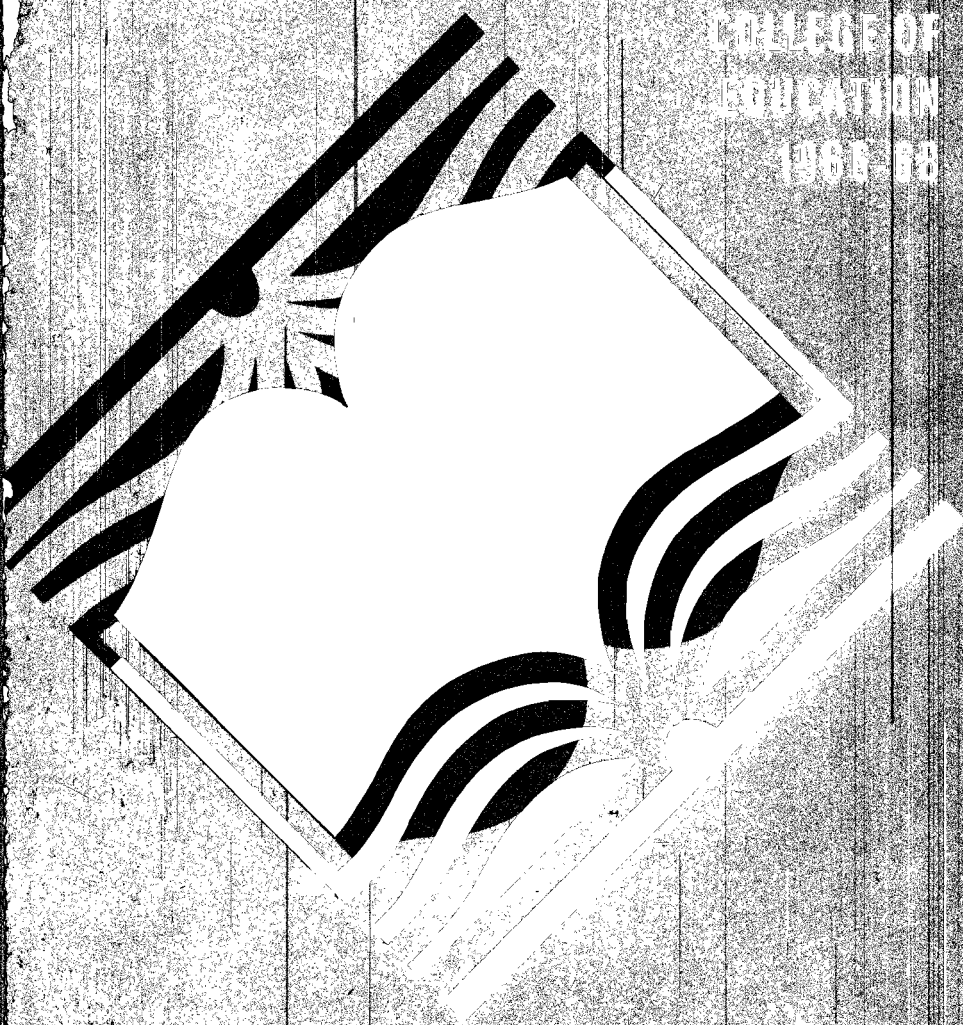


UNIVERSITY OF MINNESOTA BULLETIN

COLLEGE OF
EDUCATION
1965-68



How to Use This Bulletin

This bulletin is divided into three major parts:

Section I, General Information—All students and prospective students should read this section carefully. It contains detailed information relating to the following topics:

Courses of Study, page 2.

Admission Requirements, page 4.

Graduation Requirements, page 7.

Procedures and Practices in the College of Education, page 10.

Student Services, page 14.

Special Agencies, page 15.

Awards and Scholarships, page 16.

Master of Education Degree Requirements, page 17.

Graduate Study in Education, page 17.

Section II, Curriculums (pages 18-97)—This section contains the specific course requirements for the various fields of work offered in the College of Education. It also lists the major advisers for each field. Consult the Index of this bulletin for specific page references.

Section III, Description of Courses (pages 98-136)—This section lists the undergraduate and graduate courses offered in the College of Education.

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All students and prospective students in the College of Education will need to refer to the *Bulletin of General Information*. Some students and prospective students will wish to refer also to the following bulletins:

Bulletin of the College of Liberal Arts

Bulletin of Agriculture and Forestry

Bulletin of Home Economics

Bulletin of the School of Nursing

Bulletin of the Graduate School

All of these bulletins are available at the information booth in Morrill Hall or may be obtained by writing to the Office of Admissions and Records, University of Minnesota, Minneapolis, Minnesota 55455.

The days and hours when classes meet and the place of meeting are contained in the *Class Schedule* published just before the registration period each quarter.

ROTC—The attention of all new students is directed to the program of the Reserve Officers' Training Corps. It is possible to earn a commission in one of the military services while completing the requirements for a degree in the College of Education. See the *Bulletin of the Army-Navy-Air Force ROTC*.

UNIVERSITY OF MINNESOTA

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COLLEGE OF EDUCATION

Section I. General Information

The College of Education at the University of Minnesota was established in 1905 to prepare men and women for teaching in the schools of Minnesota and working in other kinds of educational service. The college aims to build a strong cultural and professional foundation for teaching in elementary and secondary schools and in institutions of higher learning; to prepare school administrators; to attempt the solution of important educational problems by means of research; to render assistance to school officials in meeting local problems; and to develop a philosophy of education suited to the needs of life. Toward these ends the College of Education utilizes all the resources of its own faculty and works in co-operation with other colleges of the University.

The College of Education is united with other colleges of the University in the common aim of fostering liberal education for all students, regardless of specialization or vocational goals. A liberal education is one that frees us from ignorance, enables us to experience life more fully, and enlarges our powers to judge intelligently. To participate in the quest for a liberal education requires that we seek to expand our control over the primary instruments of acquiring and communicating knowledge; that we seek to understand both the broadly significant findings of the sciences and the methods whereby the sciences contribute to man's knowledge of himself and his environment; that we seek historical and philosophical perspective on the nature of our own lives and the world in which we live; and that we seek to vivify our lives through an understanding and appreciation of the arts. Learning to view and use these knowledges, skills, and appreciations in a way that will disseminate them more broadly throughout society is integral to the quest for a liberal education as it is understood by the College of Education.

A student desiring to complete an undergraduate degree program in the College of Education is expected to distribute some part of his course work in areas of study beyond those most closely associated with his specialized or vocational interests.

COURSES OF STUDY

All students who plan to receive a teacher's certificate from the state of Minnesota upon graduation from the University of Minnesota (Minneapolis and St. Paul) must complete a B.S. degree program in the College of Education. Students wishing physical education or recreational leadership programs enter the College of Education as freshmen. All other majors take 1 or 2 years of preprofessional work in another college before entering the College of Education.

This section of the bulletin contains brief descriptions of the courses of study, admission requirements, graduation requirements, and procedures and practices that are followed in the College of Education. These requirements

should be studied as well as the detailed requirements for a particular curriculum as listed in Section II of this bulletin.

Detailed information concerning general entrance requirements, as well as University admission procedures and estimated expenses, will be found in the *General Information Bulletin*. The Office of Admissions and Records, University of Minnesota, will send the student a copy upon request.

Programs in Which Students Normally Begin Directly in the College of Liberal Arts

Students who wish to be graduated in physical education or recreational leadership are encouraged to register as freshmen in the College of Education and complete the program of study as prescribed in Section II. Students in other colleges who decide on one of these majors should transfer to the College of Education as soon as possible.

Programs in Which Students Normally Spend the Freshman Year in the College of Liberal Arts

Students who wish to major in art education, business and distributive education, industrial education, and music education spend 1 year in the College of Liberal Arts taking preparatory work as prescribed in the appropriate curriculum in Section II. They apply for a transfer to the College of Education early in the third quarter of the freshman year.

Programs in Which Students Normally Spend Two Years in the College of Liberal Arts

Students wishing to major in one of the following programs spend 2 years in the College of Liberal Arts:

Biological Science
Chemistry
Earth Science
Economics
Elementary Education
English
French
Geography
German
History
Language Arts

Latin
Mathematics
Nursery-Kindergarten-Primary
(NKP) Education
Physics
Political Science
Russian
Spanish
Sociology
Speech
Speech Pathology

These students apply for transfer to the College of Education early in the third quarter of their sophomore year.

Combined Programs with the College of Liberal Arts

Students who qualify may combine programs of the College of Liberal Arts and of the College of Education and earn both the B.A. and B.S. degrees. The student must complete the requirements of both colleges and must register

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3 quarters in the Upper Division of each college. Students should expect to extend their programs 1 or more quarters beyond the usual 4-year period. To reduce the extended period to the minimum, students should plan combined programs as early as the beginning of the sophomore year. They should formally apply for admission to the program early in the third quarter of the sophomore year.

Special Programs in the Institute of Technology and the College of Education

Students with majors in physics, chemistry, or mathematics in the Institute of Technology may plan a program leading to a baccalaureate degree from the Institute of Technology and a master of education degree from the College of Education, qualifying for a teaching certificate and both degrees at the close of a 5-year program. Such students apply for admission to the combined program in the third quarter of their third (junior) year and register for courses in the Institute of Technology and the College of Education in the fourth and fifth years.

Special Programs in Agriculture and Home Economics

Students who wish to prepare for careers in the teaching of agriculture or home economics register for freshman and sophomore years in the College of Agriculture, Forestry, and Home Economics. Registration, beginning with the junior year, is a joint one—in the College of Agriculture, Forestry, and Home Economics and in the College of Education. Students should apply for admission to the joint program early in the third quarter of the sophomore year.

Master of Education Degree and Graduate Study in Education

(See index)

Reserve Officers' Training Corps

Three reserve training programs are available to students in the College of Education as well as to students in other colleges of the University. The programs in military science, air science, and naval science lead to commissions in the reserve components of the Army, Air Force, and Navy, respectively. Credits earned in these programs may be applied as electives toward graduation. Interested students should arrange to enter the ROTC program at the beginning of the freshman year or during the sophomore year for entrance to a 2-year program. (See *Bulletin of the Army-Navy-Air Force ROTC.*)

ADMISSION REQUIREMENTS

General Statement—Admission to the College of Education is granted on the basis of academic standards and an appraisal of other factors related to

teaching fitness. Continuation in teacher education is subject to a review of qualifications before entrance to the junior year, before entrance to student teaching, and at other points in the training which may be necessary in individual cases.

1. Students who apply for admission to the College of Education must satisfactorily complete certain clearance procedures as listed in the instruction sheet issued at the time of application. One of the clearances requires a certificate from the University Health Service indicating that the student has no physical limitations or health conditions which would prevent successful pursuit of educational work.
2. Students applying for admission must present a record of success in previous academic work.
 - a. To be considered for admission to the College of Education as a freshman, a high school graduate must have a college aptitude rating of 50 or higher. This rating is the average of the applicant's percentile rank in his high school graduating class and his percentile rank among University freshmen on a college aptitude test. Such students are considered without reference to the pattern of courses taken in high school.
 - b. To be considered for admission with advanced standing a student must have at least a C (2.00) average in all of his previous work. In addition, a student applying for a program that prepares for teaching above the elementary grades must have earned at least a C+ (2.50) average in all college courses that will be counted toward his major.
 - c. Students who intend to enter the College of Education after 1 or 2 years of preprofessional study in the College of Liberal Arts must meet the freshman entrance requirements of that college. (See *General Information Bulletin*.)

Admission Requirements for Specific Programs in Education

Specific admission requirements have been established for the elementary, primary, kindergarten, and nursery school program as well as for the art education, business and distributive education, industrial education, and music education programs. The student who plans to enter the College of Education should read carefully the requirements for the program of his choice. (See Section II.)

Admission to Academic Secondary Curriculums

Students who have taken 2 years of work in the College of Liberal Arts and are preparing to teach academic subjects (other than speech pathology)

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in high school may be considered for admission to the College of Education upon satisfying the following requirements:

1. 90 quarter credits with a C (2.00) grade point average.
2. 15 quarter credits in a major field with a C+ (2.50) grade point average.
3. 10 quarter credits in a minor field with a C (2.00) grade point average. (In the case of those individuals taking broad field majors, the minors may be subdivisions of the broad field major and the student should present a minimum of 25 credits in the major.)
4. Freshman English: Comp 1-2-3 or Engl A-B-C or Comm 1-2-3 or Engl 10H-11H-12H or exemption.
5. 48 additional credits from the following categories as indicated:
 - a. Communication, Language, or Symbolic Systems: English and foreign language skills; linguistics, rhetoric, logic, philosophical analysis; mathematics (9 credits)
 - b. Physical and Biological Science (12 credits)
 - c. Man and Society. Psy 1-2 and 12 credits selected from among at least two of the following fields: history, geography, political science, sociology, anthropology, and economics (or SSci 1-2-3 plus an additional 3-credit course in one of the social sciences).
 - d. Artistic Expression (9 credits from literature, humanities, art, and music).
6. PubH 5 or 50 (3 credits) or equivalent.
7. Nonprofessional physical education courses (3 credits).

Students with 2 years of college work who lack certain entrance requirements may be considered individually. If such a student is admitted, certain deficiencies may be made up after enrollment, and in other cases adjustments may be possible after consultation with the chairman of the Committee on Student Scholastic Standing.

Requirements for speech pathology are listed in the curricular description in Section II of this bulletin.

Admission of Students from Colleges Outside the University

Students who have not completed the amount and kind of course work necessary for admission to a program of the College of Education will generally be expected to complete the prescribed work in the College of Liberal Arts.

Students with 2 full years of quality college work who lack minor requirements may be admitted to the College of Education and make up deficiencies after admission. Such deficiencies, however, may delay graduation or necessitate extra summer work.

Admission of Students with Three or More Years of College Work

Students may transfer a maximum of 141 credits to the College of Education. Those who have completed 3 or more years of college, including those who already hold the B.A. or B.S. degree, may enter the College of Education for work toward a degree and a teacher's certificate. In elementary education, a special 1-year program is available for those entering with a Bachelor's degree (see Elementary Education, Curriculums IIIA and IIIB). A student entering elementary education after having completed 3 years of college work frequently can meet B.S. degree requirements if he attends summer school and the following year. Secondary education students transferring maximum credit, including those who already hold the Bachelor's degree, must check their individual requirements before determining the amount of additional time needed to complete B.S. degree requirements. The time needed will be influenced by the extent and strength of the preparation in the major teaching field. Ordinarily, 1 or 2 summer terms preceding a September-to-June registration will be needed. Provision is also made for combining additional work needed for certification with graduate study in the major field in special cases.

Admission of Students with Two-Year Certificates from State Colleges

Individuals who graduated from a 2-year certificate course of the Minnesota state teachers colleges and other accredited teacher training institutions within Minnesota prior to March 1952 are admitted to the elementary program in the College of Education with 90 "blanket credits." Individuals who have completed work for the provisional elementary certificate since March 1952 will have their previous work evaluated course by course rather than in "blanket credits."

Students who transfer from the third or fourth year in the Minnesota state colleges will receive credit from any part of their work in so far as such work is equivalent to courses offered in the College of Education (see Residence Requirement).

Students who transfer 90 "blanket credits" should refer to the description of the Elementary IIA Curriculum.

Adult Special Students

Teachers of experience who are unable to meet the regular requirements for admission may be permitted to take courses in the College of Education as adult special students. In order to become candidates for a degree, however, they must be admitted as regular students.

GRADUATION REQUIREMENTS

Students who complete the following requirements graduate from the College of Education with the bachelor of science degree and receive upon application the appropriate Minnesota teaching certificate.

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In some specialized curriculums the number of credits required is more than 186. The student should read carefully the credit requirements of the curriculum in which he is interested. (See Section II of this bulletin.)

Amount and Quality of Work

Usually a total of 186 credits and 372 grade points (the number of grade points must equal two times the number of credits), including the required courses in physical education, is needed for graduation. During the junior and senior years a grade average of C (2.00) for all courses except those in the major must be maintained. In the minor subjects a grade average of C (2.00) is required. In the student's teaching major subjects, excepting Elementary Education IA and IB, a grade average of C+ (2.50) is required.

Professional Requirements for Students Graduating from all Curriculums Except Secondary Academic

The requirements for these programs are outlined in the descriptions of the specific curriculums in Section II of this bulletin.

Professional Requirements for Students Graduating with Secondary Academic Majors

The following requirements are for students with 2 years of college preparation who are enrolled in the 2-year College of Education curriculums for teachers of secondary school subjects.

University students who wish to qualify for the Minnesota state high school standard certificate in secondary school subjects must be graduates of the College of Education. A student wishing to teach outside Minnesota may have his program modified to meet the specific requirements of that state. To qualify for the degree and the Minnesota certificate, students should meet the following requirements:

1. One academic major. Some courses of study are outlined not for a one-subject major but for a broad field of specialization, such as language arts, natural science, or each of the majors in the area of social science.

2. One or more minors in academic or special fields except in the case of individuals choosing one of the broad fields of specialization, who need not complete a minor outside of their field.

Majors and minors must be selected from the subjects commonly taught in high schools, except that a minor may be presented in military science, naval science, or air science. Students should select majors and minors early in their college course and with regard to the demands of high schools. Major and minor requirements in each field are described in Section II of this bulletin.

3. Professional courses (in the College of Education) totaling not less than 29 credits.

- a. Required course—Ed 55A-B (10 cr; prereq Psy 1-2).

Graduation Requirements

- b. **Methods and student teaching**—The student must complete a course in methods and teaching in his major field (prereq Ed 55A-B). This course includes general methods, special methods, and student teaching. (See Index under Methods and Student Teaching.)
- c. **History and philosophy of education**—Satisfactory completion of HEd 90 is included in the professional requirements for graduation.
- d. **Education electives**—To complete the professional requirements of at least 29 quarter credits for the degree and the teacher's certificate the candidate will elect additional credits in conference with a faculty adviser. All of these courses are described in Section III, Description of Courses.

Health Education

All students in the College of Education except those in speech pathology are required to take (a) personal health and (b) community health. It is suggested that students meet this requirement through registering for PubH 5 (3 cr) or PubH 50 (3 cr). Alternates for PubH 5 or PubH 50 would be PubH 2 or 3 (2 cr) and PubH 4 (2 cr); or PubH 51 (3 cr) may be taken instead of PubH 4. Note that any of the alternate plans requires more than the 3 credits for PubH 5 or 50. Certain curriculums include PubH 57.

Residence Requirements

A minimum of 45 credits must be earned while in residence in the College of Education. Thirty of the last 45 credits of the degree must be earned in residence. These are minimum residence requirements for graduation, and thus for a degree and teaching certificate.

Correspondence courses and extension courses do not count as residence credits, excepting only General Extension courses offered in Minneapolis, St. Paul, or Duluth.

The required courses in education are arranged in a sequence for the junior and senior years, and the 2-quarter introductory course must be completed before the fall quarter of the senior year. A student who does not enter the College of Education by the fall or winter quarter of his junior year may need to register for the summer terms preceding his senior year in order to complete the professional sequence.

Degrees and Honors

Students who graduate from the College of Education receive the degree of bachelor of science. Those with outstanding grade records, at least a B average in student teaching, and a minimum of 45 credits completed in residence before the final quarter of the senior year will be considered for graduation "with distinction" or "with high distinction." These honors are not automatic, but are conferred upon favorable recommendation by the faculty. Application by the student is not necessary. Anyone entering the College of

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Education with a previously earned Bachelor's degree is not eligible for graduation with honors since these awards apply only to students whose first 4-year degree will be received from this college.

Students graduating from one of the 5-year curriculums in the College of Education receive the master of education degree.

PROCEDURES AND PRACTICES IN THE COLLEGE OF EDUCATION

Procedures for the most efficient use of college facilities are described generally in the following paragraphs; more detailed information and help on specific points may be secured at the information desk of the Student Personnel Office in 206 Burton Hall.

Admission Procedures—There is a different admission procedure for the various groups of students entering the College of Education: (1) those without previous college training, (2) those transferring from another division of the University, (3) those transferring from another collegiate institution, and (4) adult special students.

1. Students without previous college training apply for admission as freshmen. They are referred to the *General Information Bulletin* and are expected to follow the same procedure as applicants for other colleges in the University. New students are expected to attend the orientation-registration period, for which the University will send full instructions. This is the official time for the registration of new students.

2. Students applying for transfer to the College of Education from other divisions of the University should apply at the Office of Admissions and Records in Morrill Hall, where they will receive printed instructions.

3. Students applying for transfer from other collegiate institutions should write to the Office of Admissions and Records for application materials and have a transcript of previous college credits sent to the dean of admissions and records by the former college. Students will be notified of acceptance and receive further instructions by mail.

4. Persons of adult age and experience who desire to take specific courses in the college but are not candidates for a degree should apply at the Office of Admissions and Records for admission forms in the adult special status. An adult special student who wishes to become a candidate for a degree must complete the regular college admission procedure. This admission procedure should be completed as soon as the student decides to work for a degree and in no case later than the beginning of the senior year.

Examinations for Advanced Standing Credit—Students who believe themselves sufficiently prepared in some subjects to pass examinations in them upon entrance may, with the approval of the Committee on Student Scholastic Standing, take such examinations without charge. They may apply to the chairman in 206 Burton Hall within the first 6 weeks of residence.

Procedures and Practices in the College of Education

Registration Procedures—Dates for registration in the college and the specific procedures to be followed are published each quarter in the Official Daily Bulletin contained in the *Minnesota Daily*. Students registering in the College of Education for the first time should present their admission certificates and obtain registration materials and instructions at the Office of Admissions and Records.

Change of Registration—The student who finds it necessary to change his program should obtain a change in registration form ("cancel-add slip") at the information desk in 206 Burton Hall. The student may add a course or change to a different course during the first week of the quarter. Prior to the end of the sixth week in a quarter the student may cancel registration in any course. After the sixth week, cancellation of a course in which the student is failing will result in a grade of F in the course. Cancel-add slips must be signed by the major adviser or a member of the Committee on Student Scholastic Standing.

Change of Major—The student who wishes to change his major within the College of Education should see a counselor in the Student Personnel Office, 206 Burton Hall.

Clearance for Admission to the Junior Year—Students who are enrolled in the College of Education in the sophomore year are asked to complete clearances during the spring quarter. They take the required physical examination and psychological and speech tests according to printed instructions mailed to them during winter quarter.

Examination for Credit—Credit for material mastered outside of class may be obtained by special examination. A student who believes that he is as well informed in a particular subject as the students successfully completing the course should apply to the Committee on Student Scholastic Standing, 206 Burton, for a special examination. If the request is approved, the committee will appoint a special faculty committee to administer the examination. The fee for such examination is \$5.

Application for a Degree—The student should file an application for a degree at the information window, Office of Admissions and Records, during the spring quarter of the junior year, or 1 full year before he expects to graduate.

Senior Balance Sheet—The senior balance sheet is mailed to the student by the Office of Admissions and Records after application for a degree. It lists the required number of courses the student has completed, his total number of earned credits, his grade point average, and deficiencies that must be removed before the student may graduate. It is to be used by the student and his adviser in planning the remainder of his program.

Senior Physical Examination—It is the responsibility of the student to make an appointment at the University Health Service and take the physical examination within 1 year previous to the date the degree is to be granted.

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Application and Registration for Student Teaching—Admission to student teaching is not automatic. Students obtain applications for student teaching and information sheets in the Student Teaching Office, 227 Burton Hall, during stated intervals throughout the year, depending upon the major and program they intend to complete. Exact dates when applications should be picked up, and when they must be submitted, are announced to students in the Official Daily Bulletin of the *Minnesota Daily*, and in the lecture sessions of Ed 55 and Ed 75.

Secondary academic majors are required to register for their methods courses all 3 quarters of the regular academic year. Therefore, all majors in biological science, chemistry, earth science, economics, English, geography, German, French, history, language arts, Latin, mathematics, physics, political science, Russian, sociology, Spanish, and speech and theatre arts must pick up applications for student teaching and methods (in the Student Teaching Office, 227 Burton) during the first 3 weeks of the spring quarter prior to the academic year in which they will take methods and student teaching. They must present these applications to their advisers, who forward them with their recommendations within 1 week to the Student Teaching Office.

Majors in agricultural education, art education, business and distributive education, elementary, nursery school-kindergarten-primary, home economics education, industrial education, music education, physical education for men and for women, and speech pathology, and minors in health education and library science file applications during the quarter preceding the one in which they expect to begin student teaching.

Minors in special education (teaching mentally retarded, crippled, hearing impaired, and visually handicapped children) and physical education for women file applications during the quarter preceding the one in which they expect to begin student teaching.

Students not enrolled in the University during spring quarter who wish to begin student teaching in the fall should apply at the Student Teaching Office as early as possible in the summer terms.

Summer Session student teaching is available only in a few fields and to a limited number of students during the first term. Student teaching is offered only for University of Minnesota students who are regularly enrolled in a degree program. New applicants must file for this before June 1.

Scheduling and other arrangements for student teaching vary from department to department. Students should consult the appropriate section of this bulletin, their major adviser, and the Student Teaching Office.

Admission to student teaching and assignment to a classroom for student teaching are subject to the approval of the director of student teaching, and involve the following "clearances":

1. Completion of a satisfactory pattern of courses in the major field and the recommendation of the major adviser.
2. Completion of the basic junior courses (Ed 55A-B for secondary education and Ed 75A for elementary education) and the recommendation of the course instructors.

Procedures and Practices in the College of Education

3. C+ average (2.50 grade points per credit) in the major for IIIA elementary and IIIB nursery school-kindergarten-primary education programs and for all secondary programs except agricultural education, which has special requirements. IA elementary and IB N-K-P programs require a C average (2.00) in all work in the major and outside the major, considered separately.
4. C average (2.00 grade points per credit) in the minor field, and satisfactory progress toward all other degree requirements of the college.
5. Completion of the College of Education psychological test battery given at the junior-year level.
6. Satisfactory report from the University Health Service on the physical examination required of all students for entrance to the junior year and of students who enter the college with advanced standing.
7. Satisfactory rating on the Speech and Hearing Clinic tests included in the requirements for junior standing.
8. In modern languages, passing a special proficiency examination.

A student may be required at any time to cancel his registration in student teaching if he fails to meet the requirements or if his work is unsatisfactory.

Unsatisfactory Work—Any student who is not making satisfactory progress in the curriculum in which he is registered may be placed on probation by the Committee on Student Scholastic Standing. Unsatisfactory work in the College of Education is defined as follows:

1. Grades of D or F in 50 per cent of the work taken in any 1 quarter. (Grades of F, together with the number of credits represented by them, are included in the computation of the grade point average.)
2. An average less than C (2.00) for all credits earned in any 1 year, and an average of less than C+ (2.50) in courses in the major subject.

Students who fail to make satisfactory progress toward a degree after being on probation for 1 quarter are in danger of being dropped.

Teacher Certification—When the senior student who wishes to teach in Minnesota registers for the final quarter in the College of Education, he is expected to apply for the teacher's certificate. He obtains the application form in 206 Burton Hall, attaches a money order for the certification fee (payable to the Treasurer, State of Minnesota) and leaves the application and money order at the College of Education window in the Office of Admissions and Records. All other details are handled by the University and the qualified graduate receives the appropriate certificate to teach in the area of his preparation in the public schools of Minnesota.

Education Courses in the General Extension Division—For evening and correspondence study courses in education see the *Bulletin of Evening Classes* and the *Bulletin of Correspondence Study*. Teachers and others not regularly

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enrolled in the College of Education who take these courses may later apply the credits earned in certain of them toward a degree if they become regular students in the college. Students regularly enrolled in the College of Education must file a petition with the Committee on Student Scholastic Standing for permission to take, for credit, courses offered by the General Extension Division.

STUDENT SERVICES

Preparation of teachers for professional service involves a broad range of student experiences, observation, guidance, certification, placement, and other factors. This section describes briefly the services in these areas available to students in the College of Education.

Information—The central information desk in 206 Burton Hall is a “first stop” for any student seeking direction or information.

Student Personnel Office—Students in the college who find that they need special information and experienced help in making a choice of professional goals or in meeting more personal problems, have available to them trained counselors and special facilities of the Student Personnel Office. These services are available also to students not in the College of Education who are considering a career in teaching. Appointments may be made in 206 Burton Hall.

In addition to the personnel services available in this college, the student is invited to use the specialized services provided for all University students through the Office of the Dean of Students in Eddy Hall.

Faculty Advisers—Each student has as an adviser a member of the faculty who teaches in his major field. The adviser counsels the student concerning preparation in his major field, helps the student register each quarter, and serves as a general adviser on academic questions. At the time of admission to the college, the student should learn who his major adviser is from the counselor in the Student Personnel Office.

Committee on Student Scholastic Standing—A student who encounters difficulties in adjusting his program to his individual needs or background should seek the assistance of the Committee on Student Scholastic Standing in 206 Burton Hall.

Office of Student Teaching—Student teaching in public schools in Minneapolis, St. Paul, suburban communities, and other schools in the state, in campus laboratory schools, and in a variety of civic agencies is co-ordinated in the Student Teaching Office, 227 Burton Hall. Administrative arrangements, admission to the program, and supervision are the responsibility of this office.

A student teaching workroom (240 Burton Hall) is available for the use of student teachers in all fields. The workroom is open from 8 a.m. to 5 p.m., Monday through Friday.

Orientation-Registration Program—An orientation program for all new freshman and sophomore students is offered by the University shortly before the opening of each quarter. Students are expected to attend in order to complete first registration and to explore opportunities available to University

students. To find answers to preliminary questions the new student is urged to read *The Moccasin* (new students' handbook) before arriving on campus.

Student Activities Office—The student organizations in the College of Education maintain a joint office in 242 Burton Hall. Students interested in joining any education organizations or desiring information about them should call at this office.

Teacher Placement Service—The College of Education provides placement service for its qualified students and graduates, helping them to secure the kinds of positions they desire. All graduating seniors and candidates for the master of education degree, excepting those in recreation leadership, register with the Bureau of Recommendations, 102 Burton Hall. The \$10 fee entitles the student to placement service for a 1-year period ending October 1.

SPECIAL AGENCIES

The College of Education includes a number of divisions and special enterprises established to further its work in the preparation of teachers, to extend professional knowledge in education, and to render service to education throughout the state and nation.

Laboratory Schools—The campus laboratory schools and selected Minneapolis public schools are used for demonstration, observation, and research. Senior students do their student teaching in the campus laboratory schools, the public schools of the Minneapolis-St. Paul metropolitan area, or in other parts of the state.

University High School is a 6-year secondary school maintained on the Minneapolis Campus to provide opportunity for observation, demonstration, student teaching, experimentation, and research in secondary education. The University Nursery School provides similar facilities. Minneapolis schools located near the campus are affiliated with the College of Education for demonstrations and research in the elementary grades.

Bureau of Field Studies and Surveys—The Bureau of Field Studies and Surveys is maintained by the College of Education for research and service in school problems of instruction, administration, finance, and physical plant. Essentially a service division operated for the benefit of the schools of Minnesota, the technical staff of the bureau co-operates with local school districts in solving numerous administrative and instructional problems. The offices of the director of the bureau and of the technical staff are in Burton Hall.

Education Library and Instructional Materials Center—To facilitate research, class instruction, and curriculum development studies, the College of Education library has been established on the second floor of the Walter Library. Instructional materials formerly included in the Curriculum Laboratory have served as the nucleus of a more extensive collection of curriculum materials, school textbooks, literature for children and adolescents, and other aids to improvement of instruction. Reference materials usable in research projects and professional books for class study are also included.

General Information

Institute of Child Development—The Institute of Child Development of the University of Minnesota has been a prominent center for research and study in child psychology since its founding in 1925. In its academic instructional program, the institute offers both undergraduate and graduate majors in child psychology. The undergraduate major is administered by the College of Liberal Arts. The graduate major is administered jointly by the institute and the Graduate School. The institute operates a laboratory nursery school for observation, research, and the training of nursery school teachers; and maintains a clinic for diagnostic study and treatment of a wide range of children's behavior problems. The research programs deal with personality and social development, language and cognitive development, and learning, perception, and motivation in children. The institute director, faculty, Nursery School, and Child Development Clinic are located in the Child Development Building.

Psycho-Educational Clinic—The Psycho-Educational Clinic, with offices and clinical quarters in Pattee Hall, serves three principal purposes: (a) to train teachers and school specialists in the diagnosis and remedy of special problems of children; (b) to encourage and conduct research; and (c) to provide special assistance for children who have educational problems due to physical, mental, or emotional handicaps. Although the facilities of the clinic are used for observation by teachers-in-service and students in various education classes, the main work of the center is clinical diagnosis of the problems of individual children and recommendation of remedial procedures. The clinic is in large measure a self-sustaining service center, operated for the benefit of Minnesota children, parents, and teachers. Teachers and parents concerned with obtaining diagnostic and remedial help for particular children apply to the director of the clinic for appointments.

AWARDS AND SCHOLARSHIPS

Coffman Foundation Award—For graduate study in education, made each year to a senior or graduate student in the College of Education on the basis of scholarship, qualities of leadership, and promise of professional achievement.

Alice Pomeroy Scholarship—Awarded annually to a woman student in the college on the basis of need, character, and ability.

W. E. Peik Teacher Education Fund—In most years one or more scholarships will be available to College of Education students.

Dora V. Smith Scholarship Fund in Education—Awarded annually to a junior in the College of Education majoring in speech, English, or language arts. Selection is made on the basis of academic aptitude, character, promise as a teacher, and financial need.

Bertha Weiskopf Memorial Scholarship—A scholarship of \$100 awarded to the student in the College of Education with the highest scholarship and competence in the field of intercultural education who is planning to teach or to do graduate work in that special field.

Students may secure information about these scholarships from the chairman of the College of Education Scholarship Committee, 206 Burton Hall. In addition many all-University scholarships and awards are open to students in the College of Education. Inquiry concerning them should be made at the Bureau of Student Loans and Scholarships, 104 Westbrook Hall.

MASTER OF EDUCATION DEGREE REQUIREMENTS

The professional degree, master of education (M.Ed.), is granted to students who satisfactorily complete prescribed 5-year programs. Although students ordinarily register in these curriculums at the beginning of the freshman year, students who have already earned a Bachelor's degree in one of these fields may qualify for the master of education degree by completing all the requirements of the fifth year, provided that their undergraduate training in the major is equivalent to that required in the College of Education.

The general requirements for this degree include: (a) 90 quarter credits in academic fields; (b) a teaching minor in an academic field; (c) a broad major field of specialization, usually about 90 quarter credits; and (d) advanced professional training, including 1 quarter of internship under a master teacher. Forty-five credits beyond the Bachelor's degree must be earned, and the total number of credits earned in the college must include at least 45 earned in courses numbered 100 or above. In the course work of the fifth year a B average (3 grade points per credit) is required, as are final written and oral comprehensive examinations and demonstration of teaching competence. A health examination must be taken within 1 year prior to the date the degree is to be granted.

GRADUATE STUDY IN EDUCATION

Graduate study in education, leading to the master of arts and the doctor of philosophy degrees, may be pursued in the Graduate School. Application for admission for an M.A. or Ph.D. program must be made to the Graduate School office. Graduate courses may be taken during the regular academic year and during the Summer Session. Students holding the Bachelor's degree, attending summers only, may ordinarily complete the work for the Master's degree in three or four full Summer Sessions.

Section II of this bulletin refers to various graduate programs, but for a complete description of graduate work in education, and for a full statement of regulations, consult the *Bulletin of the Graduate School*. Applicants must present a minimum of 6 quarter credits in psychology, plus not less than 18 quarter credits of undergraduate work in education, including introduction to secondary or elementary school teaching. Ordinarily students entering graduate study in education should already hold a teaching certificate, and for some fields, such as school administration or counseling, teaching experience is strongly advised.

Section II. Curriculum

AGRICULTURAL EDUCATION

Major advisers: Professors Kitts, Peterson, Swanson; Associate Professor Marvin;
Lecturer Nelson

This curriculum, offered jointly with the College of Agriculture, Forestry, and Home Economics, is designed for students who plan to teach agriculture in public schools and communities of Minnesota. It is appropriate to the needs of agricultural extension workers and others preparing to farm or to work in rural areas. Agricultural education provides comprehensive training in technical agriculture and permits emphasis upon such fields as dairying, agronomy, agricultural economics, horticulture, animal husbandry, soils, and mechanized farming. In addition, it offers the special training in education needed to qualify students for certification as agriculture instructors in public high schools.

During the first 2 years the students complete the required work of the agricultural education curriculum in the College of Agriculture, Forestry, and Home Economics. In the junior and senior years they complete the combined curriculum of the College of Education and the College of AFHE leading to the bachelor of science degree.

In the third quarter of their sophomore year, students should make application for the combined curriculum at the Office of Admissions and Records, Coffey Hall. They will then complete admission requirements of the College of Education, which include speech, health and psychological examinations, and interviews.

Students may complete minors in agricultural departments. Such a minor consists of 18 credits exclusive of introductory courses. Minors in high school teaching subjects are included in this section.

Students wishing to major in agricultural education must:

1. Have satisfactory agricultural background and experience.
2. Complete the student teaching requirement.
3. Earn a minimum of 204 credits for graduation including all-college requirements. A minimum of 80 credits must be in technical agriculture courses.
4. Complete the following requirements (students may wish to take exemption examinations or special examinations for credit in certain of the following listed required courses). Included within the following program are courses which meet the liberal education requirements of the University.

FRESHMAN YEAR

| | |
|---|---|
| AgEd 1—Introduction to Agricultural Education (1) | Biol 1-2—General Biology (10) |
| Agro 1—Introduction to Agronomy (4) | DyHu 1—Elements of Dairying (3) |
| AnHu 1—Introductory Animal Husbandry (4) | Ent 1—Insect Life (4) |
| | GeCh 4-5—General Principles of Chemistry (10) |

Hort 1—General Horticulture (4)
(or) Hort 6—Fruit Growing (3)
(or) Hort 32—Vegetable Growing (3)
Math 10—College Algebra and Analytic
Geometry (5)

MeAg 4—Agricultural Shop: Metalwork (4)
Orie 1—College Orientation Lectures (1)
Rhetoric—Freshman Communication re-
quirement
Soil 19—Introductory Soil Science (4)

SOPHOMORE YEAR

- a. Freshman courses not completed.
- b. The following courses may be taken any quarter offered except that proper sequence of continuation courses and prerequisites must be observed:

AgEc 1—Principles of Economics I (3)
AgEc 2—Principles of Economics II (3)
AgEd 20—Rural Education and Commu-
nity Leadership (3)
MicB 53—General Bacteriology (5)
Humanities requirement (9) to be selected
from humanities, art, HE 120 (Art His-
tory), literature, music, philosophy, and
theatre arts (see index of Agriculture and
Forestry bulletin)
MeAg 23—Beginning Physics (5)

Mechanized agriculture (6) to be selected
from the following:
7—Farm Building Construction (3)
12—Agricultural Machinery (3)
64—Rural Sanitation and Water Supply
(3)
45—Engines and Tractors (3)
84—Hydrology and Erosion Control (3;
prereq jr)
Psy 1-2—General Psychology (6)
Social science requirement (see index of
Agriculture and Forestry bulletin)

- c. In the second or third quarter of the sophomore year, students must apply for admission to the College of Education and the joint curriculum of agricultural education.
- d. When the student is admitted to the College of Education and to student teaching he must have a grade point average of 2.30 in all courses taken in the following areas: agricultural economics, agronomy, animal husbandry, dairy, entomology, forestry, horticulture, mechanized agriculture (except MeAg 23), plant pathology, poultry, and soils.

JUNIOR-SENIOR YEARS

The following courses if not previously taken:

AgEd 56—Rural Education Through Ex-
tension Methods (3)
AgEc 80—Farm Accounting (3)
AgEd 81—Teaching Agriculture in Sec-
ondary Schools (4)
AgEd 91—Student Teaching (6)
AgEd 101—Young Farmer Education in
Agriculture (4)
AgEd 103—Adult Education in Agriculture
(4)
AgEd 104—Planning Programs (3)
Agro 30—Genetics (3)

Ed 55B—Introduction to Secondary School
Teaching (5)
MeAg 130—Instructional Method in Farm
Mechanics (3)
PlPa 1—Plant Pathology (5)
PubH 50—Personal and Community Health
(3) or PubH 5—Individual and Public
Health (3) (transfer students or others
who have already taken PubH 3 should
take PubH 4 or 51)
Rhet 22—Public Speaking (3)
Rhet 51—Exposition (3; prereq jr)

Note—For agricultural education majors, AgEd 56, 101, and MeAg 130 may be taken concurrently with AgEd 91 or by consent of instructor.

5. Achieve a minimum grade point average of 2.50 in fifteen courses selected from at least eight of the following areas by the time of graduation: AgEc

Curriculum

12, 80, 82, 108; Agro 1, 21, 27, 30; AnHu 1, 8, 30, 36, 37, 62, 63, 64, 65; BioC 1A; DyHu 1, 11, 121, 122, 123; Ent 1, 50; For 10; Hort 1, 6, 10, 32; MeAg 4, 7, 12, 64, 45, 84, 130; PIPa 1, 3; Poul 1, 154; Soil 19, 54; VMC 52.

Minors in Agriculture and Agricultural Education

1. **Minor in Agriculture for Elementary School Teachers**—A minor in agriculture is open to students in the elementary education field. It may be taken by any student following Curriculum IA, IB, IIA, or IIB in elementary education. The following courses are recommended, but others may be chosen with the consent of the adviser.

A minimum of 18 credits selected from the following:

| | |
|---|--|
| AgEd 20—Rural Education and Community Leadership (3) | Hort 1—General Horticulture (3) |
| AgEd 56—Rural Education Through Extension Methods (3) | (or) Hort 6—Fruit Growing (3) |
| Agro 1—Introduction to Agronomy (3) | (or) Hort 32—Vegetable Growing (3) |
| AnHu 1—Livestock Production (4) | DyHu 1—Elements of Dairying (3) |
| | For 1A—Conservation of Natural Resources (3) |
| | For 10—Farm Forestry (3) |

2. **Minor in Agriculture for Agricultural Education Majors**—Students majoring in agricultural education may complete minors in agriculture departments. Such a minor consists of 18 credits exclusive of introductory courses. For details see the Agriculture and Forestry bulletin.

3. **Minor in Agricultural Education**—A minor in agricultural education is open to students majoring in the agricultural science curriculum. This minor, however, will not complete the requirements for a teaching certificate.

It is recommended that Psy 1 and 2 be completed before entering the minor sequence. A minimum of 18 credits may be selected from the following: AgEd 20, 56, 101, 103, 104, 121, 171.

Fifth Year Leading to the Master of Education Degree

The College of Education and the College of Agriculture, Forestry, and Home Economics will award the master of education degree (M.Ed.) to students who satisfactorily complete a fifth year of work in agricultural education at the graduate level and who meet all of the requirements for the professional degree. In addition to the general requirements for the M.Ed. degree, the specific requirements as applied to agricultural education are as follows:

1. A total of 249 credits or 45 credits beyond the requirements for a Bachelor's degree in agricultural education.

2. In addition to the period of observation and student teaching required for graduates in the 4-year curriculum, a period of internship will be required for which the maximum of 8 credits will be given.

