauer, Kierkegaard, Nietzsche, J. S. Mill. Prerequisite: one course in philosophy or consent of instructor.*

411(g). PHILOSOPHY OF SCIENCE.

4 HOURS.

Philosophical analysis of the fundamental concepts, laws and theories of the natural and social sciences. Prerequisite: one course in philosophy or consent of instructor.*

420(g). CONTEMPORARY ANALYTIC PHILOSOPHY.

4 HOURS. Study of some major themes and figures in contemporary analytic philosophy. Prerequisite: one course in philosophy or consent of instructor.*

430(g). KANT.

A study of one or more major works of Kant. Prerequisite: One course in philosophy or consent of instructor.*

440(g). SELECTED PHILOSOPHICAL PROBLEM.

4 HOURS. Intensive study of a selected philosophical problem. Specific topic for each term offered will be announced in class schedule. Students may register for this course more than once since content will vary. Prerequisite: One course in philosophy or consent of instructor.*

450(g). SEMINAR ON MAJOR PHILOSOPHER.

4 HOURS. Intensive study of the work of an important classical or contemporary philosopher. The specific philosopher for each term offered will be announced in class schedule. Students may register for this course more than once since content will vary. Prerequisite: one course in philosophy or consent of instructor.*

PHYSICS

330-331(g)-332(g). INTERMEDIATE MECHANICS I, II, III.

3 HOURS EACH An advanced unified approach to physical problems. Include: Newton's Laws, algebra

and calculus of vectors, particle dynamics in one, two and three dimensions, systems of particles, gravitation, moving reference frames, Lagrange's equations, dynamics of rigid bodies, Hamilton's equations, variational principles, Hamilton-Jacobi theory, small oscillations, mechanics of continua, special theory of relativity. Prerequisites: Physics 297 or permission of instructor.

370(g)-371(g)-372(g). ELECTROMAGNETIC THEORY AND PHYSICAL OPTICS I, II, III.

3 HOURS EACH An advanced study of electromagnetism, electromagnetic waves and light. Includes: Boundary value problems for Poisson's and Laplace's equations, electrostatics of microscopic media, magnetostatics, Maxwell's equations, plane electromagnetic waves, Huygen's principle, interference, polarization, Fresnel's equations, radiation and diffraction, multipole fields, scattering and dispersion, Lienard-Wiechert potentials, self forces, radiation of moving charges, relativistic particle dynamics, covariant formulation of electrodynamics. Prerequisites: Physics 252, 299, 330 or permission of instructor.

399-400(g). THERMAL PHYSICS I, II. 3 ноиль еасн Elements of thermodynamics, kinetic theory, and statistical mechanics. Thermodynamics: Temperature, equations of state, work, 1st and 2nd laws, thermodynamic potentials, applications to special systems, black-body radiation, irreversible process, entropy generation, heat flux. Kinetic theory: ideal gas law, Maxwell velocity distribution, Brownian motion, mean-free path, elementary transport phenomena. Statistical Mechanics: Phase space, Liouville theorem, gases in force fields, specific heats, partition functions, quantum statistics, ensembles, fluctuations. Exact Kinetic Theory: Boltzmann transport equation, molecular chaos, H-theorem, fluid dynamics, special solutions of transport equation. Prerequisite: Physics 300, or permission of instructor. For 399; Physics 332(g), 300 or permission of instructor for 400(g).

410(g)-411(g). ELECTRONICS I, II.

4 HOURS. EACH
A functional and theoretical treatment of basic electronic concepts, including: general
circuit analysis, a mathematical treatment of fundamental circuit types of rectifiers,
amplifiers, and oscillators. Prerequisite: Math. 331 or Physics 330, Physics 220 or 231
or 252, or permission of instructor.

470(g)-471(g). QUANTUM MECHANICS I, II. 3 HOURS EACH Interference experiments and the wave-particle duality, probability amplitudes, general formalism in terms of linear vector spaces, symmetries, Schrodinger equation and applications, operators and transition elements, perturbation theory, quantum electrodynamics, quantum statistical mechanics. Prerequisites: Physics 430(g), 300 and/or permission of instructor.