3. The distribution of credits for the fifth year will include:

- a. Agricultural education (12-15 credits) of which not more than 6 credits may be in problems courses.
- b. Education other than agricultural education (11-15 credits).
- c. Technical agriculture and areas other than those listed above (15-22 credits).

Note—Undergraduate students in agricultural education who expect to qualify for the M.Ed. degree should confer with their advisers by the beginning of the junior year in order that the work of the junior, senior, and fifth years may be co-ordinated to the best advantage.

ART EDUCATION

Major advisers: Professors Gayne, Hastie; Instructors Bradley, Hegg, Olson

For talented students interested in careers in art education and for those who wish to combine creative art careers with teaching, the art education curriculum offers the following:

1. A balanced general education.
2. A comprehensive basic training in art.

3. An opportunity to specialize in the area of art most interesting to the candidate. (A choice of subjects is available for meeting requirements and for electives.)

4. The student successfully completing the 4-year curriculum receives the bachelor of science degree, and upon application is awarded the teaching certificate by the State Department of Education. He is qualified to teach art in elementary and secondary schools, and to fill other educational positions.

5. On successful completion of the 5-year curriculum, the master of education degree is granted.

Emphasis of the Department—Art education is “art for all,” and aims at the enrichment of lives through our educational systems. Preparation for adult needs, although important, is not enough. Schools must provide experiences of immediate interest to pupils and of significance to cultural development. Nonverbal techniques are at least as essential in education as more abstract knowledge. Our public schools, as they become more community-minded, are assuming the role of art centers for a democratic society. Art educators require training for leadership in developing art programs with roots in the community. Elementary teachers and administrators require opportunities to develop broad cultural interests and skills worthy of educators of vision because the elementary school provides the only channel through which art may reach the majority of individuals in our society.

The Department of Art Education co-ordinates the varied facilities of the University available for art education training through program planning and advice for education majors at both undergraduate and graduate levels.

The Major in Art Education

Admission

Students who plan careers in art education are expected to submit applications for admission to the College of Education early in the third quarter of the freshman year or during the quarter in which they will meet admission requirements. Limited space restricts the number that can be admitted to the program.

Freshmen should complete at least 45 credits including a minimum of 15 credits of art with at least one course in each of the five areas: art history, design theory, drawing and painting, sculpture, and design in materials (architecture, ceramics, commercial, costume, crafts, industrial, interior, jewelry, landscape, photography, puppetry, stage, weaving). The student must have an over-all C (2.00) grade point average and a C+ (2.50) average in work taken in the major. At the time of formal application for transfer to the College of Education the student must complete clearances, including psychological tests, interviews, and examples of art work.

Course Requirements

Group 1. Art Education Courses

| | |
|--|---|
| ArEd 14—Introduction to Art Education (2) (sophomores and transfers) | ArEd 86, 87, 88—Student Teaching and Supervision of Art (9) (seniors) |
| ArEd 56, 57, 58—Basic Principles and Experiences in Art Education (15) (juniors) | ArEd 86A, 87A, 88A—The Teaching and Supervision of Art (6) (seniors) |
| | Total—32 credits |

Group 2. Art and Related Courses—To be selected from the following or equivalents approved by major adviser:

A. Art History and Theory (6 credits required)

| | |
|---|------------------------|
| ArtH 2, 3, 4—Survey of History of Art (3-9) | ArtH 78—Modern Art (3) |
|---|------------------------|

B. Design and Its Application (24-28 credits required)

| | |
|---|---|
| Art 10—Photography (3) | ArEd 80—Contemporary Crafts (3) |
| Art 23, 24, 25—Drawing and Design I (3-9) | ArEd 81—Puppetry in Education (3) |
| Art 45—Ceramic Processes (3) | FamS 15—The Home, Its Furnishing (3) |
| Art 73—Presentation Techniques (3) | Th 34—Stagecraft: Construction and Painting (3) |
| ArEd 53—Introduction to Weaving (3) | |

C. Drawing, Painting, Sculpture, and Printmaking (12-16 credits required)

| | |
|---|------------------------|
| Art 40—Sculpture I (3) | Art 90—Printmaking (3) |
| Art 20, 51, 70—Drawing, Painting II and III (6) | Total—46 credits |

Group 3. A teaching minor is recommended to be chosen from teaching minors as specified in this bulletin; or as an alternative, 15 Upper Division credits outside both the major field and professional education may be chosen.

Group 4. Professional Education Courses

| | |
|---|----------------------------|
| Ed 55A-B—Introduction to Secondary School Teaching (10) | Methods in the minor (2-3) |
| HEd 90—The School and Society (3) | Education electives (2-3) |
| | Total—18 credits |

Group 5. Liberal Education Courses

A. Freshman English Requirement

Comp 1-2-3, or Engl A-B-C, or Comm 1-2-3, or Engl 10H-11H-12H, or exemption
Additional courses in language, literature, writing, or foreign languages (9 credits)

B. Physical and biological sciences: 9 credits

C. Man and Society

Hum 1, 2, 3 (15) or Hist 1, 2, 3 (9)
Soc 1 (3)
Psy 1, 2 (6)

D. Artistic Expression

(See Group 2)

Group 6. Physical Education and Health

Physical Education (3)
PubH 5 or 50 (3)

Group 7. Electives—To complete a total of 186 credits.

Recommended: Continuation of a language begun in high school; speech and theatre arts for use in teaching and in play production; courses in philosophy, history, sociology, psychology; sports, dance, journalism, music, literature. Electives may be in art courses beyond the minimal requirement. Attendance at concerts, exhibitions, and plays is urged as a part of art education.

Quality Standard

In addition to the over-all average and the average in the major, the student must have a C (2.00) average in his minor and a C (2.00) average in all course work outside the major in the junior and senior years.

The Minor in Art Education

Plan 1. For elementary school teachers, 27 credits:

| | |
|--|--|
| ArEd 17—Pictorial Expression for Elementary Education (3) | ArEd 84—Teaching of Art in the Elementary School (3) |
| ArEd 18—Design Activities for Elementary Education (3) | Drawing and design courses (6) |
| ArEd 19—Functional Arts and Crafts in Elementary Education (3) | Electives (9) |

Plan 2. For secondary school teachers, 28 credits:

| | |
|---|--|
| ArEd 14—Introduction to Art Education (2) | ArEd 56, 57—Basic Principles and Experiences in Art Education (10) |
|---|--|

Curriculum

ArEd 87A—The Teaching and Supervision of Art (2) Courses in drawing and design (6)
Art 2-3-4—Survey of History of Art (3-9) Electives (3-5)

Fifth Year Leading to the Master of Education Degree

The M.Ed. degree is administered by the College of Education. Students seeking this degree should apply to the Office of Admissions and Records for admission to the College of Education.

The student must meet all general requirements for the M.Ed. degree (see index). In addition he must meet the following special requirements:

1. Art education major, including advanced courses in art (24 credits)
2. Education electives (9-12 credits)
3. Academic electives (9-12 credits)
4. Demonstration of competency in teaching
5. Comprehensive examinations in art education and education

For Graduates of Other Institutions—Graduates of other institutions who have had an undergraduate major in art or in art education equivalent to that offered by the University of Minnesota are eligible to apply for the fifth-year M.Ed. program. In some cases it may be necessary for the student to take prerequisite courses at the undergraduate level. Undergraduate work in education must be equivalent to that required in the 4-year program at the University of Minnesota.

Graduate Work

For qualified students with majors in art education or elementary education the Art Education Department offers opportunities to work toward the M.A. and the Ph.D. See the *Bulletin of the Graduate School* and the Department of Art Education advisers.

BUSINESS AND DISTRIBUTIVE EDUCATION

Major advisers: Professors Meyer, Price

The following curriculums are designed to prepare teachers of business subjects in secondary schools. Completion of one of these curriculums leads to the bachelor of science degree. While no minor is required, it is possible by a careful selection of electives to secure one minor.

Students should confer with major advisers as early as possible in order to plan their programs effectively.

Students will normally enter the College of Education at the beginning of their second year; although they may enter later providing they satisfy the admission requirements.

Requirements for Admission

For admission to the College of Education the student is required:

1. To have completed approximately 45 quarter credits from the courses listed under freshman and sophomore years, groups 1-8, and 11A or 11B.
2. To have a grade average of at least C (2.00).

FRESHMAN AND SOPHOMORE YEARS

Students who have had high school courses or experience in bookkeeping may be exempt from Acct 24 and be admitted to Acct 25 by passing a placement test. Students who have had 1 year of high school typewriting are admitted to OMgt 33; those who have had 2 years of high school typewriting are admitted to OMgt 34. Students who have had 2 years of high school shorthand are admitted to OMgt 39.

Students preparing for vocational certification may be exempt from part of OMgt 149 or Mktg 67 if they have had practical business experience. The extent of this exemption will depend on the quality, amount, and recency of such experience.

1. Education (3 credits)

EdCI 45—Introduction to Business and Distributive Education (3)

2. Freshman English (12-15 credits)

Comm 1-2-3; Comp 1-2-3; Engl A-B-C; Engl 10H-11H-12H; or exemption

3. Communications, Language, Symbolic Systems (9 credits)

Mathematics (3 credits required); and speech, rhetoric, philosophic analysis, logic, linguistics, English, foreign language, or additional mathematics.

4. Physical and Biological Sciences (9 credits)

Natural science, biology, botany, chemistry, physics, astronomy, or geology.

5. Man and Society (9 credits)

SSci 1-2-3—Personality, Work, Community (9) or courses selected from two of the following fields: sociology, political science, history, anthropology, economic geography

6. Public Health (3 credits)

PubH 5—Individual and Public Health (3)
(or) PubH 50—Personal and Community Health (3)

7. Physical Education (3 credits)

8. Artistic Expression (9 credits)

Art, music, literature, theatre arts

9. Psychology (6 credits)

Psy 1 and 2—General Psychology (6)

Curriculum

10. Economics (6 credits)

Econ 1 and 2—Principles of Economics (6)

11A. Business Administration (distributive and basic business only) (20-21 credits)

OMgt 32—Beginning Typewriting (1)

GC 18D—Salesmanship (3)

Acct 24-25-26—Principles of Accounting (9)

QA 5—Elements of Statistics (4)

(or) Soc 45—Social Statistics (5)

BLaw 28—Business Law (3)

(or) BLaw 58—Business Law: Contracts (3)

(or) GC 20A—Practical Law (5)

11B. Business Administration (office and basic business only) (30-35 credits)

OMgt 32—Beginning Typewriting (1)

OMgt 33—Intermediate Typewriting (1)

OMgt 34—Typewriting Procedures (2)

OMgt 36—Office Procedures (3)

OMgt 37-38-39—Shorthand (9)

Acct 24-25-26—Principles of Accounting (9)

QA 5—Elements of Statistics (4)

(or) Soc 45—Social Statistics (5)

BLaw 28 or 58—Business Law (3)

(or) GC 20A—Practical Law (5)

12. Electives (chosen after consultation with adviser)

The Major in Office and Basic Business Education

JUNIOR AND SENIOR YEARS

1. Economics electives (6)

2. Mktg 57—Principles of Marketing (3)

3. Office Management

OMgt 79A-B—Administrative Secretarial Studies (6)

OMgt 89A—Calculating Equipment (1)

OMgt 119—Business Communications (3)

4. Mgmt 109—Management of Administrative Services (3)

5. Business administration electives (6)

6. Ed 55A-B—Introduction to Secondary School Teaching (10)

7. History and Philosophy of Education

HEd 90—The School and Society (3)

8. Methods and Student Teaching

EdT 80—Teaching Typewriting and Book-keeping (2)

EdT 81—Teaching Shorthand (2)

EdT 82—Teaching the Basic Business Subjects (2)

EdT 73—Student Teaching of Business Subjects (9)

9. Electives (20 credits)

For the purpose of computing the C+ (2.50) average the following are considered major courses: Acct 24-25-26, OMgt 34, 36, Mktg 57, OMgt 79A-B, 119, OMgt 89A, Mgmt 109.

The Major in Clerical and Basic Business Education

JUNIOR AND SENIOR YEARS

The same requirements with the exception of OMgt 37-38-39, 79A-B, and EdT 81. In place of these courses the student will take 17 credits of elective courses approved by the adviser.

The C+ (2.50) average is based on the following courses: Acct 24-25-26, OMgt 34, 36, 119, Mktg 57, Mgmt 109.

The Major in Distributive and Basic Business Education

JUNIOR AND SENIOR YEARS

1. Economics (3 credits)

Econ 65 or 66—Intermediate Economic Analysis I, II (3 each)
(or) 67—Money and Banking (3)

2. Industrial Relations (3 credits)

IR 52—Systems: Labor Marketing (3)

3. Marketing (12-21 credits)

Mktg 57—Marketing (3)
Mktg 67—Practice Course (0-9)
Mktg 107—Retail Management I (3)

Psy 156—Psychology of Advertising (3)
Marketing elective (3)

4. Ed 55A-B—Introduction to Secondary School Teaching (10)

5. History and Philosophy of Education

Hed 90—The School and Society (3)

6. Distributive Education

EdCI 136—Organization and Administration of Distributive Education (3)
EdCI 139—Co-ordination Techniques (3)
EdCI 147—Workshop: Teaching Display (3)

7. Industrial Education

Ind 40—Analysis: Course Construction (5)
(or) 135—Course Construction (3)

8. Methods and Student Teaching

EdT 90A-B-C—Teaching Distributive Education Subjects (6)
EdT 72—Student Teaching: Distributive Education (9)

9. Electives

For the purpose of computing the C+ (2.50) average the following courses are considered major courses: Econ 2, Acct 26, IR 52, Mktg 57, 107, Psy 156, GC 18D, EdCI 136, 139, Ind 40 or 135.

Curriculum

The Minor in Basic Business

Econ 1-2—Principles of Economics (6)
EdCI 45—Introduction to Business and
Distributive Education (2)
BLaw 58, 88—Business Law (6)
Mktg 57—Principles of Marketing (3)
EdT 82—Teaching Basic Business (2)

EdT 73—Student Teaching of Business
Subjects (3)
Electives—Department of Economics and
School of Business Administration courses
(15)

The Minor in Distribution

Econ 1-2—Principles of Economics (or)
Econ B-C (or) Econ 50A-B (or) AgEc
1-2 (6)
GC 18D—Salesmanship (3)
Mktg 57—Principles of Marketing (3)
(or) AgEc 40—Principles of Marketing Or-
ganization (3)
EdCI 136—Organization and Administra-
tion of Distributive Education (3)

Mktg 107—Retail Management I (3)
(or) GC 18B—Retailing and Selling (5)
EdT 90B—Teaching Distributive Education
Subjects (2)
EdT 72—Student Teaching: Distributive
Education (3)
Electives approved by adviser (12)

At least half of the credits in this minor must be Upper Division courses.

Recommended Electives

In the Upper Division it is recommended that the following areas or courses be considered: advanced courses in the School of Business Administration, visual materials, consumer education in the schools, guidance, conference leading, psychology of adolescence, social foundations of education, advertising, textiles, occupational psychology, vocational psychology, and co-operative part-time work-experience program.

COUNSELOR EDUCATION, COUNSELING PSYCHOLOGY, AND COLLEGE PERSONNEL WORK

Major advisers: Professors Edson, Hagenah, Parker; Associate Professors Blocher, Glotzbach, Snoko, Tennyson; Assistant Professor Hansen

Graduate study leading to the M.A., Specialist Certificate (2-year program), or Ph.D. degrees can be taken with a concentration in this area. Preparation is possible for professional or administrative positions at either the secondary school or college level. A major in educational psychology is most frequently advised with a minor in psychology, education, or sociology. Preparation of counseling psychologists is closely related to this field with a heavier concentration in various aspects of psychology.

Stress is placed upon preparation that leads to understanding the individual student and group behavior. Emphasis is also placed upon clinical practice or supervised experience in school, university, or social agency guidance programs, provided for under EPsy 281 and 282, or under internship in counseling psychology and personnel work.

Some basic courses most frequently included in the preparation for various fields of personnel work are: EdCI 124, 125, and 135, EPsy 116, 117,

125, 133, 134, 140, 196-197, 259, 216-217-218, 225-226, 233, 250, and 251. In addition, students are advised to become familiar with curriculum and administrative problems at either the public school or higher education level, to take selected courses in psychology and sociology, and, if doctoral candidates, to take advanced courses in statistics and measurement and to probe research problems.

CURRICULUM AND INSTRUCTION

Major advisers: Professors Birkmaier, Boeck, Clymer, Curtin, Eckert, Goossen, Donovan Johnson, Kegler, McCune, Price, West; Associate Professor Gardner; Assistant Professors Gennaro, David C. Johnson, Lange; Lecturer Piché

Graduate students interested in curriculum and instruction may secure graduate work in the field with special emphasis on elementary, secondary, or higher education. For a statement of the general program and requirements leading to the M.A. or Ph.D. degree see the *Bulletin of the Graduate School*. The following are special programs for secondary school teachers in certain fields.

For English Teachers

Major advisers: Professor Kegler; Lecturer Piché

Note—See also 5-year program in English education.

English teachers may secure a master of arts degree in the Graduate School with a major in education or in curriculum and instruction and a supporting minor in English under Plan A or Plan B. Courses applicable to the teaching of English from which the student may profitably choose are as follows:

| | |
|--|---|
| EdCI 113—Principles of Secondary School Curriculum (3) | HED 141—Critical Issues in Contemporary Education (3) |
| EdCI 122—Literature for Adolescents (3) | EdCI 296—Special Problems in Teaching English (ar) |
| EdCI 144—Teaching of Reading in Secondary Schools (3) | EPsy 117—Basic Principles of Measurement (3) |
| EdCI 195—Current Developments and Curriculum Construction in English (3) | EPsy 193—Psychological Analysis of Instruction (3) |
| EdCI 294—Advanced Materials and Methods of Secondary School English (3) | |

Programs should be arranged in consultation with the major adviser.

For Science Teachers

Major advisers: Professor Boeck; Assistant Professor Gennaro

Note—See also the 5-year program in science.

Science teachers may secure a master of arts degree in the Graduate School under one of two plans: Following Plan A, the student elects a major in education or curriculum and instruction and takes his minor work in science; under Plan B, the student majors in curriculum and instruction and

Curriculum

takes, in addition, courses in one or more of the sciences and/or courses in education in areas not represented in the field of concentration or the student majors in education with related fields in the sciences or science and other academic areas.

Students interested in obtaining the master of arts degree under one of the plans described should arrange their programs in consultation with their major adviser.

For Social Studies Teachers

Major advisers: Professors McCune, West; Associate Professor Gardner

Social studies teachers may secure a master of arts degree in the Graduate School with a major in education or in curriculum and instruction and a minor or related courses in history, economics, political science, geography, sociology, or anthropology. Courses which are recommended as fitting into this plan are:

| | |
|---|--|
| EdCI 155—Materials Laboratory for Social Studies Teachers (3) | EdCI 201—Problems in Teaching the Social Studies (3) |
| EdCI 168—Current Developments in the Social Studies (2) | EdCI 204—Social Studies Curriculum (3) |

The seminar, EdCI 222, is required with or without credit for all students with a major or minor under Plan A.

Programs should be arranged in consultation with the major adviser.

ECONOMICS

Major adviser: Associate Professor Harlan Smith

A student who majors in economics registers in the College of Liberal Arts for his first 2 years. His program during this time should include the first requirement listed below under the economics major. He also meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. The economics major should be proficient in typing before he reaches his senior year. Spch 5 and a course in statistics are recommended. The student must maintain a 2.50 over-all average in the social science courses.

Economics as a Major Subject

Econ 1-2—Principles of Economics (6)
(or) Econ B-C—Scope, Methods, and Application of Economics and Introduction to Economic Analysis (6)
(or) Econ 50A-B—Economic Problems of the American Economy (6)
Econ 65—Intermediate Economic Analysis: The Firm (3)
Econ 66—Intermediate Economic Analysis: Income and Employment (3)
Econ 68—Elements of Public Finance (3)
(or) Econ 178A—Public Finance (3)

IR 52—Modern Industrial Relations: Labor Marketing (3)
(or) Econ 62—Labor Economics (3)
Econ 69—Government Regulation of Business (3)
Econ 104—International Economics (3)
Elective courses in economics—at least 12 credits from two of the areas designated under economics courses in the *Bulletin of the College of Liberal Arts*
A total of 36 credits in economics

Because of the economics teacher's need for a broad social studies background and because most social studies positions require teachers to teach more than one subject within the social studies area, the economics major must complete the following spread of supporting courses in the social sciences. This requirement is in lieu of a required teaching minor.

26 credits of history, including Hist 1-2-3 or 53-54-55—World Civilization (and) Hist 23-24—American History
5 credits of geography, either Geog 1 or 4 or 41
20 credits in the other social sciences, including:
Pol 1-2—American Government and Politics
Soc 3—Social Problems (and) one course numbered over 100
Anth 2A—Cultural Anthropology (or) 100—Principles

Economics majors are urged to build a teaching minor in a non-social science area in order to improve their chances of obtaining teaching positions.

All economics majors must include one course on Russia and one on the Far East. These courses may be taken in any one of the social sciences and will count toward meeting the credit requirements in those fields. Econ 160 or Econ 164 will satisfy the requirement for a course on Russia.

Professional Education Courses—The student majoring in economics must take the following courses within the total requirement of 29 credits in education:

| | |
|--|--|
| Ed 55A-B—Introduction to Secondary School Teaching (10) | EdT 69A-B—Methods of Teaching the Social Studies (5) |
| EdT 69j—Student Teaching: Social Studies Juniors (1 cr; prereq jr, §55A) | HEd 90—The School and Society (3) |
| EdT 69—Student Teaching in the Social Studies (9 cr during sr yr) | |

EDUCATIONAL ADMINISTRATION

Major advisers: Professors Hooker (chairman), Curtin, Domian, Keller; Associate Professors Davis, Firth, Hendrix, Lambert, Popper; Assistant Professors Mueller, Nickerson, Pierce

The student who wishes to become a superintendent of schools, a secondary school principal or supervisor, or an elementary school principal or supervisor must complete the requirements for the master of arts degree in the Graduate School. All such candidates should have completed as undergraduate students one of the curriculums preparing teachers for the elementary or secondary schools.

For the M.A. program for prospective superintendents, secondary school principals, and general secondary co-ordinators, the major will be educational administration, with related course work in curriculum and instruction, educational psychology, and other areas. The prospective elementary school principal majors in educational administration or in curriculum and instruction, with the program including both areas. (Supervisors and consultants for particular fields of secondary instruction and for the elementary school usually will apply for a major in curriculum and instruction.)

Advanced study beyond the M.A. degree in educational administration may lead to the specialist in education certificate or to the Ph.D. degree.

Curriculums

Included in the specialist certificate program are advanced courses, workshops, and field work.

For information concerning the general requirements for the M.A. and the Ph.D. degrees and for the specialist in education certificate, see the *Bulletin of the Graduate School*.

EDUCATIONAL PSYCHOLOGY

Major advisers: Professors Wilk (chairman), Balow, Borow, Clymer, Collier, Edson, Edwards, Hagenah, Hoyt, Kellogg, Merwin, Parker, Reynolds, Stecklein; Associate Professors Blocher, Burris, Corcoran, Duker, Force, Glotzbach, Hall, Hively, Karlsen, Neale, Snoke, Tennyson, Wilderson; Assistant Professors Hansen, P. Johnson, MacEachern, Samuels, Wood

Graduate study in educational psychology leading to the M.A. or Ph.D. degree may be designed to provide professional preparation in one of four specialized areas: foundation studies (school learning, personality and social psychology, measurement, statistics, and research design); counselor education (school counseling, counseling psychology, college personnel work); school psychology; and special education. The Specialist Certificate (2-year program) is offered in counseling and school psychology. Students may also elect one of these areas as a minor field for the M.A. or the Ph.D. degree.

Students who plan to major or minor in educational psychology should apply for admission to the Graduate School and plan their program in consultation with a department adviser. Although students apply and are admitted to concentrate their study primarily in one area, all students are expected to attain a level of competence in certain foundation studies and in research methodology. For courses and requirements, see the *Bulletin of the Graduate School*.

ELEMENTARY, PRIMARY, KINDERGARTEN, AND NURSERY SCHOOL EDUCATION

Major advisers: *Elementary Education (supervision or teaching)*—Professors Clymer, Curtin, Goossen, Rogers; Associate Professors Chase, Dykstra, Humphreys, Jackson, Keach, Lambert, Manning, Odland, Stochl; *Nursery School-Kindergarten-Primary Education*—Instructor Sorenson

The curriculums outlined in this section prepare students for elementary school teaching from nursery school and kindergarten through the 8 years of the elementary school. Upon graduation the student, depending on his choice of curriculum, is eligible for one of two certificates: (a) the general elementary certificate for teaching in the elementary school (grades 1 through 8), or (b) the special nursery school-kindergarten-primary certificate for teaching in nursery school, kindergarten, and grades 1 through 3.

The following curriculums are for persons of different backgrounds of education, training, and experience. Curriculums IA and IB are for regular college students who take 4 years of work. Curriculums IIA and IIB are for teachers and others who have completed (prior to March, 1952) 2 years of

training in a teachers college and already have a certificate for elementary school teaching. Curriculums IIIA and IIIB are for students who already hold a B.A. or B.S. degree. A student should identify his curriculum and consult an adviser in his field. Information about curriculums and assistance in making a choice may be secured at the Student Personnel Office, 206 Burton Hall.

The regular 4-year student will follow Curriculum IA for elementary school teaching, grades 1-8, or Curriculum IB for nursery school-kindergarten-primary teaching.

A limited number of deficiencies due to transfer from other colleges can be made up after entering the College of Education. The aim is broad functional contacts with cultural fields of knowledge essential for the liberal education of the teacher and as resources for teaching the common and special subjects of the elementary school.

Curriculums IA and IB—Elementary Education and Nursery School-Kindergarten-Primary Education

Students who plan to follow Curriculum IA or IB will register in the College of Liberal Arts for the first 2 years. Students will be considered for admission to the College of Education for Curriculums IA and IB only after completion of 2 years' college work with a minimum of 90 credits. The program for these first 2 years should follow the listing below. A grade point average of at least C (2.00) is required for considering admission to the junior year.

FRESHMAN AND SOPHOMORE YEARS

(in the College of Liberal Arts)

Note—Items marked with two asterisks (**) may be taken *only after completing the freshman year*.

1. English

Comp 1-2-3 or Engl A-B-C or Comm 1-2-3 or Engl 10H-11H-12H or exemption
Engl 60—Introduction to English Language (3)**

2. Natural Science

NSci 4-5—The Physical World (and) Biol 1A-2A—General Biology (7) (and) Geo 1—
Physical Geology (4)
(or) NSci 4-5—The Physical World (8) (and) Biol 1-2—General Biology (10)
(or) NSci 1-2-3—Orientation to the Natural Sciences (15)

3. Social Sciences

Geog 1—Geography of Natural Resources (5)
(or) Geog 4—Human Geography (5)
Hist 23-24—American History (8)
Soc 1—Man in Modern Society (3) (and) Soc 3—Social Problems (3)
(or) SSci 1-2-3—Personality, Work, Community (9)

4. Mathematics

Math 5A and 5B—Foundations of Arithmetic (6)

Curriculums

5. Music, Art, and Speech

- Mus 4—Fundamentals (2) or exemption
Art 1—Principles of Art (5)
(or) Art 2 or 3 or 4—Survey of the History of Art (3)
(or) Art 47—Introduction to Far Eastern Art (3)
Spch 5—Fundamentals of Speech (5)**

6. Psychology

- Psy 1-2—General Psychology (6)**

7. Health and Physical Education

- PubH 5—Individual and Public Health (3)
(or) PubH 50—Personal and Community Health (3)**
Physical education activity courses—Curriculum IA (3), with substitute of PEW 45 (2) recommended for part of the requirement; Curriculum IB (3)

8. Electives to complete a total of 90 credits; should include courses toward an academic minor

JUNIOR AND SENIOR YEARS

(in the College of Education)

Approximately half the work in the junior and senior years is in courses other than education. In selecting academic courses students should consult the *Bulletin of the College of Liberal Arts* and confer with their major advisers.

Academic Requirements

1. *Upper Division Academic Credits*—A minimum of 18 credits in Upper Division academic courses. Students who did not complete Engl 60, Introduction to English Language, during the sophomore year must include this course. An exception to the Upper Division academic requirements allows students to count toward these 18 credits any credits accumulated in Lower Division courses in the natural sciences beyond the number of 15, and credits in any mathematics courses numbered 40 or above.
2. *Academic Minor*—A minimum of 30 credits from any one of the following fields: anthropology, art, economics, English, foreign language, geography, history, humanities, mathematics, music, natural science, political science, sociology, speech, others by special permission. This minor is not expected to lead to a junior high school endorsement. Those interested should see statement under "Junior High School Endorsement."

Professional Requirements

1. Foundations

- Ed 75A—Introduction to Elementary School Teaching (educational psychology) (5)
(junior year)
Ed 75B—Introduction to Elementary School Teaching (curriculum and organization)
(3) (senior year)
HEd 90—The School and Society (3) (senior year)

Elementary, N-K-P Education

2. Physical Education

- PEW 70—Teaching Health and Physical Education in the Elementary Schools (3)
(elementary majors only)
PEW 91A—Physical Education for NKP (3) (NKP only)
PEW 91B—School Health Education and First Aid for NKP (3) (NKP only)

3. Art Education

- ArEd 10—Elementary Survey (2)
ArEd 84—Teaching Art in the Elementary School (2) (elementary only)

4. Music Education

- MuEd 51—Teaching Music (2)
MuEd 52—Teaching Music (2) (elementary only)

5. Basic Methods

- EdCI 60—Teaching Reading in the Elementary School (3)
EdCI 61—Teaching Social Studies in the Elementary School (3)
EdCI 62—Teaching Mathematics in the Elementary School (3)
EdCI 63—Children's Literature (3)
EdCI 64—Teaching English in the Elementary School (3)
EdCI 65—Teaching Science in the Elementary School (3)

6. Student Teaching

- EdT 54A and B—Student Teaching in the Elementary School (12) (elementary only)
EdT 77—Student Teaching in the Nursery School (4) (NKP only)
EdT 78—Student Teaching in the Kindergarten (6) (NKP only)
EdT 79—Student Teaching in the Primary Grades (6) (NKP only)

7. Other Courses Required in the IB (NKP) Curriculum Only

- CPsy 80—Child Psychology (3)
EdCI 54—Literature and Storytelling for Young Children (2)
EdCI 55—Foundations of Early Childhood Education (3)
EdCI 56—Methods and Observation in the Kindergarten (3)
EdCI 57—Nursery-Kindergarten-Primary Lab in Social Studies, Sciences, Art, and Music (4)
EdCI 59—Methods and Observation in Nursery School (3)

A total of 186 credits is necessary for graduation. The required major average of C (2.00) will be based on the following courses:

- Elementary IA: Ed 75A-B; EdCI 60, 61, 62, 63, 64, 65; HED 90; EdT 54A-B
NKP IB: Ed 75A-B; EdCI 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65; HED 90; EdT 77, 78, 79

Admission to student teaching requires a C average (2.00) in all the major courses listed above which are taken prior to student teaching.

Curriculum IIA—Elementary Education for Teachers

JUNIOR AND SENIOR YEARS

This curriculum is for teachers and other students who have completed a 2-year course of professional training and already hold an elementary school

Curriculum

certificate. Those who hold the provisional elementary certificate based upon completion of a prescribed program since March 1952 should follow plan IA.

The College of Education allows a minimum of 90 credits for the 2-year diploma course in elementary education taken in an accredited teacher training institution. These credits are listed as "blanket credits" and are not assigned to particular courses. They are accepted in lieu of the general course requirements for the freshman and sophomore years and the following program represents the work of the last 2 years.

Major in Elementary Education (30 credits):

1. Required of all—9 credits

- EPsy 60—Introduction to Measurement and Statistics (3)
- EdCI 119—Elementary School Curriculum (3)
- HEd 90—The School and Society (3)

2. Twelve credits in methods to be chosen from the following:

- EdCI 65—Teaching Science in the Elementary School (3)
- (or) EdCI 103—Teaching Science in the Elementary School (3)
- EdCI 63—Children's Literature (3)
- (or) EdCI 121—Children's Literature (3)
- EdCI 61—Teaching Social Studies in the Elementary School (3)
- (or) EdCI 102—Teaching Social Studies in the Elementary School (3)
- EdCI 60—Teaching and Supervision of Reading in the Elementary School (3)
- (or) EdCI 143—Teaching and Supervision of Reading in the Elementary School (3)
- EdCI 145—Reading Difficulties (3)
- EdCI 62—Teaching and Supervision of Mathematics in the Elementary School (3)
- (or) EdCI 149—Teaching and Supervision of Mathematics in the Elementary School (3)
- EdCI 151—Diagnosis and Treatment of Learning Difficulties (3)
- EdCI 64—Teaching and Supervision of English in the Elementary School (3)
- (or) EdCI 153—Teaching and Supervision of English in the Elementary School (3)
- Other courses in methods by petition

3. Education electives (9 credits)

Elective credits may be chosen from any of the preceding courses or from any of the courses listed under general courses for elementary education.

Students minoring or having a concentration in an education field are not permitted to take any education elective courses for the major area.

The C+ (2.50) average is based on the 21 credits of the major field excluding any credits taken as electives.

Note—Students may be required to take EdT 54A-B (Student Teaching) unless evidence of satisfactory experience is presented. The decision is made by the major adviser and the director of student teaching. Students are urged to plan their programs early so as not to exceed the 30 credits allowed in education.

Minor and Academic Courses (60 to 66 credits)—These credits are to be selected from courses other than education. At least 18 of the academic credits must be in the courses numbered 50 or above. Requirements are as follows:

1. Courses in public health: PubH 50—Personal and Community Health (3)

2. A minor of 30 credits from any one of the following fields: anthropology, art, economics, English, foreign language, geography, history, humanities, mathematics, music, natural science, political science, sociology, speech, others by special permission.

This minor is not expected to lead to a junior high school endorsement. Those interested should see statement under "Junior High School Endorsement."

3. Eighteen credits in at least one of the following or such other fields as may be approved by the adviser. In each case all 18 credits are to be taken during the third and fourth years and are as a rule to be selected from courses offered in the College of Liberal Arts. Students must aim to supplement and not to duplicate courses taken elsewhere. Credit cannot be allowed for courses that are largely duplication. Child psychology and psychology are not areas of concentration, but general electives may be chosen from those fields. The fields are: English, a foreign language, a social science or general social science (other than history or geography), speech, language arts, humanities, geography, history, a science or general science, mathematics, art, music, library science, physical education, others by special permission.

4. Academic electives—to complete the total of 186 credits. At least 18 credits in *academic courses* must be in courses numbered 50 or above. Any course listed in the *Bulletin of the College of Liberal Arts* will count toward this requirement whether taken as a part of the minor or concentration or as an elective.

Courses in General Extension—Elementary teachers taking extension and late afternoon and Saturday morning courses should complete all the procedures for admission to the college as a regular student as soon as possible after they begin their work and in no case later than the beginning of the senior year (when they have earned 135 credits). They should follow the pattern of the curriculum to be certain that all work taken will apply toward graduation. They should consult an adviser in the College of Education early in their course with regard to transfer credits and any courses not a part of the curriculum.

Curriculum IIB—Nursery School-Kindergarten-Primary Education for Teachers

Teachers college graduates, coming with 90 blanket credits and interested in the NKP emphasis under elementary education, should consult the NKP adviser for information about the program.

Curriculum IIIA—Elementary Education

SENIOR YEAR

This curriculum is for students who already have a B.A. or B.S. degree and who wish to prepare for elementary school teaching.

Curriculum

Students are urged to enter the program in the fall, and complete the courses of the fall, winter, and spring quarters in sequence. They may, however, make up any deficiencies or lighten their programs by taking work in the Summer Session.

A minimum of 45 credits and a C+ average (2.50) on the total is required.

Ed 75A-B—Introduction to Elementary School Teaching (75A, Educational Psychology [5]; 75B, Curriculum and Organization [3])

EdCI 60—Teaching Reading in the Elementary School (3)

EdCI 61—Teaching Social Studies in the Elementary School (3)

EdCI 62—Teaching Mathematics in the Elementary School (3)

EdCI 63—Children's Literature (3)

EdCI 64—Teaching English in the Elementary School (3)

EdCI 65—Teaching Science in the Elementary School (3)

(In exceptional cases courses in the same area numbered 100 or above may be

substituted for the methods courses in the 60 sequence)

EdCI 145—Reading Difficulties (3)

(or) EdCI 151—Diagnosis and Treatment of Learning Difficulties (3)

EdT 54A-B—Student Teaching in the Elementary School (12)

(Admission to student teaching shall be based on a C+ (2.50) average in all courses in the major program completed prior to student teaching)

MuEd 51—Teaching Music (2)

(or) MuEd 52—Teaching Music (2)

ArEd 84A—Teaching Art in the Elementary School (2)

On completion of the IIIA curriculum the student will be recommended for the B.S. degree from the College of Education and for the teacher's certificate for elementary school teaching.

Admission to this program is based on the assumption that the student has an adequate background in the areas of natural science, geography, history, and health. In case of deficiencies the student shall be required to take additional courses in deficient areas in order to give him an appropriate background for elementary school teaching.

Completion of Psy 1-2, General Psychology, is required for admission to the curriculum if it has not been included in the student's previous Bachelor's degree program. If the student has not had equivalent work in public health or mathematics he must add PubH 50, Personal and Community Health, and Math 5A-B to the above program.

Curriculum IIIB—Nursery School-Kindergarten-Primary Education

SENIOR YEAR

This curriculum is for students who already have a B.A. or B.S. degree and who wish to receive a B.S. degree from the College of Education and the special certificate for nursery school-kindergarten-primary teaching.

Students are urged to enter this program in the fall quarter. A minimum of 45 credits is to be selected from the following courses in conference with the adviser:

Ed 75A-B—Introduction to Elementary School Teaching (75A, Educational Psychology [5]; 75B, Curriculum and Organization [3])

CPsy 80—Child Psychology (3)

EdCI 55—Foundations of Early Childhood Education (3)

EdCI 56—Methods and Observation in the Kindergarten (3)

Elementary, N-K-P Education

| | |
|--|---|
| EdCI 57—Nursery-Kindergarten-Primary Lab in Social Studies, Sciences, Art, and Music (4) | EdCI 64—Teaching English in the Elementary School (3) |
| EdCI 59—Methods and Observation in the Nursery School (3) | EdCI 65—Teaching Science in the Elementary School (3) |
| EdCI 60—Teaching Reading in the Elementary School (3) | EdT 77—Student Teaching in the Nursery School (4) |
| EdCI 61—Teaching Social Studies in the Elementary School (3) | EdT 78—Student Teaching in the Kindergarten (6) |
| EdCI 62—Teaching Mathematics in the Elementary School (3) | EdT 79—Student Teaching in the Primary Grades (6) |
| EdCI 63—Children's Literature (3) | MuEd 51—Teaching of Music (2) |

A grade average of C+ is required for the above major.

Completion of Psy 1-2, General Psychology, is required for admission to the curriculum if it has not been included in the student's previous Bachelor's degree program.

Admission to this program is based on the assumption that the student has an adequate background in the areas of natural science, geography, history, and health. In case of deficiencies, the student shall be required to take additional courses in deficient areas in order to provide an appropriate background for teaching in the primary grades.

Junior High School Endorsement

A student following curriculums IA, IIA, or IIIA may secure endorsement on the certificate for the elementary school permitting him to teach half-time or less in the junior high school. A student who wishes to teach full-time in junior high school must complete the regular major required for secondary school teachers of the subject. A student who wishes to teach half-time must complete a regular minor in that subject for teaching in secondary schools, which he must expand to a major within 7 years of the initial certification. The following professional requirements must be met:

1. EdAd 167—The Junior High School (3)
2. A special methods course covering the junior high school level in the minor.
3. Student teaching in grades 7, 8, or 9 (EdT 52, Student Teaching [2-3]) in addition to student teaching in the elementary school.

Five-Year Program in Early Childhood Education Leading to the Master of Education Degree

The College of Education, in co-operation with the Institute of Child Development, has outlined a 5-year program leading to the master of education degree in early childhood education for students who satisfactorily complete a fifth year of work in education and child psychology courses at the graduate level and who meet all the regulations for the professional degree. Undergraduate students in the nursery school-kindergarten-primary school

Curriculum

curriculum who expect to qualify for the M.Ed. degree should confer with their advisers by the beginning of the junior year in order that the work of the junior, senior, and fifth years may be co-ordinated.

In addition to the general requirements for the M.Ed. degree the specific requirements in early childhood education are as follows: (a) a total of 45 credits beyond the requirements for the Bachelor's degree in the nursery school-kindergarten-primary education curriculum; (b) a period of internship for which a maximum of 8 credits will be given; (c) a distribution of credits for the fifth year in accordance with an approved pattern, including the internship and courses in child psychology and in curriculum and instruction, with other courses to be selected from educational psychology, psychology, or sociology, and from educational administration or the history and philosophy of education. For further information consult the major adviser.

Five-Year Program in Elementary Education Leading to the Master of Education Degree

The College of Education has outlined a 5-year program leading to the master of education degree in elementary education upon the satisfactory completion of a fifth year of work at the graduate level. The work of the fifth year is based on the 4-year curriculum in elementary education (Curriculum IA) and conforms to the general requirements set up for the M.Ed. degree. For information in regard to the program consult the major adviser or the dean of the college.

Graduate Programs

Programs leading to the M.A. and Ph.D. degrees are offered in the Graduate School emphasizing various areas of study in elementary education. Applicants should have completed one of the undergraduate curriculums leading to certification for elementary school teaching. In general, the graduate programs either prepare the teacher at an advanced level for his classroom work or lead toward one of the several specialties in elementary education. For example, there are graduate programs for prospective school psychologists, supervisors and consultants, principals, specialists in teacher training, child psychologists, teachers of special classes, and reading specialists.

Classroom teachers, supervisors, and consultants ordinarily will major in the Graduate School in curriculum and instruction. Prospective elementary school principals may major in educational administration or in curriculum and instruction, but their programs will include work in both areas with special emphasis on the improvement of instruction. Graduate programs in childhood education are offered by the Institute of Child Development with majors in child psychology; for school psychological work, the programs combine graduate study in educational psychology, child psychology, psychology, and curriculum and instruction. Special class teachers should refer to the listing of courses under curriculum and instruction and under educational psychology which cover their particular area of teaching.

The general plan of graduate work and requirements for the M.A. and Ph.D. degrees are described in the *Bulletin of the Graduate School*. In applying for admission to the Graduate School, the applicant should be sure to indicate the area which he wishes to emphasize in his program.

ENGLISH

Major advisers: Lecturer Piché; Instructor Kemp

Students who major in English register in the College of Liberal Arts for the first 2 years, and their programs during this time should include the Lower Division courses in the major, listed below. They must fulfill general requirements of the College of Education and the Lower Division requirements for admission to the junior year in the Academic Secondary School Curriculum, listed in Section I of this bulletin.

Students who major in English must complete Spch 5 and one course selected from each of the following two groups:

Group A: Spch 51, 61, 101, 106

Group B: Th 11, Spch 81, or both Th 12 and Th 74

Those who wish to combine the major in English with related work in speech, journalism, and library science, instead of completing a minor in a second teaching field, should refer to the language arts curriculum.

English as a Major Subject

Engl 21, 22, 23—Introduction to Literature (15)
Engl 55, 56—Shakespeare (6)
Engl 72, 73, 74—American Literature (9)
Engl 165—Introduction to Modern English (3)
Engl 166—History of the English Language (3)

Comp 27, 28—Advanced Writing (6)
Electives in courses numbered 75 or above (12) or a minimum of 6 credits in courses numbered 75 and above and the remainder from Upper Division humanities courses.

Students with a major in English are required to take EdCI 122 (Literature for Adolescents, 3 cr) which is counted in the professional requirement. For student teaching and special methods in English they register in EdT 75 (Student Teaching in the Language Arts), and EdT 75A-B-C or D (The Teaching of the Language Arts).

Students interested in earning both the B.A. and B.S. degrees should consult one of the major advisers for information about the combined degree program.

English as a Minor Subject—Engl 22, 23, 55, 56, 73, 74, and 165; and Comp 27, 28.

Note—Students majoring or minoring in English who receive a grade of A or B in Comp 27 may elect an English course numbered over 74 or Spch 109 instead of Comp 28.

Curriculum

Professional Education Courses—The student majoring in English must take the following courses in education:

Ed 55A-B—Introduction to Secondary School Teaching (10)

EdT 75—Student Teaching in Language Arts (9)

Ed 75A-B-C—Teaching Language Arts in Secondary School (5)

HEd 90—The School and Society (3)

EdCI 122—Literature for Adolescents (3)

Five-Year Program Leading to the Master of Education Degree

The College of Education has outlined a 5-year curriculum leading to the professional degree of master of education for teachers of English. The curriculum includes specific recommendations for Lower Division work. Students should confer with an adviser early in their college course. The work of the fifth year, representing 45 credits beyond the requirements for the Bachelor's degree with a major in English or language arts, conforms to the general requirements of the M.Ed. degree, and is made up of graduate courses in English, and in education, including the internship and courses in curriculum and instruction, educational psychology, and the history and philosophy of education. For further information consult one of the major advisers. See also Graduate Study in Education, Section I.

FRENCH

See Romance Languages

GEOGRAPHY

Major advisers: Associate Professor Barrett; Assistant Professor Adams

A student who majors in geography registers in the College of Liberal Arts for the first 2 years. His program during this time should include the first three courses listed under the major. He also meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. The geography major is urged to take geology as part of his science requirement. He should be proficient in typing before he reaches his senior year. Completion of Spch 5 is advisable. The student must maintain an over-all 2.50 grade point average in the social science courses.

Geography as a Major Subject

Geog 1—Geography of Natural Resources (5)

Geog 4—Human Geography (5)

Geog 41—Geography of Primary Production (5)

Elective courses in geography, at least 24 credits, including one course in each of

the following areas: (a) Anglo-America, (b) Europe, (c) Soviet Union, (d) Southeast Asia, (e) Africa and the Middle East, (f) Latin America

A total of 39 credits in geography

Because of the geography teacher's need for a broad social studies background and because most social studies positions require teachers to teach

more than one subject within the social studies area, all geography majors must complete the following spread of supporting courses in other social science fields. This requirement is in lieu of a required teaching minor.

- 26 credits in history, including Hist 1-2-3 or 53-54-55—Civilization of the Modern World (and) Hist 23-24—American History, plus 9 additional credits in courses numbered 65 or above.
- 18 credits in the other social sciences including:
 - Pol 1-2—American Government and Politics
 - Econ 1-2—Principles of Economics; (or) B—Scope, Methods, and Application of Economics (and) C—Introduction to Economic Analysis; (or) 50 A-B—Economic Problems of the American Economy
 - Soc 3—Social Problems
 - Anth 2A—Cultural Anthropology
 - (or) 100—Principles of Anthropology

Geography majors are urged to build a teaching minor in a non-social science area in order to improve their chances of obtaining teaching positions.

Geography as a Minor Subject—28 credits of geography, including Geog 1, 4, and 41 plus one course in each of three of the six areas listed for a geography major. The student must also include the following: Hist 23-24 (8), Pol 1-2 (6), Econ 1-2 or B-C or 50A-B (6), Anth 2A (5) or 100 (3).

Professional Education Courses—The student majoring in geography must take the following courses within the total requirement of 29 credits in education.

- | | |
|--|--|
| <ul style="list-style-type: none"> Ed 55A-B—Introduction to Secondary School Teaching (10) EdT 69J—Student Teaching: Social Studies Juniors (1 cr; prereq jr, ¶55A) EdT 69—Student Teaching in the Social Studies (9 cr during sr yr) | <ul style="list-style-type: none"> EdT 69A-B—Teaching Social Studies in the Secondary School (5) HED 90—The School and Society (3) |
|--|--|

GERMAN

Major advisers: Professors Menze, C. Wood

A student who wishes to obtain a major or a minor in German registers for the first 2 years of work in the College of Liberal Arts and there meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin, as well as all prerequisites for Upper Division courses in German. The 2 years of work remaining will be taken while the student is registered in the College of Education.

German as a Major Subject for High School Teaching

- | | |
|---|---|
| <ul style="list-style-type: none"> Ger 80—History of the German Language (3) (or) Clas 56—Elementary Linguistics (3) Ger 57-58-59—Composition (6) Ger 61-62-63—Conversation (6) (or) Ger 64-65-66—Advanced Conversation and Essay Writing (6) Ger 60—Analysis of Modern German Structure for Teachers (2) | <ul style="list-style-type: none"> Any 2 quarters (6 cr) of: <ul style="list-style-type: none"> Ger 91-92-93—Civilization and Culture (Ger 68, Contemporary Germany, may be substituted for Ger 93) (or) Ger 95-96—Survey of German Literature 12 credits in courses numbered 56A or above (at least 9 cr should be in literature courses) |
|---|---|

Curriculum

German as a Minor Subject—23 credits including Ger 57-58-59, 60, 61-62-63, and 9 additional credits in literature courses numbered 56A or above.

Professional Education Courses—The student majoring in German must take the following courses within the total requirement of 29 credits in education:

| | |
|--|---|
| Ed 55A-B—Introduction to Secondary School Teaching (10) | EdT 70A-B—Teaching Modern Languages (5) |
| EdT 70—Student Teaching in Modern Languages (3 cr U High, 6 cr off-campus, total 9 cr) | HEd 90—The School and Society (3) |

HIGHER EDUCATION

Major advisers: Professors Eckert, Keller, Mork

Qualified graduate students may select courses preparing them for service in colleges and universities. These courses and seminars are designed both for students majoring in education and for those specializing in other academic and professional disciplines. Unusual facilities are provided for laboratory work in higher education through the co-operation of the University's instructional, research, and service departments. See the *Bulletin of the Graduate School* for a statement of courses and requirements for advanced degrees.

HISTORY

Major advisers: Professor T. Smith; Associate Professors Altholz, Berkhofer

A student who majors in history registers in the College of Liberal Arts for his first 2 years. His program during this time should include the first two requirements listed under the history major. He also meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. The history major is urged to take geology as part of his science requirement. He should be proficient in typing before he reaches his senior year. Completion of Spch 5 is advisable. The student must maintain an over-all 2.50 average in social science courses.

History as a Major Subject

| | |
|---|---|
| Hist 1-2-3 or 53-54-55—Civilization of the Modern World (9) | A course taken in history or one of the other social sciences in each of the following cultural areas: (a) Latin America, (b) Asia, (c) Africa and the Middle East. |
| Hist 23-24—American History (8) | These courses can be counted toward the required number of credits in these fields. |
| Hist 120F—Russia (3) | A total of 47 credits in history |
| Elective courses in history—at least 27 additional credits in courses numbered 65 or above (with completion of satisfactory paper, as required for Arts majors) | |

Because of the history teacher's need for a broad social studies background and because most social studies positions require teachers to teach more than one subject within the social studies area, all history majors must

complete the following supporting courses in other social science fields. This requirement is in lieu of a required teaching minor.

23 credits in geography, including Geog 1 and 4, and one course in each of four of the six areas listed for the geography major.

15 credits in the other social sciences including:

Pol 1-2—American Government and Politics

Econ 1-2—Principles of Economics; (or) B—Scope, Methods, and Application of Economics (and) C—Introduction to Economic Analysis; (or) 50A-B—Economic Problems of the American Economy

Soc 3—Social Problems

Anth 2A—Cultural Anthropology

(or) Anth 100—Principles of Anthropology

History majors are urged to build a teaching minor in a non-social science area in order to improve their chances of obtaining teaching positions.

History as a Minor Subject—29 credits in history, including Hist 1-2-3 or 53-54-55; and 23-24; and 12 credits in courses numbered 65 or above.

The student must also include the following: Geog 1 or 4 (5), Pol 1-2 (6), Econ 1-2 or B-C or 50A-B (6), Anth 2A (5) or 100 (3)

Professional Education Courses—The major in history must take the following courses within the total requirement of 29 credits in education:

Ed 55A-B—Introduction to Secondary School Teaching (10)

EdT 69A-B—Teaching the Social Studies in the Secondary School (5)

EdT 69J—Student Teaching: Social Studies Juniors (1 cr; prereq jr, §55A)

HEd 90—The School and Society (3)

EdT 69—Student Teaching in the Social Studies (9 cr during sr yr)

HISTORY AND PHILOSOPHY OF EDUCATION

Major advisers: Professors Beck, T. Smith; Associate Professors Bagley, Corcoran

Work in the history and philosophy of education is available at the graduate level leading to the M.A. and Ph.D. degrees. Students should arrange a program in consultation with an adviser in accordance with their special fields of interest. For courses and requirements see the *Bulletin of the Graduate School*.

HOME ECONOMICS EDUCATION

Major advisers: Professors Brown, Ford; Assistant Professors Christenson, Wantoch; Instructors Burkland, Turk

The curriculums in home economics education offered jointly by the College of Agriculture, Forestry, and Home Economics and the College of Education are designed for students who plan to become home economics teachers in secondary schools or adult programs or to assume home economics positions in the Agricultural Extension Service. Satisfactory completion of the teaching curriculum qualifies the student for teaching home economics in Minnesota including those departments which are federally aided.

Curriculum

During the first 2 years the student is registered in the College of AFHE and carries the required work of the home economics education curriculum. In the junior and senior years she completes the combined curriculum of the College of Education and the College of AFHE leading to the bachelor of science degree.

Application for admission to the joint curriculum should be made during the first 2 weeks of the third quarter of the sophomore year or of the first quarter in residence for those who transfer after 2 years of college work. The application form and information about procedure should be obtained at 212 McNeal Hall.

Application for student teaching must be made during the quarter prior to proposed enrollment in HEEd 63. Forms and a list of requirements for admission to student teaching may be obtained at 212 McNeal Hall.

In order to be recommended for graduation from the teaching specialization, the student must have a C+ (2.50) average in 40 credits of home economics work in the curriculum for general home economics teaching and an average of B (3.00) in all other courses pursued during the junior and senior years.

Four-Year Curriculum in Home Economics Education Leading to the B.S. Degree

Home Economics Teaching

The following courses are required for those preparing for teaching home economics. The list includes liberal education requirements, as well as those in the major and professional areas.

FRESHMAN-SOPHOMORE YEARS

Orie 1—College Orientation Lectures (1)
Rhetoric—Freshman communication requirement (9)
Rhet 22—Public Speaking (3)
HE 1—Clothing Selection (3)
HE 3—Clothing Construction I (3)
(or) HE 4—Clothing Construction II (3)
HE 5—Home Economics in Contemporary Society (3)
HE 15—Home and Family in Society (3)
HE 20—Introduction to Related Art (3)
HE 21—Color (3)
HE 24A—Problems in Home Planning and Furnishing (3)
HE 24B—Home Planning, Furnishing Experience I (3)
HE 31—Introduction to Nutrition (3)
HE 40—Food Preparation (5)
HE 41—Food Management and Marketing (5)
HE 49—Household Equipment (3)
PubH 5—Individual and Public Health (3)
(or) PubH 50—Personal and Community Health (3)
Soc 1A or 1—Man in Modern Society (3)

AgEc 1-2—Principles of Economics (6)
(or) Econ 1-2—Principles of Economics (6)
Psy 1-2—General Psychology (6)
HEEd 49—Introduction to Home Economics Education (2)
GC 10B—Human Body: Structure, Function, Health (5)
DJnd 20—Introductory Microbiology (4)
3 credits elective in communication (see course list, Council on Liberal Education)
9 credits in humanities to be selected from humanities, HE 120, literature, non-studio art or music (courses may be taken on Mpls or StP Campus)
Select one of the following options:

Option I

GeCh 4-5—General Principles of Chemistry (10)
BioC 1A—Elements of Biochemistry (5)
(or) OrCh 41-42—Elementary Organic Chemistry (8)
MeAg 23—Introductory Physics (5)
Biol 1A-2A—General Biology (7)

Home Economics Education

Option II

- Social science elective (3)
- GeCh 4-5—General Principles of Chemistry (10)
- MeAg 23—Introductory Physics (5)

Option III

- 12 credits social science electives from two areas (sociology, anthropology, history, political science)
- NSci 4-5—The Physical World (6)

JUNIOR-SENIOR YEARS

- HE 50—Textiles (4)
- HE 76—Nutrition of the Family (4)
- HE 85—Home Management Principles (3)
- HE 86 or 86A—Home Management Laboratory (4)
- (or) HE 86B—Experimental House (4)
- HE 87—Family Relationships (3)
- HE 99—Senior Seminar (3)
- HE 115—Sociological and Economic Aspects of Clothing (3)
- (or) HE 116—Family Clothing Problems (3)
- PubH 50—Personal and Community Health (3)
- (or) PubH 5—Individual and Public Health (3)
- Rhet 51—Exposition (3)
- Ed 55A-B—Introduction to Secondary School Teaching (10)
- HEd 90—School and Society (3)
- HEEd 60—Curriculum in Home Economics Education (3)
- HEEd 61—Methods of Teaching Home Economics (3)

- HEED 62—Evaluation in Home Economics (3)
- HEED 63—Supervised Teaching in Home Economics (9)
- HEED 64—Adult Education in Home Economics (3)
- HEED 65—Colloquium in Home Economics Education (2)
- HEED 90—Child Development (3)
- HEED 90A—Practicum in Child Development (1)
- 9 credits to be selected from advanced courses in at least two areas:
 - Food and Nutrition: 70, 137, 138, 139
 - Textiles and Clothing: 53, 152, 153, 154
 - Home Management—Family Living: 182, 183, 186, 187, 190
 - Related Art: 120, 127, 180, 197
 - Household Equipment: 131, 133, 189A-B-C

Home Economics Extension

FRESHMAN-SOPHOMORE YEARS

- Orie 1—College Orientation Lectures (1)
- Rhetoric—Freshman communication requirement (9)
- Rhet 22—Public Speaking (3)
- HE 1—Clothing Selection (3)
- HE 3—Clothing Construction I (3)
- (or) HE 4—Clothing Construction II (3)
- HE 5—Home Economics in Contemporary Society (3)
- HE 15—Home and Family in Society (3)
- HE 20—Introduction to Related Art (3)
- HE 21—Color (3)
- HE 24A—Problems in Home Planning and Furnishing (3)
- HE 24B—Home Planning, Furnishing Experience I (3)
- HE 31—Introduction to Nutrition (3)
- HE 40—Food Preparation (5)
- HE 41—Food Management and Marketing (5)
- HE 49—Household Equipment (3)
- PubH 5—Individual and Public Health (3)
- (or) PubH 50—Personal and Community Health (3)

- 9 credits in humanities to be selected from humanities, HE 120, literature, philosophy, non-studio music or art (courses may be taken on Mpls or StP Campus)
- Psy 1-2—General Psychology (6)
- AgEc 1-2—Principles of Economics (6)
- (or) Econ 1-2—Principles of Economics (6)
- 6 additional credits in social science to be selected from anthropology, geography, political science, sociology
- 3 credits elective in communication (see course list, Council on Liberal Education)
- GeCh 4-5—General Principles of Chemistry (10)
- MeAg 23—Introductory Physics (5)
- DInd 20—Introductory Microbiology (4)
- GC 10B—Human Body: Structure, Function, Health (5)
- HEED 49—Introduction to Home Economics Education (2)

Curriculums

JUNIOR-SENIOR YEARS

- HE 50—Textiles (4)
HE 76—Nutrition of the Family (4)
HE 85—Home Management Principles (3)
HE 86 or 86A—Home Management Laboratory (4)
(or) HE 86B—Experimental House (4)
HE 87—Family Relationships (3)
HE 99—Senior Seminar (3)
HE 115—Sociological and Economic Aspects of Clothing (3)
(or) HE 116—Family Clothing Problems (3)
9 credits in advanced home economics courses to be selected in consultation with adviser
PubH 50—Personal and Community Health (3)
(or) PubH 5—Individual and Public Health (3)
- Rhet 51—Exposition (3)
AgJo 53—Publicity (3)
Ed 55A-B—Introduction to Secondary School Teaching (10)
AgEd 56—Rural Education Through Extension Methods (3)
HEEd 60—Curriculum in Home Economics (3)
HEEd 61—Methods in Teaching Home Economics (3)
HEEd 64—Adult Education in Home Economics (3)
HEEd 95—Supervised Field Experience (6)
HEEd 190—Readings (2)
HEEd 90—Child Development (3)
HEEd 90A—Practicum in Child Development (1)

Professional Five-Year Curriculum

This is a joint curriculum between the College of Education and the College of AFHE leading to the degree of master of education (M.Ed.).

Special Requirements

1. A total of 230 credits including at least 45 (in courses numbered 100 or above) in the fifth year.
2. An average of B in courses in the fifth year.
3. A satisfactory report on a health examination within 1 year prior to obtaining the M.Ed. degree.
4. Satisfactory performance in requirements prescribed by the College of Education for professional degrees:
 - a. 90 credits in academic fields
 - b. A teaching minor or concentration in an academic field (18 credits)
 - c. Broad major field specialization (approximately 90 credits)
 - d. 35 credits in education including 1 quarter internship (optional—8 credits allowed for 1 quarter)

The best results may be anticipated when plans for the extended training are made during the student's junior year so that the fifth year may be integrated with the 4-year program. The student should plan her program under the direction of a member of the graduate faculty in home economics education.

Satisfaction of part of the education requirement may be made through internship in a home economics department in a secondary school. The internship will include full-time work for 1 quarter in a school off the campus. The

intern will work under the supervision of her adviser at the University and will return to the campus regularly for Saturday morning conferences which will deal with classroom, co-curricular, and community problems met during the internship.

In addition to the general requirements for the M.Ed. degree, the students must meet the specific requirements for the degree in this field, as follows:

Additional academic courses (8-24 credits), home economics (17-25 credits), general education (4-9 credits), home economics education (5-9 credits) and certification of competence in teaching in the major field.

A student with a Bachelor's degree with a major in home economics education from another accredited institution, upon fulfilling the requirements or their equivalents of the 5-year curriculum, will receive the master of education degree with a major in home economics education.

INDUSTRIAL EDUCATION

Major advisers: Professor Nelson; Associate Professors Kavanaugh, Moss;
Assistant Professor Randleman

Students applying for admission to the industrial education undergraduate degree program must have satisfactorily completed 45 quarter credits (2.00 average) of college-level work. Courses in mathematics, physical science, and English must be represented among those 45 credits. For those entering CLA with the expectation of pursuing an industrial education major it is suggested that the first-year program be drawn from the liberal education block below.

The following curriculum has been designed for persons who desire to prepare for teaching positions in the field of industrial arts education and to gain background for later graduate level courses. The satisfactory completion of the 4 years of work here specified entitles the student to the bachelor of science degree and provides the training necessary for the high school standard special certificate required to teach industrial arts in Minnesota public schools.

Certain departmental courses of professional or classroom type are also acceptable for vocational certification leading to service in vocational technical schools and programs—day, evening, and part-time. The state supervisor of trade and industrial education certifies the vocational competence of such candidates. Those given his approval take certain professional courses to complete the requirements for teaching. Special certificates are issued by the State Department of Education. Industrial arts certificates and vocational industrial certificates are based upon wholly different preparations and therefore should not be confused.

In addition to the campus schedules, the department conducts off-campus courses in centers scattered throughout the state; offerings are made through co-operation of officials in the State Department of Education and local school authorities. Such courses may be had with fee and credit, or without fee and credit, according to demand, but a given class or group must be of one or the other type rather than mixed as to status. Services of the department are available to industrial groups, such as foremen and other personnel who have

Curriculum

instructional responsibilities, and to the public school authorities. The department provides courses for other divisions of the college and the University.

Students may arrange to take a number of shopwork and drawing courses at William Hood Dunwoody Industrial Institute, without fees other than those paid at the University. Department consent must be secured prior to registration in Dunwoody courses. For a listing of all department course offerings see Section III.

Industrial Education Course Requirements (74 credits)

- Ind 6—Introduction to Industrial Arts Teaching (5) Block A—Ind 2, 3, 4, 12, 30, 31, 32, 74, 75, MeAg 7
Ind 35—Fundamentals of Vocational Education (3) Block B—Ind 7, 8, 9, 10, 70, 71, 15, 16, 72, 73
Ind 40—Analysis and Course Construction (3) Block C—Ind 20, 21, 22, 23, 24, 78, 79
Ind 50—Industrial Practices and Processes (3) Block D—Ind 25, 26, 27, 28, 29, 76, 77, MeAg 4
Ind 90—Independent Study I (3) Electives—9 credits to be selected from among: Ind 44, 91, 92, 103, 60D; EdCI 105; Blocks A, B, C, D
Ind 101—Tests in Industrial Subjects (3)
Ind 110—Vocational Guidance (3)
Laboratory Blocks A, B, C, D (42 credits distributed 6 in each of two blocks and 15 in each of two other blocks).

Professional Education (28 credits)

- HEd 90—The School and Society (3) Ind 60A, B, C—Student Teaching (9)
Ed 55A-B—Introduction to Secondary School Teaching (10) Ind 60S—Student Teaching Seminar (1-3)
Ind 55—Teaching Industrial Arts (3) PEW 25—First Aid (2)

Liberal Education (84 credits)

Communication:

- Comm 1, 2, 3 or Rhet 1, 2, 3, 4 and Math T and Math 10
(or) Comp 1, 2, 3 or Engl A, B, C and Math T and Math 10 and an additional course in speech or language

Man and Society (14):

- Suggested courses—SSci 1, 2, 3; Anth 2A, 42, 100; AgEc 1, 2, 3; Econ 1, 2, 3; history
Required courses—Psy 1, 2

Physical Sciences (15):

- Suggested courses—Phys 1 and 1A, 2 and 2A, 3 and 3A; GeCh 4-5; MeAg 23, 24, 25
Required courses—PubH 5 or 50

Artistic Expression (14):

- Suggested courses—GC 45B (recommended), Hum 1A, 2A, 3A (or) 1, 2, 3 (or) 21, 22, 23 (or) 51, 52, 53 (or) 71, 72, 73; Art 10, 11, 24, 25; ArtH 1, 2, 3 (or) 50, 52, 53; PEM

Sports Education (3)

Academic electives (to complete a total of 84 credits). To be selected from: mathematics, science, language, English, speech, social science, philosophy, history, sociology, psychology, and child psychology. It is strongly

recommended that the student plan his academic electives to provide subject concentrations which will directly reinforce his professional education. Consultation with department staff concerning an elective plan is encouraged during the student's sophomore year.

Note—All General College courses must be taken during freshman or sophomore years.

Prerequisites to student teaching are advanced-junior or full-senior status, taking of psychological examinations, courses Ind 6 and 55 or 6 and 100, and a C+ average (2.50 grade points per credit) in the major. The C+ average is based on all courses in industrial education, laboratory courses included. It is required that 30 of the 42 laboratory credits (Blocks A, B, C, D) will have been completed.

Manual Arts Therapy

Selected students working toward the B.S. degree, with a major in industrial education, or those who already possess this degree can become qualified as manual arts therapists by attending a 3-month clinical training program at the Minneapolis Veterans Administration Hospital. Persons desiring to learn more of this co-operative clinical training program are invited to confer or to correspond with one of the major advisers.

JOURNALISM

Minor adviser: Associate Professor Sim

Journalism is a desirable minor for teachers who are called upon to supervise school publications, to teach subjects related to the field, or to assist with school public relations. It is recommended as a minor for students in the language arts and social studies curriculums, and as a second minor for those with an English major.

Journalism as a Minor Subject

- | | |
|--|--|
| Jour 11—Introduction to Journalistic Writing (3) | Jour 82—Supervision of School Publications (3) |
| Jour 41—Publications Editing (3) | Jour 90—Mass Communications and the News (3) |
| EdT 74—The Teaching of Journalism (3) | |

Six additional credits chosen from Jour 57, 60, 103, 109, 111, 124, and 150.

THE LANGUAGE ARTS

Major advisers: *English*—Lecturer Piché; Instructor Kemp; *Speech*—Professor Graham; Assistant Professors Adey, Fredericks

The course of study in the language arts for the secondary schools of Minnesota requires a teacher proficient in the broad area of the language

Curriculum

arts, including both speech and English. It assumes ability to teach the principles of effective speech and writing and intelligent understanding of currently acceptable levels of usage. It necessitates knowledge of current books as well as the literary heritage. It demands acquaintance with and intelligent use of the mass media of communication, such as radio, newspaper and magazine, motion picture, and television.

In the small school, also, the teacher of the language arts must be able to direct plays, to supervise the school paper, and sometimes to assist with the library.

The following program permits the prospective teacher to prepare for such diversified assignment.

It is important that teachers of language arts support this major with a strong background in general culture and social science. A minor in some area outside the language arts is not required but would be a valuable addition to the teacher's preparation.

The student registers in the College of Liberal Arts for the first 2 years and should include in his program the required Lower Division courses for admission to the junior year in the Academic Secondary Curriculum. Comm 1-2-3 is recommended in place of Engl A-B-C or Engl 1-2-3 but not required. The student will be held responsible for all the general requirements of the College of Education including public health, and for the required professional courses for secondary school teaching. In addition he must take EdCI 122 (3 cr) which will count in the professional requirement. Participation in extra-curricular speech activities is important.

A Major in the Language Arts

The requirements of the curriculum are as follows:

1. The student selects one of the two fields, English or speech, and completes the course requirements listed for his core subject. A student may not offer more than 54 credits in this field.
2. The student must also complete 30 or 31 credits in the second field.
3. In addition 12 or 13 credits are required in journalism or library science, as listed under Journalism and Library Science below.

English

English as the Core Subject (54 credits)

Engl 21, 22, 23—Introduction to Literature (15)
Engl 55, 56—Shakespeare (6)
Engl 72, 73, 74—American Literature (9)
Engl 185—Introduction to Modern English (3)
Engl 166—History of the English Language (3)

Comp 27, 28—Advanced Writing (6)
Electives in courses numbered 75 or above (12 credits) (or) a minimum of 6 credits in courses numbered 75 or above and remainder from Upper Division humanities courses.

English as the Second Field with Speech as the Core Subject (31 credits)

Engl 22, 23, 55, 56, 73, 74, and 165, Comp 27, 28.

Note—Students receiving a grade of A or B in Comp 27 may elect an English course numbered over 74 or Spch 109 instead of Comp 28.

Speech

Speech as the Core Subject (42 credits)

Spch 5—Fundamentals of Speech (5)

Th 11—Introduction to the Theatre (3)

Th 12—Introduction to the Theatre (laboratory) (1)

Th 21—Beginning Acting (3)

Spch 61—Introduction to Speech and Language in Human Behavior (3)

Spch 67—Phonetics (3)

Spch 81—Interpretation (3)

Electives (21)

Electives may be selected from the following courses with not less than 3 credits in each of the four speech areas. For descriptions of these courses and the ones listed under Journalism and Library Science, consult the *Bulletin of the College of Liberal Arts*.

1. Public Address and Communication Theory: Spch 51, 65, 97A, 101, 102, 106, 55 or 56, and 126A or 126B
2. Speech Science, Pathology, and Audiology: SSPA 99, 119, 120, 142, 143, 170
3. Oral Interpretation: Spch 82, 83
4. Theatre: Th 74, 75, 76, 131, 132

Speech as the Second Field with English as the Core Subject (30 credits)

Spch 5, 61, 81, Th 11, 12; and 15 credits chosen from one of the two following groups:

Group A: Spch 51, 55 or 56, 65, 67, 101, 102, 106, 126A or 126B; SSPA 99

Group B: Th 21, 74, 75, 76, 131, 132; Spch 82

Journalism and Library Science

All language arts majors will take Jour 90 (3 credits). In addition they will take 8 to 12 credits in library science chosen from the following courses: Lib 50, 62, 70, 74; or 9 credits in journalism selected from Jour 11, 41, 82, 103, 109-110, 111, and 112.

Professional Education Courses—The student majoring in language arts must take the following courses in education:

Ed 55A-B—Introduction to Secondary School Teaching (10)

EdT 75A-B and C or D—Teaching Language Arts in Secondary Schools (5)

EdT 75—Student Teaching in Language Arts (9)

HEd 90—The School and Society (3)

EdCI 122—Literature for Adolescents (3)

Curriculum

LATIN

Major adviser: Associate Professor Forbes

Latin as a Major Subject for Secondary School Teaching

Lat 73—Prose Composition (3)
Lat 61-62-63—Survey of Latin Literature
(9)
6 cr from Lat 174A-D, 176A-D, 178A-D—
Latin Literature
Lat 101—Structure of Latin (3)

Clas 56—Elementary Linguistics (3)
Classics courses or courses in the area of
classical civilization offered by the De-
partments of Art, History, or Philosophy
(6)

Latin as a Minor Subject

A total of 23 credits required, including the following 21 credits of
Upper Division work:

Lat 73—Prose Composition (3)
Lat 61-62-63—Survey of Latin Literature
(9)
Clas 56—Elementary Linguistics (3)

Classics courses or courses in the area of
classical civilization offered by the De-
partments of Art, History, or Philosophy
(6)

Sequence of Courses in Latin—Students who have had no Latin in high school will take Lat 1-2-3, leading to the Lat 61-62-63 sequence. Students entering the University with 1 year of high school Latin may, with the permission of the department, take Lat 1 and 2 for credit, or they may enter Lat 3. Students entering with 2 years of Latin may, with the permission of the department, take Lat 3 for credit; or they may enter Lat 3X, followed by Lat 4X and Lat 63, or with the consent of the instructor, by 62 and 63. Students entering with 3 or 4 years of Latin may enter Lat 61-62-63 directly.

The first 2 years are taken in the College of Liberal Arts and students meet the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. They should include in their programs the Lower Division courses in Latin prerequisite to registration in Lat 61-62-63.

Professional Education Courses—The student majoring in Latin must take the following courses within the total requirement of 29 credits in education:

Ed 55A-B—Introduction to Secondary
School Teaching (10)
EdT 71—Student Teaching in Latin (9)

EdT 71A-B—Teaching Latin (5)
HEd 90—The School and Society (3)

LIBRARY SCIENCE

Minor adviser: Instructor Kromer

Anyone intending to do library work in elementary or secondary schools should consult an adviser in the Library School, if possible, before beginning the junior year. The Library School offers two programs for school librarians:

1. A minimum certificate program of 24 credits in library science. A student in the College of Education who completes the program as

part of his Bachelor's degree or as study after completing the degree may be employed as a school librarian with minimum qualifications.

2. A fifth-year program leading to the Master's degree. To fully qualify for professional librarianship, a librarian is expected to earn a 4-year Bachelor's degree and a Master's degree in library science.
 - a. For the education graduate who holds a valid teaching certificate, a regular M.A. program.
 - b. For the liberal arts graduate who lacks a teaching certificate, a special M.A. program.

For further information on courses and requirements see the *Bulletin of the Library School*.

Courses Advised—For a minor in library science and recommendation to the Minnesota State Department of Education for certification the student must be admitted to the 24-credit certification program by the Library School and the College of Education and have successfully completed the following courses: Lib 53, 74, 102, 103, 104, 171, 172 and either 101 or 105. EdCI 105 is recommended.

MATHEMATICS

Major advisers: Professors Guggenheimer, Loud; Associate Professors Miracle, Storvick; Assistant Professor Joichi

Students take the first 2 years in the College of Liberal Arts and meet the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. They should include in their programs the courses prerequisite to Math 42, and as much as possible of the Math 42-43-44 sequence. Solid geometry (entrance credit or its equivalent) and higher algebra taken either in high school or college are prerequisites for both majors and minors in mathematics. Students who do not present solid geometry for entrance may meet this requirement by taking a course in the subject offered (a) by the General Extension Division, (b) in daytime classes directed by the Department of Mathematics in the Institute of Technology, (c) in the Correspondence Study Department, or (d) by the public school system of Minneapolis in individualized instruction for adults at West High School.

Mathematics as a Major Subject

| | |
|--|--|
| Math 15—College Algebra (5) | 3 additional credits in geometry |
| Math 42-43-44—Analytic Geometry and Calculus I, II, III (15) | 3 additional credits in probability and/or mathematical statistics |
| Math 60—Synthetic Metric Geometry (3) | 3 elective credits to be earned in Upper Division courses |
| 6 additional credits in analysis | |
| 6 additional credits in algebra | |

The additional credits must be chosen from the following:

Analysis: 55, 71, 80A, 112, 125A-B
 Algebra: 63, 80B, 109, 119, 131A-B

Curriculum

Geometry: 80C, 115A, 117A-B-C

Probability and Statistics: Stat 90, Math 131-132-133, 178A-B-C

Mathematics as a Minor Subject

Math 15—College Algebra (5)

3 additional credits in algebra

Math 42-43-44—Analytic Geometry and
Calculus I, II, III (15)

3 additional credits in analysis

3 additional credits

Math 60—Synthetic Metric Geometry (3)

Professional Education Courses—The student majoring in mathematics must take the following courses within the total requirement of 29 credits in education:

Ed 55A-B—Introduction to Secondary
School Teaching (10)

EdT 67A-B-C—Teaching Secondary School
Mathematics (5)

EdT 67—Student Teaching in Mathematics
(9)

HEd 90—The School and Society (3)

Programs Leading to the Master of Education Degree

Fifth-Year Program—The College of Education offers a fifth-year program leading to the master of education degree for students who hold a Bachelor's degree and teaching certificate with a major in mathematics. The program is open only to persons holding a regular teaching certificate for public school teaching in mathematics, currently valid. Recent teaching experience is required, with a minimum of 1 year of full-time successful public school teaching; except that the program may be open to students wishing to complete work for the M.Ed. immediately following their Bachelor's degree studies, provided that a year's successful full-time teaching experience is completed before the awarding of the M.Ed. degree.

Prerequisite to admission is an undergraduate major in mathematics equivalent to the mathematics major required for the bachelor of science degree in the College of Education, University of Minnesota. In some cases, where the requirements are nearly satisfied, a student may be admitted with certain prerequisite courses to be completed.

Approval of admission is unlikely if the course work in mathematics at the Upper Division level is below a B average.

Admission procedure requires clearance by the College of Education and the Mathematics Department, 207 Main Engineering. Students apply through the Office of Admissions and Records for admission to the M.Ed. program in the College of Education with a major in mathematics.

Program Planning

After 12 credits have been completed in mathematics courses numbered 100 or above with a B average (at least 2.75 grade point average), application may be made for approval of a total program. During the first quarter in residence, the student will take the test battery required of all M.Ed. students in the College of Education (the Education Graduate Test Battery); the results will be used for advisory purposes.

Required Program

1. A total of 45 credits in courses numbered 100 or higher with an average of B for the 45 credits, including the following:
 - a. Mathematics—A minimum of 24 credits with at least a B average (2.75 grade point average), including 6 credits in analysis, such as advanced calculus, critical reasoning in mathematical analysis, methods of applied mathematics, etc.
 - b. An expository paper on some mathematical topic of particular suitability for a secondary school teacher
2. Related academic field or fields—9 to 12 credits
3. Education courses—9 to 12 credits, including at least one course in the area of mathematics teaching

Final Examinations

1. Major field examination, either written or oral, or both.
2. Professional education examination.

Five-Year Program—For students interested in a 5-year program the Institute of Technology and the College of Education offer a combined curriculum leading to the bachelor of science and the master of education degrees with a major in mathematics. For other information see index for Special Programs.

MUSIC EDUCATION

Major advisers: Professor Caswell; Associate Professor Borg

The 4-year curriculum in music education leads to the bachelor of science degree. Theoretical and practical courses in music are combined with general education and professional training for music teaching.

Students normally enter the College of Education following completion of 1 year in the College of Liberal Arts. For admission to the College of Education, the student must have completed 45 credits from the 4-year curriculum listed below with a grade average of at least C (2.00).

For graduation, students must earn 186 credits with an over-all grade average of C (2.00). They must earn 24 credits in applied music (Mus 11-27 and 61-77) including a minimum of 18 in the major applied medium and 6 in a second applied medium other than the major. Students not majoring in piano must take 1 year of piano (Mus 11 or 11A, B, C or 11E), 2 credits per quarter. Students not majoring in voice must take 1 year of voice (Mus 12 or 12A, B, C or 12E), 2 credits per quarter. It is recommended that the applied music requirements be met by the end of the junior year, but additional applied music credits are encouraged of all students.

In addition to the practical and theoretical studies in music, this curriculum includes courses in communication and languages, physical and bio-

Curriculums

logical sciences, man and society, as well as professional courses prescribed by the College of Education. The music studies are distributed between the instrumental and vocal courses so that the graduate is prepared to be an instrumental music instructor or a vocal-general music instructor. Each student, however, chooses one of the two concentrations offered.

Observation and student teaching are arranged in the Minneapolis, St. Paul, suburban, and University laboratory schools.

A major grade average of C+ (2.50) is required, based on the following courses:

MuEd 4-5-6-7-8-9-10, 50A, 50B, 53, 59, 68, 69

Mus 1T through 6T, 34, 35, 36

Applied music major—Mus 11-27 and 61-77, up to 18 credits

Applied music minor—Mus 11-27, up to 6 credits

Admission to student teaching requires a C+ average in all of these courses taken prior to the senior year, also the successful completion of MuEd 50A, 50B, 53 and Ed 55A-B for the vocal-general major and MuEd 68 and Ed 55A-B for the instrumental major.

Courses in Applied Music

A student may not register for a course in applied music (Mus 11-27 and 61-77, 100) for credit until he has passed the required applied entrance examination. Students may not take special examinations in applied music for work done elsewhere while in residence at the University.

Courses numbered 11 through 27 and 61 through 77 carry either 2 credits (minimum of 10 private half-hour lessons) per quarter or 4 credits (minimum of 10 hour lessons) per quarter.

All music education majors are required to attend Music Hour, held weekly in Scott Hall Auditorium, and are required to attend a minimum of five concerts per quarter sponsored by the Music Department.

Applied Music Entrance Requirements

Music and Music Education Majors and Minors

Piano—A student should be able to play (1) major and minor scales in a moderate tempo; (2) three pieces in different styles, such as (a) a Bach invention or dance from one of the suites, (b) one of the less difficult sonatas by Haydn, Mozart, or Beethoven, and (c) one of the shorter pieces by a 19th or 20th-century composer.

Organ—Same as for piano; sight reading of hymns.

Voice—Sing on pitch, with correct phrasing and musical intelligence, standard songs in good English (the simpler classics recommended). Demonstrate ability to read a simple song at sight and have a knowledge of the rudiments of music. A knowledge of piano is also recommended.

Violin—Major and minor scales, arpeggios; the simpler Kreutzer Etudes; a sonata by Handel, Haydn, Mozart, Schubert; a more modern work displaying

special techniques peculiar to the violin. A knowledge of piano is also recommended.

Other Orchestral Instruments—A student should be able to play, with good tone, phrasing and style, two solo numbers of good musical quality. He will be examined in sight reading as well as in the playing of scales. A knowledge of piano is also recommended.

Four-Year Curriculum in Music Education

1. Liberal Education Courses

Freshman English requirement (12-15 credits); Comp 1-2-3, or Engl A-B-C, or Comm 1-2-3, or Engl 10H-11H-12H, or exemption

Foreign language (10)

(or) Spch 5, 6—Fundamentals of Speech (and) Spch 67—Phonetics (11)

Physical and/or Biological Sciences (9)

Hist 1, 2, 3—Civilization of the Modern World (9)

(or) Hist 11, 12, 13—Medieval and Renaissance (9)

(or) SSci 1, 2, 3—Personality, Work, Community (9)

Soc 1—Man in Modern Society (3)

Psy 1, 2—General Psychology (6) (prereq to Ed 55A)

PubH 5 or 50 (3)

Physical education (3)

2. Professional Education Courses

Ed 55A-B—Introduction to Secondary School Teaching (10) (prereq to student teaching)

HEd 90—The School and Society (3) (taken in sr yr)

Education elective (3)

3. Music and Music Education Courses

Instrumental Concentration

Mus 1T-6T—Music Theory (21)

MuEd 4-5-6-7-8-9-10—Instrumental Techniques (12)

Mus 11A-B-C—Class Piano (6)

Mus 12A-B-C—Class Voice (6)

(or) Mus 12 or 12E—Applied Voice (6)

Mus 11-27 and 61-77—Applied Music (18)

MuEd 20—Educators' Chorus (3) (prereq to MuEd 53 and 59)

Mus 34, 35, 36—Music History (9)

Mus 40, 41, 42—Orchestra (6)

(or) Mus 46, 47, 48—Band (6)

Mus 53 or 54 or 55—Instrumental Ensemble (2)

MuEd 53—Teaching Music in Secondary Schools (3)

MuEd 59—Choral Literature and Conducting (1)

MuEd 60, 61—Student Teaching (9)

MuEd 65—Instrumentation (3)

MuEd 68—Teaching Instrumental Music (3)

MuEd 69—Instrumental Literature and Conducting (4)

Mus 84—Form and Analysis (3)

Vocal-General Concentration

Mus 1T-6T—Music Theory (21)

MuEd 4, 7—Instrumental String Techniques (4)

Mus 11A-B-C—Class Piano (if vocal major) (6)

(or) Mus 11 or 11E—Applied Piano (if vocal major) (6)

Mus 12A-B-C—Class Voice (if piano major) (6)

(or) Mus 12 or 12E—Applied Voice (if piano major) (6)

Mus 11-27 and 61-77—Applied Music (18)

MuEd 20—Educators' Chorus (6) (3 cr; prereq to MuEd 53 and 59)

Mus 34, 35, 36—Music History (9)

Mus 39—Women's Glee Club (6)

(or) Mus 43—University Chorus (6)

(or) Mus 49—Men's Glee Club (6)

(or) Mus 56, 57, 58—Chamber Singers (12)

MuEd 50A—Teaching Music in Primary Grades (3) (prereq to MuEd 50B)

Curriculums

MuEd 50B—Teaching Music in Intermediate and Junior High Grades (3) (prereq to MuEd 53)
MuEd 53—Teaching Music in Secondary Schools (3)
MuEd 59—Choral Literature and Conducting (4)
MuEd 60, 61—Student Teaching (9)

MuEd 65—Instrumentation (3)
MuEd 69—Instrumental Literature and Conducting (1)
Mus 84—Form and Analysis (3)
Mus 112, 113, 114—History of Vocal Art (6)
(or) Mus 115, 116, 117—Vocal Literature (6)

Minor in Music Education

Approval by an adviser is required before the student begins course work in the minor.