490(g)-491(g)-492(g). PHYSICS SEMINAR I, II, III. 1 HOUR EACH Examination of some of the current literature in the field. Analysis and presentation of some aspects of this literature by students. Prerequisite: Permission of Department Chairman.

499(g). SPECIAL PROBLEMS IN PHYSICS. 1 TO 4 HOURS. Considers special intermediate and advanced problems in physics. Area and credit to be specified in transcript. Perequisite: Permission of Department Chairman.

POLITICAL SCIENCE

310(g). INTRODUCTION TO POLITICAL BEHAVIOR.

3 HOURS. The current dispute between "behavioralists" and "traditionalists" about proper methodology, approach, and technique in Political Science. Representative studies are used to illustrate different approaches to the study of politics. (Prerequisite: P.S. 110, 120 or consent of instructor.)

311(g). AMERICAN POLITICAL THOUGHT.

A survey of American political thought from New England Puritanism to modern pragmatism and conservatism. (Prerequisite: P.S. 120 or consent of instructor.)

312(g). COMMUNIST AND MARXIST FOUNDATIONS OF COVERNMENT.

3 HOURS.

Historical evolution of Communism in Eastern and Western cultures as a theory and practice of government. Marxism and the nineteenth century development of Communism, its dialectic of historical materialism and the future stateless society; will the state wither away? (Prerequisite: P.S. 110 or consent of instructor.)

341(g). POLICY AND ADMINISTRATION.

3 HOURS. The policy processes of the national government, focusing particular attention on the interplay between the political forces and administrative agencies. Detailed exploration of how the Executive and the Congress direct and control administration, with illustrations from major foreign and domestic policies. (Prerequisite: P.S. 120.)

342(g). PUBLIC PERSONNEL PROBLEMS.

3 HOURS.

Development and maintenance of an efficient, effective and representative public service. Special attention will be given to the role of the policy branches in setting personnel policies and to the activities of central personnel agencies in setting up and enforcing personnel standards. (Prerequisite: P.S. 120, 240 or consent of instructor.)

351(g). COMPARATIVE GOVERNMENT OF EASTERN

EUROPEAN STATES.

Analysis of Socialist and Communist practices of government in the Soviet Union and other Eastern European countries. The particular historical background and political evolution of Communist parties in each country and the modalities of exercise of power in each context. (Prerequisite: P.S. 312(g).)

352(g). POLITICAL PROBLEMS OF DEVELOPING COUNTRIES.

3 HOURS.

Analysis of social and economic conditions affecting political institutions and their forms in the developing countries. The third world in the political and economic context of international relations. (Prerequisite: P.S. 111 or consent of instructor.)

360(g). AMERICAN FOREIGN POLICY.

4 HOURS. The particularities of the U.S. foreign policy in the light of its historical evolution, geographical position, economic, military and political interests, Theory and practice within the federal system of government and the American democracy. (Prerequisite: P.S. 111 or consent of instructor.)

361(g). INTERNATIONAL LAW.

3 + 3 hours.

I: The legacy of international law; the doctrine of sovereignty; sources of international law; rights and obligations of states; freedom of the high seas; disputes, conflicts and the laws of war.

II: International law through the cases. The development of international jurisdiction; negotiation, arbitration and judical settlement. The court system and its development. Each section will be offered alternately for 3 credits; prerequisite: P.S. 230.

362(g). INTERNATIONAL ORGANIZATIONS.

3 + 3 HOURS.

I: The historical development of international organizations; the ideal and functional approaches. The nineteenth century European experiences; from the League of Nations to the United Nations; the charter, its meaning and its interpretation.

II. The Specialized Agencies of the United Nations; different regional organizations, their economic, political, cultural or military purposes and the degree of their integration.

Each section will be offered alternately for 3 credits; prerequisite: P.S. 111 or consent of instructor.