A minimum of 25 credits in music and music education from the following three groups:

Mus 1T, 2T, 3T—Music Theory (6-9)
Mus 11-27—Applied Music (2-6)
Music 31, 32, 33—Music Literature (2-4)

Mus 1—Introduction to Music (5)
(or) Mus 50—Introduction to Music (5)
(or) Mus 51, 52—History of Musical Styles (2-4) (prereq Mus 50)

Music Education Methods (2-4) selected from:

MuEd 50A—Teaching Music in Primary Grades (3)
MuEd 50B—Teaching Music in Intermediate and Junior High Grades (3)
MuEd 51—Teaching Music in Primary Grades (2)

MuEd 52—Teaching Music in Intermediate Grades (2)
MuEd 54—Teaching Music in Primary Grades (2) (for NKP majors only)
MuEd 55—Teaching Music (2) (for Recreation Leadership majors only)

The remaining credits selected from:

MuEd 4-5-6-7-8-9-10—Applied Instrumental Techniques (2-4)
Mus 11A-B-C—Class Piano (2-6)
Mus 12A-B-C—Class Voice (2-6)
MuEd 20—Educator's Chorus (2-6)
Mus 39—Women's Glee Club (3)

Mus 40, 41, 42—Orchestra (3-6)
Mus 43—University Chorus (3-6)
Mus 46, 47, 48—Band (3-6)
Mus 49—Men's Glee Club (3-6)
Mus 53, 54, 55—Instrumental Ensemble (2)
Mus 56, 57, 58—Chamber Singers (2-6)

Five-Year Curriculum Leading to the M.Ed. Degree

The 5-year curriculum in music education leading to the master of education degree is designed to give a higher standard of professional competence in music as well as a larger scope of general education than does the 4-year curriculum. It includes about 2 years of general education, a minor in a teaching field other than music, extensive training in applied music, advanced phases of musical theory or musicology at the graduate level, work in music education covering both vocal and instrumental music, basic courses in psychology, educational psychology, and education, and, usually, 1 quarter of internship.

The work of the fifth year is integrated with that of the first 4 years described above. The fifth year will provide opportunity for concentration, if desired, in either vocal or instrumental music.

Students with a Bachelor's degree with a major in music education from other accredited institutions, upon fulfilling the requirements of the 5-year curriculum or their equivalent, will receive the master of education degree with a major in music education.

In addition to the grade point requirements for the 4-year curriculum, a grade point average of B (3.00) must be attained in all fifth-year work. The work of the fifth year is described below.

Electives in Academic Major or Minor (or closely related field), 9-17 credits in courses numbered 100 or over

Music, 12 credits in courses numbered 100 or over

Music Education, 10 credits in courses numbered 100 or over

Education, 6 credits selected from:

EPsy 193—Psychological Analysis of Instruction (3)

EdCI 113—Principles of Secondary School Curriculum (3)

(or) EdCI 119—Elementary School Curriculum (3)

EdCI 150—Supervision and Improvement of Instruction (3)

(or) EdCI 172—Supervision of Secondary Instruction (3)

Other education courses from the various departments may be substituted with the permission of the adviser; elementary school supervision, adolescent psychology, measurement, educational administration, and guidance are recommended.

NURSING EDUCATION

Major advisers: Professor Fritz; Associate Professor Harris; Assistant Professors Dunning, Backlund

Master of Education Program in Nursing Education

The purpose of the program is to prepare professional nurses for positions in educational programs in nursing. In accord with this purpose the program has been developed to provide opportunity for students to achieve the following objectives:

1. Increased understanding of the health needs of society and skill in assessing and meeting the nursing needs of individuals and groups.
2. Knowledge and competence in teaching.
3. An appreciation of resources for continuing growth.
4. Increased appreciation of research and research methodology.
5. Increased understanding of and a feeling of responsibility for assuming a leadership role in nursing.
6. Enthusiasm for the potential of the nursing profession and its interdependent relationship to other professional disciplines.

Curriculum

Scholastic achievement considered minimal for admission to this program includes a rank in the upper one-third of the class in the nursing program from which an applicant graduated, and a grade point average of 3.00 (B average) in prior undergraduate college work. Postbaccalaureate credits earned in other universities will generally not be granted transfer credit toward meeting the requirements for this degree.

The course of study is so organized as to provide a central group of courses in nursing education with an opportunity for study in related fields. Emphasis is placed on the development of increased understanding of human behavior, skill in guidance of learning, and effective functioning as a faculty member of a school of nursing. Candidates must meet the general requirements for the master of education degree with the exception of a teaching minor in an academic field.

The program requires a minimum of 45 credits distributed as follows: nursing (6), nursing education (12), education (9), field experience in teaching (9), and electives (9).

Variation in distribution of credits requires approval of the major adviser and the College of Education Committee on Student Scholastic Standing.

The following courses are required of all candidates, and are arranged in a 3-quarter sequence:

Nurs 190—Foundations of Nursing (3)

NuEd 197E, 198E—Advanced Teaching of Nursing (9)

EdCI 199E—Internship (9)

Other courses are to be selected by the student in consultation with a major adviser from course offerings numbered 100 and above. At least 6 of the elective credits must be selected from fields other than nursing and education.

Candidates who did not have the equivalent of EPsy 193, 3 credits in the area of History and Philosophy of Education, EdT 51A-B, and at least 3 credits in other education courses in an accredited college or university before admission will be required to include them in the master of education program. These courses do not constitute a part of the 45 required credits.

Students in this program must be prepared to accept, if necessary, assignment to field experience outside of the Twin Cities during the internship quarter.

SCHOOL OF PHYSICAL EDUCATION

The School of Physical Education offers the following professional programs of instruction: physical education for men, physical education for women, recreation leadership, dance education, camping and outdoor education, and school health education. In addition, physical education activity courses are offered for all University students who may elect such courses as a part of their general education in accordance with the regulations of the particular college in which they are enrolled. These courses for men are listed as PEM 1A-B-C, 2A-B-C, and for women as PEW A-B-C.

Physical Education for Men

Major advisers: Professors Donnelly, McAdam, Piper, Richardson; Associate Professors Alexander, Ostrander; Assistant Professor Mowerson; Instructors Bird, Walsh, Webster

The Department of Physical Education for Men offers the following curriculums in physical education:

1. Four-year curriculum leading to the bachelor of science degree with a major in physical education.
2. Advanced offerings leading to:
 - a. M.Ed. degree based upon either a 5-year or fifth-year curriculum in the College of Education.
 - b. M.A. degree with a major in physical education in the Graduate School.
 - c. Ph.D. degree with a major in education and an emphasis on physical education in the Graduate School.
3. Curriculum for a teaching minor in physical education at the elementary or the secondary levels.
4. Curriculum for the Minnesota Public Secondary School Athletic Coaching Certificate.

These curriculums have been designed for men who desire to prepare for teaching, coaching, and administrative positions in the field of physical education. Completion of the undergraduate major curriculum entitles a student to the B.S. degree and the endorsement of the College of Education for a Minnesota High School Standard Special Certificate. Students planning a major or minor in physical education or preparation for the Minnesota Athletic Coaching Certificate should consult one of the major advisers in Cooke Hall.

Four-Year Curriculum in Physical Education for Men

The following requirements must be met by students desiring a bachelor of science degree in physical education and a Minnesota high school standard special certificate:

1. The prescribed physical education curriculum listed below which includes the liberal education requirements.
2. A total of 29 credits in education including student teaching, methods in the major and minor, Ed 55A-B and HEd 90.
3. A teaching minor.
4. A total of 186 credits, at least 90 of which must be outside the major and professional education.

Curriculum

5. An average of C+ (2.50 grade points per credit) in all courses counted toward the major.
6. An average of C (2.00 grade points per credit) in the minor and in all courses taken outside the major during the junior and senior years.

FRESHMAN AND SOPHOMORE YEARS

A. Liberal Education—57 credits

Category I. Communication, Language, Symbolic Systems

- Comm 1-2-3—Communications (12) Spch 5—Fundamentals of Speech (5)
(or) Comp 1-2-3—Freshman Composition (or) GC 32 A-B—Oral Communication (6)
(12) Plus 2 credits selected from rhetoric, speech,
(or) Engl A-B-C—Freshman Composition, English, foreign language, mathematics,
Literature (15) philosophy

Category II. The Physical and Biological Sciences

- GeCh 4-5—General Principles of Chemistry Biol 1-2 or 1A-2A—General Biology (10
(10) or 7)

Category III. Man and Society

- Psy 1-2—General Psychology (6) PubH 5—Individual and Public Health (3)
Soc 1—Man in Modern Society (3) (or) PubH 50—Personal and Community
Health (3)

Category IV. Artistic Expression

- Nine credits selected from art, dance, music, humanities, literature, theatre arts (unless Engl A-B-C is selected)

B. Physical Education—18 credits

- PEM 4A-B-C—Fundamentals of Sports (3) PEM 8—Tennis and Golf (1)
PEM 5A-B-C—Physical Education Activities (3) PEM 9A-B—Folk, Ballroom, and Square
Dancing (2)
PEM 6A-B-C—Intramural Sports (3) PEM 32—Introduction to Physical Education (3)
PEM 7A-B-C—Recreational Games and Sports (3)

C. Other Courses—6 credits

- Anat 27—Anatomy for Physical Education Students (4) Hlth 25—First Aid (2)
(or) PEM 50—Human Anatomy (3) (or) Hlth 59—Instructor's Course in First Aid (3)

D. General Electives—12 credits

JUNIOR AND SENIOR YEARS

A. Professional Education—32 credits

- Ed 55A-B—Introduction to Secondary School Teaching (10) PEM 75—Student Teaching (9)
HEd 90—The School and Society (3) (or) PEM 76—Student Teaching (block plan) (9)
Hlth 83—Methods and Materials in School Health Education (3) Methods course in the minor (3)
PEM 55—Methods and Materials in Physical Education (4)

B. Physical Education—31 credits

- | | |
|--|--|
| PE 51—Mechanics of Movement (3) | PEM 65—Adapted Physical Education (3) |
| PE 82—Principles of Physical Education (3) | PEM 66—Officiating Football and Basketball (3) |
| PE 97—Testing in Physical Education (2) | PEM 67—Football Coaching (2) |
| PEM 60A—Prevention and Care of Injuries (3) | PEM 68—Basketball Coaching (2)** |
| PEM 60B—Athletic Training Laboratory (1) | PEM 69—Track Coaching (2) |
| PEM 63—Organization and Administration of Physical Education (3) | PEM 72—Baseball Coaching (2)** |
| | PEM 96—Administration of Intramural Sports (2) |

C. Other Courses—8 credits

- PubH 91, 92—Physiological Hygiene (8)

D. Electives—To complete a total of 186 credits

The C+ (2.50) average is based on the following courses: PE 51, 82, 97; PEM 4A-B-C, 5A-B-C, 6A-B-C, 7A-B-C, 8, 9A-B, 32, 55, 60A-B, 63, 65, 66, 67, 68, 69, 72, 96; Hlth 25.

Minor in Physical Education for Men

A total of 31 credits is required as follows:

Group A—all required

- | | |
|--|--|
| PEM 5C—Physical Education Activities (1) | PEM 60A—Prevention and Care of Injuries (3) |
| PEM 7A-B-C—Recreational Games and Sports (3) | PEM 63—Organization and Administration of Physical Education (3) |
| PEM 55—Methods and Materials in Physical Education (4) | PE 82—Principles of Physical Education (3) |
| Anat 27—Anatomy for Physical Education Students (4) | |

Group B—4 credits required

- | | |
|--------------------------------|------------------------------|
| PEM 67—Football Coaching (2) | PEM 72—Baseball Coaching (2) |
| PEM 68—Basketball Coaching (2) | PEM 81—Hockey Coaching (2) |
| PEM 69—Track Coaching (2) | |

Group C—6 credits required

- | | |
|--|--|
| PEM 5A-B—Physical Education Activities (2) | PEM 8—Tennis and Golf (1) |
| PEM 6A-B-C—Intramural Sports (3) | PEM 9A—Fundamental Rhythms (1) |
| | PEM 9B—Square and Ballroom Dancing (1) |

Minnesota Public Secondary School Athletic Coaching Certification

A teacher in a Minnesota public secondary school who is head coach in baseball, basketball, football, hockey, track, or wrestling may be certified

** Elective for men with varsity squad experience in these sports.

Curriculums

either by completion of the major or minor in physical education or by the following special coaching preparation program. Students who successfully complete this program will receive the endorsement of the University for athletic coaching in Minnesota public secondary schools.

Required Courses—19 to 24 credits

Hlth 25—ARC; Standard, Advanced First Aid (2)
(or) Hlth 59—Instructors Course in First Aid (3)
PEM 50—Human Anatomy (3)
(or) Anat 27—Anatomy for Physical Education Students (4)
PEM 60A—Prevention and Care of Injuries (3)
PEM 60B—Athletic Training Laboratory (1)
PEM 71—Physiological Applications to Sports (3)
PE 82—Principles of Physical Education (3)
(or) PE 101—Foundations of Physical Education (3)
PEM 77—Student Teaching for Coaches (3)
(or secondary public school coaching experience)

Minimum of two courses from:

PEM 67—Football Coaching (2)
PEM 68—Basketball Coaching (2)
PEM 69—Track Coaching (2)
PEM 72—Baseball Coaching (2)
PEM 81—Coaching of Ice Hockey (2)
Elective courses—a minimum of 3 credits
PE 51—Mechanics of Movement (3)
PEM 63—Organization and Administration of Physical Education (3)
PEM 66—Officiating Football and Basketball (3)
Two additional coaching courses selected from PEM 67, 68, 69, 72, and 81

Total—22-27 credits

Graduate Study in Physical Education

Advanced work in physical education is offered in both the College of Education and the Graduate School. Students who want the M.Ed. degree should make application to the Office of Admissions and Records for admission to the College of Education. Those who want the M.A. or Ph.D. degree should apply for admission to the dean of the Graduate School.

The M.Ed. is designed primarily as a 5-year degree program which a student completes uninterruptedly after receiving the B.S. degree with a major in physical education. This applies both to graduates of the University of Minnesota as well as to graduates of other accredited institutions that have the same undergraduate requirements for physical education as does the University of Minnesota. In addition to being a program designed for the physical educator without teaching experience, the M.Ed. is also well suited for teachers who have a Bachelor's degree but do not have an undergraduate major in physical education. Finally, the M.Ed. provides a teaching or a nonresearch program for experienced physical education teachers.

The M.A. program is described in the *Bulletin of the Graduate School*. This is a program that should be elected by students who plan to pursue work beyond the Master's level leading to a Doctor's degree. It should also be elected by those students who as a result of their previous training or interest prefer to do the research that is required of all M.A. candidates instead of the internship required in the M.Ed. sequence.

Five-Year Curriculum Leading to the Master of Education Degree

A. Students with a B.S. degree from the University of Minnesota with a major in physical education who plan to obtain the master of education degree must fulfill the following requirements:

1. Twenty-one additional credits in courses numbered above 100 in physical education.
2. Additional courses to complete 231 credits, 90 of which must be in courses other than professional education or physical education. A maximum of 41 credits is allowed in education, excluding all courses in physical education.
3. During the last 2 years a minimum of 45 credits with an average of B (3.00) in courses numbered 100 and above.
4. Each candidate is required to pass:
 - a. A written comprehensive examination covering the major in physical education.
 - b. A written comprehensive examination in education.
5. A candidate may be required to pass an oral examination unless exempted on the basis of the results of his written examinations.
6. Internship experience for inexperienced teachers to include:
 - a. Teaching under the supervision of a master teacher.
 - b. Supervision by the principal and/or superintendent as well as by the master teacher.
 - c. Participation in school and community activities other than teaching.
 - d. Conferences with the major adviser of the M.Ed. program.
 - e. Group conferences of all interns and all advisers in charge of the M.Ed. program.
7. Substitute internship or equivalent of a practicum nature for experienced teachers who are exempted from the internship requirement by the major adviser. The substitution or equivalent consists of one or more of the following:
 - a. A concentrated experience.
 - b. A combination of experiences to add more meaning to theoretical courses.
 - c. A systematic service or field study.
 - d. Observation of teaching, supervision, facilities, etc.

Curriculum

B. Students with a Bachelor's degree with a major in physical education from other accredited institutions may receive the master of education degree with a major in physical education when the following requirements have been fulfilled.

1. PE 82—Principles of Physical Education (3)
2. Twenty-four additional credits in physical education courses numbered above 100
3. Ed 55A-B—Introduction to Secondary School Teaching (or equivalent)
4. Forty-five credits in courses numbered 100 and above with an average grade of B (3.00)
5. Items 4, 5, 6, and 7 listed under section A

The transfer credits and University of Minnesota credits should (a) include at least 90 credits in courses other than professional education and the major, and (b) not exceed a total of 41 credits in professional education including student teaching in physical education.

C. Students with a Bachelor's degree without a major in physical education, but with previous work or experience in physical education, may receive the master of education degree when they have satisfied the requirements listed under B and the following undergraduate work:

Personal and community hygiene (3-6 credits)

Human anatomy, physiology, applied anatomy (Mechanics of Movement, Kinesiology) (9 credits)

Physical education activities (12 credits)

Professional physical education courses other than activities (18-21 credits)

Minimum total—45 credits

Advanced Work in the Graduate School

Graduate courses are offered leading to the following degrees:

1. The master of arts degree with a major in physical education granted by the Graduate School.
2. The degree of doctor of philosophy with a major in education, emphasizing physical education, granted by the Graduate School.

For complete statement of the M.A. requirements under Plan A and Plan B and the Ph.D. requirements see the *Bulletin of the Graduate School*.

Physical Education for Women

Major advisers: Professors Jaeger, Slocum, Wilson; Assistant
Professors Cato, Hauptfuehrer

The Department of Physical Education for Women offers the following curriculums in physical education:

1. Four-year curriculum leading to the bachelor of science degree with a major in physical education.
2. Advanced offerings leading to:
 - a. M.Ed. degree based upon either a 5-year or fifth-year curriculum in the College of Education.
 - b. M.A. degree with a major in physical education in the Graduate School.
 - c. Ph.D. degree with a major in education and an emphasis on physical education in the Graduate School.
3. Curriculum for a teaching minor in physical education at the elementary or the secondary levels.
4. Curriculum for a teaching minor in dance education.

The curriculums offered by the Department of Physical Education for Women are designed to prepare graduates for the direction of physical education and dance programs at the elementary, secondary, and college levels and to provide the preparation necessary to meet certification standards of the state of Minnesota.

Students wishing to register for one of the professional curriculums or any of the preceding curriculums should consult one of the major advisers. Inquire at 101 Norris Gymnasium for Women for assignment to a particular adviser.

Four-Year Curriculum in Physical Education for Women

Students who plan to complete the work for the bachelor of science degree and the special teacher's certificate must meet the following requirements:

1. The required courses in the physical education curriculum which include the liberal education requirements.
2. A total of 29 credits in education including student teaching in physical education, Ed 55A-B, and HEd 90.
3. At least one teaching minor which may be partially fulfilled in the required curriculum.
4. A total of 186 credits, at least 90 of which must be in academic courses.

Curriculum

5. An average of C+ (2.50 grade points per credit) in all courses counted toward the major and a C average in the minor and in all other courses taken outside the major during the junior and senior years.

FRESHMAN YEAR

A. Liberal Education

Category I—Communications, Language, Symbolic Systems**

Engl A-B-C (15) (or) Engl 1-2-3 (12) (or) Comm 1-2-3 (12)

Category II—Physical and Biological Sciences

Biol 1-2 (10) (or) Biol 1A-2A (7)

Category III—Man and Society**

Soc 1—Man in Modern Society (3) (or) Soc 3—Social Problems (3)

Category IV—Artistic Expression**

Mu 4—Fundamentals of Music for Nonmajors (2)

B. Physical Education

PEW 20A-B-C, 21A, 22B-C, 41A, 42A (8)

C. Additional Course Requirements

PubH 5—Individual Public Health (3)

D. General Electives (4-10)

SOPHOMORE YEAR

A. Liberal Education

Category I—Communications, Language, Symbolic Systems**

Spch 5—Fundamentals of Speech (5)

Category II—Physical and Biological Sciences

GeCh 4-5—General Principles of Chemistry (10)

Category III—Man and Society**

Psy 1-2—General Psychology (6)

Category IV—Artistic Expression**

PEW A-B-C—Intermediate Modern Dance (1-1½)

B. Physical Education††

PEW 21B-D, 22A-D, 40A-C (6½)

** In addition to the required courses listed above, a minimum number of elective credits must be selected from the following categories: I (3-4), III (3), IV (3); for appropriate courses see *College of Liberal Arts Bulletin*.

†† Physical Education—In addition to the required courses listed above, 1 credit in individual sports and 1 credit in team sports are to be selected from the following: (a) archery, bowling, fencing, intermediate badminton, golf, tennis from PEW A-B-C; (b) PEW 40B, Officiating Field Hockey, Volleyball; 41B, Officiating Basketball; or PEW A-B-C, Lacrosse.

School of Physical Education

PE 44—Physical Education for the Elementary School (3)

PEW 46—Water Safety Instructor's Course (2)

C. Additional Course Requirements

Anat 27—Anatomy for Physical Education Students (4)

Students failing to complete PEW 41A, Advanced Aquatics (1), 42A, Senior Life Saving (1), 46, Water Safety Instructor's Course (2) are required to make up credit deficiencies in other appropriate physical education courses. Students meeting PEW course requirements through proficiency examinations are required to elect appropriate physical education courses as a means of meeting credit deficiencies.

D. General Electives—8 credits

JUNIOR YEAR

A. Liberal Education

Category IV Artistic Expression

PEW 80—History of Dance (3)

B. Physical Education

PE 51—Mechanics of Movement (3)

PEW 55—Teaching of Individual and Team Sports (3)

PEW 56—Teaching of Dance (3)

PEW 57—Teaching of Posture and Self Testing Activities (3)

PE 61—History of Physical Education (3)

C. Additional Course Requirements

Hlth 25—Standard and Advanced First Aid (2)

Ed 55A-B—Introduction to Secondary School Teaching (10)

Hlth 83—Methods and Materials of School Health Education (3)

PubH 91-92—Physiological Hygiene (8) (or) Phys 51—Physiology (6)

D. General Electives—4-6 credits

SENIOR YEAR

A. Liberal Education (complete requirements)

B. Physical Education

PEW 58—The Intramural-Extramural-Inter-school Sports Program (3)

PE 82—Principles of Physical Education (3)

PEW 90B-C-D—Student Teaching in Physical Education (9)

PEW 95—Administration of Physical Education (3)

PE 97—Testing in Physical Education (2)

PE 102—Curriculum (3)

C. Additional Course Requirements

HEd 90—The School and Society (3)

D. General Electives—to complete a total of 186 credits

Curriculums

The Minor in Physical Education for Women with a Major in a Secondary Education Field

A minimum of 33 credits distributed as follows:

1. A maximum of 5 credits may be allowed for credits earned in fulfilling the regular physical education requirement in nonprofessional classes. Courses selected under 1 cannot be duplicated under 2.
2. A minimum of 6 credits must be taken in the professional skills courses listed below. Choice of courses should lead to a distribution in four of the five skill areas:

Aquatics

- PEW 20D—Beginning Aquatics (1)
- PEW 41A—Advanced Aquatics (1)
- PEW 42A—Senior Life Saving (1)

Dance

- PEW 21B—Rhythmic Fundamentals and Elementary Folk Dance (1)
- PEW 22A—Folk and Ballroom Dance (1)
- PEW 40A—Elementary Modern Dance (1)

Individual Sports

- PEW 20A—Badminton (1)
- PEW 22B—Golf (1)
- PEW 22C—Tennis (1)

Posture and Self Testing Activities

- PEW 21D—Posture and Functional Exercise (1)
- PEW 40C—Stunts, Tumbling and Apparatus (1½)

Team Sports

- PEW 20B—Field Hockey and Volleyball (1)
- PEW 21A—Basketball (1)
- PEW 22D—Speedaway and Softball (1)
- PEW 40B—Officiating Field Hockey and Volleyball (1)
- PEW 41B—Officiating Basketball (1)

3. Required Courses—17 credits

- Hlth 25—Standard and Advanced First Aid (2)
- PEW 55—Teaching of Individual and Team Sports (3)
- PE 82—Principles of Physical Education (3)
- Hlth 83—Methods and Materials in School Health Education (3)
- PEW 93—Student Teaching (3)
- PE 102—Curriculums (3)

4. A minimum of 5 credits selected from:

- PEW 46—Water Safety Instructor's Course (2)
- PEW 54—Camp Leadership (3)
- PEW 56—Teaching of Dance (3)
- PEW 57—Teaching of Posture and Self Testing Activities (3)
- PEW 58—The Intramural-Extramural-Inter-school Sports Program (3)
- PEW 90A—Orientation to Student Teaching (pre-fall experience) (2-3)
- PE 97—Testing in Physical Education (2)
- Hlth 103—Role of the School Health Educator in Health Appraisal (3)
- PE 104—Teaching Physical Education for the Handicapped Child (3)

Note—Strongly recommended: PEW 56, 57, 58, and 90A.

The Minor in Physical Education for Women with a Major in Elementary Education

A minimum of 33 credits distributed as follows:

1. A maximum of 5 credits may be given for credits earned in fulfilling the regular physical education requirement in nonprofessional classes. Suggested courses are: Stunts and Tumbling, Modern Dance, Folk and Square

School of Physical Education

Dance, Social Games and Mixers, Posture and Individual Exercise, and courses in individual and team sports of special interest to the minor. Courses selected under 1 cannot be duplicated under 2.

2. A minimum of 4 credits must be taken in the professional skills courses listed below. Choice of courses should lead to a distribution of experiences in three of four of the following skill areas:

Dance

- PEW 21B—Rhythmic Fundamentals and Elementary Folk Dance (1)
PEW 22A—Folk and Ballroom Dance (1)
PEW 40A—Elementary Modern Dance (1)

Posture and Self Testing Activities

- PEW 21D—Posture and Functional Exercise (1)
PEW 40C—Stunts, Tumbling and Apparatus (1½)

Individual Sports

- PEW 20A—Badminton (1)
PEW A-B-C—Archery and Bowling (1-1½)

3. Required Courses—16 credits

- | | |
|--|--|
| Hlth 25—Standard and Advanced First Aid (2) | PE 82—Principles of Physical Education (3) |
| PEW 45—Physical Education Activities for the Elementary School (2) | Hlth 83—Methods and Materials in School Health Education (3) |
| PEW 70—Teaching Health and Physical Education in the Elementary School (3) | PEW 93—Student Teaching (3) |

4. A minimum of 8 credits required:

- | | |
|--|--|
| PEW 55—Teaching of Individual and Team Sports (3) | PEW 90A—Student Teaching (pre-fall experience) (2-3) |
| PEW 56—Teaching of Dance (3) | PE 97—Testing in Physical Education (2) |
| PEW 57—Teaching of Posture and Self Testing Activities (3) | PE 102—Curriculum (3) |
| PEW 76—Teaching of Creative Dance for Children (3) | PE 104—Teaching Physical Education for the Handicapped Child (3) |

Note—Strongly recommended: PEW 55 and 76. Permission to complete this minor must be obtained from the major adviser.

Dance Education Minor

The following sequence of courses in dance is open to all students in the College of Education who are particularly interested in the teaching of dance as a minor field. A minimum total of 27 credits is required. Consultation should be held with the dance adviser as early as possible in order to plan for individual needs.

Lower Division Courses, Physical Education for Women

A minimum of 5 credits is required which may be fulfilled in the non-professional program, PEW A-B-C. Skills courses should include experience in all dance forms and may be selected from the courses listed below:

- | | |
|--------------------------------------|----------------------------------|
| PEW—Beginning Modern Dance (1-1½) | PEW—Advanced Modern Dance (1-1½) |
| PEW—Intermediate Modern Dance (1-1½) | PEW—Dance Techniques (1-1½) |

Curriculum

PEW—Beginning Ballroom Dance (1-1½)
PEW—Intermediate Ballroom Dance (1-1½)

PEW—Beginning Folk and Square Dance (1-1½)

Upper Division Courses, Physical Education for Women

Required Courses:

PEW 56—The History of Dance (3)
PEW 80—History and Trends of Dance (3)

Electives—a minimum of 7 credits to be selected from the courses listed below:

PE 51—Mechanics of Movement (3)
PEW 76—The Teaching of Creative Dance for Children (3)
PEW 87—Dance Composition (2)
PEW 88—Dance Composition (2)
PEW 89—Dance Production (3)

Electives in Speech and Theatre Arts, Music, and Art—a minimum of 9 credits selected from two of the three areas listed below:

Speech and Theatre Arts

Th 11—Introduction to the Theatre Arts (3)
Th 12—Laboratory Section: Introduction to the Theatre Arts (1)
Th 23—Beginning Acting: Technique (3)
Th 74—Play Production in the Secondary School (3)
Th 131—Creative Dramatics (3)
Th 174-175-176—History and Techniques of Stage Movement (3)

Mus 50—Introduction to Music (5)
Mus 51—History of Musical Styles I (2)
Mus 52—History of Musical Styles II (2)
Mus 53—History of Musical Styles III (2)

Art (any one of the following):

Art 1—Principles of Art (5)
Art 50—Visual Arts (3)
Art 78—Modern Art—The Twentieth Century (3)
Art 20—Basic Drawing (3)

Music

Mus 4—Fundamentals of Music (2)
Mus 12A—Voice (2)

Fifth Year Leading to the Master of Education Degree

Five-Year Program—Students who plan to obtain the master of education degree with a major in physical education should make this decision upon completion of their second year as majors in physical education in order that the work of their next 3 years may be properly integrated and directed.

Fifth-Year Program—Students who already hold a degree and wish to qualify as candidates for the master of education degree may do so by having completed a major in physical education from an accredited teacher education institution, or meeting the equivalent of a physical education major while completing the fifth-year degree requirements. Candidates are expected to demonstrate average or above-average motor skill in basic activities as shown by motor ability tests and demonstration of performance level.

The programs for candidates for the M.Ed. degree are arranged in conference with the department adviser according to the interest and background of the students. Application should be made to the Office of Admissions and Records for admission to the College of Education.

Candidates for the master of education degree must meet the following requirements:

1. A total of 45 credits in graduate courses distributed as follows: general academic fields, 12; education, 9; physical education, 24.

2. Average performance skill in at least three activity areas (sports, aquatics, dance, etc.) or outstanding skill in any one area.
3. A written comprehensive examination administered by the Department of Physical Education for Women.
4. The general requirements and standards of the College of Education for the completion of the work for the master of education degree (see Section I).

Advanced Work Leading to the M.A. and Ph.D. Degrees

The department offers courses in the Graduate School leading to the master of arts degree with a major in physical education, and to the doctor of philosophy degree in education with an emphasis on physical education. For requirements and course offerings for these degrees consult the *Bulletin of the Graduate School*. Application for admission should be made to the dean of the Graduate School.

For information concerning the advanced work in school health education refer to the School Health Education section of the bulletin.

Recreation Leadership

Major advisers: Professors Donnelly, Anderson; Associate Professors Giles, Chapman; Instructor Schultz

Two types of training, represented by two different programs, are offered in recreation leadership. These programs are listed as Plan I and Plan II. Both involve 4 years of work, lead to the B.S. degree, and are open to men and women.

Plan I. Recreation Leadership and Administration

Plan I is the professional curriculum offering preparation for administrative and supervisory positions in connection with public and private institutions. All the general requirements for graduation from the College of Education apply to this curriculum and students satisfactorily completing the program are eligible for the fifth year's work leading to the M.Ed. degree.

Students register in the College of Education. Lower Division courses are selected from offerings in the College of Liberal Arts, the General College, and from the 4-year curriculums in physical education, music education, art education, industrial education, home economics education, and agricultural education.

A student may graduate with or without a teaching certificate. No teaching certificate is given for the recreation major, and one may be obtained only by including preparation for teaching in one or more academic or special subjects. In order to qualify for a teaching certificate in the minor, special methods and student teaching must be taken. During the freshman or sophomore year the selection of a teaching major is recommended for students desiring a teaching certificate.

Curriculums

FRESHMAN AND SOPHOMORE YEARS

A. Liberal Education—65 credits

Category I—Communication, Language, Symbolic Systems

Comm 1-2-3—Communication (or) Comp 1-2-3—Freshman Composition (or) Engl A-B-C (12-15)

Spch 5—Fundamentals (5)

One course from the following: Spch 51, Soc 45, Phil 2, Jour 11, foreign languages, and mathematics (3-5)

Category II—The Physical and Biological Sciences

NSci 1-2-3—Orientation (15)

(or) a total of 15 credits in the following fields: astronomy, chemistry, geology, physics, biology, botany, zoology

Category III—Man and Society

SSci 1-2-3—Personality, Work, Community (9)

(or) Soc 1-2-3—Man in American Society, American Community, Social Problems (9)

At least two additional courses from the following fields: anthropology, classics, economics, geography, history, humanities, philosophy, political science (6)

Psy 1-2—General Psychology (6)

Category IV—Artistic Expression

Mus 4—Fundamentals (2)

Th 11-12—Theatre Arts, Theatre Arts Lab (4)

(or) Th 131—Creative Dramatics (3)

(or) Th 132—Children's Theatre (3)

B. Skill Techniques—15 credits

Arts and Crafts—9 credits

ArEd 17—Pictorial Expression for Elementary Education (3)

(or) ArEd 18—Design Activities for Elementary Education (3)

(or) ArEd 19—Functional Arts, Crafts in Elementary Education (3)

A total of 6 credits from the following:

Ind 1—Elementary Handcrafts

Ind 12—Craftwork (3)

Art 10—Photography (3)

Art 45—Ceramic Processes (3)

ArEd 81—Puppetry (3)

Games, Rhythms, and Sports (Men)—6 credits

PEM 4A-B-C—Fundamentals of Athletic Sports (3)

PEM 6A-B-C—Intramural Sports (3)

PEM 8—Tennis and Golf (1)

PEM 9A-B—Rhythms (2)

PEM 43—Camp Aquatics (2)

PEM 45—Camp Craft (2)

Hlth 25—First Aid (2)

Games, Rhythms, and Sports (Women)—6 credits

PEW A-B-C—College Program in Physical Education—Selected from Aquatics, Individual Sports, and Rhythms (4)

Hlth 25—First Aid (2)

C. Recreation—9 credits

Rec 11—Survey of Recreation Activities (3)

Rec 23—Introduction to Recreation Leadership (3)

Rec 49—Social Aspects of Leisure (3)

(or) GC 4—Leisure Today (3)

D. General Electives—to total 96 credits

School of Physical Education

JUNIOR AND SENIOR YEARS

A. Education—18 credits

Ed 55A-B—Introduction to Secondary School Teaching (10)
EdCI 104—Adult Education (3)

EdCI 105—Audio-Visual Materials in Education (3)
(or) PE 155—Instructional Aids in Health, Physical Education, and Recreation (3)
HEd 90—The School and Society (3)

B. Recreation—27 credits required, to be chosen from the following courses:

Rec 52—Leadership of Social Activities (3)
Rec 46—Camp Leadership (2)
(or) PEW 54—Camp Leadership (3)
Rec 57—The Organization and Conduct of Recreation Centers (3)
Rec 58—Leadership in Community Recreation (3)
Rec 78—Scout Leadership (2)
Rec 105—Conservation of Natural Resources (2)
Rec 110—Recreation Surveys (3)
Rec 111—Recreation Areas and Facilities (3)

Rec 112—Programming in Recreation (3)
Rec 116—Community Recreation Resources and Organizations (3)
Rec 121—Principles of Recreation Method (3)
Rec 141—Introduction to Hospital Recreation (3)
Rec 142—Leadership in Hospital Recreation (3)
Rec 143—Programming in Hospital Recreation (3)

C. Skill Techniques—10 credits required, to be chosen from the following courses:

Music—2 credits
MuEd 55—Music for Recreational Leadership (2)
Nature—4 credits
Rec 64A-B—Leadership in Nature Recreation (4)
Games, Rhythms, and Sports (men)—4 credits
PEM 5A-B-C—Physical Education Activities (3)

PEM 7A-B-C—Recreational Games and Sports (3)
Games, Rhythms, and Sports (women)—4 credits
PEW 62—Teaching Physical Education Activities (3)
PEM 9A—Fundamental Rhythms (1)
PEM 9B—Square and Ballroom Dancing (1)

D. Practice and Field Work—12 credits required, to be chosen from the following courses:

EdT 84—Practice and Field Work in Recreation (6)
EdT 85—Practice and Field Work in Recreation (6)
Special methods and student teaching (if teaching certificate is desired)

E. General Electives—selected from Upper Division courses in consultation with major adviser to complete a total of 186 credits

The C+ average is based on the following courses: Rec 46 or PEW 54, Rec 57, 58, 78, 110, 111, 112, 116, 121; and 16 credits in skill techniques in at least three different fields using no more than 6 credits in any one skill.

Minor in Recreation Leadership

Hlth 25—ARC: Standard Advanced First Aid (2)
EdT 85—Practice and Field Work in Recreation (3)

Recreation leadership (12) (courses to be chosen in consultation with recreation leadership adviser)

Curriculum

Skill techniques (12) (to be chosen in consultation with major adviser)

Elective—one course to be selected from the following:

Psy 140—Social Psychology (3)

EdCI 104—Adult Education (3)

EdCI 169—Student Activity Programs in Secondary Schools (3)

EPsy 158—Psychology of Adolescence (3)

Note—For secondary school teachers the minor in recreation cannot take the place of the regular teaching minor but may be taken as a second minor.

Fifth Year Leading to the Master of Education Degree

Recreation Leadership and Administration—The College of Education awards the master of education degree with a major in recreation to students who satisfactorily complete a fifth year of work in recreation leadership and administration at the graduate level and who meet all regulations for the professional degree.

Specific Requirements:

1. A total of 231 credits, including 45 credits in courses numbered above 100 beyond the requirements for the Bachelor's degree in recreation leadership and administration.
2. In addition to the practice and field work required for graduation in the undergraduate curriculum, a period of satisfactory internship will be required for which a maximum of 8 credits will be given, if the student does not have qualifying experience in the recreation field.
3. Students holding Bachelor's degrees with majors in physical education, recreation, social work, or other allied fields from other accredited institutions, may receive the master of education degree with a major in recreation when the following requirements other than herein listed have been fulfilled at the undergraduate level:
 - a. Ed 55A-B, Introduction to Secondary School Teaching, or equivalent
 - b. Twenty-six quarter hours of skill techniques in the fields of music, art, dramatics, nature recreation, games, sports, and rhythms; demonstrated proficiency may be substituted for the requirement with the consent of the major adviser
 - c. Qualifying interest and experience in the field of recreation
4. Satisfactory completion of final written and oral examinations
5. Distribution of credits for the fifth year as follows: education, 6-9; recreation, 24-28; electives, 8-15.

Courses are selected in consultation with a major adviser. For graduate courses in recreation see Section III.

Hospital Recreation—The College of Education awards the master of education degree with a major in hospital recreation to those who successfully complete a specialized professional program with an internship.

Admission Requirements:

1. A Bachelor's degree from an accredited institution in recreation, music, art, speech, physical education, psychology, or sociology, with a level of academic performance indicating probable success in the professional program.
2. Completion of undergraduate introductory courses in psychology, sociology, and science.
3. Twenty-six quarter hours of skill techniques in the fields of music, art, dramatics, nature recreation, physical education, and social recreation. Demonstrated proficiency may be substituted for this requirement or for part of it, with the consent of the major adviser. Those who do not meet this requirement will be held for undergraduate skill courses on the advice of the major adviser.
4. Qualifying interest and experience in the field of recreation.
5. Ninety academic credits included in the undergraduate course work. This total must be reached before the degree will be granted if the student is admitted with less than this amount.

Graduation Requirements:

1. Forty-five credits in courses numbered 100 and above with a grade average of B (3.00) distributed as follows: professional specialization in hospital recreation, 12-18; internship, 6-9; related professional fields and medical information, 11-19; electives 6-9.
2. An internship extending from 3 to 6 months depending on the previous experience of the individual student, carrying 6 to 9 credits. The assignment may or may not be on a paid basis.
3. A comprehensive written examination covering professional specialization in hospital recreation, related professional fields, and medical information.

Plan II. Recreation Activity Leaders Training Course

The recreation activity leaders training course is a 4-year program established by the College of Education to prepare qualified individuals for recreation activity positions as distinct from preparation for teaching and from Plan I, which is directed toward positions of recreation leadership and administration. Satisfactory completion of the program leads to the B.S. degree but does *not* qualify for a teaching certificate. Enrollment in the curriculum is limited and the first 2 years are taken in General College.

The program is for students who have special abilities in various fields of recreational activities, such as games, sports, music, handcrafts, drama,

Curriculums

etc., which will be valuable to them as activity leaders. In addition, selection for the program is based on such attributes as personality, leadership ability, past experience in recreation, and possibility of success in recreation activity leadership. To be eligible for continuance in the curriculum, the student must maintain a C (2.00) average in all work completed at the University of Minnesota.