410(g). WESTERN POLITICAL THOUGHT. 4+4 HOURS.

I: Political thought from ancient times to the Reformation.

II: Political thought from the seventeenth century to the present. Each section will be offered alternately for 4 credits; prerequisite: P.S. 110 or consent of instructor.

411(g). EASTERN POLITICAL THOUGHT.

An introduction to the traditional concepts of government in Asia. The major schools of political thought in China, India and Persia through the ages and later developments in Japan and the Middle East up to the advent of modern states.

420(g). SEMINAR IN AMERICAN POLITICS.

Research and advanced analysis of selected topics. Supervised personal studies by students interested in the American political system. May be repeated as content is changed. (Prerequisite: consent of instructor.)

430(g). CONSTITUTIONAL LAW. 3+3 Hours. I: Interpretation of the Constitution of the United States by federal courts with particular emphasis on the federal governmental system.

II: Interpretation of the Constitution of the United States by federal courts with emphasis on civil rights.

Each section will be offered alternately for 3 credits; prerequisite: P.S. 120.

440(g). ORGANIZATIONAL THEORY AND PROBLEMS.

3 HOURS.

Theories of how organizations are managed, particularly public bureaucracies. Current thought on reorganizations, drawing on the literature of behavioral sciences and from the more traditional schools of thought. The impact of bureaucratic structures on individuals is emphasized. (Prerequisite: P.S. 240 or consent of instructor.)

441(g). COMPARATIVE PUBLIC ADMINISTRATION.

3 HOURS. A cross-national study of the role of public administration in the modernization of developing nations and an examination of governmental organization for national development. (Prerequisite: P.S. 240.)

450(g). COMPARATIVE GOVERNMENT OF ASIA. 3+3 hours. I: Analysis of political systems of Asian countries with traditional patterns and modern governmental institutions of Western inspiration, including India, Japan and Southeast Asia. (Prerequisite: P.S. 411(g).)

II: An examination of the Marxist theory and practice of government as applied to the Asian context, with particular emphasis on China. The role and leadership of Communist parties in changing the social and political pattern of Asian institutions. (Prerequisite: P.S. 312(g) and 411(g).)

Each section will be offered alternately for 3 credits.

451(g). COMPARATIVE GOVERNMENT OF THE MIDDLE EAST. 3 HOURS. Common social patterns and different political orientations in the area in the light of economic and political pressures from outside and the evolution of values within; the role of Islam and Arab nationalism. (Prerequisite: P.S. 352 and 411(g) or consent of the instructor.)

452(g). GOVERNMENT AND POLITICS IN AFRICA.

4 HOURS. Problems of independence as experienced by the French-speaking and English-speaking African states. Common backgrounds; traditional tribal structures. Different governmental approaches; new patterns adaptable to new situations. The African personality. (Prerequisite: P.S. 352 or consent of instructor.)

510. SEMINAR IN POLITICAL THEORY.

3 HOURS. Intensive study of selected political concepts. Approaches to deductive and behavioral systems of analysis. Personal laboratory work on specific issues. May be repeated as content is changed. (Prerequisite: consent of instructor.)

530. SEMINAR IN CONSTITUTIONAL LAW AND POLITICS.

3 ноивь. Intensive study of selected topics and personal research by students on the role of the federal judiciary as one of the policy-making branches of the federal government. Мау

540. SEMINAR IN PUBLIC ADMINISTRATION.

3 HOURS. Selected topics of public administration with particular emphasis on such fields as budgeting and finance. May be repeated as content is changed. (Prerequisite: consent of instructor.)

be repeated as content is changed. (Prerequisite: P.S. 430(g).)

550. SEMINAR IN COMPARATIVE GOVERNMENT.

3 HOURS. Methods of comparison. Analysis of differences in governmental structures and their evolution through the study of their aggregate political characteristics and their different components. Forces that influence the nature of political systems in different areas. May be repeated as content is changed. (Prerequisite: consent of instructor.)