FRESHMAN AND SOPHOMORE YEARS

Courses taken while enrolled in the General College:

A. Natural Science—18 credits required

GC 7A-B-C-D—Physical Sciences (15) GC 10A-B—Human Biology (10)
(or) NSci 1-2-3—Orientation in Natural PubH 3—Personal Health (2)
Sciences (15)

B. Composition, Literature, Speech—18 credits required (9 must be in some form of writing)

GC 31A-B-C—Writing Laboratory (9) GC 32A-B-C-D—Oral Communication
(or) Comm 1-2-3—Communication (12) Speech Laboratory (6)
(or) Engl 1A-2A-3A—Freshman English (or) Spch 5—Fundamentals of Speech (5)
(12) GC 29A-B-C-D-E—Literature (3)

C. Social Sciences—24 credits to be selected from the following courses:

GC 37—Social Trends and Problems (5) GC 45D—Community Problems (3)
GC 38A—General Geography (5) GC 46A-B—Problems of Government (3-6)
GC 39—General Anthropology (3) Pol 1-2—American Government and Poli-
GC 43A—Background of the Modern tics (6)
World (5) SSci 1-2-3—Personality, Work, Community
GC 43B—Biography (3) (3-9)
GC 44B—Current History (2) Hist 1-2-3—Civilization of the Modern
GC 45A—The Growth of American De- World (3-9)
mocracy (5) Hist 23-24—American History (4-8)
GC 45C—Minnesota History (5)

D. Psychology—5 credits required

GC 2A—Psychology in Modern Society (5)

E. Recreation Theory—9 credits required

Rec 11—Survey of Recreation Activities (3) Rec 49—Social Aspects of Leisure (3)
Rec 23—Introduction to Recreation Leader- (or) GC 4—Leisure Today (3)
ship (3)

F. Recreation Skills—19 credits required

GC 22A, B—Art Today (3-6) Hlth 25—First Aid (2)
GC 23A—Art Laboratory (3) PEM 6C—Aquatics (1)
GC 24A, B, C—Music Today (3-9) Rec 45—Camp Craft (2)
Mus 4—Fundamentals of Music (2) Rec 43—Camp Aquatics (2)
GC 25A—Music Laboratory (3)
PEM 4A, B, C—Fundamentals of Sports
(1-3)
(or) PEW A-B-C—College Program in
Physical Education (1-3)

School of Physical Education

JUNIOR AND SENIOR YEARS

Courses taken while enrolled in the College of Education:

A. Recreation Theory—35 credits required

- Rec 57—Organization and Conduct of Recreation Centers (3)
Rec 58—Leadership in Community Recreation (3)
Rec 52—Leadership in Social Activities (3)
Rec 78—Scout Leadership (2)
PEW 54 or Rec 46—Camp Leadership (3 or 2)
Rec 105—Conservation of Natural Resources (2)
Rec 107—Camp Administration (3)
Rec 110—Recreation Surveys (3)
Rec 111—Recreation Areas and Facilities (3)
Rec 112—Programming in Recreation (3)
Rec 116—Community Recreation Resources and Organizations (3)
EdT 84—Field Practice in Recreation, Junior Year (6)
EdT 85—Field Practice in Recreation, Senior Year (6)
Rec 121—Principles of Recreation Methods (3)
Rec 141—Introduction to Hospital Recreation (3)
Rec 142—Leadership in Hospital Recreation (3)
Rec 143—Programming in Hospital Recreation (3)

B. Recreational Skills—22 credits required

- Ind 1—Elementary Handcrafts (3)
Ind 12—Craft Work (3)
Rec 64A-B—Leadership in Nature Recreation (4)
Th 11—Introduction to the Theatre Arts
Th 12—Theatre Arts Lab (1)
Th 131—Creative Dramatics (3)
Th 132—Children's Theatre (3)
MuEd 55—Music for Recreational Leadership (2)
Physical Education for Men (10 credits required from the following):
PEM 5C—Stunts, Contests, Softball, Baseball (1)
PEM 7A—Games and Relays (1)
PEM 7C—Recreational Games (1)
PEM 8—Tennis and Golf (1)
PE 9A-B—Rhythms (2)
PEM 66—Officiating Football and Basketball (3)
PEM 68—Basketball Coaching (2)
PEM 69—Track Coaching (2)
Physical Education for Women (10 credits required from the following):
PEW 62—Teaching of Physical Education Activities (3)
PEW 20C—Physical Education Activities (1)
PEM 9A—Fundamental Rhythms (1)
PEW A-B-C—College Program in Physical Education (4)
PEM 9B—Square and Ballroom Dancing (1)

C. General Courses—5 or 6 credits required

- PE 155—Instructional Aids in Health, Physical Education, and Recreation (3)
EdCI 105—Audio-Visual Materials in Education (3)
PubH 4—Health Problems of the Community (2)
(or) PubH 51—Community Hygiene (3)

D. General Electives—20 or 21 credits selected from Upper Division courses in consultation with a major adviser, to complete total of 186 credits. Recreation leaders in Plan II are required to present a C average in the following recreation courses: Rec 52, PEW 54 or Rec 46, Rec 58, Rec 110 and Rec 121.

Minor in Camping and Outdoor Education

The Recreation Department offers a minor in camping and outdoor education based on the following requirements. Thirty-five credits are required.

Curriculums

It is open to majors in elementary education and may be taken as an additional minor by students in secondary education. It does not constitute a teaching minor and cannot be substituted for any minor requirement listed in any curriculum.

| | |
|---|---|
| Rec 46—Camp Leadership (2) | Rec 121—Principles of Recreation Methods (3) |
| Rec 45—Camp Craft (2) | Recreational music (3) |
| Rec 107—Camp Administration (3) | Recreational dramatics (3) |
| Rec 105—Conservation of Natural Resources (2) | Handcrafts (3) |
| Rec 43—Camp Aquatics (2) | Recreational games and sports (3) |
| CPsy 81—Adolescent Psychology (3) | Rec 43 or PEM 6C—Aquatics (1) |
| Rec 64A-B—Leadership in Nature Recreation (4) | Hlth 25—First Aid (2) |
| Rec 52—Leadership in Social Activities (3) | Field work in camping (1 summer's experience) |

School Health Education

M.Ed. advisers: Professors Grout, Slocum
Minor adviser: Professor Slocum

The student may take an undergraduate minor or a program leading to an M.Ed. degree with a major in school health education in the College of Education. The Graduate School offers an M.A. in physical education, or a Ph.D. in education with a concentration in school health. Students who seek the M.Ed. degree should make application to the Office of Admissions and Records for admission to the College of Education. Those desiring to work toward the M.A. or Ph.D. degree should apply for admission to the dean of the Graduate School.

School Health Education as a Minor Subject

The minor in school health education requires 31 to 38 credits in addition to the basic background courses.

Basic Background Courses—11-20 credits required

| | |
|--|--|
| Biol 1-2—General Biology (10) | PubH 5—Individual, Public Health (3) |
| (or) Biol 1A-2A—General Biology (7) | (or) PubH 50—Personal and Community Health (3) |
| (or) GC 10A-B—Human Biology (6) | Hlth 25—Standard and Advanced First Aid (2) |
| (or) NSci 1-2-3—Orientation in Natural Sciences (15) | |

Minor Sequence—31-38 credits required

| | |
|--|---|
| EPsy 159—Personality Development and Mental Hygiene (3) | Hlth 103—Role of School Health Educator in Health Appraisal (3) |
| (or) PubH 133—Mental Hygiene (3) | Hlth 114—Administration of School Health Education (3) |
| Hlth 59—Instructor's Course in First Aid (3) | FamS 1—Dynamics of Dating, Courtship, and Marriage (3) |
| PubH 75—Environmental Sanitation (3) | (or) FamS 1A—Dynamics of Dating, Courtship, and Marriage (3) |
| HE 31—Nutrition (3) | Anat 27—Anatomy for Physical Education Students (4) |
| (or) HE 72—Nutrition (2) | (or) PEM 50—Anatomy (3) |
| (or) PubH 95—Human Nutrition (3) | |
| Hlth 83—Methods and Materials of School Health Education (3) | |
| (or) Hlth 117B—Advanced Instruction in School Health for Secondary Schools (3) | |

PubH 91-92—Physiological Hygiene (8)
(or) Phsl 51—Human Physiology for Nurs-
ing, Physical Therapy Students (5)

Hlth 94—Student Teaching in School
Health Education (2)
(or) equivalent included in PEW 90A-B-C
or PEM 73-74-75

Master of Education in School Health Education

Students admitted to this program must have within their background work in the following fields: personal health, first aid, nutrition, human anatomy, human physiology, biology, chemistry, bacteriology, or microbiology, and sociology. Areas of deficiency may be fulfilled at the Master's level where courses numbered 100 or over are available. The program is open only to persons with a currently valid teaching certificate for public school teaching, and classroom teaching experience in health or related sciences.

The candidate for the M.Ed. must have a total of 48 credits with a grade point average of B (3.00). Courses followed by a double asterisk (***) are required.

School Health Education—18 credits minimum

Hlth 103—Role of School Health Educator
in Health Appraisal (3)***

Hlth 114—Administration of School Health
Education (3)***

Hlth 117A—Instruction in School Health
for Elementary Schools (3)***

(or) Hlth 117B—Advanced Instruction in
School Health for Secondary Schools (3)***

Hlth 124—Supervision in Health and Physi-
cal Education (3)***

PE 104—Teaching Physical Education for
the Handicapped Child (3)

PE 130—Contribution of Basic Sciences
to Physical Education (3)

PE 171—Applied Physiology (3)

Public Health—15 credits minimum

PubH 100A—Elements of Public Health I
(3)***

PubH 102A—Environmental Sanitation
(2)***

PubH 125—Public Health Education (2)***

In addition to the above courses each student is required to take either:

EdCI 215—Problems: School Health Education (cr ar)
(or) EdCI 199E—Internship (cr ar)

Final Examination—A written comprehensive final examination is required.

POLITICAL SCIENCE

Major adviser: Assistant Professor Flanigan

A student who majors in political science registers in the College of Liberal Arts for the first 2 years. His program during this time should include the first three requirements outlined below under the political science major. He also meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. Completion of Spch 5 is advisable. The student should be proficient in typing before he reaches his senior year. He must maintain an over-all 2.50 grade point average in the social science courses.

Curriculums

Political Science as a Major Subject

Pol 1-2—American Government and Politics (6)

Pol A-B—State in the Modern World (6)

Pol 25—World Politics (3)

Pol 40—Contemporary Political Ideologies (3)

Elective courses in political science—at least 18 additional credits in courses numbered 100 and above. Six of these credits must be taken in the field of American government (in courses numbered between 100 and 122) and 6 credits must be taken either in the field of international relations (in courses numbered between 175 and 189) or in the field of comparative government (in courses numbered 141 to 159)

Total—36 credits in political science

Because of the political science teacher's need for a broad social studies background and because most social studies positions require teachers to teach more than one subject within the social studies area, all political science majors must complete the following spread of supporting courses in the other social science fields. This requirement is in lieu of a required teaching minor.

23 credits of history, including Hist 1-2-3 or 53-54-55 (9); Hist 23-24 (8); Hist 120F (3); and Hist 150E (3)

Geog 1 or 4 (5)

20 credits of economics, sociology, and anthropology including:

Econ 1-2 or B-C or 50A-B (6)

Soc 1 or 3 (3)

Anth 2A (5) or 100 (3)

Political science majors are urged to build a teaching minor in a non-social science area in order to improve their chances of obtaining teaching positions.

Professional Education Courses—The major in political science must take the following courses within the total requirements of 29 credits in education:

Ed 55A-B—Introduction to Secondary School Teaching (10)

EdT 69A-B—Teaching the Social Studies in the Secondary School (5)

EdT 69J—Student Teaching: Social Studies Juniors (1 cr; prereq Jr, ¶55A)

HED 90—The School and Society (3)

EdT 69—Student Teaching in the Social Studies (9 cr during sr yr)

ROMANCE LANGUAGES

Major advisers: *French*—Professor Renaud; Assistant Professor Mantini;
Spanish—Associate Professor Floripe; Assistant Professor Sullivan

Students wishing to major in French or Spanish take the first 2 years in the College of Liberal Arts and meet the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. Their programs should include the prerequisite courses and the following Upper Division courses:

French as a Major Subject—Fren 30 and 36 Upper Division credits including:

Fren 54—French Composition (3)

Fren 57—Advanced Composition (3)

Fren 55—French Conversation (3)

Fren 60-61-62—Civilization, Culture (12)

Fren 100—Advanced Phonetics (3)
(or) Fren 107—Structure of Modern French
(3)

Fren 114—Romance Philology (3)

In addition, at least 1 more quarter of the Fren 107-108-109 sequence is recommended, or Clas 56.

French as a Minor Subject—23 college credits of which 18 credits will be in courses numbered above 25 including:

Fren 30—Introduction to Literary Texts (3)
Fren 55—French Conversation (3)
Fren 60-61-62—Civilization, Culture (12)

Spanish as a Major Subject—36 Upper Division credits in Spanish including:

Span 54—Spanish Composition (3)
Span 55—Spanish Conversation (3)
Span 57—Advanced Composition (3)
Span 60-61-62—Spanish Civilization and Culture (9)
(or) Span 60-63-64—Latin-American Civilization and Culture (11)

Span 65-66-67—Survey of Spanish Literature (9)
(or) Span 74-75-76—Survey of the Literature of Spanish America (9)
Span 107-108—The Structure of Modern Spanish (6)
Span 114—Romance Philology (3)

It is recommended that the student also take Span 109 (3) or Clas 56 (3).

Spanish as a Minor Subject—23 college credits of which 18 credits will be courses numbered above 25, including one of the following sequences:

Span 60-61-62—Spanish Civilization and Culture (9)
(or) Span 60-63-64—Latin-American Civilization and Culture (11)
(or) Span 65-66-67—Survey of Spanish Literature (9)
(or) Span 74-75-76—Literature of Spanish America (9)

Professional Education Courses—The student majoring in French or Spanish must take the following courses within the total requirement of 29 credits in education:

Ed 55A-B—Introduction to Secondary School Teaching (10)
EdT 70—Student Teaching in Modern Languages (3 cr U High, 6 cr off-campus, total 9 cr)

EdT 70A-B—Teaching Modern Languages (5)
HEd 90—The School and Society (3)

RUSSIAN

Major advisers: Professor Birkmaier; Instructor Donchenko

The College of Education and the Department of Slavic Languages of the College of Liberal Arts offer a program of study for a teaching major and minor in Russian.

A student wishing to obtain a major or minor in Russian registers for the first 2 years of work in the College of Liberal Arts and there meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin, as well as all prerequisites for Upper Division courses in Russian. These prerequisites are Russ

Curriculums

1, 2, and 3 (15 cr); 4, 5, and 6 (9 cr)—a total of 24 credits. The 2 years of work remaining will be taken in the College of Education.

Russian as a Major Subject—36 Upper Division credits, including:

| | |
|--|--|
| Russ 56, 57, 58—Russian Conversation (9) | Russ 71, 72, 73—Readings in Russian Literature (9) |
| Russ 61, 62, 63—Russian Composition (6) | Clas 56—Elementary Linguistics (3) |
| Russ 75, 76, 77—Russian Civilization and Culture (9) | |

Russian as a Minor Subject—27 Upper Division credits, including:

| | |
|-----------------------------|----------------------|
| Russ 56, 57, 58, 61, 62, 63 | Russ 75, 76, 77 |
| Clas 56 | (or) Russ 71, 72, 73 |

Professional Education Courses—The student majoring in Russian must take the following courses within the total requirement of 29 credits in education:

| | |
|--|---|
| Ed 55A-B—Introduction to Secondary School Teaching (10) | EdT 70A-B—Teaching Modern Languages (5) |
| EdT 70—Student Teaching in Modern Languages (3 cr U High, 6 cr off-campus, total 9 cr) | HEd 90—The School and Society (3) |

SCIENCE

Advisers: Professor Boeck; Assistant Professor Gennaro

For registration, students should consult with the appropriate subject adviser.

Students seeking to teach science in Minnesota high schools will be qualified to receive endorsement for certification upon completion of one of the four programs of teacher preparation below.

Registration for this first 2 years will be in the College of Liberal Arts. During this period the student will complete the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum, listed in Section I of this bulletin. Early consultation with an appropriate subject adviser during this period is recommended.

Upon admission to the College of Education, the student will complete the major, a minor or related sciences, and the following professional courses and credits:

| | |
|---|--|
| Ed 55A-B—Introduction to Secondary School Teaching (10) | EdT 68—Student Teaching in Science (9) |
| EdT 68A-B-C—Teaching Secondary School Science (5) | HEd 90—The School and Society (3) |
| | Elective in education (2) |

Earth Science Major

Adviser: *Geology*—Associate Professor Rapp

Students completing this program will be qualified to receive endorsement for Minnesota certification to teach earth and general science courses full time in junior and senior high schools.

Requirements:

1. Completion of the courses and credits, with a grade point average of 2.50, the field of concentration as follows:

| | |
|--|---|
| Geo 11, 22—Introductory Physical and Historical Geology (10) | Geo 101—Regional Field Geology (2) Electives: 2 credits from Geo 140, 144, 155; and 3 credits from Geo 105, 125, 131 |
| Geo 62—Mineralogy and Lithography (5) | |
| Geo 110—Sedimentology and Stratigraphy (4) | Ast 11—Descriptive Astronomy (5) |
| Geo 115—Geomorphology (4) | Elective course in meteorology (3-5) |
| Geo 120—Structural Geology (4) | |

2. Completion, with a grade point average of 2.00, of the following courses and credits in related sciences:

Biol 1, 2—Biology (10)
 GeCh 4, 5—General Principles of Chemistry (10)
 Phys 1, 2, 3 and 1A, 2A, or 3A—Physical Science (10)

It is recommended that those who seek credits in the earth science major beyond the above requirements should take mathematics (through Math 40) and physics (Phys 4, 5, 6).

Biological Sciences Major

Advisers: *Zoology*—Professor M. Olson; *Botany*—Assistant Professor Soulen

Students completing the program will be qualified to receive endorsement for Minnesota certification to teach biological and general sciences full time in junior and senior high schools.

Requirements:

1. Completion of a field concentration, with an average of 2.50. This field will be planned with the advice and consent of an adviser in the field and will consist of 45 credits with courses from each of the following: biology, botany, genetics, microbiology, physiology, and zoology.
2. Completion, with an average of 2.00, of the following courses and credits in related sciences:

| | |
|--|--|
| GeCh 4, 5—General Principles of Chemistry (10) | Geo 1—Physical Geology (4) |
| OrCh 41—Elementary Organic Chemistry (5) | Ast 11—Descriptive Astronomy (5) |
| | Phys 1, 2, 3, and physical science (9) |

Chemistry Major

Adviser: Professor Boeck
 Departmental representative: Professor O'Connor

Students completing the program will be qualified to receive endorsement for Minnesota certification to teach chemistry and physical science full time and for part-time teaching in the selected minor.

Curriculum

Requirements:

1. Completion, with an average of 2.50, of the following courses and credits in the major:

| | |
|--|--|
| GeCh 4, 5—General Principles of Chemistry (10) | OrCh 61, 62—Elementary Organic Chemistry (10) |
| GeCh 6—Solution Chemistry (4) | PCh 107, 108—Elementary Physical Chemistry (6) |
| AnCh 57A, 57B—Quantitative Analysis (5) | |

2. Completion of 15 credits, with an average of 2.00 in related physics:

Phys 7, 8, 9—General Physics (15)

3. Completion of a minor, with an average of 2.00 in either physics or mathematics.

Physics Minor:

Phys 7, 8, 9—General Physics (15)

Phys 50, 50A, 51, 51A—Intermediate Physics (10)

Mathematics Minor: Credits in mathematics as described in the mathematics section of this bulletin.**

Physics Major

Adviser: Professor Freier

Students completing the program will be qualified to receive endorsement for Minnesota certification to teach physics and physical science full time and for part-time teaching in the selected minor.

Requirements:

1. Completion, with an average of 2.50, of the following courses and credits in the major:

| | |
|---|--|
| Phys 7, 8, 9—General Physics (15) | Ast 51—Astronomy (3) |
| Phys 50, 50A, 51, 51A—Intermediate Physics (10) | Electives selected from Phys 100, 123, 144, or 165 (4) |
| Phys 133—Physical Optics (3) | |

2. Completion of 15 credits of related chemistry with an average of 2.00

GeCh 4, 5—General Principles of Chemistry (10)

OrCh 41—Elementary Organic Chemistry (5)

3. Completion of a minor, with an average of 2.00, in either chemistry or mathematics

Chemistry Minor:

GeCh 4, 5—General Principles of Chemistry (10)

GeCh 6—Solution Chemistry (4)

** Since single subject teaching assignments are uncommon, it is recommended that those minoring in mathematics enroll in the minor methods course and student teaching EdT 67M and EdT 67.

OrCh 41—Elementary Organic Chemistry (5)
(or) OrCh 16, 17—Carbon Compounds (5)
PCh 107, 108—Elementary Physical Chemistry (6)

Mathematics Minor: Credits in mathematics as described in the mathematics section of this bulletin.**

Science Minors

Students with majors other than science may elect science minors in earth science, biological science, chemistry, or physics. Completion of the minor qualifies the student to receive endorsement for Minnesota certification to teach half time or less in the minor field in junior and senior high schools.

The requirements are:

1. Completion with an average of 2.00 of the courses and credits in the minor field as outlined below.
2. Completion of EdT 68M (3 credits), and EdT 68 (3 credits), a course in science teaching methods and student teaching in science.

Earth Science

| | |
|--|---|
| Geo 11, 22—Introductory Physical and Historical Geology (10) | Elective course in meteorology (3-5) |
| Geo 62—Mineralogy and Lithography (5) | Geo 101—Regional Field Geology (2) |
| Ast 11—Descriptive Astronomy (5) | Electives in geology from courses required in the major (3-5) |

Biological Science

Twenty-seven credits planned with the advice and consent of a field adviser including courses from the fields of biology, botany, zoology, physiology, and microbiology.

Chemistry

See chemistry minor described with physics major.

Physics

See minor described with the chemistry major.

Five-Year Program Leading to the Master of Education Degree

The College of Education offers a 5-year program leading to the professional degree of master of education for teachers of some science areas. For specific information confer or correspond with the major adviser of the specific science area of interest.

** Since single subject teaching assignments are uncommon, it is recommended that those minorng in mathematics enroll in the minor methods course and student teaching EdT 67M and EdT 67.

SCHOOL SOCIAL WORK

Training to be a school social worker (or visiting teacher) is offered at the graduate level in the School of Social Work. Generally the M.S.W. degree in social work is required for this field of service. Students interested in this field should consult an adviser in the School of Social Work, 909 Social Science Building.

SOCIAL STUDIES

Minor adviser: Professor Edith West

Those interested in social studies majors should see individual social sciences (history, geography, economics, sociology, and political science).

Those interested in social studies minors should decide whether they wish to minor in geography, history, or the broader social studies minor listed below.

The minor below may be taken only by those not majoring in one of the social sciences.

Social Studies as a Minor Field

26 credits of history, including Hist 1-2-3 or 53-54-55; Hist 23-24; and 9 additional credits in courses numbered 50 and above

8 credits of geography, including Geog 1 or 4; and 3 credits in courses numbered 100 and above

6 credits of economics, including Econ 1-2 or B-C or 50A-B

6 credits of sociology, including Soc 3 and a course numbered 50 or above

6 credits of political science, including Pol 1-2

Total—52 credits in social science

Those minoring in social studies must include one course on Russia and one on the Far East. These courses may be taken in any of the social sciences.

SOCIOLOGY

Major advisers: Professors Hill, Johnson, Straus

A student who majors in sociology registers in the College of Liberal Arts for his first 2 years. His program during this time should include the first three requirements listed below under the sociology major. He also meets the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum listed in Section I of this bulletin. He should be proficient in typing before he reaches his senior year. Completion of Spch 5 is advisable. The student must maintain an over-all 2.50 grade point average in the social science courses.

Sociology as a Major Subject

Soc 1—Man in Modern Society (3)
Soc 3—Social Problems (3)

Soc 45—Social Statistics (5)
Soc 53—Elements of Criminology (3)

Soc 180—Methods of Social Research (3) Total—30 credits in sociology
Elective courses in sociology—at least 13
additional credits in courses numbered 50
or above

Because of the sociology teacher's need for a broad social studies background and because most social studies positions require teachers to teach more than one subject within the social studies area, all sociology majors must complete the following supporting courses in other social science fields. This requirement is in lieu of a required teaching minor.

26 credits in history, including Hist 1-2-3 or 53-54-55 (9); and Hist 23-24 (8)

5 credits in geography—Geog 1 or 4

26 credits in the other social sciences, including:

Pol 1-2 (6)

Econ 1-2 (6) or B-C (6) or 50A-B (6)

Anth 2A (5) or 100 (3)

Sociology majors are urged to build a teaching minor in a non-social science area in order to improve their chances of obtaining teaching positions.

All sociology majors must take one course on Russia and one on the Far East. These courses may be taken in any of the social sciences and will count toward credit requirements in those fields.

Professional Education Courses—The major in sociology must take the following courses within the total requirement of 29 credits in education:

Ed 55A-B—Introduction to Secondary
School Teaching (10)

EdT 69J—Student Teaching: Social Studies
Juniors (1 cr; prereq jr, ¶55A)

EdT 69—Student Teaching in the Social
Studies (9 cr during sr yr)

EdT 69A-B—Teaching the Social Studies
in the Secondary School (5)

HEd 90—The School and Society (3)

SPANISH

See Romance Languages

SPECIAL EDUCATION

Major advisers: Professors Balow, Reynolds; Associate Professors Force, Karlsen, Wilderson; Assistant Professors Turnure, Wood

While several of the programs in the Special Education Department require graduate status, in some cases a student may complete all or a significant part of the course work within a 4-year program in elementary or secondary education. Students interested in teaching crippled, mentally retarded, or hearing-impaired children are particularly urged to consult an adviser as early as possible, preferably before the beginning of the junior year. In these two programs EdT 53A, Teaching Handicapped Children, may be substituted for the second quarter of regular student teaching (EdT 54B) by students enrolled in the IA elementary curriculum or substituted for EdT 77 by NKP majors.

Students who hold regular teaching certificates and who have teaching experience do not usually take a program as outlined below. They should

Curriculum

consult an adviser for a special program to meet certification requirements. Any such student must apply for admission to the Special Education Department before any departmental recommendation for certification will be considered.

In addition to the full teacher preparation sequence announced below, the Special Education Department offers courses relating to the education of other groups of exceptional children, such as the gifted and the culturally disadvantaged.

Teaching Visually Handicapped Children

Students wishing endorsement for a special certificate to teach the blind and partially seeing complete a regular curriculum leading to certification for kindergarten-primary, elementary, or secondary school teaching. They may take three courses in special education during the junior or senior year: EdT 50, EPsy 182, and EdCI 115. After graduation they take the remaining courses listed for the graduate program in teaching blind and partially seeing children. Most students will wish to use course work completed in this program in meeting requirements for the M.A. degree.

The following courses are required to qualify for teaching blind and partially seeing children. Most of this specialized work is offered at graduate level.

EPsy 182—Education of Exceptional Children (3)
EdCI 115—Introduction to the Education of Visually Handicapped Children (3)
EdCI 116—Braille I (3)
EdCI 117—Braille II (3)
EdCI 118—Education of Blind Children in the Elementary Grades (3)
EdCI 120—Education of Blind Children in Secondary Schools (3)

EdCI 182—Education of Partially Seeing Children (3)
EdCI 178—Structure and Function of the Eye—Educational Implications (3)
EPsy 288—Practicum in Special Education (6)
(or) EdT 53A—Teaching Handicapped Children (visually handicapped) (6)

Other courses dealing with the visually handicapped are frequently offered. See current *Class Schedule* or special announcements.

Teaching Mentally Retarded Children

Adviser: Karlsen

A minimum of 23 credits is required for completion of a program to teach mentally retarded children. This program may be completed at either the undergraduate or graduate levels. Required in this curriculum are four basic courses (EPsy 182, CPsy 143, EPsy 184, and EdCI 179 or EdCI 180) plus EdT 53A. The latter course may sometimes be substituted for part of the student teaching requirements in certain other curriculums.

EPsy 182—Education of Exceptional Children (3)
EPsy 184—Introduction to Education of the Mentally Retarded (3)

EdCI 179—Education of Mentally Retarded Children in the Elementary School (3)
(or) EdCI 180—Education of Mentally Retarded Children in the Secondary School (3)

CPsy 143—Problems of Mental Deficiency (3)

EdT 53A—Teaching Handicapped Children (mentally retarded) (6)

Other courses may be selected from the following in consultation with the adviser:

EdT 50—Junior Practicum in Special Education (3)

EdCI 145—Reading Difficulties (3)

CPsy 80—Child Psychology (3)

CPsy 81—Adolescent Psychology (3)

CPsy 85—Psychological Appraisal of Child Behavior (3)

CPsy 89—Psychology of Parent-Child Relationships (2)

CPsy 140—Behavior Problems (3)

CPsy 179—Clinical Procedures with Children (3)

EPsy 110—Educational Measurement in the Classroom (3)

EPsy 188—Education of the Culturally Disadvantaged Child (3)

Ind 1 or 12—Handcrafts or Craftwork

(or) ArEd 19—Functional Arts and Crafts in Elementary Education (3)

Teaching Crippled Children

Adviser: Force

Students wishing to teach crippled children take a minimum of 23 credits from the courses listed below, selected in consultation with the adviser. This program may be completed at either the undergraduate or graduate levels. Required in this program are the courses listed below. EdT 53A may sometimes be substituted for part of the student teaching requirements in other curriculums.

EPsy 182—Education of Exceptional Children (3)

EPsy 187—Education of Crippled Children (3)

EPsy 190—Educational Problems of Cerebral Palsy (3)

EdT 53A—Teaching Handicapped Children (crippled children) (6)

Teaching Hearing-Impaired Children

The preparation sequence for students wishing to teach hearing-impaired children is a co-operative program of the College of Education and the Department of Speech, Communication, and Theatre Arts. Students may take some of the special courses during the junior and senior years, but the major portion of the course work will generally be taken at a post-baccalaureate level. Most students will wish to use course work completed in this program toward the requirements for the Master's degree.

The following courses comprise the minimum program for preparation of teachers of hearing-impaired children. Additional and specialized courses may be required. Student teaching in a special class may sometimes be substituted for other student teaching requirements.

SSPA 119—Fundamentals of Sound (3)

(or) SSPA 120—Anatomy and Physiology of the Speech and Hearing Mechanisms (3)

SSPA 121—Phonetics (3)

SSPA 170—Hearing Disorders (3)

(or) EdCI 128—Introduction to the Education of Hearing-Impaired Children (3)

SSPA 171—Audiometry I (4)

Curriculums

- SSPA 180—Auditory Training (3)
SSPA 181—Speech for the Hearing Impaired (3)
SSPA 183—Language for the Hearing Impaired (3)
EdCI 127—Methods of Teaching School Subjects to the Hearing Impaired (3)
- CPsy 183—Language Development (3)
EPsy 288—Practicum in Special Education (9)
(or) EdT 53A-B—Teaching Handicapped Children (12)

Other courses may be selected from the following in consultation with adviser:

- EdT 50—Junior Practicum in Special Education (3)
Anat 57—Anatomy for Physical Education Students (4)
CPsy 143—Problems of Mental Deficiency (3)
EPsy 184—Introduction to Education of the Mentally Retarded (3)
PEW or PEM 51—Mechanics of Movement (kinesiology) (3)
- PEM 65—Adapted Physical Education (3)
PE 104—Teaching Physical Education for the Handicapped Child (3)
CPsy 142—Psychology of Handicapped Children
EdCI 179—Education of Mentally Retarded Children in the Elementary School (3)

Teaching Emotionally Disturbed and Socially Maladjusted Children

Advisers: Professor Balow; Associate Professor Wilderson; Assistant Professor Wood

Course work leading to certification in this field is available at the graduate level only. However, undergraduates who are interested in teaching disturbed children should consider taking EdT 50, and are invited to discuss the selection of undergraduate elective courses with the advisers.

SPEECH, COMMUNICATION, AND THEATRE ARTS

Major advisers: Professors Ballet, Graham, Whiting; Assistant Professors Adey, Brock, Fredricks; Lecturer Piché

Students majoring in speech, communication, and theatre arts register for the first 2 years in the College of Liberal Arts, there meeting the Lower Division requirements for admission to the junior year in the Academic Secondary Curriculum listed in Section I of this bulletin. The 2 years of work remaining will be taken in the College of Education.

Students interested in the language arts or speech pathology curriculums, see index.

Speech, Communication, and Theatre Arts as a Major Subject—48 credits

1. All students must complete the following core of 21 credits:

- | | |
|--|--|
| Spch 5—Fundamentals of Speech (5) | Th 21—Beginning Acting (3) |
| Th 11—Introduction to the Theatre Arts (3) | Spch 61—Introduction to Thought and Language in Human Behavior (3) |
| Th 12—Introduction to the Theatre—Lab (1) | Spch 67—Phonetics (3) |
| | Spch 81—Interpretative Reading (3) |

Speech, Communication, and Theatre Arts

2. Students select one of the following curriculums with the aid of a major adviser:

Curriculum I—27 credits

Spch 51—Advanced Public Speaking (3)
Spch 97A—Intercollegiate Debate and Oratory (3)

Spch 106—Discussion (3)
SSPA 161—Introduction to Speech Pathology and Audiology (3)

6 credits selected from the following:

Spch 55, 56—Speech Writing and Platform Speaking (6)

Spch 65—Radio and Television Speech (3)

Spch 101 or 102 or 103—Argumentation and Persuasion (3)

Spch 109—Classical Rhetoric (3)

Spch 126A or 126B—History and Criticism of Public Address (3)

9 credits selected from the following:

Th 63—Radio and Television Drama (3)

Th 74, 75, 76—Play Production (9)

Spch 82, 83—Interpretative Reading (6)

Curriculum II—27 credits

Th 34—Stagecraft (3)

Th 76—Play Production (3)

Th 91—Stage Design (3)

Th 92—Stage Lighting (3)

(or) Th 90—Stage Costuming (3)

Th 111, 112—Stage Direction (6)

9 credits selected from the following:

Th 22—Beginning Acting: Creating a Role (3)

Th 23—Beginning Acting: Technique (3)

Th 61—Advanced Acting (3)

Th 131—Creative Dramatics (3)

Th 132—Children's Theatre (3)

SSPA 99—Introduction to Speech Pathology and Audiology (3)

Spch 51—Advanced Public Speaking (3)

Spch 55—Speech Writing and Platform Speaking (3)

Spch 97A—Intercollegiate Debate and Oratory (3)

Spch 82, 83—Interpretative Reading (6)

Professional Education Courses—The student majoring in speech, communication, and theatre arts must take the following courses in professional education within the total requirements of 29 credits:

Ed 55A-B—Introduction to Secondary School Teaching (10)

EdT 75A-B-D—Teaching Language Arts in Secondary Schools (5)

EdT 75—Student Teaching in Language Arts (9)

HED 90—The School and Society (3)

Speech, Communication, and Theatre Arts as a Minor Subject

Students minoring in speech must complete 30 credits in courses indicated below. Minors must also complete a "methods" course in the minor field (see below). Requirements: Spch 5, 81; Th 11, 12; and 18 credits chosen from one of the following groups:

Group A: Elect 12 credits from the following: Spch 51, 61, 55 or 56, 97A, 101 or 102, 106. Elect 6 credits from the following: Th 74, 75, 131, 132, Spch 81, 82.

Group B: Elect 12 credits from the following: Th 21, 74, 75, 131, 132. Elect 6 credits from the following: Spch 51, 61, 97A, 82, 83.

Additional Requirements

Because of the close relationship between English and speech in Minnesota high schools, students majoring in speech must have a minor in English. Modification of the minor requirement may be made on recommendation of the departmental adviser with the approval of the Committee on Student Scholastic Standing.

Curriculum

All students majoring or minoring in speech are expected to participate in one or more co-curricular activities such as debating, theatre, radio, public reading, and public speaking.

Students majoring in speech will register in their senior year in EdT 75A-B-D, Teaching of Language Arts, and in EdT 75, Student Teaching in the Language Arts. Students minoring in speech with an English major will register in EdT 75A-B-C and EdT 75. Students minoring in speech with a major other than English will register for EdT 76G.

SPEECH PATHOLOGY

Advisers: Professor Starr, Assistant Professor McDermott

The speech pathology curriculum is designed for students interested in clinical work with persons having speech and language disorders. The B.S. degree is awarded upon the completion of the 4-year undergraduate program. Those entering professional positions in schools or other agencies are urged to proceed, if possible, with the M.A. program in the Graduate School.

Students interested in this field should consult the major adviser and take advantage of opportunities to observe clinical and laboratory activities.

For the first 2 years, students enroll in the College of Liberal Arts and complete the requirements listed below. During the winter or spring quarter of the sophomore year, they should apply for admission to the College of Education.

FRESHMAN AND SOPHOMORE YEARS

1. Communication, Language, Symbolic Systems

Freshman English requirement: Comp 1-2-3 or Engl A-B-C or Comm 1-2-3 or Engl 10H-11H-12H or exemption (0-12)
Spch 5—Fundamentals of Speech (5)

Phil 2—Logic (5)
Math 10—College Algebra and Analytic Geometry (5)

2. The Physical and Biological Sciences (9 credits)

3. Man and Society

Psy 1-2—General Psychology (6)
Psy 4-5—Introduction to Laboratory Psychology (4)

9 credits in the analysis of social, economic, and political institutions or in the development of civilization

4. Artistic Expression—9 credits in literature or the arts

5. Physical Education—3 credits

6. Electives—to complete the total of 90 credits

JUNIOR YEAR

SSPA 99—Introduction to Speech Pathology and Audiology (3)
SSPA 119—Fundamentals of Sound (3)
SSPA 120—Anatomy and Physiology of the Speech and Hearing Mechanism (3)

SSPA 121—Phonetics (3)
SSPA 140—Diagnosis and Evaluation of Speech Disorders (4)
SSPA 141—Stuttering (3)
SSPA 142—Voice Disorders (3)

SSPA 143—Articulation Disorders (3)
SSPA 170—Hearing Disorders (3)
CPsy 80—Child Psychology (3)
EPsy 116 or equivalent—Introduction to
Statistical Methods (3)
Psy 117 or equivalent—Analysis of Human
Behavior (3)

Ed 75B—Introduction to Elementary School
Teaching (3)
(or) Ed 55A—Introduction to Secondary
School Teaching (5)

SENIOR YEAR

SSPA 122—Voice Science (3)
Three of the following four courses:
SSPA 144—Neuromuscular Disorders (2)
SSPA 145—Aphasia (2)
SSPA 146—Cleft Palate (2)
SSPA 147—Rehabilitation of the Laryn-
gectomized (2)
SSPA 171—Audiometry I (4)

SSPA 172—Communication Problems of the
Hearing Impaired (3)
EdCI 174-175—Clinical Methods, Practice
in Speech Pathology (6)
HEd 90—The School and Society (3)
Electives to complete the 4-year total of
186 credits (consult adviser)

The required C+ (2.50) average is based on all the SSPA courses of the junior and senior years.

Section III. Description of Courses

This section contains descriptions of the courses offered in the College of Education and certain schools and departments in which some students take a major portion of their work. Courses in agriculture and home economics are described in the *Bulletin of Agriculture and Forestry* and the *Bulletin of Home Economics*. Other courses representing general requirements, majors and minors in the high school subjects, and general electives are described in the *Bulletin of the College of Liberal Arts*.

The *Class Schedule*, published just before the registration period each quarter, contains the days and hours when classes meet, the place of meeting, quarter offered, and the name of the instructor. Students should check carefully with the *Class Schedule* for the exact course offerings for each quarter.

Courses are numbered as follows: 1-49 for freshmen and sophomores; 50-99 for juniors and seniors; 100-199 for juniors, seniors, and graduate students; 200 and over for graduate students only. The prerequisite will indicate the minimum class standing when there is an exception. Courses designated with a capital "E" are at graduate level, and carry credit toward the master of education degree, but do not carry credit in the Graduate School.

When no departmental prefix precedes the number of a course listed as a prerequisite, this prerequisite course is in the same department as the course being described.

Symbols—The following symbols are used throughout the course descriptions and will not carry page footnotes:

- Courses through which it is possible for graduate students to prepare Plan B papers.
- † To receive credit, all courses listed before dagger must be completed.
- ‡ Students may enter any quarter preceding the double dagger.
- § No credit is given if credit has been received for equivalent courses listed after section mark.
- ¶ Concurrent registration is required in course listed after paragraph mark.
- ‡ Consent of instructor is required.
- △ Consent of department offering course is required.