560. SEMINAR IN INTERNATIONAL RELATIONS.

Study and analysis of selected topics of international relations and supervised personal research by students. May be repeated as content is changed. (Prerequisite: consent of instructor.)

PSYCHOLOGY

447(g). COMPARATIVE PSYCHOLOGY.

4 HOURS.
The study of animal behavior from an ontogenetic and phylogenetic point of view; intraand interspecific comparisons of innate behavioral patterns, sensory and learning
processes, and social behavior. Prerequisites: Psych. 344 or consent of the instructor.

460(g). ABNORMAL PSYCHOLOGY.

Behavior pathology; theories of development of functional disorders; theories of remediation. Prerequisite: Consent of instructor.*

465(g). CLINICAL PSYCHOLOGY.

Survey of approaches to diagnosis of maladjustment and its remediation. Introduction to techniques of psychotherapy. Prerequisite: Consent of the instructor.*

470(g). HISTORY AND SYSTEMS OF PSYCHOLOGY.

4 HOURS. Contemporary theories and their historical development. Prerequisite: Psch. 340, 342, 344 or the consent of the instructor.

COURSE OFFERINGS

476(g). THEORIES OF PERSONALITY.

4 HOURS.
Theoretical approaches to the study of personality; trait theories, field theory, psychoanalysis, social theories. Prerequisite: Consent of the instructor.*

481-482(g). SEMINAR IN PSYCHOLOGY.

2-6 HOURS. Topics of special interest. For majors, and advanced students in other areas. This may be repeated. Prerequisite: Consent of instructor required for non-majors.

491-492(g). PROBLEMS IN PSYCHOLOGY.

2-6 HOURS. Individual projects on subjects of special interest. This may be repeated. Prerequisite: Consent of the instructor.

495-496(g). FIELD WORK IN PSYCHOLOGY.

2-3 HOURS. Supervised field work, experience in social service agencies, or research settings. Pre-requisite: Consent of instructor. Students must have obtained prior approval by the Department of Psychology for all projects they wish to take for credit.

581. READINGS IN PSYCHOLOGY.

Directed readings on selected topics. May be repeated to a maximum of 4 hours. Prerequisite: General psychology or consent of instructor.*

SOCIAL STUDIES

390(g). SPECIAL METHODS IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. 3 hours. Adapted to the special needs and experiences of those enrolled. On request.

540. PROBLEMS IN SOCIAL STUDIES. Individual problems and problems common to the group. 3 Hours.

550. THE SCOPE, METHOD, AND VALIDITY OF THE SOCIAL SCIENCES.

3 HOURS.

Theory, methods, and foundations of the social sciences; basic assumptions and

epistemology in history, political science, economics, sociology, and anthropology.

599. THESIS IN SOCIAL STUDIES.

6 HOURS.

SOCIOLOGY AND ANTHROPOLOGY SOCIOLOGY

409(g). STATISTICAL METHODS AND SOCIAL MEASUREMENT. Special problems of social relationships are described and interpreted in terms of statistical methods. The practical application of research principles and experimental designs. Theoretical analysis of social measurement; logic of inquiry; standardization of measuring instruments; and the influence of value-judgments in sociology. Prerequisite: consent of instructor.

410(g). METHODS IN SOCIOLOGICAL RESEARCH. Relationship of theory, method, and data. Major methods employed in social research. Formulation of research problems. Prerequisite: Soc. 205.

3 HOURS. 415(g). SOCIAL ORGANIZATION. Analysis of social groups and complex organizations. Characteristics of bureaucracy. Integration and disintegration of social organizations. Prerequisite: Soc. 110, and 12 credits in history or the social sciences.

417(g). SOCIAL CHANGE. Analysis of social heritage, social evolution, cultural inertia, conservatism, human nature and culture.

3 HOURS. 418(g). SOCIOLOGY OF EDUCATION. Social processes and patterns of interaction in education institutions; relation of the school to other groups and institutions; methods and data of sociology applied to the school situation. Prerequisite: 12 hours in sociology, or consent of the instructor.