AGRICULTURAL EDUCATION (AgEd)

1. **Introduction to Agricultural Education.** Orientation to employment and services; qualifications of teachers, survey of preparatory offerings; the program in Minnesota. (1 cr; prereq ‡)
20. **Rural Education and Community Leadership.** Appraisal of community educational agencies; process of and responsibilities for community leadership; role of the school in the rural community; co-ordination of the school with non-school educational agencies. (3 cr, §120)
56. **Rural Education Through Extension Methods.** Role of the Extension Service in rural education; methods and techniques of instruction in nonschool educational programs. (3 cr; prereq soph)

81. **Teaching Agriculture in the Secondary School.** Fundamentals of teaching agriculture to high school students; use of the home, farm, and community in structuring courses of study; Future Farmers of America, Vo-Ag Planning and Summary Book; building and utilizing teaching units. (4 cr; prereq 91 or Ed 55B)
91. **Student Teaching in Agriculture.** Instruction in developing individual farming programs, contacting parents, program analysis of community needs, conducting classes, community activities, F.F.A. and case studies. (6 cr; prereq sr, 81, Ed 55B, and #)
101. **Young Farmer in Agriculture.** Developing and organizing a continuing program of educational activities for farm youth not in school and not established in an occupation; co-ordinating community resources, determining needs, deriving goals and individual plans of procedure for establishment in farming and related occupations; observation of young farmer programs. (4 cr)
103. **Adult Education in Agriculture.** Systematic instruction for established farmers; analysis of the agricultural situation; adoption of appropriate management practices; determining needs of production, marketing, credit, conservation; developing a continuing program; observation of adult education programs. (4 cr)
104. **Planning Programs.** Agricultural education program development in a community school; integration with total school program; administrative relationships and professional improvement. (3 cr; prereq #)
- 120.* **Rural Education and Community Leadership.** Role of school in rural community; co-ordination of school with nonschool educational agencies; responsibility for community leadership. (3 cr, §20; prereq #)
121. **Enterprise Analysis.** Analyzing the farm business as a basis for identifying problems. Planning learning experiences to improve farm management at the high school, young farmer, and adult levels. (3 cr; prereq #)
141. **Supervised Farm Practice in Vocational Agriculture.** Selection, planning, supervising, and summarizing of individual farming programs; adaptation to needs of high school F.F.A students, young farmers, and adults. (3 cr per qtr, total of 9 cr; prereq 10 cr in education or #)
145. **High School Curriculum in Agriculture.** Philosophy, organization, and administration of instruction in agriculture departments in the secondary schools. (3 cr; prereq 10 cr in education)
151. **Organization and Management.** Administrative structure and function of sub-collegiate programs of agriculture education. (3 cr; prereq #)
- 156.* **Rural Education through Extension Methods.** Role of Agricultural Extension Service; methods and techniques of instruction in nonschool educational programs; special problem required. (3 c, §56; prereq grad or #)
166. **Techniques of Instruction in Rural Electrification.** Developing a program of instruction in electricity and rural electrification; teaching aids, units of instruction, job sheets, demonstration facilities, and materials for adult, young farmer, and high school classes. (3 cr; prereq MeAg 130 or equiv)
171. **Procedures in Teaching Agriculture.** New developments in methodology; assessment of innovations and procedures; consideration of various levels of instruction. (3 cr; prereq #)
- 199E. **Internship.** (Cr ar)

Description of Courses

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 221. Field Problems
- 232.° Research in Agricultural Education
- 250. Supervision of Vocational Agriculture
- 283. Organization and Administration of Educational Programs in Agriculture
- 286. Current Issues in Agricultural Education
- 291. Seminar: Agricultural Education

ART EDUCATION (ArEd)

- 10. **Elementary Survey.** Introduction to pictorial expression, design, and the function of art in the social environment as a foundation for elementary teachers. (2 cr)
- 14. **Introduction to Art Education.** For art education majors, a preview of career opportunities, basic problems of teaching, professional qualifications, use of University educational resources. (2 cr)
- 17. **Pictorial Expression for Elementary Education.** Materials, techniques, and ideas important to children's art expression; relationship to adult expression; significance in educational growth. (3 cr)
- 18. **Design Activities for Elementary Education.** Projects in invention, arrangement, and decoration; color, lettering, posters, bulletin board displays. (3 cr)
- 19. **Functional Arts and Crafts in Elementary Education.** Projects related to clothing, architecture and interior design, community planning, commercial and industrial design, puppetry, dramatics, intercultural relations, and holidays. (3 cr)
- 53. **Introduction to Weaving.** Equipment, design, setting up and operation of table and floor looms. (3 cr)
- 54. **Advanced Weaving.** Multiharness floor looms, warp beams, draft studies, design, finishes. (3 cr)
- 56, 57, 58. **Basic Principles and Experiences in Art Education.** Sequence for art education majors. Basic types of art expression as a foundation for teaching methods adjusted to age and ability groups; experiences in planning group activities in art. (5 cr per qtr; prereq 14)
- 80. **Contemporary Crafts.** Materials, equipment, design criteria and techniques for textile, wood, metal, and ceramics; application to educational programs in elementary and secondary schools, adult education, special education, recreation, and occupational therapy. (3 cr)
- 81. **Puppetry in Education.** Use of simple puppetry as a teaching technique; correlation with school subjects; construction, manipulation, and stage techniques related to school situations. (3 cr)
- 84. **Teaching Art in the Elementary School.** Place and content of art in the elementary school curriculum. (2 cr; prereq 10 or 6 cr from 17, 18, and 19)
- 84A. **Teaching Art in the Elementary School.** Materials, projects, and methods for students without previous background in art. (3 cr; enrollment limited to IIIA registrants)

85. **Art for Integration in Secondary Education.** Using art to further the objectives of instruction in secondary school subjects. (3 cr)
- 86, 87, 88.† **Student Teaching and Supervision of Art.** Observation, participation, student teaching, and supervisory experiences with various types and levels of art classes. (3 cr per qtr [9 cr required]; prereq sr art education, 56-57, Ed 55A-B, ¶86A or ¶87A or ¶88A)
- 86A, 87A, 88A.† **Teaching and Supervision of Art.** Planning and methods for art education in the schools. (2 cr per qtr [6 cr required]; prereq sr art education, 56-57, Ed 55A-B, ¶86, ¶87, ¶88)
- 151-152-153.† **Curriculum Building in Art Education.** Selection, evaluation, and organization of material for teaching units and projects. 151: Critical survey. 152: Innovations. 153: Programs for exceptional children. (3 cr per qtr)
156. **Intercultural Education Through Art.** Approaches to international understanding through recognition of aesthetic contributions of diverse peoples to American life. (3 cr)
158. **Art Education in Europe.** Current practices, problems, and achievements in art education in western Europe compared with practices in American art education. (3 cr)
184. **Improving Art Programs in the Elementary School.** Evaluating research findings and introducing new materials; developing co-operation between classroom teachers and art education specialists. (3 cr; prereq tchg exper or #)
185. **Improving Art Programs in the Secondary School.** For experienced teachers of art and advanced students; critical examination of art programs. (3 cr; prereq tchg exper or #)
189. **Application of Aesthetic Theory in Education.** Contemporary theories of art, their psychological and philosophical foundations. Open to teachers, supervisors, and administrators concerned with art in general education at all levels. (3 cr)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

284. **Research in Art Education**
- 295.° **Problems: Art Education**
296. **Seminar: Art Education**

CHILD PSYCHOLOGY (CPsy)

80. **Child Psychology.** Introduction to the science of child behavior. Emphasis on a critical review of theories and research in child psychology. (3 cr; prereq Psy 2)
- 80H. **Honors Course: Child Psychology.** Students attend lectures in 80, and meet with the lecturer in a 2½-hour seminar each week. (3 cr; prereq Psy 2 and #)
81. **Adolescent Psychology.** Social, physical, mental, emotional, and personality development during adolescence. (3 cr; prereq Psy 2)
88. **Children in Society.** Historical, socio-economic, cross-cultural influences, and social changes in child development. (3 cr; prereq 80 and #)

Description of Courses

89. **Psychology of Parent-Child Relationships.** Discussion of parent-child relationships and family situations; evaluation of relevant research literature. (3 cr; prereq 80)
125. **Experimental Research with Children.** Supervised research experience; design and conduct of experiments on child behavior in controlled laboratory situations. (3 cr; prereq 80, #)
126. **Case Study of Children.** Supervised intensive study of the intellectual, personality, and social development and functioning of individual normal children. (3 cr; prereq 80, #)
127. **Social Behavior of Children.** Behavior of children in groups; supervised observation and experience. (3 cr; prereq 80, #)
132. **Adolescent Development.** Growth; mental, social, emotional, and personality development. (3 cr, §81; prereq sr, 12 cr in psychology)
140. **Behavior Problems.** Types, origin, development, and treatment of behavior difficulties in normal children. (3 cr; prereq 80 or equiv)
142. **Psychology of Handicapped Children.** Research related to sensory speech, language, and physical disabilities of children. (3 cr; prereq 80 or equiv)
143. **Problems of Mental Deficiency.** Diagnosis, care, training; social and vocational problems. (3 cr; prereq 80 or equiv)
144. **Psychology of the Gifted Child.** Psychology and development of high intellectual ability and special talents. (3 cr; prereq 80 or equiv)
179. **Clinical Procedures with Children.** Survey of methods of clinical psychology; basic concepts and research problems in clinical work with children; primarily for students not majoring in clinical psychology or child psychology. (3 cr; prereq 12 cr in psychology, educational psychology, sociology, or clinical psychology)
180. **Personality Development.** Development of personality in children. Psychoanalytic and behavior theory formulations and related research literature. (3 cr; prereq 80)
181. **Social Development.** Family and peer influences; social interaction and social relations; developmental changes. (3 cr; prereq 80)
183. **Language Development.** Development of structure and function of language; methodological problems; speech and language development; language scales; theories of language development. (3 cr; prereq 80)
184. **Sensory and Motor Development.** Development of sensory and perceptual processes; simple and complex motor skills. (3 cr; prereq 80)
190. **Topics: Child Development.** Independent reading or research. (Cr ar; prereq #)

Note—For child psychology courses at the 200 level consult the *Bulletin of the Graduate School*.

CURRICULUM AND INSTRUCTION (EdCI)

General Courses

104. **Adult Education.** Agencies, programs, philosophies, history, and trends. Each student will devote some time to a field of special interest. (3 cr)

105. **Audio-Visual Materials in Education.** Characteristics, advantages, limitations, and practical classroom use of audio-visual materials of nonprojected and projected types. Practice in operation of audio-visual equipment. (3 cr; prereq sr)
106. **Co-ordinating an Audio-Visual Education Program.** Criteria for equipment, facilities, and materials; in-service training of teachers; problems in schools or industry. (3 cr; prereq 105 or #)
107. **Radio and Television in Education.** Production, techniques of classroom use, selection of equipment, teaching appreciation, and the administration of radio and television in the schools. (3 cr; prereq 9 cr in education)
108. **Nonprojected Audio-Visual Materials and Equipment Laboratory.** Planning and making nonprojected materials for audio-visual education; use of materials and equipment. (3 cr; prereq 105 or §105)
109. **Projected Audio-Visual Materials and Equipment Laboratory.** Planning and making projected materials for audio-visual education; use of materials and equipment. (3 cr; prereq 105 or §105)
115. **Introduction to Education of Visually Handicapped Children.** Educational programs, services, and resources for blind and partially seeing children; historical background; philosophy; sociological and psychological problems. (3 cr; prereq #)
116. **Braille I.** Mastery of literary braille code and introduction to use of mathematics and music codes; analysis of specialized equipment and emphasis on use of Braille writers and slates. (3 cr; prereq 115 or #)
117. **Braille II.** Development of classroom materials involving literary Braille code; mastery of Nemeth Code of Mathematics; opportunity for mastery of music code; consideration of newer approaches in setting up text and references materials. (3 cr; prereq 116)
126. **Orientation and Mobility for Blind Children.** Provides techniques to help blind children gain skill in orientation and mobility. Lectures and demonstrations; practice in basic techniques; conferences on psychological and physical factors in mobility; discussions of cane, dog guide, and related methods of travel. (3 cr; prereq #)
127. **Methods of Teaching School Subjects to the Hearing Impaired.** Adaptation of materials and teaching methods for hearing-impaired children in reading, mathematics, social studies, and science. (3 cr; prereq SSPA 183, #)
128. **Introduction to the Education of Hearing Impaired Children.** Educational programs, services, and resources; historical background; philosophy; sociological and psychological problems. (3 cr; prereq #)
133. **Consumer Education in the Schools.** Objectives, content, and curriculum organization at elementary and secondary levels. (3 cr)
145. **Reading Difficulties.** Causes, prevention, and correction. Remedial practices useful to the classroom teacher, school counselor, and reading specialist. (3 cr; prereq 143A or 144 or equiv)
151. **Diagnosis and Treatment of Learning Difficulties.** Evaluation of the results of teaching; diagnosis of pupil difficulty; development and prevention; tests as aids to teaching; following up a testing program. (3 cr)
155. **Materials Laboratory for Social Studies Teachers.** Printed and audio-visual materials useful in social studies classes. (3 cr; prereq #)

Description of Courses

170. **Programs and Procedures of Curriculum Development.** Leadership in procedures, operational processes, major considerations in planning and organizing, interpersonal relationships, and evaluation of improvement programs. (3 cr, §170A-B; prereq 113 or 119)
171. **Workshop: Curriculum Laboratory Practice.** Analysis and construction of units, courses of study, and curriculums according to needs, interests, level, and specialization. (0-3 cr per qtr)
173. **Preparation of Curriculum Materials.** Selecting and organizing units, courses of study, curriculum guides, and writing materials individually and in groups. (3 cr, §173A-B; prereq 113 or 119)
- 174-175-176. **Clinical Methods and Practices in Speech Pathology.** Case history and analysis; testing and diagnosis of speech defects; techniques and work programs for treatment; practical clinical work. (3 cr per qtr, §SSPA 164 for 174, §SSPA 165 for 175, §SSPA 166 for 176; prereq SSPA 141, 142 or #)
- 174A. **Clinical Practicum in Speech Correction: Cleft Palate.** Supervised clinical experience in the diagnosis and treatment of speech problems associated with cleft palates. Students will spend approximately 4 hours per week in clinical activities. (1 cr; prereq SSPA 146, #)
178. **Structure and Function of the Eye—Educational Implications.** An ophthalmologist discusses anatomy and physiology of the eye. An educator presents the educational implications. Consideration of visual screening, visual efficiency, aids. Field trips, films, observations. (3 cr; prereq #)
182. **Education of Partially Seeing Children.** Principles of preparation, selection, and effective use of instructional materials for the partially seeing child; adaptation of school environment. (3 cr; prereq EdCI 115, 118, and #)
185. **Advanced Course in the Teaching of Modern Languages.** New curriculums, classroom procedures; use of language laboratory, and other mediums and evaluating techniques. Open to teachers of modern languages and registrants in language institutes. (3 cr)
189. **Materials and Curriculum Construction in Modern Languages.** Curriculum development, preparation of units, testing techniques; materials for classroom, language laboratory, televised instruction, and programmed learning. (3 cr; prereq 185 and #)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 201.° **Problems: Teaching Social Studies**
203. **Supervision and Administration of Special Education**
- 205.° **Problems: Audio-Visual Education**
- 207.° **Problems: Radio-Television Education**
- 215.° **Problems: School Health Education Program**
217. **Seminar: School Health Education Program**
- 227.° **Problems: Rural Education**
230. **Survey of Theory and Classical Research in Mathematics Education**
- 232.° **Problems: Teaching Mathematics**
233. **Seminar: Mathematics Education**

- 240. Workshop: Improvement of Instruction
- 241. Seminar: Advanced Study in Supervision and Curriculum Development
- 242. Field Practicum in Supervision and Curriculum Development
- 243A. Research Foundations for Reading Instruction
- 243B. Recent Research in Reading
- 243C. Seminar: Reading Instruction
- 271.° Problems: Curriculum Construction
- 273.° Problems: Reading
- 288.° Seminar: Research in Modern Language Learning
- 291.° Research in Mathematics Education
- 296.° Problems: Teaching English
- 297. Research in English and Speech Education

Elementary Education

- 54. Literature and Story Telling for Young Children. (2 cr; prereq CPsy 80)
- 55. Foundations of Early Childhood Education. Development, tools, aims of early childhood education. (3 cr; prereq CPsy 80 or ¶CPsy 80)
- 56. Methods and Observations in Kindergarten. Directed observations of kindergarten children and procedures. (3 cr; prereq CPsy 80)
- 57. Nursery-Kindergarten-Primary Lab in Social Studies, Science, Art, and Music. Lectures and laboratory work on methods and materials for children of ages 2 to 6 in nursery school, kindergarten, and home. (4 cr; prereq CPsy 80)
- 59. Methods and Observations in Nursery School. Directed observations of nursery school children and procedures. (3 cr; prereq CPsy 80)
- 60. Teaching Reading in the Elementary School. Emphasis on intermediate and upper elementary grades; reading readiness, word recognition techniques, development of basic study skills, development of word meanings, comprehension abilities, and interests and tastes in reading. (3 cr; prereq Ed 75A)
- 61. Teaching Social Studies in the Elementary School. Content and philosophy of the social studies program; methods of instruction and problems. (3 cr; prereq Ed 75A)
- 62. Teaching Mathematics in the Elementary School. Principles of learning pertinent to the modern program of mathematics in primary and elementary grades, objectives, content, philosophy, instructional materials, methods of instruction and evaluation. (3 cr; prereq Ed 75A, Math 5)
- 63. Children's Literature. Materials for children's reading in the elementary school program. (3 cr)
- 64. Teaching English in the Elementary School. Development of language power in the elementary school in relation to all activities of the school day. (3 cr; prereq Ed 75A)
- 65. Teaching Science in the Elementary School. Objectives, content, materials, philosophy, and methods of instruction and evaluation; practical applications. (3 cr; prereq Ed 75A, 10 cr in natural science)

Description of Courses

66. **Treatment of Learning Difficulties.** Classroom procedures in diagnosis and treatment of learning difficulties at the elementary school level; emphasis on arithmetic, reading, and other language arts. (3 cr; prereq 60, 62, student tchg)
102. **Teaching and Supervision of Social Studies in the Elementary School.** Content and organization of social studies programs; programs of understanding, improving the learning situation, and the effective use of materials. (3 cr; prereq Ed 75B or equiv)
103. **Teaching Science in Elementary School.** Resources, materials, and their application in elementary grades. (3 cr; prereq sr, Ed 75B or tchg exper)
118. **Education of Blind Children in the Elementary Grades.** Adaptation of curriculum for blind children; procedures in teaching specialized curriculum: Braille reading, typing, orientation, and mobility; utilization of family, school, and community resources. (3 cr; prereq 115, 116 and #)
119. **Elementary School Curriculum.** Selection and organization of subject matter for courses; methods, problems, and findings of research by subjects. (3 cr; prereq Ed 75B or equiv)
121. **Literature for the Elementary School.** Evaluation of books for children; research on children's reading interests; selection of literature. (3 cr)
- 143A. **Teaching and Supervision of Reading in the Elementary School.** Objectives, materials, and teaching procedures; current practices and curriculums; class and individual projects; observation of reading techniques and materials in the demonstration school. (3 cr; prereq 9 cr in education)
- 143B. **Materials and Instructional Techniques of Elementary Reading.** Analysis and evaluation of materials; consideration of programmed, basal, linguistic, and other types of materials. Laboratory projects and demonstrations of techniques of instruction; criteria for selection of materials and techniques for students with special needs. (3 cr; prereq 60 or 143A or #)
- 143C. **Instructional Leadership in Elementary Reading.** Survey of formal and informal procedures for evaluating reading instruction; demonstration teaching as instructional leadership; grouping procedures in improvement of reading programs. Intended for supervisors and principals. (3 cr; prereq 143A or #)
- 149A. **Teaching and Supervision of Mathematics in the Elementary School.** Present practices and trends in methods, evaluation and diagnosis; objectives, psychology and philosophy related to improvement of instruction. (3 cr, §149; prereq 62 or #)
- 149B. **Materials Laboratory for Elementary School Mathematics Instruction.** Printed and programmed materials, audio-visual aids, community resources; laboratory projects and techniques of using mathematical devices and instruments. (3 cr; prereq 62 or 149A or #)
- 149C. **Current Developments in Elementary School Mathematics Instruction.** Contemporary literature, trends, and experimentation with content; criteria for program evaluation. (3 cr; prereq 62 or 149A or #)
150. **Supervision and Improvement of Instruction.** Functions and duties of a supervisor; techniques; analysis of classroom activities. (3 cr; prereq 9 cr in education)
153. **Teaching and Supervision of English in the Elementary Schools.** Improvement of instruction, study of trends in English education. (3 cr; prereq 64 or elem school tchg exper)

- 153A. **Materials Laboratory for Teaching English in Elementary Schools.** Examination and evaluation of textbooks, programmed materials, and audio-visual resources for elementary school language arts instruction. (3 cr; prereq 64 or elem school tchg exper)
154. **Elementary Social Studies and the Social Science Disciplines.** Relationship of sociology, political science, economics, geography, anthropology, and history to social studies education. Scope, meaning, goals, and significance as they relate to elementary school programs. (3 cr; prereq 61 or 102 or #)
- 155A. **Materials Laboratory for Elementary Social Studies Teachers.** Printed, audio-visual and other materials; investigation and evaluation of teaching materials and devices. (3 cr; prereq 61 or 102 or #)
- 165A. **Mathematics for Gifted Children.** Curriculum and methods of instruction for academically talented children; development of enrichment units; source material for teachers. (3 cr; prereq 62 or 149A or #)
- 165B. **Mathematics for Slow Learning Children.** Units of instruction emphasizing mathematical concepts essential for vocational competence; experimental materials and methods designed to improve performance of low achievers. (3 cr; prereq 62 or 149A or #)
166. **Current Trends, Kindergarten Education.** Continuing needs of children in our changing culture; kindergarten practices and recent research. (3 cr; prereq tchg exper in NKP or #)
179. **Education of Mentally Retarded Children in the Elementary School.** Curriculum content, materials, and methods of instruction for educable mentally retarded children. Preparation of units and development of teaching aids. (3 cr; prereq EPsy 184)
181. **Foundations of Elementary School Methods.** Psychology and philosophy related to improvement of elementary school instruction; utilization of research findings. (3 cr; prereq 9 cr in education)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

206. **Curriculum Construction in Elementary Social Studies**
208. **Research in Elementary Social Studies**
209. **Seminar: Elementary Social Studies Education**
226. **Seminar: Elementary School Problems**
231. **Recent Research in Elementary School Mathematics Instruction**
257. **Research in English Composition in Elementary Schools**
258. **Research in Skill Development in Spelling, Handwriting, and Listening**
- 261.* **Problems: Improvement of Instruction**
264. **Research in Educational Diagnosis**

Secondary Education

45. **Introduction to Business and Distributive Education.** Survey of the field at the secondary, junior college, and adult levels. (3 cr)
- 101A. **Driver Education I.** (4 cr, §101; prereq Δ)

Description of Courses

- 101B. **Driver Education II.** (4 cr; prereq 101 or 101A and Δ)
113. **Principles of Secondary School Curriculum.** Fundamental principles; curricular concepts, special services, student activity programs, instructional instruments, administrative systems, and future trends. (3 cr; prereq Ed 55B or equiv)
114. **Interdisciplinary Approaches to Curriculum.** Rationale, status and trends, design, operation, and evaluation of a core curriculum, unified studies, and other approaches. (3 cr)
120. **Education of Blind Students in the Secondary Schools.** Adaptation of curriculum for junior-senior high school students; preparation of educational materials; reader service, orientation and mobility, specialized equipment; utilization of guidance and counseling services, local, state, and national resources. (3 cr; prereq 118, and #)
122. **Literature for Adolescents.** Background for pupil guidance in extensive reading in junior and senior high schools. (3 cr; prereq Ed 55B or junior-senior high school tchg exper)
124. **Foundations of Career Development.** Evaluation of vocational theory and career development research; occupational analysis and industrial structure; methods of classifying the world of work; analysis of labor force and employment trends; basic concepts and principles for effective work in educational and vocational planning and development. (3 cr)
125. **Occupational Information Laboratory.** Using, reviewing, and evaluating occupational information; sources and types of material, occupational filing plans, and practical techniques at the secondary school level. (3 cr; prereq #)
129. **Trends and Issues in Secondary Curriculum.** Research findings and analysis of current proposals at the national, state, and local levels. (3 cr; prereq 113 or equiv)
131. **Advanced Teaching of Technical Business Subjects.** Recent research and trends. (3 cr)
132. **Teaching the Basic Business Subjects.** Recent trends and developments in teaching general business, economic geography, marketing, business law, and consumer education. (3 cr)
135. **Group Procedures in Guidance.** Content and materials for home room groups, occupations units, and other guidance courses in junior and senior high school. (3 cr; prereq 9 cr in education, EPsy 133 or #)
136. **Organization and Administration of Distributive Education.** Principles, practices, and legislation followed in developing co-operative part-time and adult programs under federal vocational acts. Basic course for teacher-coordinators and vocational administrators. (3 cr)
- 137A. **Materials and Methods in Co-operative Part-Time Classes.** For co-operative part-time distributive, office, miscellaneous trades, and diversified occupations classes. (3 cr)
- 137B. **Advanced Materials and Methods in Co-operative Part-Time Classes.** Individual and group work on related vocational materials. New methods of teaching co-operative part-time distributive, office, miscellaneous trades, and diversified occupations classes. (3 cr; prereq #)
138. **Training Store and Office Supervisors.** Conducting short unit courses for store and office supervisors and improving on-the-job training in co-operative part-time programs. (3 cr)

Curriculum and Instruction

139. **Co-ordination Techniques.** Problems of co-ordinators in the co-operative part-time program; guidance and selection; placing students in work stations, assisting job adjustments, developing the training program. (3 cr)
141. **Co-operative Part-Time Work Experience Programs.** Planning, organizing, curriculum building, plant and equipment, promoting and evaluating co-operative part-time distributive, office, miscellaneous trades, and diversified occupations programs. (3 cr)
142. **Business and Distributive Programs for Adults.** Selection and training of evening school instructors; planning and promoting evening school distributive education classes. (3 cr)
144. **Teaching Reading in Secondary Schools.** Procedures, objectives, and materials for teaching reading in subject-matter fields. (3 cr; prereq 9 cr in education)
147. **Workshop: Teaching Display.** Materials and methods; practice in using equipment. (3 cr; prereq #)
148. **Post-Secondary Business and Distributive Education.** Determining needs, curriculum, facilities, admission practices, placement, and follow-up of students, teacher qualifications, interorganizational relations in junior college and area technical school programs. (3 cr)
156. **Trends in Business Education.** Historical development of business education; trends in philosophy, curriculum, and teaching procedures. (3 cr)
158. **Materials and Methods in Office and Stenographic Procedures.** Recent research and developments in teaching office practice, clerical practice, and office machines. (3 cr)
159. **Materials Laboratory, Secondary School Distributive Education.** Development of specific related vocational materials for distributive occupations, co-operative part-time classes. (3 cr; prereq 137A or EdT 90C or #)
160. **Materials Laboratory, Occupational Relations.** Development of general related vocational materials for all types of co-operative part-time classes. (3 cr; prereq 137A, EdT 90C or #)
161. **Curriculum Construction in Business Education.** Curriculum problems; organization and preparation of teaching units. (3 cr; prereq 113)
167. **Economic Education Programs.** Conceptual framework of economic education through analyzing its research, objectives, philosophy, scope, and curricular sequence. (3 cr; prereq Econ 2 or equiv or #)
168. **Current Developments in the Social Studies.** Contemporary literature, curricular trends, and developments in methods. (3 cr; prereq grad or #)
169. **Student Activity Programs in Secondary Schools.** Values, purposes, and practices in organizing, sponsoring, and evaluating student activity programs. (3 cr; prereq Ed 55B or equiv)
171. **Workshop: Curriculum Laboratory Practice.** Analysis and construction of units, courses of study and curriculums according to needs, interests, level, and specialization. (0-3 cr per qtr; prereq 113 or 119, #)
172. **Supervision of Secondary Instruction.** Achievement of appropriate teaching expectations focusing on problems of personnel responsible for their improvement. (3 cr; prereq 113)
180. **Education of the Mentally Retarded in the Secondary Schools.** Curriculum, materials, and methods of instruction for the educable mentally retarded students. Philosophy, administration, vocational and personal guidance, parent

Description of Courses

- consultation, and work programs. Field trips when possible. (3 cr; prereq EPsy 184)
190. **Current Developments in Secondary School Science Teaching.** Curriculums, methods, materials of instruction, evaluation. (3 cr; prereq EdT 68B-C or 68M, equiv undergrad courses, or exper in science tchg)
191. **Advanced Teaching and Supervision of Secondary Mathematics.** Methods, materials, and curriculum development; principles of learning; review of research; preparation and evaluation of units, tests, and materials of instruction. (3 cr)
192. **Mathematics Laboratory.** Sources and types of materials, laboratory projects and techniques of using mathematical devices and instruments, visual aids, and community resources. (3 cr; prereq grad or experienced tchr)
194. **New Content and Methods in Mathematics.** Trends and experimentation with content; special programs for the gifted and the slow learner; methods in mathematics; program evaluation. (3 cr; prereq exper in math tchg)
195. **Current Developments and Curriculum Construction in English.** Analysis and evaluation of curriculums and trends; emphasis on articulation. (3 cr; prereq EdT 75C or 75D or equiv)
- 199E. **Internship.** (Cr ar; available for MEd students)

FOR GRADUATE STUDENTS ONLY

(Description in Bulletin of the Graduate School)

200. **Organization and Supervision of Business Education**
204. **Social Studies Curriculum**
222. **Seminar: Secondary Curriculum and Instruction**
- 225.* **Problems: Secondary School Supervision**
237. **Seminar: Research in Business, Distributive, and Economics Education**
- 238.* **Problems: Distributive Education**
- 239.* **Problems: Business Education**
280. **Supervision of Counseling**
- 287.* **Research Foundations of Secondary School Science Teaching**
- 294.* **Advanced Materials and Methods in Secondary School English**
295. **Readings in English and Modern Language Education**

Higher Education

184. **Supervision of Student Teaching.** For persons planning to supervise or administer student teaching and other professional laboratory experiences in elementary and secondary education. (3 cr; prereq 15 cr in education or #)

FOR GRADUATE STUDENTS ONLY

(Description in Bulletin of the Graduate School)

- 228.* **Problems: Higher Education and Teacher Education**
250. **Higher Education in the United States**

- 251. Curriculum Trends in American Colleges
- 252. Effective College Teaching
- 253. Seminar: Improvement of College Instruction
- 253A. Seminar: Materials and Methods in Marriage Education
- 254. Directed Experience in College Instruction
- 284.° Problems: Student Teaching
- 285-286. Professional Education of Teachers

EDUCATION (Ed)

- 55A. Introduction to Secondary School Teaching. Secondary education; purposes, history, organization, curriculum, pupils; organization of instructional units; teaching profession. Lecture, discussion section, and individual youth leadership project. (5 cr; prereq Psy 2)
- 55B. Introduction to Secondary School Teaching. Individual differences and educational measurement; statistics, standardized tests, teacher-made tests, marking and promotion, educational research; psychology of learning and human development. Lecture, discussion section, and individual youth leadership project. (5 cr; prereq 55A)
- 75A-B. Introduction to Elementary School Teaching
 - 75A. Educational Psychology. Child growth and development during elementary school years; principles of learning; adjustment. (5 cr; prereq Psy 2)
 - 75B. Introduction to Elementary School Teaching. Curriculum and organization patterns; unit instruction; reporting, promotion and nonpromotion classroom management; the control and support of public education. (3 cr; prereq 75A, [EdT 54A, # [except IIIA, IIIB and speech pathology majors])

EDUCATIONAL ADMINISTRATION (EdAd)

General Administration

- 101. Public School Administration. Organization, administration, and general support of public schools in state and local school districts. (3 cr; not open to majors in educational administration; prereq 9 cr in education)
- 118. The Community School. Philosophy, purposes, organization, and functioning of the community school, and its relationships with the area it serves. (3 cr)
- 128. Workshop: Educational Administration. Laboratory approach which provides opportunities for experienced educational administrators to concentrate their study on common administrative and supervisory problems. (1-6 cr; prereq practicing educational administrator or #)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 201. Foundations of Educational Administration
- 202. Foundations of Educational Administration

Description of Courses

- 210. Public School Finance
- 211. School Business Management
- 224. Legal Aspects of Public School Administration
- 226. School Plant Planning
- 227. Public School Personnel Programs
- 228.^o Problems: Educational Administration
- 230. School-Community Relations
- 231. Workshop: School-Community Relations Technique
- 232. Workshop: School Business Management
- 235. Seminar: Educational Administration
- 236. Field Study
- 237. Seminar: Educational Law
- 238. Seminar: Research and Theory
- 239. School Principal's Workshop
- 241. Seminar: Internship in Educational Administration
- 242. Administrative Organization and Staffing of School Systems

Elementary Education

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 200. Seminar: Elementary School Administration
- 215. Elementary School Principalship
- 270A.^o Problems: Elementary School Administration

Secondary Education

- 167. **The Junior High School.** Sources of the movement; purposes, functions, and limitations; fundamental problems, types, and curricular implications of re-organization. (3 cr; prereq 9 cr in education)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 218. Seminar: Secondary School Administration
- 233. Workshop: The Junior High School
- 264. The Secondary School Principalship
- 265. Administering the High School Program
- 270B.^o Problems: Secondary School Administration

Higher Education

(Description in *Bulletin of the Graduate School*)

- 253. Administration in Higher Education
- 274. The Junior College
- 275. Junior College Administration
- 290. Financing Higher Education
- 291. Public Relations for Colleges and Universities

EDUCATIONAL PSYCHOLOGY (EPsy)

General Courses

- 60. **Introduction to Measurement and Statistics.** Measures of central tendency, variability, and correlation; principles of test construction. (2 or 3 cr; prereq 6 cr in psychology)
- 100. **Individual Appraisal for Counseling.** Analysis of techniques; use in guidance and counseling. (3 cr; prereq 9 cr in education)
- 110. **Educational Measurement in the Classroom.** Principles and methods for construction, evaluation, and improvement of educational measurements in classroom instruction. (3 cr)
- 116. **Introductory Statistical Methods.** Basic statistical techniques; comprehension of literature using elementary concepts and methods. Not equivalent to EPsy 216, 216A. (3 cr)
- 116A. **Introductory Statistical Methods—Laboratory.** (2 cr; prereq ¶116)
- 117. **Basic Principles of Measurement.** Principles underlying construction of achievement examinations; developments in educational and psychological measurement; theory and practice related to statistical methods; types and uses of derived scores; factors influencing reliability and validity. (3 cr; prereq 116 or 216 or Psy 70 or equiv)
- 125. **Group Dynamics in Education.** Review of literature; practical application of social-psychological concepts to the analysis of group behavior. (3 cr)
- 126. **Analysis of Behavior in Groups.** Laboratory experimentation; individual projects with class help. (3 cr; prereq 125)
- 133. **Introduction to Guidance.** Philosophy, principles, and practices in development and operation of pupil personnel services; role of counselor, teacher, principal, and specialized personnel; guidance techniques and case studies. (3 cr; prereq 9 cr in education)
- 140. **Instruments and Techniques of Measurement.** Measuring intelligence, achievement, interests, attitudes, and personality traits and use in educational guidance, personnel work, administration, and supervision. (3 cr; prereq 110 or 117)
- 141. **Computer Programming.** Computer as a tool for research in the behavioral sciences. Computer systems, language, and the development of specific programs that demonstrate computer characteristics. Laboratory experience. (3 cr; prereq sr)

Description of Courses

148. **Clinical Diagnosis of Reading Difficulties.** Relationship to psychological factors and clinical remedial correction. (3 cr; prereq EdCI 145)
150. **Clinical Practice in Remedial Teaching.** Remedial tutoring of individual children who have difficulty in school learning. (3 cr; prereq EdCI 145 or 151 and #)
152. **Introduction to School Psychological Services.** Relationship of the psychologists to teachers, administrators, parents, and the community. Problems of normal children; diagnosis and treatment of educational and psychological disabilities. (3 cr)
159. **Personality Development and Mental Hygiene.** Fall: for seniors and first-year graduate students only—elementary and secondary classroom conditions. Spring: for graduate students only—basic theory, group and individual procedures in treatment. (3 cr)
182. **Education of Exceptional Children.** An overview of the field of special education for classroom teachers, counselors, supervisors, and administrators; the initial course for students working on special class certificates. (3 cr; prereq Ed 55B or 75B)
183. **Education of Gifted Children.** Abilities, characteristics, and education of intellectually gifted children and adults. (3 cr; prereq Ed 55B or 75B or equiv)
184. **Introduction to Education of the Mentally Retarded.** Issues which relate to educational practices; community planning; educational philosophy, administration and organization, and programming. (3 cr; prereq 182)
185. **Education of the Auditorially Handicapped Child.** Group and individual observation of classes for auditorially handicapped children; individual and small group conferences. (3 cr)
186. **Education of Emotionally Disturbed and Socially Maladjusted Children.** Discussion and evaluation of curriculum, materials, and methods for instruction of disturbed and delinquent children in hospital, training school, and public school settings. (3 cr; prereq grad or #)
187. **Education of Crippled Children.** Characteristics and abilities; methods and materials for training; observation of teaching situations involving these groups. Personal consultation scheduled in addition to class hours. (3 cr; prereq 182 or #)
188. **Education of the Culturally Disadvantaged Child.** Educational needs of children handicapped by behavior related to deficiencies of physical and/or cultural environment; adaptations of educational programs. (3 cr; prereq HED 90, CPsy 80 or equiv)
190. **Educational Problems of Cerebral Palsy.** Problems in development, learning, and adjustment; study and development of materials to meet the special educational needs; observations of teaching; personal conferences. (3 cr; prereq 182 or #)
193. **Psychological Analysis of Instruction.** Use of psychological concepts and principles in analysis of instructional problems and development of teaching strategies. Consideration of behavior modification; behavioral objectives; task analysis. (3 cr, §old 193, §196-197; prereq sr)
- 194-195. **Experimental Analysis of Instruction.** Introduction to programmed instruction and behavior modification with emphasis on methodological and theoretical foundations. (3 cr per qtr; prereq none for 194, 194 for 195)

196-197.* **Psychology of School Learning.** Acquisition of skills, knowledge, and attitudes which form the content of the school curriculum; influence of motivational variables. (3 cr per qtr, §193; prereq sr for 196, 196 for 197)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 200.* **Seminar: Guidance**
- 207. **Research Practicum**
- 208.* **Methods in Educational Research**
- 209. **Seminar: Research Planning**
- 210. **Individual Mental Testing**
- 211. **Advanced Individual Mental Testing**
- 216-217-218. **Statistical Methods**
- 216A-217A-218A. **Statistical Methods—Laboratory**
- 219. **Design and Analysis of Experiments**
- 219A. **Design and Analysis of Experiments—Laboratory**
- 220-221. **Advanced Theory of Measurement**
- 225. **Counseling Theory and Procedure I**
- 226.* **Counseling Theory and Procedure II**
- 233.* **Problems: Guidance and Personnel Work**
- 234. **Seminar: Counseling Theory and Research**
- 240.* **Problems: Measurement**
- 241. **Seminar: Developing Computer Applications**
- 242. **Computer Application to Statistical Analysis**
- 243.* **Problems: Statistics for Students in Education and Psychology**
- 244. **Research in Special Education**
- 248. **Seminar: School Psychology**
- 253.* **Research Problems**
- 257. **Clinical Practice in Educational Diagnosis**
- 259. **Personality Theory in Mental Hygiene**
- 260. **Seminar: Educational Psychology**
- 261. **Survey of Theory and Research in Education of the Mentally Retarded**
- 262. **Functional Analysis of Behavior in Mental Retardates**
- 263. **Design and Interpretation of Behavioral Research with the Mentally Retarded**
- 264. **Assessment of the Handicapped**
- 265. **Theories of Educating Disturbed Children**
- 266. **Research in Education of Disturbed Children**
- 267. **Research Designs in Education of Disturbed Children**
- 268. **Seminar: The Culturally Disadvantaged**

Description of Courses

- 280. Practicum in Group Leadership
- 286. Advanced Course: Education of Emotionally Disturbed and Socially Mal-adjusted Children
- 287. Practicum: School Psychological Services
- 288. Practicum: Special Education
- 289. Survey of Special Education Problems
- 290. Advanced Counseling Practicum
- 292. Recent Literature in Educational Psychology
- 295. Research Practicum in Programmed Instruction and Behavior Modification
- 297.° Psychology of Knowledge Acquisition
- 298.° Psychological Theories of Teaching
- 299.° Seminar: School Learning

Secondary Education

- 134. Counseling Procedures. Introductory course in counseling for school and community personnel; basic theories and principles applied to the work of the classroom teacher, school principal, church and community agency personnel; counseling procedures, case studies, and role playing. (3 cr)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 282A. Field Practice in Guidance
- 282B. Supervised Practicum in Counseling

Higher Education

- 250. College Student Personnel Work—Development and Administration
- 251. College Student Personnel Work
- 252. Seminar: The College Student
- 254.° Measurement and Evaluation in Higher Education
- 255. Diagnosis and Treatment of College Learning Difficulties
- 256. Clinical Practice in Diagnosis and Treatment of College Learning Difficulties
- 281. Practice in Personnel Work

HISTORY AND PHILOSOPHY OF EDUCATION (HEd)

- 90. **The School and Society.** Readings in social science and philosophy give the student an opportunity to integrate points of view in thinking about the roles of the school in present-day society. (3 cr; prereq sr)
- 101. **Historical Foundations of Modern Education.** Background course for all other courses in the history and philosophy of education. Analysis and interpretation of important elements in modern education derived from the Greeks, Romans, the Middle Ages, and the Renaissance. (3 cr)

Home Economics Education

110. **Intercultural Education.** Racial, religious, and nationality problems; their importance for the schools. (3 cr)
131. **Comparative Education.** European, Asiatic, and American systems and philosophies of education. Explores possibilities of international education. (3 cr)
141. **Critical Issues in Contemporary Education.** Introduces graduate students to ideas involved in current theory and practice. (3 cr)
- 149-150-151. **Social History of American Education.** Impact of education on social and institutional developments in America from the colonial period to the present. Although schools, both private and public, will receive continuous attention, education will be defined broadly to include the work of the family, the religious congregation, the popular press, clubs, and other private associations. (3 cr per qtr, §Hist 139E, 140E, 141E)
155. **History of Western Educational Thought.** Examination of the major educational classics of Western civilization: Plato, Cicero, Locke, Rousseau, Dewey, and others. (3 cr)
156. **History of Ideas in American Education.** Readings in American political, economic, and social development; reference to the emerging system of public education. Recommended as background for 170. (3 cr)
170. **American Pragmatism and Education.** Analysis and interpretation of the educational philosophy of pragmatism (experimentalism). Readings from Dewey, Kilpatrick, Bode, Counts, Childs, and others. (3 cr)
182. **Comparative Philosophies of Education.** Examination of competing philosophies of education. (3 cr)
190. **Sociology of Education.** Advanced studies in the social aspects of education including the school as a socialization process, the social structure of education, the role of school in social change, and others. (3 cr; prereq 90)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

- 241.* **Problems: History and Philosophy of Education**
242. **Seminar: Educational Philosophy**
- 296-297-298. **Seminar: American Social and Educational History**

HOME ECONOMICS EDUCATION (HEEd)

49. **Introduction to Home Economics Education.** Nature of the home economics teacher's work; means for developing necessary competencies. (2 cr; prereq soph, Psy 2)
60. **Curriculum in Home Economics Education.** Selection and organization of content of curriculum at secondary level. (3 cr; prereq 49, Soc 1 or 1A, Ed 55B or §Ed 55B)
61. **Methods of Teaching Home Economics.** Study of teaching procedures to achieve desired learnings; materials of instruction. (3 cr; prereq 60, §62)
62. **Evaluation in Home Economics.** Techniques for measuring progress toward specific objectives in different areas. (3 cr, §192; prereq 60, §61)
63. **Supervised Teaching in Home Economics.** Observation, participation, and teaching under supervision. (9 cr, §93-94; prereq 61, 62)

Description of Courses

64. **Adult Education in Home Economics.** Objectives of adult education in home-making; problems affecting community and family life; methods of helping adults and out-of-school youth in solving problems in home living. (3 cr, §194A; prereq 60)
65. **Colloquium in Home Economics Education.** Significant issues, relating knowledge and belief about teaching into coherent pattern. (2 cr; prereq 63)
90. **Child Development.** Growth and development of children and problems in training. Emphasis on the pre-school child. Observations of children. (3 cr; prereq soph, Psy 2)
- 90A. **Practicum in Child Development.** Direct observation and experience with children as a method of teaching child development in the home economics program. (1 cr; prereq 90 or §90)
95. **Field Experience for Home Agents.** Observation, participation, and actual experience under supervision in the agricultural extension program. Study of the program on the St. Paul Campus and participation in a selected county program with a home agent. A written report summarizing the experience will be required. (6 cr; prereq 49, Δ and consent of the director of agricultural extension)
- 160A. **Home Economics Curriculum.** Examination of research and literature; development of units of study and programs at the elementary and secondary level; production and evaluation of materials. (3 cr, §193A; prereq 63 or #)
- 160B. **Home Economics Curriculum: College Level.** Examination of research and literature; course and program development in home economics in higher education; analysis of current college programs; production and evaluation of curriculum materials. (3 cr, §193B; prereq #)
161. **Method in Teaching Home Economics: Theory and Technology.** Derivation of theory for educational method from relevant research; application to the educational objectives of home economics; analysis of technology related to teaching method. (3 cr, §191; prereq 61, 63, or #)
162. **Evaluation: Theoretical and Technical Aspects.** Relation among concepts pertinent to evaluation in teaching; collecting and interpreting evidences related to achievement of objectives; emphasizing higher levels of cognition and affective behaviors. (3 cr, §292; prereq 62 and #)
163. **Practicum: Adult Education.** Individual field assignments under supervision. (3 cr; prereq #)
164. **Adult Education in Home Economics.** Planning a community program; teaching procedures; special problems. Planned for teachers and supervisors of adult education. (3 cr, §194B; prereq 64 or #)
165. **Proseminar: Home Economics Education.** Purposes and concepts of professional study; relation of the processes and standards of rational thought to professional competence and the goals of a graduate program of study. (2 cr; required of all new grad students)
166. **Trends in Home Economics Education.** Current status; purposes, programs, content emphases, research, problems, and issues in the field. (3 cr, §243; prereq 160A or 160B)
190. **Readings in Home Economics Education.** Independent study under tutorial guidance. (1-3 cr; prereq #)

Home Economics Education

195. **Space, Equipment, Furnishings, and Materials for Home Economics Departments.** Remodeling old and planning new departments, equipping and furnishing them. Review of research; investigation of problems. (3 cr; prereq 61, 63, HE 49)
196. **Home Experiences and the Extended Program.** Place of home experiences in the high school program; procedures in directing home experiences; effective use of the period of extended employment of homemaking teachers in the vocational program. (3 cr; offered when demand warrants)
- 196A. **Workshop: Home Planning and Furnishing.** Problems at high school and adult levels; use of new materials and techniques; group and individual projects to meet the needs and interests of experienced teachers. (4 cr; prereq grad)
- 196B. **Workshop: Child Development and Human Relations.** Recent emphasis on growth and guidance of individuals; materials and techniques for high school and adult levels to attain better understanding. (4 cr; prereq grad)
- 196C. **Workshop: Foods and Nutrition.** Problems in teaching at high school and adult levels; use of new materials and techniques; group and individual projects for experienced teachers. (4 cr; prereq grad)
- 196D. **Workshop: Materials for Instruction.** Problems in selection and use of new materials for instruction in home economics. (4 cr; prereq grad)
- 196E. **Workshop: Adult Education.** Procedures in teaching adults; planning the program; use of new materials and techniques; group and individual problems for experienced teachers. (4 cr; prereq grad)
- 196F. **Workshop: Home Experience and Extended Employment.** Methods of using the extended period of employment effectively; techniques for selection, execution, and evaluation of home experiences; group or individual problems for experienced teachers. (4 cr; prereq grad)
- 199E. **Internship.** Directed teaching and practice work for the master of education degree. (Cr ar; prereq #)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

200A. **Research Methods**

200B. **Research Methods**

201.* **Problems: Home Economics Education**

260. **Seminar: Curriculum Development**

263. **Seminar: Supervision of Student Teaching**

264. **Seminar: Improvement of Instruction in Adult Education**

265. **Seminar: Teacher Education**

266. **Seminar: History and Philosophy of Home Economics Education**

267. **Seminar: Administration and Supervision of Home Economics Programs**

295. **Seminar: Home Economics Education**

Description of Courses

INDUSTRIAL EDUCATION (Ind)

A letter in parentheses (A, B, C, or D) following the course title designates laboratory block to which the course is assigned.

1. **Elementary Handicrafts.** For students in elementary, art, special, and recreation education. (3 cr)
2. **Wood Processing I (A).** Use of common hand and machine tools, materials, and finishing principles. (3 cr)
3. **Wood Processing II (A).** Use and maintenance of power equipment; laboratory production experiences. (3 cr; prereq 2 or #)
4. **Wood Processing III(A).** Building construction practices. (3 cr; prereq Δ)
6. **Introduction to Industrial Arts Teaching.** Objectives, programs, and experiences involving tools, materials, design, and processes of industrial arts teaching. (5 cr; for freshmen and others contemplating the major)
7. **Drafting (B).** Sketching, lettering, use of instruments, orthographic projection, pictorial representation, and blueprint reading. (3 cr)
8. **Design I (B).** Laboratory. Introduces the student to creative design as a process of solving problems with tools and materials. (3 cr; prereq 7 or #)
9. **Building Construction Drafting (B).** Principles of orthographic and pictorial representation applied in building construction. (3 cr; prereq 7)
10. **Advanced Drafting (B).** (3 cr; prereq Δ)
12. **Craftwork (A).** Manipulative experiences in craft mediums suitable for industrial arts, such as plastics, art metal, lapidary, and leatherwork. (3 cr)
15. **Graphic Arts I (B).** Typesetting and presswork, photography, silk screen printing, and general duplicating. (3 cr)
16. **Graphic Arts II (B).** Letterpress, dry point etching, bookbinding, photography, and offset printing. (3 cr)
20. **Electricity and Electronics (C).** Introduction to electricity as an area of industrial arts; basic principles, fundamental skills, and teaching ideas particularized for junior high school. (3 cr)
21. **Communication Electronics (C).** Continuation of Ind 20 into basic principles of radio and television equipment. (3 cr; prereq 20)
22. **Industrial Electronics (C).** Basic electronic control devices and systems with laboratory service and maintenance techniques. (3 cr; prereq 20)
23. **Applied Electronics I (C).** (3 cr; prereq Δ)
24. **Applied Electronics II (C).** (3 cr; prereq Δ)
25. **Metal Processing I (D).** General metalwork, machine practices. (3 cr; prereq Δ)
26. **Metal Processing II (D).** Machine shop practices. (3 cr; prereq Δ)
27. **Metal Processing III (D).** General metalwork, welding. (3 cr; prereq Δ)
28. **Metal Processing IV (D).** General metalwork, sheet metal fabrication. (3 cr; prereq Δ)
29. **Metal Processing V (D).** Advanced metalwork. (3 cr; prereq Δ)

30. **Small Gas Engines (A).** Operating principles, maintenance and adjustment of 2- and 4-cycle gas engines. (3 cr)
31. **Automotive Mechanics I (A).** 3 cr; prereq Δ)
32. **Automotive Mechanics II (A).** (3 cr; prereq Δ)
35. **Fundamentals of Vocational Education.** Development and characteristics of vocational training; conservation of human and material resources; social and economic significance; current theories and practices; programs of organization and control; types of programs, support; selection, training, and certification of teachers. (3 cr)
40. **Analysis and Course Organization.** Study of instructional analysis techniques and course development principles and practices. (3 cr)
44. **Equipment and Management.** Planning, evaluating, and the management of industrial education shop and laboratory facilities. (3 cr; prereq 6 or 40 or #)
50. **Industrial Practices and Processes.** An organized series of field trips to be selected; representative industrial plants; visitation preceded by classroom study and investigation. (3 cr; prereq 35)
55. **Teaching Industrial Arts.** Laboratory in study and practices of teaching industrial arts. (5 cr; prereq 55A or ¶55A)
- 60-A-B-C. **Student Teaching.** (3 cr each [9 required]); prereq 6 and 55 or 6 and 100, Δ)
- 60D. **Student Teaching.** Elective course. (3 cr; prereq Δ)
- 60S. **Student Teaching Seminar.** (1-3 cr; prereq ¶Ind 60A, B, C, D)
70. **Drafting, Technical Specialty I (B).** (3 cr; prereq Δ)
71. **Drafting, Technical Specialty II (B).** (3 cr; prereq Δ)
72. **Graphic Arts, Technical Specialty I (B).** (3 cr; prereq Δ)
73. **Graphic Arts, Technical Specialty II (B).** (3 cr; prereq Δ)
74. **Power Mechanics, Technical Specialty I (A).** (3 cr; prereq Δ)
75. **Power Mechanics, Technical Specialty II (A).** (3 cr; prereq Δ)
76. **Metals, Technical Specialty I (D).** (3 cr; prereq Δ)
77. **Metals, Technical Specialty II (D).** (3 cr; prereq Δ)
78. **Electronics, Technical Specialty I (C).** (3 cr; prereq Δ)
79. **Electronics, Technical Specialty II (C).** (3 cr; prereq Δ)
- 90-91-92. **Independent Study.** Self-directed study; preceded by classroom instruction in basic research procedures. (3 cr per qtr; prereq jr or #)
100. **Industrial Instruction.** Concepts and techniques of instruction in industrial arts, trade and industrial schools and classes, and training-within-industry programs. (3 cr; prereq 40, #)
101. **Tests in Industrial Subjects.** Application of principles of evaluation to shop and drawing subjects. (3 cr; prereq Ed 55B)
102. **The General Shop.** Lectures only. Purpose of general shop organization; types of shops, equipment, instructional materials and procedures, pupil personnel plans. (3 cr)
103. **Instructional Aids.** Planning, construction, use. (3 cr; prereq 55 or 40 or 100 or equiv)

Description of Courses

105. **Administration of Industrial Education.** General and vocational phases; objectives, programs, and practices; laws, rulings, and standards for aid; significant literature. (3 cr; prereq 35 or #)
106. **Industrial Education Workshop.** Areas of concentration vary with each successive offering. (3 or 6 cr; prereq tchg exper, #)
107. **Co-ordination.** Duties and responsibilities of co-ordinators in trade schools, part-time programs, and comprehensive high schools. (3 cr; prereq 35 or 125, or #)
109. **Conference Leading for Industry.** Purposes, advantages, and limitations of conference method; techniques of conference procedure; experience in planning, leading, and evaluating conferences and in writing summaries. (3 cr; prereq #)
110. **Vocational Guidance.** History of educational and vocational guidance movement; typical public school means and methods; types and uses of occupational information; duties of the counselor; organization and relationships. (3 cr; prereq Ed 55B)
111. **Instructional Materials Laboratory for Nonmajors.** For students needing manipulative skills and craftwork activities in their teaching; individual and group projects. (3 cr; prereq tchg exper or #)
115. **Supervision of Industrial Education.** Principles of creative supervision; duties, organization for supervision. (3 cr; prereq 35 or 105)
125. **Philosophy and Practice of Industrial Education.** History, objectives, development, and current practices of the field. (3 cr, §35)
135. **Industrial Course Construction.** Principles and techniques; experience in planning, organizing, and building a teaching guide. (3 cr, §40)
136. **Instructional Materials Laboratory.** Laboratory and shop experience with new materials, processes, and equipment; development of complementary instructional materials. (3-6-9 cr; prereq major, tchg exper or #)
150. **Vocational Education Surveys.** Practices and techniques in the study of communities or areas for the establishment or improvement of vocational courses and facilities. (3 cr; prereq 105 or 125 or equiv)
155. **Critical Issues in Industrial Education.** Identification, analysis, and discussion of major current problems in the field. (3 cr)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

200. **Research Problems**
205. **Seminar: Industrial Education**
250. **Literature of Industrial Education**
251. **Research in Industrial Education**

Off-campus courses. Services in conference leader training, instructor training programs, foremanship, and supervision.

METHODS AND STUDENT TEACHING (EdT)

For description of the requirements and procedures for admission to student teaching, see Section I. Student teaching courses listed in other sections of this bulletin are as follows (see entries for the departments concerned): AgEd 91;

Methods and Student Teaching

ArEd 86-87-88; HEEd 63; Ind 60A-B-C-D; MuEd 60-61; PEM 75-76-77; PEW 90A-B-C-D-E

For the practicum in laboratory school teaching in special education, see EdCI 110; for clinical methods and practice in speech pathology, see EdCI 174-175; for practice in personnel work, see EPsy 282A-B; for graduate practicum in special education, see EPsy 288; and for internship, see EdCI 199E.

Nursing Education

51A-B. Teaching Nursing. Observation; principles of teaching applied to teaching in schools of nursing; planning and evaluation of instruction; supervised student teaching of nursing subjects. (10 cr; prereq Ed 55N)

Recreation Leadership

84. Practice and Field Work in Recreation Leadership. Students are assigned to selected agencies. (2 or 4 cr [total 6 cr]; prereq jr, recreation majors)

85. Practice and Field Work in Recreation. Students are assigned to selected agencies. (1 or 2 or 4 cr [total 6 cr]; prereq sr, recreation majors or minors)

Elementary Education

50. Junior Practicum in Special Education. Supervised observation and participation in classrooms and related school activities for exceptional children; a pre-student teaching exploratory experience. (3 cr; prereq #)

52. Student Teaching.** Supervised teaching for students wishing to elect credits in student teaching in addition to regular requirements. (Cr ar)

53A-B. Teaching Handicapped Children.** Observing work with special classes; teaching under direction. Conducted in co-operation with the public schools of Minneapolis and St. Paul. (6 cr per qtr; prereq #)

54A-B.† Student Teaching in the Elementary School.** Five half-days a week in classroom participation and teaching under supervision. (6 cr per qtr)

77. Student Teaching in the Nursery School.** Twelve hours each week in supervised classroom participation. (1-6 cr)

78. Student Teaching in the Kindergarten.** Five half-days each week in supervised classroom participation in public or private schools. (6 cr)

79. Student Teaching in the Primary Grades.** Five half-days each week in supervised classroom participation. (6 cr)

Secondary Education

52. Student Teaching.** Supervised teaching primarily for students wishing to elect credits in student teaching in addition to regular requirements. (Cr ar)

60. Student Teaching in Library Science.** For both liberal arts college graduates and College of Education undergraduates intending to become school librarians. (2-6 cr; prereq Lib 53, 62, 70, 74, 171, 172 or #, sr)

** Admission only by application to the director of student teaching.

Description of Courses

- 67.†** Student Teaching in Mathematics. (1 or 3 or 6 cr; prereq sr, Math 60 or ¶Math 60, EdT 67A-B-C; satisfactory completion of each qtr's work necessary for continuation)
- 67A-B-C.†** Teaching Secondary School Mathematics. Methods, materials, curriculums, and principles of learning pertinent to secondary school mathematics. (3 cr [f], 1 cr [w], 1 cr [s], total 5 cr; prereq sr, 67 during same yr)
- 67M. Teaching Secondary School Mathematics. (3 cr; prereq minors only)
- 68.†** Student Teaching in Science. (1 or 3 or 6 cr; prereq sr, and ¶68A-B-C; satisfactory completion of each qtr's work necessary for continuation)
- 68A-B-C.†** Teaching Secondary School Science. Procedures in selecting and organizing materials and in teaching secondary school science. (3 cr [f], 1 cr [w], 1 cr [s], total 5 cr; prereq sr, 68 during same yr)
- 68M. Teaching Secondary School Science. (3 cr; prereq minors only)
- 69.†** Student Teaching in the Social Studies. (3 cr U High sr yr, 6 cr off-campus sr yr; prereq ¶EdT 69A-B; satisfactory completion of each qtr's work necessary for continuation)
- 69A-B.†** Teaching Social Studies in the Secondary School. (3 cr for A, 2 cr for B; prereq ¶69 for A, ¶69 and A for B)
- 69J Student Teaching: Social Studies Juniors. (1 cr; prereq jr, Ed55A)
- 69M. Teaching Social Studies in the Secondary School. (3 cr; prereq minors only)
- 70.†** Student Teaching in Modern Languages. Approval of students for this course will involve an examination of proficiency in the language. (3 cr U high, 6 cr off-campus, total 9 cr; prereq sr, and 70A-B during same yr; satisfactory completion of each qtr's work necessary for continuation)
- 70A-B.†** Teaching Modern Languages. Procedures in selecting and organizing materials and in teaching modern languages. (3 cr for A, 2 cr for B; prereq sr and ¶70 for A, ¶70 and A for B)
- 70M. Teaching Modern Languages. (3 cr; prereq minors only)
- 71.†** Student Teaching in Latin. (3-9 cr, total 9 cr [all off-campus]; prereq sr, and 71A-B-C during same yr; satisfactory completion of each qtr's work necessary for continuation)
- 71A-B.†** Teaching Latin. Procedures in selecting and organizing materials and in teaching Latin. (3 cr for A, 2 cr for B; prereq sr and ¶71 for A, ¶70 and A for B)
- 71M. Teaching Latin. (3 cr; prereq minor only)
- 72.** Student Teaching in Distributive Education. Required of all students majoring in distributive education. (3-9 cr, total 9 cr; prereq Ed 55B or \$)
- 73.** Student Teaching in Business Subjects. Required of all students majoring in business education. (3-9 cr, total 9 cr; prereq Ed 55B or \$)
74. Teaching Journalism. Methods and techniques of presenting journalism to students below college level. Required of all students with a minor in journalism. (3 cr; prereq Jour 41 or 51)

** Admission only by application to the director of student teaching.

- 75.†** Student Teaching in Language Arts. (3 cr U High, 6 cr off-campus, total 9 cr; prereq sr, and 75A-B and C or D during same yr; satisfactory completion of each qtr's work necessary for continuation)
- 75A-B and C or D.** Teaching Language Arts in Secondary Schools
- 75A. Required of all majors in speech, English, language arts. Content and method in teaching reading and literature, writing and related problems of grammar, usage, spelling, speaking, and listening. (3 cr; prereq sr, 75 during same yr)
- 75B. Required of all majors in speech, English, language arts. Special emphasis on recent trends in teaching language arts, especially writing and grammar. Stress on variant systems of grammatical analysis. (1 cr; prereq sr, 75 and 75A during same yr)
- 75C. Required of all English and language arts (English core) majors. Emphasizes speech, dramatics, debate, discussion, and related co-curricular activities. (1 cr; prereq sr, 75 during same yr)
- 75D. Required of all speech and language arts (speech core) majors. Content and methods in teaching speaking, listening, and dramatic activities. Specifically for those who will teach a course in speech in secondary schools. (1 cr; prereq sr, 75 during same yr)
- 75G. Teaching Language Arts in Secondary Schools. Methods and content in secondary school English and speech. (3 cr; prereq minor in English or language arts with major in fields other than speech)
- 76G. Teaching Language Arts in Secondary Schools. Methods and content in secondary school speech and related co-curricular activities. (3 cr; prereq minor in speech with major in fields other than English)
80. Teaching Typewriting and Bookkeeping. General methods and techniques in teaching typewriting and bookkeeping. (2 cr; prereq Ed 55B or ¶Ed 55B)
81. Teaching Shorthand. Examination and evaluation of various methods of teaching shorthand. Application of psychological principles to teaching. (2 cr; prereq Ed 55B or ¶Ed 55B)
82. Teaching Basic Business Subjects. Developments in content and method in teaching nonvocational business subjects. (2 cr; prereq Ed 55B or ¶Ed 55B)
- 90A-B-C.† Teaching Distributive Education Subjects. Methods of teaching distributive education subjects in high schools and junior colleges. (2 cr per qtr; prereq #)

MUSIC EDUCATION (MuEd)

Note—For courses in music see *Bulletin of the College of Liberal Arts*.

- 4-5-6-7. Applied Instrumental Technique. Divided into 4 quarters: 2 for strings, 1 for brass, and 1 for woodwind. Theory and technical development of instruments; elementary instruction in instrument playing; special attention to routine of class instruction. (2 cr each; prereq music education major or #...4 is prereq for 7 only)
- 8A-B. Instrumental Technique. Theory and technical development of the percussion instruments; elementary instruction and accomplishment on percussion instru-

** Admission only by application to the director of student teaching.

Description of Courses

- ments with the main emphases being (a) snare drum, (b) timpani, and (c) other percussion instruments. (1 cr each; prereq music education major or #)
- 9A-B, 10A-B. Instrumental Technique.** Elementary instruction and accomplishment on two of the following instruments as selected by the instructor: oboe, flute, bassoon, French horn, cornet, tuba. (1 cr each; prereq 5 for 9A-B, 6 for 10A-B)
- 20. Music Educators' Chorus.** Performance of music suitable for secondary schools at concerts in conjunction with all-day student teaching visits to public schools in Minnesota. Other music performed in rehearsal until stylistically correct. Additional music sightread for repertory purposes. The chorus sings for and with visiting high school choruses on campus, a capella and accompanied music for mixed chorus, men's chorus, women's chorus, and small ensembles. The chorus serves as a demonstration group for materials and methods taught in music education course work. (1 cr; prereq full acceptance in College of Education undergraduate music education major or minor sequence)
- 50A. Teaching Music in Primary Grades.** Practical methods for teaching music in nursery school, kindergarten and grades 1, 2, 3; the child's voice, rote singing, note reading, appreciation, classroom instruments, materials. (3 cr; prereq #)
- 50B. Teaching Music in Intermediate and Junior High Grades.** Music methods in grades 4-9; note reading, part singing, changing voices, voice testing, appreciation, classroom instruments, integration. (3 cr; prereq 50A, #)
- 51. Teaching Music (Kindergarten-Primary Grades).** For nonmusic majors. Methods and materials in teaching singing, music reading, creativity, classroom instruments, fundamentals, appreciation. (2 cr; prereq Mus 4)
- 52. Teaching Music (Intermediate Grades).** For nonmusic majors. Methods and materials in teaching part singing, rhythm, music reading, creativity, classroom instruments, appreciation. (2 cr; prereq 51, Mus 4 or #)
- 53. Teaching Music in Secondary Schools.** Organization and methods of teaching chorus, glee clubs, voice classes; attention to voice combinations, procedures; materials for public appearances. (3 cr; prereq Mus 3T, MuEd 20, 59, #)
- 54. Teaching Music in the Nursery, Kindergarten, and Primary Grades.** For NKP majors only. Teaching music, appreciation, methods, materials. (2 cr; prereq Mus 41)
- 55. Music for Recreation Leadership.** Directing and working with students in musical performing groups, rhythmic activities, singing, musical instruments, and listening. (2 cr; prereq Mus 4)
- 59. Choral Literature and Conducting.** Intimate contact with vocal materials; practice in conducting. (2 cr for sr, 1 cr others; prereq 20)
- 60-61. Student Teaching and Supervision of Music.** Experience in carrying forward, under supervision, the music activities of elementary, junior and senior high school teachers. (2 or 3 cr for 60, 3 to 12 cr for 61; prereq sr, 53, Ed 55B, #)
- 64. Band Organization.** Organization, promotion, curriculum, administration, equipment, problems of school band. (3 cr; prereq Mus 6T, #)
- 65. Instrumentation.** Theoretical study of orchestral and band instruments, in combination; revision of materials suitable for school use; capacity and capability of school performance on the various instruments. (3 cr; prereq sr, Mus 6T)
- 68. Teaching Instrumental Music.** Teaching and directing of school instrumentalists, band and orchestra ensembles; survey of school music materials. (3 cr; prereq #)

69. **Instrumental Literature and Conducting.** Intimate contact with instrumental materials; practice in conducting. (2 cr for final qtr, 1 cr other qtrs)
101. **Philosophies of Music Education.** Analysis and interpretation of philosophies in music and education; objectives, trends, curriculum, evaluation. (3 cr)
102. **General Music in Elementary and Junior High Schools.** Open to music education and nonmusic majors. Methods, materials, problems in teaching general music classes; emphasis on music literature. (3 cr; prereq 52 or #)
103. **Psychological Foundations.** Implications of developmental and objective psychological data in music theory and acoustics. (3 cr; prereq #)
104. **Advanced Topics: Vocal Music.** Empirical research and literature on voice development in individual, class, and choral work. Individual surveys of performance practices and organization of school vocal groups; selection of vocal music. (3 cr; prereq #)
105. **Advanced Topics: Instrumental Music.** Individual selection of topics for intensive study. Bibliographical methods, library resources. (3 cr; prereq #)
114. **Reading and Stylistic Interpretation of Choral Music.** Defining means of teaching choristers to read and interpret music of representative periods and styles of compositions. (3 cr; prereq MuEd 104 or #)
115. **Advanced String Instrument Techniques.** Research reports, lecture-demonstration; performance by class members and by school-age laboratory groups. (3 cr; prereq B.S. in music education or #)
118. **Advanced Wind and Percussion Techniques.** Research reports, practical performances and lectures. (3 cr; prereq B.S. in music education or #)
124. **Selection, Conducting of Choral Materials.** Student conducting with class as performing ensemble; criteria for selecting choral and combined choral and instrumental materials; rehearsal techniques. (3 cr; prereq sr)
125. **Selection, Instrumental Music Materials.** Sources and criteria; orchestra, band, ensemble music, and choral accompaniments; class teaching methods books; individual projects; group activities. (3 cr; prereq sr)
151. **Supervision and Administration of Elementary Music.** Analysis and evaluation of instructional techniques; supervisory and administrative techniques; readings; new trends. (3 cr; prereq major or minor in music or music education)
152. **Supervision and Administration of Junior High Music.** Evaluation of instructional techniques and materials for the required and elective courses; supervisory and administrative practices; readings; new trends. (3 cr; prereq major or minor in music or music education)
153. **Supervision and Administration of High School Music.** Materials, scheduling and teaching of performance ensembles; courses in theory and literature; individual and class lessons; extracurricular activities. (3 cr; prereq major or minor in music or music education)
170. **Recent Research and Literature.** Current research; evaluation of teaching materials; appraisal of techniques. (3 cr)
194. **Advanced Selection, Conducting of Choral Materials.** Criteria for selecting choral music for school groups; analysis of selections of varying degrees of difficulty; application of advanced rehearsal and conducting techniques with the class as a performing choral group for student directors. (3 cr; prereq 124)

Description of Courses

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

224.* Research Problems

251-252-253. Seminar: Curriculum Development

NURSING EDUCATION (NuEd)

Note—For description of courses in nursing and nursing administration see *Bulletin of the School of Nursing*.

- 171. **The Curriculum of the School of Nursing.** Principles of curriculum development applied to education programs in nursing. (3 cr; offered when feasible)
- 175. **Educational Administration in Nursing.** General orientation to the functions involved in administering educational programs in nursing; responsibilities of faculty members. (3 cr; prereq regis in grad program or #)
- 195. **Problems: Nursing Education.** Individual study of a problem in the field of nursing education. (1-9 cr; prereq regis in grad program and Δ)
- 197E. **Advanced Teaching of Nursing.** Investigation of research in learning and teaching; implications for nursing. (3 cr; prereq regis in M.Ed. program or #)
- 198E. **Advanced Teaching of Nursing.** Identification of problems of learning. Individual and group methods of problem solving. (6 cr; prereq 197E and #EdCI 199E)

PHYSICAL EDUCATION FOR MEN (PEM)

Nonprofessional Courses

- 1A-B-C, 2A-B-C. **Sports Education.** Elective specialized courses in physical education including instruction in swimming, diving, lifesaving, bowling, wrestling, weight lifting, badminton, basketball, golf, softball, handball, paddleball, squash rackets, skating, dancing, archery, gymnastics, volleyball, tennis, trampoline, ice skating, judo, karate, and adapted activities for the handicapped. (1 cr per qtr)

Nonprofessional Courses

- 4A. **Football Fundamentals.** Demonstrations and practice in football fundamentals for all positions on a football team. (1 cr)
- 4B. **Basketball Fundamentals.** Demonstrations and practice; individual and team offensive and defensive tactics. (1 cr)
- 4C. **Track Fundamentals.** Demonstrations and practice in all track and field events. (1 cr)
- 5A. **Touch Football, Calisthenics, Tactics.** Touch football, six-man football, calisthenic nomenclature, conditioning drills, posture exercises, mimetics, story plays, reconditioning exercises, grass drills, marching tactics. (1 cr)
- 5B. **Gymnastics.** Stunts on the buck, side horse, long horse, parallel bars, low bar, high bar, rings, trampoline, springboard, and mats; stall bar exercises; rope climbing; and pyramid building. (1 cr)

Physical Education for Men

- 5C. **Stunts, Contests, Softball, Baseball.** Individual double and triple stunts; combative stunts; mass contests; weight lifting; softball; baseball fundamentals. (1 cr)
- 6A. **Intramural Sports: Soccer, Speedball, Volleyball.** Fundamentals and team play in soccer, speedball, and volleyball. (1 cr)
- 6B. **Intramural Sports: Hockey, Handball, Squash.** Ice hockey, handball, paddleball, and squash rackets. (1 cr)
- 6C. **Aquatics.** Advanced swimming, diving, lifesaving. (1 cr; prereq swim 50 yds in 45 seconds)
- 7A. **Games and Relays.** Low organized games for gymnasiums, playgrounds, camps; social games for recreation; progressive game parties; relays. (1 cr)
- 7B. **Wrestling.** (1 cr)
- 7C. **Recreational Games.** Badminton, aerial darts, deck tennis, paddle tennis, table tennis, bowling, horseshoes, and archery. (1 cr)
8. **Tennis and Golf.** (1 cr)
- 9A. **Fundamental Rhythms.** Basic steps and folk dances. (1 cr)
- 9B. **Square and Ballroom Dancing.** Instruction in circle, line, square, mixer, couple dances; square dance calling. (1 cr)
32. **Introduction to Physical Education.** Orientation course covering history, vocational aspects, and principles. (3 cr)
50. **Human Anatomy.** Emphasizes bones, nerves, and muscles and their significance in physical education. (3 cr)
55. **Methods and Materials in Physical Education.** Application of principles of methodology in the teaching class activities and in coaching. Includes 3 hours per week in observation and practice in leadership in activities classes. (4 cr; prereq 9 credits in activity courses, Ed 55A or ¶Ed55A)
- 60A. **Prevention and Care of Injuries.** Policies for conditioning of athletes in interscholastic and intercollegiate sports; safety controls. (3 cr; prereq 50 or Anat 57)
- 60B. **Athletic Training Laboratory.** Thirty hours of practical experience in the training room under supervision. (1 cr; prereq 60A)
63. **Organization and Administration of Physical Education.** Problems of organization, administration, and supervision in required and elective courses, recreation and interschool athletics. (3 cr; prereq 32 or 82, 55)
65. **Adapted Physical Education.** Philosophy, principles, and techniques of adapting the program to meet the needs of handicapped pupils. (3 cr; prereq 51, Anat 57)
66. **Officiating Football and Basketball.** Four hours per week in theory and practice under supervision. (3 cr; prereq 4A, B)
67. **Football Coaching.** Theory, strategy, generalship, styles of offense and defense, methods of organizing practices, and handling of players. (2 cr; prereq 4A or 1 yr exper on squad)
68. **Basketball Coaching.** Theory, styles of offense and defense, the conditioning and handling of players. (2 cr; prereq 4B)

Description of Courses

69. **Track Coaching.** Techniques of performance in all of the standard track and field events; methods of coaching; organization of track meets; study of rules; officiating methods and practice. (2 cr; prereq 4C)
71. **Physiological Application to Sports.** Consideration of muscular contraction with applications for strength development programs; contributions of training programs to endurance, speed and skill acquisition; influence of training on the cardiovascular system; fatigue and recovery; early season training, pre-game meals and ergogenic aids in athletics. Required for the Minnesota Coaching Certificate. (3 cr, §PubH 91, 92; prereq Anat 57 or 50)
72. **Baseball Coaching.** The theory of playing each position, batting, coaching runners, and team play; study of the rules; officiating methods and practice; organization of practices. (2 cr)
75. **Student Teaching in Physical Education.** Six hours per week. One quarter devoted to coaching, 2 quarters to teaching physical education classes, including experience at two of the three school levels. (3 or 6 cr; total 9 cr; prereq 55, Ed 55B)
76. **Student Teaching in Physical Education.** Full-time teaching for one-half term. (9 cr, §75; prereq 55, Ed 55B)
77. **Student Teaching for Coaching Certificate.** (3 cr; prereq sr)
81. **Coaching of Ice Hockey.** Orientation of the prospective coach and physical education teacher to the fundamentals and advanced knowledge of hockey. (2 cr; prereq 6B or #)
96. **Administration of Intramural Sports.** Principles, policies, procedures, personnel, and planning; emphasis on secondary school level. (2 cr)

PHYSICAL EDUCATION FOR WOMEN (PEW)

Nonprofessional Courses

The following activity courses in physical education for women are open to students in the College of Education. Students may elect courses listed below. Students should register for activity classes in 210 Johnston Hall during the regular college registration period.

Students should check the *Class Schedule* to be sure their Activity Rating (which is required) is acceptable for the class in which they register. Those who have not received an Activity Permit Card may secure one at 101 Norris Gymnasium. All classes meet in Norris Gymnasium for the first meeting, except St. Paul Campus classes. A student forfeits her place in class *if she is absent the first day the class meets* unless she notifies 101 Norris Gymnasium (373-3403) that she is unable to attend. If a class is closed when a student registers, she should report to the first class meeting for possible cancellations.

Aquatics

Swimming: beginning, intermediate, advanced, and synchronized

Lifesaving: American Red Cross senior course

Water safety: American Red Cross water safety instructors' course

Diving: beginning springboard diving

Dance

Ballroom dance: beginning, intermediate

Folk and square dance: beginning, intermediate

Modern dance: beginning, intermediate, advanced, dance techniques

Physical Education for Women

Individual and Dual Sports

Archery: beginning, intermediate
Badminton: beginning, intermediate
Bowling: beginning, intermediate
Fencing: beginning
Golf: beginning, intermediate
Riflemarksmanship: beginning
Skating: beginning, figure
Social games and mixers
Tennis: beginning, intermediate, advanced

Team Sports

Basketball: beginning, intermediate
Field hockey
Lacrosse
Softball
Volleyball: beginning, intermediate

Gymnastics

Apparatus
Posture and individual exercise
Stunts, tumbling, free exercise
Conditioning exercises

Professional Courses

20ABD-21ABD-22ABD. Physical Education Activities.

- 20A—Badminton (1 cr); 20B—Field hockey, volleyball (1 cr); 20D—Beginning aquatics (1 cr)
21A—Basketball (1 cr); 21B—Rhythmic fundamentals and elementary folk dance (1 cr); 21D—Posture and functional exercise (1 cr); ¶22A—Folk and ballroom dance (1 cr); 22B—Golf (1 cr); 22C—Tennis (1 cr); 22D—Speedaway, softball (1 cr)

40ABC-41AB-42A. Physical Education Activities.

- 40A—Elementary modern dance (1 cr); 40B—Officiating of field hockey, volleyball (1 cr; prereq 20B); 40C—Stunts, tumbling, apparatus (1 cr)
41A—Advanced aquatics (1 cr); 41B—Officiating of basketball (1 cr; prereq 21A)
42A—Senior life saving (1 cr; prereq 41A)

45. **Introduction to Physical Education Activities for the Elementary School.** Laboratory course for PEW 70. Experience with graded activities; problems of organization and teaching progressions considered. (2 cr; prereq elementary education majors only)
46. **Water Safety Instructor's Course.** Methods and procedures related to organization, content, and teaching of swimming and life saving; opportunity to qualify for the American Red Cross Water Safety Instructor's Certificate; pool control and sanitation. (2 cr; prereq current American Red Cross Certificate)
54. **Camp Leadership.** Current trends and standards in camping; organization and administration of the camp program; responsibilities and duties of the counselor; committee projects; practical work in camp craft. (3 cr)
55. **Teaching of Individual and Team Sports.** General methods of teaching sports; techniques for class organization; skill analysis; individual and group guidance; evaluation; application of methods to badminton, golf, tennis, fall team sports, volleyball, basketball, and softball; observations and practical experience. (3 cr; prereq 20A, 22B, 22C, 20B, 21A, 22D)
56. **Teaching of Dance.** Methods in the teaching of creative rhythmic activities, singing games, folk and ballroom dance; an approach to children's rhythm and modern dance. (3 cr, §47; prereq 21B, 22A, 40A)
57. **Teaching Posture and Self-Testing Activities.** Methods of teaching posture, functional exercise, stunts, tumbling, and apparatus; practical procedures relating to appraisal and correction of posture problems; principles of good movement applied through student teaching within the group. (3 cr, §85; prereq 21D, 40C)

Description of Courses

58. **The Intramural-Extramural-Interschool Sports Programs.** Objectives, principles, policies, procedures and personnel involved in the planning of sports programs for girls and women. (3 cr; prereq jr, physical education major or minor)
62. **Teaching Physical Education Activities.** Methods in team and individual sports, rhythms and self-testing in the junior-senior high school program. (3 cr; prereq physical education minors and recreation majors)
70. **Teaching Health and Physical Education in the Elementary School.** Methods of instruction in health and physical education for the elementary education major. (3 cr, §Hlth 70; prereq PEW 45, 3rd qtr soph, elementary education majors)
76. **The Teaching of Creative Dance for Children.** Theory and practice of folk dance with emphasis on national and ethnic origins and the relationship of dance to other folk arts. (3 cr; prereq 40A)
79. **Massage and Therapeutic Exercises.** Principles of massage; conditions especially applicable to physical education, athletic injuries, foot disorders, paralysis, and certain functional and nervous disorders. Visits to Twin Cities physiotherapy departments. (2 cr; offered when demand warrants)
80. **History and Trends in Dance.** History and philosophy of dance; relation to allied arts. (3 cr; prereq #)
87. **Dance Composition.** Principles of composition with practical application. (2 cr; prereq advanced modern dance or dance techniques or equiv)
88. **Dance Composition.** Advanced theory and practice including various approaches. (2 cr; prereq 87 or equiv)
89. **Dance Production.** Various phases of dance production in schools and colleges; dance recital and demonstration; elements of stage craft and costuming. (3 cr; prereq #)
- 90A. **Orientation to Student Teaching.** Program and problems of organization and management in physical education; begins with fall semester opening of public schools. (3 cr; prereq #)
- 90B. **Student Teaching: Junior High School.** (3 cr; prereq Ed 55A-B, major in physical education, and §90C)
- 90C. **Student Teaching: Senior High School.** (3 cr; prereq Ed 55A-B, major in physical education, and §90B)
- 90D. **Student Teaching: Elementary School.** (3 cr; prereq Ed 55A-B, major in physical education)
- 90E. **Advanced Student Teaching.** Optional for those who have done superior work in 90B-C-D. (3 cr; prereq #)
- 91A. **Physical Education for NKP.** Nature and function of play and factors influencing play interests; practical skills and techniques in low organized games, rhythms, stunts, and self-testing activities. (3 cr; prereq NKP majors, 3rd qtr soph)
93. **Student Teaching: Physical Education for Minors.** (3 cr; prereq Ed 55A-B, minor in physical education)
95. **Administration of Physical Education.** Professional responsibilities; organization of instructional and extracurricular program in the school and community; appraisal of activities; protection and classification of students; standards for operation of physical education plant. (3 cr; prereq sr)

PHYSICAL EDUCATION FOR MEN AND WOMEN (PE)

44. **Physical Education Activities for the Elementary School.** Analysis of basic skills, observations, and laboratory experience in teaching physical education activities suitable to elementary school children. (3 cr; prereq physical education major, soph)
51. **Mechanics of Movement.** Structure of the body, principles and mechanics of bodily movements. (3 cr; prereq Anat 57)
61. **History of Physical Education.** Influence of social, economic, political, and religious factors in the development of physical education from ancient times to the present; origin and development of games and sports. (3 cr)
82. **Principles of Physical Education.** Philosophy; principles underlying curriculum building; methods of teaching; measurement; and outcomes. (3 cr; prereq sr)
97. **Testing in Physical Education.** Selection, evaluation, construction, and administration of tests; emphasis on physique, motor and sports skill testing at secondary school level. (2 cr; prereq Ed 55B)
101. **Foundations of Physical Education.** Establishment of guide lines for individual and group professional action; examination of pertinent social forces, educational philosophies and general ethics. (3 cr; prereq grad or MEd student)
102. **Curriculum.** For students without previous experience in curriculum; objectives, content, organization, evaluation, and trends. (3 cr; prereq sr)
104. **Teaching Physical Education for the Handicapped Child.** Selection and organization of appropriate activities for students with physical disabilities; program planning at all levels; observation, demonstrations, special lectures. (3 cr; prereq #)
106. **Curriculum Development.** Trends, issues, and problems at selected levels of interest: elementary, secondary, junior college. For experienced teachers. (3 cr; prereq 102 or equiv)
115. **Advanced Kinesiology.** Techniques of mechanics and kinesiology of movement; skills; evaluation of pertinent research methods and devises; application to individual projects. (3 cr; prereq undergrad course in kinesiology, or #)
- 118E. **Problems.** Focus on teaching of physical education. (Cr ar; prereq MEd candidate, #)
123. **Advanced Methods of Teaching Physical Education.** Teaching procedures and methods at all levels; research results. (3 cr; prereq #)
124. **Supervision of School Health and Physical Education.** Functions; adaptations of accepted procedures for observation, guidance, and training of teachers. (3 cr, §Hlth 124; prereq #)
130. **Contributions of Basic Sciences to Physical Education.** Recent research in basic sciences and applications in selected areas. (3 cr; prereq grad or #)
135. **Tests and Measurements in Physical Education.** Place and limitations of measurement; construction and interpretation of evaluative procedures in physical education. (3 cr; prereq grad or MEd, #)
136. **Introduction to Research.** Methods and design for research in health, physical education, and recreation. (3 cr; prereq #)
137. **Readings: Physical Education.** Independent study under tutorial guidance. (1-3 cr; prereq sr honor, grad, #)

Description of Courses

155. **Instructional Aids in Health, Physical Education and Recreation.** Evaluation, construction, and use; stressing audio-visual aids. (3 cr)
171. **Applied Physiology.** Lectures and laboratory problems demonstrating the physiological bases for objectives and content of the program. (3 cr; prereq PubH 92 or Phys 51 or equiv)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

202. **Professional Preparation of Physical Education Teachers**
221. **Seminar: Physical Education**
- 224A.° **Research Problems**
- 224B.° **Research Problems**
233. **Administration of the Physical Education Program in Secondary Schools**
236. **Laboratory Research Techniques**
238. **Administration of Physical Education in Colleges and Universities**
- 261A. **Seminar: Contemporary Problems in Physical Education**

SCHOOL HEALTH EDUCATION FOR MEN AND WOMEN (Hlth)

25. **American Red Cross Standard Advanced First Aid.** Lectures, demonstration, and practice in emergencies and first aid treatment. American Red Cross Standard and Advanced Certificate in First Aid received upon successful completion of course. (2 cr)
59. **Instructor's Course in First Aid.** Preparation to teach the standard course in first aid. (3 cr; prereq American Red Cross Standard Certificate, age 20)
70. **Teaching Health and Physical Education in the Elementary School.** Methods of instruction in health and physical education for the elementary education major. (3 cr, §PEW 70; prereq 3rd qtr soph, elementary education majors)
83. **Methods and Materials of School Health Education.** Methods, materials, problems, and evaluation in preparation for health teaching; allocation and gradation of health subject matter. (3 cr)
- 91B. **School Health Education and First Aid for NKP.** Includes American Red Cross Standard course in first aid and the teaching of school health education with emphasis on habit formation in the nursery school, kindergarten, and primary grades; role of the teacher in the total school health education program; concepts in health habit formation. (3 cr; prereq NKP majors, 3rd qtr soph)
94. **Student Teaching in School Health Education.** (2 cr; prereq sr, 83, #)
103. **Role of the School Health Educator in Health Appraisal.** Role of school medical and dental advisers, nurse, teachers, health educator, and other school personnel in health protection and maintenance phases of school health education. (3 cr; prereq sr, #)
114. **Administration of School Health Education.** Co-ordination of total program; health supervision and guidance; relationships between public schools and government health organizations and agencies; evaluation. Guidance in the

solution of individual professional problems. (3 cr; prereq 83, PubH 50, equiv, or #)

117B. Advanced Instruction in School Health for Secondary Schools. Instructional and individual problems. (3 cr; prereq 83, or #)

118E. Problems. Focus on teaching of health education. (Cr ar; prereq MED candidate, #)

124. Supervision of School Health and Physical Education. Functions; adaptations of accepted procedures for observation, guidance, and training of teachers. (3 cr, §PE 124; prereq #)

137. Readings: Health Education. Independent study under tutorial guidance. (1-3 cr; prereq sr honor, grad, #)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

224A.* Research Problems

224B.* Research Problems

RECREATION LEADERSHIP (Rec)

11. Survey of Recreation Activities. Requires the student to search out, analyze, and classify recreation opportunities on the campus and in the Twin Cities area. (3 cr)

23. Introduction to Recreation Leadership. Study of and participation in group recreation programs in Coffman Memorial Union. (3 cr)

43. Camp Aquatics. Administration of waterfront program; basic skills in handling small craft. (2 cr)

45. Camp Craft. Practical experience in various phases of camping and outdoor education. (2 cr)

46. Camp Leadership. Introduction to camping and outdoor education for prospective counselors. (2 cr)

49. Social Aspects of Leisure. Sociological consideration of leisure and recreation as parts of our total socio-economic structure. (3 cr)

52. Leadership in Social Activities. Technique of leadership in social games, parties, dances, outings. (3 cr)

56. The Nature and Function of Play. The biological play drives and the theory and philosophy of play and recreation. (3 cr; prereq soph)

57. The Organization and Conduct of Recreation Centers. Operation, management, facilities, equipment, and programs of recreation centers. (3 cr; prereq 23)

58. Leadership in Community Recreation. Breadth and scope of leadership in recreation. (3 cr; prereq 57)

64A-B. Leadership in Nature Recreation. Identity and scope of nature recreation field; classwork and field trips. (2 cr per qtr; prereq 15 cr in natural science)

78. Scout Leadership. Orientation course for students interested in the Boy Scout program. (2 cr)

***05. Conservation of Natural Resources.** Importance and relation to recreation and outdoor education. (2 cr; prereq sr, 64A-B)

Description of Courses

- 107. **Camp Administration.** Prepares qualified personnel for responsibilities of camp administration. (3 cr; prereq 46, and #)
- 110. **Recreation Surveys.** Techniques and practice. (3 cr; prereq 57, 58)
- 111. **Recreation Areas and Facilities.** Orientation, design, planning, and standards. (3 cr; prereq 57, 58)
- 112. **Programming in Recreation.** Principles of program planning for an organized offering of recreation opportunities. (3 cr; prereq 57, 58)
- 116. **Community Recreation Resources and Organization.** Agencies and their inter-relationships. (3 cr; prereq 110-111-112)
- 118E. **Problems.** Focus on conduct of recreation programs. (Cr ar; prereq MED candidate, #)
- 121. **Principles of Recreation Methods.** Leadership methodology in all aspects of recreation. (3 cr; prereq EdT 84)
- 131. **Industrial Recreation.** History, scope, place, and relationship of management-employee recreation. (3 cr; prereq #)
- 137. **Readings: Recreation.** Independent study under tutorial guidance. (1-3 cr; prereq sr honor, grad, #)
- 141. **Introduction to Hospital Recreation.** General field of recreation in hospitals as background for the recreation leader, hospital administrator, and other personnel. (3 cr; prereq #)
- 142. **Leadership in Hospital Recreation.** Application of methodology. (3 cr; prereq 141)
- 143. **Programming in Hospital Recreation.** Planning programs for hospital patients. (3 cr; prereq 141)

FOR GRADUATE STUDENTS ONLY

(Description in *Bulletin of the Graduate School*)

224A.* Research Problems

224B.* Research Problems

240. Legal and Financial Aspects of Recreation

241. Administration of Public Recreation

242. Community Organization for Recreation

261B. Seminar: Contemporary Problems in Recreation

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UNIVERSITY OF MINNESOTA BULLETIN

1941

UNIVERSITY OF MINNESOTA

Board of Regents

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| Gerald R. Firth, Director, University High School | 130 Peik | 373-3300 |

See list of graduate advisers on pages 20 and 21.