420(g). ANALYTICAL SOCIOLOGICAL THEORY. Analysis of problems in the development of sociological theory. Review of major sociological theories and concepts. Prerequisite: Soc. 415, or consent of the instructor.

421(g). DEVELOPMENT OF MODERN SOCIAL THOUGHT. 3 HOURS. Key trends in social thought from the Renaissance to the emergence and foundation of the Social Sciences in the 19th century, with special emphasis on the conditions contributing to the origins of sociology. Prerequisite: Soc. 110, or 12 credits in the social sciences, or consent of the instructor.

424(g). COMPARATIVE SOCIAL ORGANIZATION. An examination of the social organization of several world regions; the demographic and ecological characteristics, stratification system, organization, and forms of association in several world regions, with special attention to the national community. Prerequisite: 20 hours in Sociology, Economics, Political Science, or consent of instructor.

461(g). READINGS IN SOCIOLOGY. 3-6 HOURS. Selected reading in sociology under the close supervision of the members of the department. May be repeated to a maximum of 6 credits. Prerequisite: senior status and permission of department chairman.

500-501. SOCIOLOGICAL THEORY I, II. 3 HOURS EACH Advanced current sociological theory. Prerequisite: graduate standing and permission of instructor.

510. INDIVIDUAL RESEARCH. 3-6 HOURS. Maximum 3 hours per quarter. May be repeated once for credit.

Research on selected topics in sociology under the close supervision of the members of the department. Prerequisite: graduate standing and consent of the instructor.

Maximums 3 hours per quarter. May be repeated once for credit. Detailed exploration of selected topics in sociology. Prerequisite: graduate standing and permisison of instructor.

513. TOPICAL SEMINAR IN SOCIOLOGY.

513. TOPICAL SEMINAR IN SOCIOLOGY.

3-6 HOURS (MAXIMUM 3 HOURS PER QUARTER)

May be repeated once for credit. Detailed exploration of selected topics in sociology. Prerequisite: graduate standing and permission of instructor.

560. STUDIES IN SOCIOLOGY. Directed readings and discussion in the field agreed upon by the instructor and the student. Prerequisite: major in Sociology, or consent of the instructor.

ANTHROPOLOGY

461(g). READINGS IN ANTHROPOLOGY. Selected reading in anthropology under the close supervision of the members of the department. May be repeated to a maximum of 6 hours. Prerequisite: Upper division status and permission of the instructor.

SPEECH

Courses are listed numerically under each of the three headings: Theatre; Speech Pathology and Audiology; and Public Address.

THEATRE

322(g). DEVELOPMENT OF THE DRAMA I. 4 HOURS. Representative readings in dramatic literature from Aeschylus to Shakespeare.*

324(g). DEVELOPMENT OF THE DRAMA II. 4 HOURS. Representative readings in dramatic literature from Shakespeare to Ibsen.*

326(g). DEVELOPMENT OF THE DRAMA III. 4 HOURS. Representative readings in dramatic literature from Ibsen to the present.*

328(g). THE AMERICAN THEATRE.

4 HOURS.
The development of the American theatre from its beginnings to the present, with representative readings in the American drama.

330(g). DRAMATIC PRODUCTIONS I.

3-6 ноив.

Theory and practice in the play production techniques of acting, directing and technical theatre through the production processes of preparing one play weekly for summer theatre audiences. Prerequisite: consent of instructor.

331(g). DRAMATIC PRODUCTION II.

3-6 HOURS. Theory and practice in the play production techniques of acting, directing and technical theatre through the production processes of preparing one play weekly for summer theatre audiences. Prerequisite: consent of instructor.

332(g). ADVANCED ACTING.

The advanced study of character analysis, voice training, and movement problems, in terms of acting styles. Prerequisite: Speech 222 or consent of instructor.

334(g). PRINCIPLES OF SCENE DESIGN.

4 HOURS.
The fundamentals of pictorial representation, including composition, perspective, and color rendering in the planning and execution of scenic design. Prerequisite: Speech 225 or consent of instructor.

336(g). ADVANCED SCENE DESIGN.

4 HOURS.

Detailed investigation of historical developments and current practices in scenic design with experience in scenic rendering. Prerequisite: Speech 334 or consent of instructor.

338(g). STAGE COSTUME DESIGN.

A history of the development of clothing from the Egyptians to the twentieth century.

Practical experience in costume design and water color rendering techniques.

430(g). PERIOD PLAY PRODUCTION.

4 ноив.
The study of the problems involved in directing and acting in the production of historical drama. Prerequisite: Speech 222 and Speech 344 or consent of instructor.*

432(g). ADVANCED PLAY DIRECTION.

4 HOURS. Advanced study of techniques of visual dramatization through the use of movement, pantomime, tempo, and the analysis of character. Prerequisite: Speech 344 or consent of instructor.*

434(g). SPECIAL PROJECTS IN DRAMATIC ARTS.

4 HOURS. Opportunity for the advanced theatre student to do individual creative or investigative work in a particular phase of dramatic arts. Prerequisite: consent of instructor, senior standing or graduate student.*

436(g). EXPERIMENTAL THEATRE DESIGN.

Advanced investigation in scene design and projects in scene, costume, property, and lighting design for standard and experimental plays. Prerequisite: Speech 336 or consent of instructor.*

520. SEMINAR IN EDUCATIONAL THEATRE. 3 HOURS. An examination of the problems involved in the development of educational theatre programs. Prerequisite: consent of instructor.*

522. DRAMATIC THEORY AND CRITICISM.

3 HOURS.

Principles of dramatic criticism from Aristotle to the present day. Critical standards and methods, and theory application in the evaluation of drama in performance. Prerequisite: consent of instructor.*

SPEECH PATHOLOGY AND AUDIOLOGY

460(g). STUTTERING.
Significant theories and therapies for stuttering in children and adults.

462(g). ADVANCED SPEECH CORRECTION. 3 HOURS. Advanced study of the major disorders of speech; emphasis on individual study and application of research and diagnostic techniques to speech therapy. Prerequisite: nine credits in speech pathology.

466(g). CLINICAL PRACTICUM.
6 HOURS.
Supervised clinical practice with speech defective children and adults in the college
Speech Clinic. Prerequisite: consent of the instructor.

3 HOURS.

468(g). SPEECH CORRECTION FOR THE CLASSROOM TEACHER. 3 HOURS. The major disorders of speech, emphasizing the teacher's role in detecting and helping the speech handicapped child.

2 то 9 ноивз. 470(g). SPECIAL PROBLEMS IN SPEECH. Individual study in speech pathology and audiology. Prerequisite: consent of the instructor.

PUBLIC ADDRESS

410(g). CLASSICAL RHETORIC. An examination of the Greek and Roman rhetoricians with an emphasis on Aristotle, Plato, Quintilian and Cicero. Prerequisite: Speech 200 or 314, or consent of instructor.*

412(g). HISTORY AND CRITICISM OF AMERICAN PUBLIC ADDRESS. 4 HOURS. A course in the history of American public address from the Eighteenth Century to the present. A critical study of the speechs and speaking careers of outstanding American statesmen, lawyers, and clergymen, considering especially the sources of their effectiveness. Prerequisite: Speech 200 or 314, or consent of instructor.*

414(g). HISTORY AND CRITICISM OF BRITISH PUBLIC ADDRESS. 4 HOURS. A course in the history of British public speaking from the Eighteenth Century to the present. A critical study of the speeches and speaking careers of outstanding British statesmen and lawyers, consideration especially the source of their effectiveness. Prerequisite: Speech 200 or 314, or consent of instructor.*

3 Hours. 540. PROBLEMS IN SPEECH EDUCATION. An examination of the problems involved in the development of speech programs.*

6 HOURS. 599. THESIS IN SPEECH. Opportunity for the advanced student to do individual creative or investigative work in an area of speech for which he has had basic training.







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