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September 1, 1966

UNIVERSITY OF MINNESOTA BULLETIN

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The contents of this bulletin and of other University bulletins, publications, or announcements are subject to change.

Late Afternoon and Saturday Morning Classes

GENERAL INFORMATION

The following program of late afternoon and Saturday classes is arranged by the College of Education for teachers in service. Many of the offerings are subjects required in the regular curriculums for high school and elementary teachers, or in the specialized curriculums. Any student registering for courses to be applied toward a degree program should read carefully the section on Admission to Degree Program, and should consult a major adviser as early as possible. Failure to apply for admission or to consult an adviser may delay graduation and make extra work necessary.

The fee for part-time registration in the College of Education is \$8.25 per credit for residents of the state and \$23.50 per credit for non-residents. If 6 or more credits are taken, an incidental fee of \$27.00 is also required.

The fee in the Graduate School for 6 credits or less or thesis only is \$52.00 for residents and \$140.00 for nonresidents. Graduate students taking more than 6 credits pay \$104.00 (resident) and \$280.00 (non-resident). The incidental fee of \$27.00 is required of all students in the Graduate School except teachers in service taking less than 6 credits.

Other fees include a \$1.00 record service fee required of all new students. Auditors pay the same fees as students registered for credit.

Telephone requests for information about College of Education matters should be made to 373-2234.

Registration

Teachers in service are expected to register during the regularly scheduled periods of registration as announced in the University Calendar on page 22.

Teachers who find it impossible to come in during the regular registration period may register from Monday through Friday of the first week of the quarter but should report to register an hour before class begins so that they will not miss the first class session.

Students who have been admitted to the Graduate School may secure registration materials in 316 Johnston Hall. College of Education students, including those registering as adult special students, should

secure registration materials as follows: (a) those registered in the preceding regular quarter (excluding summer terms) should report to 206 Burton Hall; (b) those not so registered should report to the Office of Admissions and Records, Window 4, in Morrill Hall (Administration Building).

Special arrangements will be made for registering graduate and undergraduate students taking *only* Saturday classes and who find it *impossible* to register during the regular registration period. These students may report to register at 206 Burton Hall on Saturday morning of the first week of classes (fall quarter, October 1). Since advisers are not usually available on Saturday morning, students who register this late should make prior arrangements for advising. Veterans registering under Public Laws 815 and 894 cannot be registered under this special arrangement for Saturday students, and they should therefore report during the first week of the quarter or during the regular registration periods.

Admission as Adult Special Student

Teachers in service may be admitted as adult special students in the College of Education. The adult special application form should be requested from the Office of Admissions and Records and then should be presented to that office as early as possible, and certainly before registration. Only those credits earned *in the first quarter* of adult special registration may be transferred to a Graduate School record. Adult special students are not permitted to take courses numbered 200 or above as these courses are reserved for students who have been admitted to the Graduate School.

Admission to Degree Program

Anyone planning to pursue a program of study leading to an undergraduate or graduate degree should file an application for regular admission with transcripts of previous academic work. Those who have been admitted as adult special students and wish to proceed with a degree program should file transcripts *during the first quarter of registration*.

For Bachelor of Science or Master of Education Programs:

Application for admission to the College of Education should be made through the Office of Admissions and Records, Morrill Hall. See the *Bulletin of the College of Education* for these programs. Procedures for undergraduate admission include satisfactory completion of certain psychological tests, a health examination, and a speech examination. These tests are offered at the beginning of each quarter. Special arrangements to complete these admission requirements can be made in the Student Personnel Office, 206 Burton Hall, by applicants who are unable to attend during the regular class week.

For Master of Arts and Doctor of Philosophy Programs:

Application for admission to the Graduate School should be made in the Graduate School office, 316 Johnston Hall. All application papers for admission, including transcripts, must be filed *at least 4 weeks* before the opening of the quarter for which the student hopes to register. (See deadline dates in Calendar, page 22). If the application is not completed by that date, or if the Graduate School has not acted on it by the opening of the quarter, the applicant may register as an adult special student, transferring the credits earned *in that 1 quarter* to his graduate record if he is later admitted.

A student previously registered in the Graduate School but not enrolled during the past 2 years must reapply for admission. Those admitted for M.A. programs who now wish to pursue studies leading to the Specialist Certificate or the Ph.D. degree also should reapply, specifying the advanced program and major in which they are interested.

Evening and Correspondence Offerings

Additional courses are available through evening and special classes and correspondence courses. Offerings include work in education and also in the various academic departments of the University. Announcements of these courses may be secured without charge by writing to the General Extension Division, Nicholson Hall, University of Minnesota, Minneapolis, Minnesota 55455.

Research Problems

In all major areas, research problems courses (with credits and hours arranged) are available for students who have been approved as candidates for the M.A. degree, Plan B. These courses are listed in the *Bulletin of the Graduate School* and in each quarter's *Class Schedule*. The candidate should consult his graduate adviser concerning registration for research problems.

Bureau of Recommendations

The Bureau of Recommendations provides placement service for persons who seek teaching, administrative, and other types of positions in schools and colleges. *Registration is compulsory for persons receiving a degree from the College of Education.* A nominal fee is required for each placement season during which service is desired. The bureau receives a great many requests for teachers, both experienced and inexperienced. The office of the Bureau of Recommendations is in 102 Burton Hall.

Summary of Class Schedules

At the back of this bulletin is a summary of class schedules by quarters, days, and hours of offerings.

Symbols

The following symbols and explanations are used throughout the course description section which does not carry page footnotes:

* Courses through which it is possible for graduate students to prepare Plan B papers.

† To receive credit, a student must complete all courses listed before dagger.

‡ Students may enter any quarter preceding the double dagger.

§ No credit is given if credit has been received for equivalent course listed after section mark.

¶ Means "concurrent registration in" (i.e., course must be taken simultaneously).

Means "consent of instructor."

△ Means "consent of department offering course."

E Signifies that the course is of graduate level in the College of Education but does not carry credit for Plans A and B in the Graduate School.

Please check the quarterly *Class Schedule* for building abbreviations. A *Class Schedule* will be given to each student with his registration material.

Hours and Days

Class hours identified by Roman numerals begin at the times shown below:

| I | II | III | IV | V | VI | VII | VIII | IX | X |
|------|------|-------|-------|-------|------|------|------|------|------|
| 8:15 | 9:15 | 10:15 | 11:15 | 12:15 | 1:15 | 2:15 | 3:15 | 4:15 | 5:15 |

A class listed IX-X TTh meets the ninth through the tenth hours Tuesday and Thursday, the hyphen always indicating "through." The days of the week are abbreviated M, T, W, Th, F, S.

PROGRAM OF COURSES

FALL QUARTER, 1966

See page 4 for explanation of symbols

ADULT SPECIALS: Only those credits earned *in the first quarter* of adult special registration may be transferred to a Graduate School record. Courses numbered 200 or above are not open to adult special students.

Please check the current *Class Schedule* for revisions in course listings.

Agricultural Education (AgEd)

Persons interested in courses in agricultural education should write directly to the Department of Agricultural Education, University of Minnesota, St. Paul, Minnesota 55101.

Art Education (ArEd)

- 151 Curriculum Building in Art Education: Critical Survey. (3 cr) III-IV S, WuH 130, Hastie
- 156 Intercultural Education Through Art. (3 cr) I-II S, WuH 110, Gayne

Child Psychology (CPsy)

- 179 Clinical Procedures with Children. (3 cr; prereq 12 cr in educational psychology or psychology or sociology or child psychology) 9:00-11:30 S, Bu 120, Reed

Educational Administration (EdAd)

- 101 Public School Administration. (3 cr; prereq sr, 9 cr in education; not open to majors in EdAd) IX-X M, JohH 105, Popper
- 118 The Community School. (3 cr; prereq sr, grad) IX-X M, Pt 111, Pierce
- 167 The Junior High School. (3 cr; prereq 9 cr in education) IX-X W, JohH 106, Popper
- 210 Public School Finance. (3 cr) I-II S, Pt 111, Domian

- 215 The Elementary School Principalship. (3 cr; prereq 201 and 202, or #) III-IV S, Bu 105, Curtin
- 224 Legal Aspects of Public School Administration. (3 cr) IX-X T, Pt 111, Hooker
- 227 Public School Personnel Programs. (3 cr) IX-X Th, Bu 123, Davis
- 264 The Secondary School Principalship. (3 cr) I-II S, PeikH 155, Nickerson

Educational Psychology (EPsy)

- 110 Educational Measurement in the Classroom. (3 cr) IX-X W, Pt 110, Becklund
- 133 Introduction to Guidance. (3 cr; prereq 9 cr in education) IX-X W, 1 hr ar, Bu 125, Tennyson
- 134 Counseling Procedures. (3 cr; prereq 110 or 117, 133 and #) IX-X M, Pt 214, A Anderson
- 182 Education of Exceptional Children. (3 cr; prereq Ed 55B or 75B) III-IV S, Pt 110, Force
- 184 Introduction to Education of the Mentally Retarded. (3 cr; prereq 182) IX-X W, CD 105, Ar
- 187 Education of Crippled Children. (3 cr; prereq 182 or #) IX-X Th, Pt 214, Force
- 188 Education of the Culturally Disadvantaged Child. (3 cr; prereq HEd 90, CPsy 80 or equiv) IX-X T, Pt 214, Wood
- 244 Research in Special Education. (1 cr per qtr; prereq 116, 117 or equiv and #) IX-X M, Pt 110, Reynolds
- 282A Field Practice in Guidance. (1-3 cr; limited to 10 students; prereq counselors in service only, #) I-IV S, Bu 125, Gerald Lee

Curriculum and Instruction (EdCI)

- 63 Children's Literature. (3 cr; limited to 60 students) Sec 3, IX-X W, Bu 120, Peterson
- 102 Teaching Social Studies in the Elementary School. (3 cr; prereq Ed 75B or equiv) I-II S, Pt 214, Keach
- 105 Audio-Visual Materials in Education. (3 cr; prereq sr) I-II S, 1 hr ar, NH 211, Pearson
- 106 Co-ordinating an Audio-Visual Program. (3 cr; prereq 105 or #) IX-X M, WeH 206, Pearson
- 108 Nonprojected Audio-Visual Materials and Equipment Laboratory. (3 cr; prereq 105 or ¶105) Lect IX-X T, WeH 206, Pearson; lab sec 2, limited to 15 students, IX-X Th, WeH 206, Ar

- 113 Principles of Secondary School Curriculum. (3 cr; prereq Ed 55B or equiv) III-IV S, 1 hr ar, PeikH 165, Firth
- 115 Introduction to Education of Visually Handicapped Children. (3 cr; prereq #) IX-X W, Pt 111, Martin
- 119 Elementary School Curriculum. (3 cr; prereq Ed 75B or equiv) IX-X W, Bu 123, Goossen
- 121 Literature for the Elementary School. (3 cr) IX-X T, Bu 123, Odland
- 122 Literature for Adolescents. (3 cr; prereq Ed 55B or jr-sr high school tchg exper) I-II S, Bu 123, Kemp
- 124 Foundations of Career Development. (3 cr) IX-X T, NH 209A, Borow
- 125 Occupational Information Laboratory. (3 cr; prereq #) IX-X Th, PeikH 165, Hansen
- 129 Trends and Issues in Secondary Curriculum. (3 cr; prereq 113 or equiv) IX-X T, Bu 120, Ar
- 136 Organization and Administration of Distributive Education. (3 cr) 4:15-6:30 W, Bu 105, Klaurens, Meyer
- 143A Teaching and Supervision of Reading in the Elementary School. (3 cr; prereq 9 cr in education) IX-X T, NH 207, Clymer
- 144 Teaching Reading in Secondary Schools. (3 cr; prereq 9 cr in education) IX-X M, Bu 123, Chase
- 145 Reading Difficulties. (3 cr; prereq 143A or 144 or equiv) IX-X W, CD 218, Manning
- 147 Workshop: Teaching Display. (3 cr; limited to 20 students; prereq #) 4:15-6:30 M, Bu 105, Klaurens
- 149A Teaching and Supervision of Mathematics in the Elementary School. (3 cr, §149; prereq 62 or #) IX-X Th, JohH 106, Jackson
- 150 Supervision and Improvement of Instruction. (3 cr; prereq 9 cr in education) IX-X T, ForH 346, Lambert
- 151 Diagnosis and Treatment of Learning Difficulties. (3 cr) III-IV S, Pt 111, Bormuth
- 153 Teaching and Supervision of English in the Elementary Schools. (3 cr; prereq 64 or elem school tchg exper) IX-X W, Pt 214, Chase
- 155 Materials Laboratory for Social Studies Teachers. (3 cr; prereq #) III-IV S, PeikH 155, Gardner
- 165A Mathematics for Gifted Children. (3 cr; prereq 62 or 149A or #) 4:15-5:30 MW, JohH 113, Stochl
- 173 Preparation of Curriculum Materials. (3 cr, §173A-B; prereq 113 or 119) IX-X Th, PeikH 255, Firth
- 184 Supervision of Student Teaching. (3 cr; prereq 15 cr in education or #) III-IV S, PeikH 175, Mork

- 185 Advanced Course in the Teaching of Modern Languages. (3 cr) I-II S, PeikH 225, Birkmaier, Lange
- 191 Advanced Teaching and Supervision of Secondary Mathematics. (3 cr) IX-X Th, PeikH 315, David C Johnson
- 195 Current Developments and Curriculum Construction in English. (3 cr; limited to 20 students; prereq EdT 75C or D or equiv) I-II S, PeikH 245, Kegler, Piché
- 200 Organization and Supervision of Business Education. (3 cr; prereq #) IX-X T, Bu 105, Ar
- 222 Seminar: Secondary Curriculum and Instruction. (1 cr per qtr, total 3 cr; prereq 113) IX-X W, PeikH 265, Firth, Gardner
- 230 Theory and Classical Research in Mathematics Education. (3 cr; prereq 149A or 191 or #) IX-X Th, JohH 113, Stochl
- 233 Seminar: Mathematics Education. (0-3 cr; prereq #) IX-X T, PeikH 315, Jackson, David C Johnson, Donovan Johnson, Stochl
- 241 Seminar: Advanced Study in Supervision and Curriculum Development. (1 cr per qtr, total 3 cr; prereq 113, 170 or 172 or equiv) IX-X M, PeikH 255, Birkmaier, Firth
- 252 Effective College Teaching. (3 cr; prereq yr of grad study in any field or 18 cr in education) I-II S, Bu 105, Eckert

History and Philosophy of Education (HEd)

- 141 Critical Issues in Contemporary Education. (3 cr) III-IV S, CD 218, Neff
- 155 History of Western Educational Thought. (3 cr) IX-X Th, Bu 105, Bagley
- 190 Sociology of Education. (3 cr; prereq 90) IX-X W, Pt 204, Bennett
- 296 Seminar: American Social and Educational History. (3 cr per qtr, §Hist 237E) IX-X W, SocSci 633, Smith

Home Economics Education (HEEd)

Persons interested in courses in home economics education should write directly to the School of Home Economics, University of Minnesota, St. Paul, Minnesota 55101.

Industrial Education (Ind)

- 35 Fundamentals of Vocational Education. (3 cr) IX-X M, TNCD 113, Miletich
- 40 Analysis and Course Organization. (3 cr) IX-X Th, TNCD 113, Kavanaugh

- 100 Industrial Instruction. (3 cr; prereq 40, Ed 55B, #) IX-X W, TNCD 116, Moss
- 107 Co-ordination. (3 cr; prereq 35 or 125 or #) IX-X T, TNCD 116, Miletich
- 250 Literature of Industrial Education. (3 cr; prereq #) IX-X Th, TNCD 116, Nelson

Music Education (MuEd)

- 104 Advanced Topics: Vocal Music. (3 cr; prereq #) IX-X M, ScH 104, Caswell
- 251 Seminar: Curriculum Development. (3 cr; prereq MA in music or music education) IX-X T, ScH 103, Borg, Caswell

Physical Education (PE)

- 136 Introduction to Research. (3 cr; prereq #) 4:00-5:15 TTh, NGW 3, Wilson
- 137 Readings: Physical Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Faculty
- 202 Professional Preparation of Physical Education Teachers. (3 cr; prereq 102) III-IV S, NGW 4, Jaeger
- 238 Administration of Physical Education in Colleges and Universities. (3 cr; prereq PEM 63 or #) I-II S, CH 214, Richardson

Recreation and Park Administration (Rec)

- 137 Readings: Recreation. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Staff

School Health Education (Hlth)

- 137 Readings: Health Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Slocum

WINTER QUARTER, 1967

See page 4 for explanation of symbols

ADULT SPECIALS: Only those credits earned in the first quarter of adult special registration may be transferred to a Graduate School record. Courses numbered 200 or above are not open to adult special students.

Please check the current *Class Schedule* for revisions in course listings.

Agricultural Education (AgEd)

Persons interested in courses in agricultural education should write directly to the Department of Agricultural Education, University of Minnesota, St. Paul, Minnesota 55101.

Art Education (ArEd)

- 189 Application of Aesthetic Theory in Education. (3 cr) I-II S, Hastie
284 Research in Art Education. (3 cr) III-IV S, Gayne

Educational Administration (EdAd)

- 200 Seminar: Elementary School Administration. (3 cr; prereq 215 or #) IX-X T, Lambert
201 Foundations of Educational Administration. (3 cr) 4:15-6:45 M, Pierce
216 Recent Research in Elementary School Administration and Supervision. (3 cr; prereq 215) III-IV S, Curtin, Lambert
242 Administrative Organization and Staffing of School Systems. (3 cr; prereq #) III-IV S, Davis
274 The Junior College. (3 cr) IX-X Th, Hendrix

Educational Psychology (EPsy)

- 133 Introduction to Guidance. (3 cr; prereq 9 cr in education) III-IV S, Tennyson
134 Counseling Procedures. (3 cr; prereq 110 or 117, 133 or #) III-IV S, Blocher
159 Personality Development and Mental Hygiene. (3 cr) IX-X MW, Ar

- 183 Education of Gifted Children. (3 cr; prereq Ed 55B or 75B or equiv) IX-X T, Reynolds
- 188 Education of the Culturally Disadvantaged Child. (3 cr; prereq HEd 90, CPsy 80 or equiv) IX-V Th, Wood
- 190 Educational Problems of Cerebral Palsy. (3 cr; prereq 182 or #) IX-X Th, Force
- 244 Research in Special Education. (1 cr per qtr; prereq 116 or 117 or equiv, #) IX-X M, Ar
- 282B Supervised Practicum in Counseling. (1-3 cr; limited to 5 students; prereq #) I-IV S, Ar

Curriculum and Instruction (EdCI)

- 105 Audio-Visual Materials in Education. (3 cr; prereq sr) IX-X T, Pearson
- 109 Projected Audio-Visual Materials and Equipment Laboratory. (3 cr; prereq 105 or ¶105) Lect IX-X M; lab, sec 2, IX-X Th, Pearson (lab limited to 15 students)
- 114 Interdisciplinary Approaches to Curriculum. (3 cr) IX-X T, Firth
- 119 Elementary School Curriculum. (3 cr; prereq Ed 75B or equiv) III-IV S, Goossen
- 121 Literature for the Elementary School. (3 cr) I-II S, Odland
- 127 Methods of Teaching School Subjects to the Hearing Impaired. (3 cr; prereq SSPA 183 or equiv) IX-X T, Ar
- 131 Advanced Teaching of Technical Business Subjects. (3 cr) I-II S, Ar
- 135 Group Procedures in Guidance. (3 cr; prereq 9 cr in education, EPsy 133 or #) IX-X Th, Hansen
- 139 Co-ordination Techniques. (3 cr) 4:15-6:30 W, Klaurens, Meyer
- 143A Teaching and Supervision of Reading in the Elementary School. (3 cr; prereq 9 cr in education) IX-X W, 1 hr ar, Clymer
- 143B Materials and Instructional Techniques of Elementary Reading. (3 cr; prereq 60 or 143A or #) IX-X W, 1 hr ar, Manning
- 145 Reading Difficulties. (3 cr; prereq 143A or 144 or equiv) IX-X M, 1 hr ar, Bormuth
- 149B Materials Laboratory for Elementary School Mathematics Instruction. (3 cr; limited to 20 students; prereq 62 or 149A or #) 9:15-12:00 S, Jackson
- 153 Teaching and Supervision of English in the Elementary Schools. (3 cr; prereq 64 or elem school tchg exper) IX-X W, 1 hr ar, Chase
- 155A Materials Laboratory for Elementary Social Studies Teachers. (3 cr; prereq 61 or 102 or #) IX-X Th, Keach

- 156 Trends in Business Education. (3 cr) IX-X T, Price
- 159 Materials Laboratory, Secondary School Distributive Education. (3 cr; prereq 137A or EdT 90C or #) III-IV S, Klaurens, Meyer
- 168 Current Developments in the Social Studies. (3 cr; prereq grad or #) I-II S, McCune
- 169 Student Activity Programs in Secondary Schools. (3 cr; prereq Ed 55B or equiv) IX-X Th, Firth
- 170 Programs and Procedures of Curriculum Development. (3 cr, §170A-B; prereq 113 or 119) III-IV S, Firth
- 178 Structure and Function of the Eye—Educational Implications. (3 cr; prereq #) IX-X W, Martin
- 180 Education of the Mentally Retarded in the Secondary Schools. (3 cr; prereq EPsy 184) IX-X Th, Karlsen
- 189 Materials and Curriculum Construction in Modern Languages. (3 cr; prereq 185 and #) I-II S, Birkmaier, Lange
- 192 Mathematics Laboratory. (3 cr; prereq grad or experienced teacher) 4:15-6:45 Th, David C Johnson
- 206 Curriculum Construction in Elementary Social Studies. (3 cr; prereq 61 or 102, and 154 or #) IX-X T, Rogers
- 222 Seminar: Secondary Curriculum and Instruction. (1 cr per qtr, total 3 cr; prereq 113) IX-X W, Firth, Gardner
- 226 Seminar: Elementary School Problems. (No cr) 4:00-5:00 Th, Ar
- 231 Recent Research in Elementary School Mathematics Instruction. (3 cr; prereq 230 or #) IX-X W, Stochl
- 233 Seminar: Mathematics Education. (0-3 cr; prereq #) IX-X T, Jackson, David C Johnson, Donovan Johnson, Stochl
- 241 Seminar: Advanced Study in Supervision and Curriculum Development. (1 cr per qtr, total 3 cr; prereq 113, 170, or 172 or equiv) IX-X M, Birkmaier, Firth
- 243B Recent Research in Reading. (3 cr; prereq #) IX-X T, Clymer
- 250 Higher Education in the United States. (3 cr; prereq yr of grad study in any field or 18 cr in education) I-II S, Fenske
- 257 Research in English Composition in Elementary Schools. (3 cr; prereq 153 or equiv) III-IV S, Chase
- 264 Research in Educational Diagnosis. (3 cr) IX-X W, Bormuth
- 285 Professional Education of Teachers. (3 cr; prereq 15 cr in education incl 184 and 250 or HEd 182 or EPsy 250 or #) III-IV S, Mork, Woestehoff
- 287 Research Foundations of Secondary School Science Teaching. (3 cr) I-II S, Boeck

- 291 Research in Mathematics Education. (Cr ar; prereq 191) IX-X M, Donovan Johnson
- 294 Advanced Materials and Methods in Secondary School English. (3 cr; limited to 20 students; prereq EdT 75C or equiv) I-II S, Kegler, Piché

History and Philosophy of Education (HEd)

- 131 Comparative Education. (3 cr) IX-X W, Corcoran
- 156 History of Ideas in American Education. (3 cr) IX-X Th, Bagley
- 297 Seminar: American Social and Educational History. (3 cr per qtr, §Hist 238E; prereq 296) IX-X W, Smith

Home Economics Education (HEEd)

Persons interested in courses in home economics education should write directly to the School of Home Economics, University of Minnesota, St. Paul, Minnesota 55101.

Industrial Education (Ind)

- 101 Tests in Industrial Subjects. (3 cr; prereq Ed 55B) IX-X Th, Kavanaugh
- 105 Administration of Industrial Education. (3 cr; prereq 35 or #) IX-X T, Nord
- 109 Conference Leading for Industry. (3 cr; prereq #) IX-X M, Miletich
- 251 Research. (3 cr; prereq #) IX-X W, Moss

Music Education (MuEd)

- 125 Selection of Instrumental Music Materials. (3 cr; prereq sr) IX-X Th, Ar
- 252 Seminar: Curriculum Development. (3 cr per qtr; prereq 251) IX-X T, Borg, Caswell

Physical Education for Men (PEM)

- 71 Physiological Application to Sports. (3 cr, §PubH 91, 92; prereq 50, Anat 57) 4:00-6:00 M, Ar

Physical Education for Women (PEW)

- 76 The Teaching of Creative Dance for Children. (3 cr; prereq 40A) 4:00-5:00 MW, 1 hr ar, Ar

Physical Education (PE)

- 130 Contributions of Basic Sciences to Physical Education. (3 cr; prereq #) I-II S, Wilson
- 135 Tests and Measurement in Physical Education. (3 cr; prereq grad or MEd, #) 4:00-5:15 MW, McAdam
- 137 Readings: Physical Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Faculty
- 224A Research Problems. (3 cr; prereq 136, EPsy 116 or #) 4:00-5:15 TTh, Graduate Faculty

Recreation and Park Administration (Rec)

- 137 Readings: Recreation. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Faculty

School Health Education (Hlth)

- 137 Readings: Health Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Slocum

SPRING QUARTER, 1967

See page 4 for explanation of symbols

ADULT SPECIALS: Only those credits earned in the first quarter of adult special registration may be transferred to a Graduate School record. Courses numbered 200 or above are not open to adult special students.

Please check the current *Class Schedule* for revisions in course listings.

Agricultural Education (AgEd)

Persons interested in courses in agricultural education should write directly to the Department of Agricultural Education, University of Minnesota, St. Paul, Minnesota 55101.

Educational Administration (EdAd)

- 202 Foundations of Educational Administration. (3 cr) I-II S, Mueller
- 215 The Elementary School Principalship. (3 cr; prereq 201 and 202 or #) IX-X T, Lambert
- 230 School Community Relations. (3 cr) IX-X M, Popper
- 233 Workshop: The Junior High School. (1-4 cr) III-IV S, Popper
- 264 The Secondary School Principalship. (3 cr) IX-X T, Nickerson
- 275 Junior College Administration. (3 cr; prereq 274 or #) IX-X Th, Hendrix

Educational Psychology (EPsy)

- 125 Group Dynamics in Education. (3 cr) 4:15-5:30 TTh, David W Johnson
- 186 Education of Emotionally Disturbed and Socially Maladjusted Children. (3 cr, prereq grad or #) IX-X T, Wilderson
- 193 Psychological Analysis of Instruction. (3 cr, §193, §196-197; prereq sr) 4:15-5:30 TTh, Samuels
- 209 Seminar: Research Planning. (1 cr per qtr; limited to 15 students) IX-X T, Hoyt
- 244 Research in Special Education. (1 cr per qtr; prereq 116, 117 or equiv, #) IX-X M, Ar
- 289 Survey of Special Education Problems. (3 cr; prereq 182 or experience and #) IX-X W, Reynolds

Curriculum and Instruction (EdCI)

- 63 Children's Literature. (3 cr; limited to 50 students) Sec 3, IX-X W, Ar
- 102 Teaching Social Studies in the Elementary School. (3 cr; prereq Ed 75B or equiv) I-II S, Rogers
- 103 Teaching Science in the Elementary School. (3 cr; prereq sr, Ed 75B or tchg exper) III-IV S, Goossen
- 104 Adult Education. (3 cr; limited to 30 students) IX-X Th, Woods
- 107 Radio and Television in Education. (3 cr; limited to 30 students; prereq 9 cr in education) IX-X M, Pearson
- 113 Principles of Secondary School Curriculum. (3 cr; prereq Ed 55B or equiv) IX-X Th, 1 hr ar, Firth
- 122 Literature for Adolescents. (3 cr; prereq Ed 55B or jr-sr high school tchg exper) I-II S, Kemp
- 124 Foundations of Career Development. (3 cr) IX-X T, Borow
- 125 Occupational Information Laboratory. (3 cr; prereq #) IX-X Th, Hansen
- 132 Teaching the Basic Business Subjects. (3 cr) IX-X T, Price
- 141 Co-operative Part-Time Work Experience Programs. (3 cr; limited to 28 students) 4:15-6:30 W, Klaurens, Meyer
- 142 Business and Distributive Programs for Adults. (3 cr; limited to 20 students) 4:15-6:30 M, Ashmun
- 143A Teaching and Supervision of Reading in the Elementary School. (3 cr; prereq 9 cr in education) IX-X T, 1 hr ar, Clymer
- 143C Instructional Leadership in Elementary Reading. (3 cr; prereq 143A or #) III-IV S, Manning
- 144 Teaching Reading in Secondary Schools. (3 cr; prereq 9 cr in education) IX-X T, Chase
- 145 Reading Difficulties. (3 cr; prereq 143A or 144 or equiv) IX-X Th, Bormuth
- 149C Current Developments in Elementary School Mathematics Instruction. (3 cr; prereq 62 or 149A or #) 4:15-5:30 MW, Stochl
- 150 Supervision and Improvement of Instruction. (3 cr; prereq 9 cr in education) III-IV S, Curtin
- 151 Diagnosis and Treatment of Learning Difficulties. (3 cr) IX-X M, Bormuth
- 153 Teaching and Supervision of English in the Elementary Schools. (3 cr; prereq 64 or elem school tchg exper) I-II S, Dykstra
- 158 Materials and Methods in Office and Stenographic Procedures. (3 cr) I-II S, Ar
- 160 Materials Laboratory, Occupational Relations. (3 cr; prereq 137A, EdT 90C or #) III-IV S, Klaurens, Meyer

- 165B Mathematics for Slow Learning Children. (3 cr; prereq 62 or 149A or #) IX-X Th, Jackson
- 166 Current Trends, Kindergarten Education. (3 cr; prereq tchg exper in NKP or #) IX-X W, Headley
- 172 Supervision of Secondary Instruction. (3 cr; prereq 113) I-II S, Firth
- 182 Education of Partially Seeing Children. (3 cr; prereq 115 and 118, #) IX-X W, Martin
- 190 Current Developments in Secondary School Science Teaching. (3 cr; prereq EdT 68B-C or 68M, equiv undergrad courses or experience in science tchg) I-II S, Gennaro
- 194 New Content and Methods in Mathematics. (3 cr; prereq experience in math tchg) IX-X MW, David C Johnson
- 203 Supervision and Administration of Special Education. (3 cr; prereq #) IX-X T, Force
- 204 Social Studies Curriculum. (3 cr) IX-X M, Gardner
- 208 Research in Elementary Social Studies. (3 cr; prereq 61 or 102, and 154 or #) IX-X W, Keach
- 222 Seminar: Secondary Curriculum and Instruction. (1 cr per qtr, total 3 cr; prereq 113) IX-X W, Firth, Gardner
- 233 Seminar: Mathematics Education. (0-3 cr; prereq #) IX-X T, Jackson, David C Johnson, Donovan Johnson, Stochl
- 241 Seminar: Advanced Study in Supervision and Curriculum Development. (1 cr per qtr, total 3 cr; prereq 113, 170 or 172 or equiv) IX-X M, Birkmaier, Firth
- 243C Seminar: Reading Instruction. (0-3 cr; prereq #) IX-X W, Clymer
- 251 Curriculum Trends in American Colleges. (3 cr; prereq yr of grad study in any field or 18 cr in education) I-II S, Eckert
- 280 Supervision of Counseling. (3 cr; prereq #) IX-X T and ar, Parker and others
- 286 Professional Education of Teachers. (3 cr per qtr; prereq 285 or #) III-IV S, Mork, Woestehoff
- 288 Seminar: Research in Modern Language Learning. (3 cr; prereq 185 and #) I-II S, Birkmaier

History and Philosophy of Education (HEd)

- 170 American Pragmatism and Education. (3 cr) IX-X Th, Bagley
- 182 Comparative Philosophies of Education. (3 cr) IX-X W, Neff
- 298 Seminar: American Social and Educational History. (3 cr per qtr, §Hist 137E; prereq 297) IX-X W, Smith

Home Economics Education (HEEd)

Persons interested in courses in home economics education should write directly to the School of Home Economics, University of Minnesota, St. Paul, Minnesota 55101.

Industrial Education (Ind)

- 44 Equipment and Management. (3 cr; prereq 6 or 40 or #) IX-X W, Kavanaugh
- 110 Vocational Guidance. (3 cr; prereq Ed 55B) IX-X Th, Lundgren
- 115 Supervision of Industrial Education. (3 cr; prereq 35 or 105) IX-X M, Miletich
- 135 Industrial Course Construction. (3 cr, §40) IX-X T, Kavanaugh
- 155 Critical Issues in Industrial Education. (3 cr) IX-X W, Moss

Music Education (MuEd)

- 102 General Music in Elementary and Junior High Schools. (3 cr; prereq 52 or #) IX-X M, Borg
- 253 Seminar: Curriculum Development. (3 cr per qtr; prereq 252) IX-X T, Borg, Caswell

Physical Education (PE)

- 137 Readings: Physical Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Faculty
- 261A Seminar: Contemporary Problems. (3 cr; prereq 136, #) I-II S, Ar

Recreation and Park Administration (Rec)

- 137 Readings: Recreation. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Graduate Faculty

School Health Education (Hlth)

- 114 Administration of School Health Education. (3 cr; prereq 83, PubH 50 or equiv or #) 4:00-5:15 MW, Slocum
- 137 Readings: Health Education. (1-3 cr; prereq sr, honor, grad, #) Hrs ar, Slocum

GRADUATE ADVISERS**

Education Fields

Agricultural Education

W. Forrest Bear—222 Agricultural Engineering (StP)
Harry W. Kitts—208 Horticulture (StP)
R. Paul Marvin—208 Horticulture (StP)
Keith N. McFarland—207 Coffey (StP)
Milo J. Peterson—208 Horticulture (StP)
Gordon I. Swanson—208 Horticulture (StP)

Art Education

Clifton A. Gayne—135 Wulling
W. Reid Hastie—135 Wulling

Child Psychology

Inquire in 102 Child Development

Curriculum and Instruction

Emma M. Birkmaier (Lang.)—224 Peik
Clarence H. Boeck (Sci.)—370 Peik
Naomi C. Chase (Elem.)—130 Burton
Theodore W. Clymer (Elem.)—520 Johnston
James R. Curtin (Elem.)—Burton
Robert Dykstra (Elem.)—Burton
Gerald R. Firth (Sec.)—130 Peik
William E. Gardner (Soc. St.)—103 Burton
Eugene D. Gennaro (Sci.)—370 Peik
Carl V. Goossen (Elem.)—Burton
Alan H. Humphreys (Elem.)—Burton
Robert L. Jackson (Elem.)—Burton
David C. Johnson (Math.)—330 Peik
Donovan A. Johnson (Math.)—330 Peik
Everett T. Keach (Elem.)—246 Burton
Stanley B. Kegler (Engl.)—214 Burton
Ronald T. Lambert (Elem.)—203 Burton

John C. Manning (Elem.)—Burton
George H. McCune (Soc. St.)—418 Johnston
Warren G. Meyer (Dist. Ed.)—115 Burton
R. Norine Odland (Elem.)—Burton
Neville P. Pearson (Aud.-Vis.)—206 Wesbrook
Ray G. Price (Bus. Ed.)—117 Burton
Vincent R. Rogers (Elem.)—Burton
James E. Stochl (Elem.)—530 Johnston
Edith West (Soc. St.)—350 Peik

Educational Administration

James R. Curtin (Elem.)—Burton
Donald E. Davis (Gen.)—215 Pattee
Otto E. Domian (Gen.)—205 Burton
Gerald R. Firth (Sec.)—130 Peik
Carl V. Goossen (Elem.)—Burton
Vernon L. Hendrix (Higher)—215 Pattee
Clifford P. Hooker (Gen.)—203 Burton
Ronald T. Lambert (Elem.)—203 Burton
Van Dyck Mueller (Gen.)—215 Pattee
Neal C. Nickerson (Gen.)—203 Burton
Douglas R. Pierce (Gen.)—203 Burton
Samuel H. Popper (Gen.)—203 Burton

Educational Psychology

Alan R. Anderson—247 Burton
Bruce E. Balow—106 Pattee
Donald H. Blocher—253 Burton
Henry Borow—30 Nicholson
Russell W. Burris—400 Ford
Theodore W. Clymer—520 Johnston
Raymond O. Collier—Burton
Mary E. Corcoran—330 Burton
Jan D. Duker—226 Child Development
William H. Edson—206 Burton

** Undergraduate students may consult the graduate adviser appropriate for the major, or inquire in 206 Burton Hall.

Charles J. Glotzbach—206 Burton
Theda Hagenah—106 Eddy
Marian D. Hall—226 Child Development
Lorraine S. Hansen—152 Peik
Vivian H. Hewer—101 Eddy
Wells Hively—139 Burton
Cyril J. Hoyt—137 Burton
David W. Johnson—Burton
Paul E. Johnson—139 Burton
Theodore Kellogg—6 Morrill
Donald MacEachern—141 Burton
Jack C. Merwin—Burton
Frank B. Murray—Burton
Daniel C. Neale—103 Burton
Clyde A. Parker—249 Burton
Alton L. Raygor—106 Eddy
Maynard C. Reynolds—101 Pattee
S. Jay Samuels—Burton
Martin L. Snoko—200 Eddy
John E. Stecklein—330 Burton
W. Wesley Tennyson—259 Burton
James S. Terwilliger—Burton
Frank B. Wilderson—107 Pattee
Roger E. Wilk—139 Burton

Elementary Education

See Curriculum and Instruction and Educational Administration

Health Education

Ruth E. Grout—1215 Mayo
Helen M. Slocum—158 Norris Gymnasium

Higher Education

Ruth E. Eckert—226 Burton

History and Philosophy of Education

Ayers L. Bagley—239 Burton
Timothy L. Smith—239 Burton

Home Economics Education

Marjorie M. Brown—121 McNeal (StP)
Roxana R. Ford—117 McNeal (StP)
Louise A. Stedman—200 McNeal (StP)

Industrial Education

William A. Kavanaugh—103 TNCD
Jerome Moss, Jr.—103 TNCD
Howard F. Nelson—103 TNCD
Robert R. Randleman—108 TNCD

Library Science

Lowell Olson—3 Walter Library

Music Education

Robert L. Borg—214 Scott
Arnold F. Caswell—241 Scott

Physical Education for Men

John F. Alexander—205 Cooke
Richard J. Donnelly—220 Cooke
Robert E. McAdam—205 Cooke
Ralph A. Piper—217 Cooke
Deane E. Richardson—220 Cooke

Physical Education for Women

Eloise M. Jaeger—101 Norris Gymnasium
Helen M. Slocum—158 Norris Gymnasium
Marjorie U. Wilson—108 Norris Gymnasium

Recreation Leadership

Frederick M. Chapman—204 Cooke

Secondary Education

See Curriculum and Instruction (Teaching of English, Languages, Mathematics, Science, Social Studies, Business, Distributive, and Economic Education) and Educational Administration

Special Education

Bruce E. Balow—109 Pattee
Dewey G. Force, Jr.—12 Pattee
Maynard C. Reynolds—101 Pattee
Frank B. Wilderson—107 Pattee
Frank H. Wood—103 Pattee

Teacher Education

Gordon M. A. Mork—225 Burton
Arnold S. Woestehoff—102 Burton

CALENDAR 1966-1967

FALL QUARTER

September

- 5 Holiday (Labor Day)
- 15 Fall quarter fees due for students registered through September 9
- 19-23 Fall registration
- 23 Last day for registration and payment of fees for the undergraduate colleges
- 26 Fall quarter classes begin
- 29 Opening Convocation; IV hour classes excused
- 30 Last day for registration and payment of fees for the Graduate School and for teachers in service

October

- 12 Holiday (Columbus Day)
- 15 Homecoming Day

November

- 3 Senate meeting, 3:30 p.m.
- 11 Holiday (Veterans Day)
- 24 Holiday (Thanksgiving Day)
- 25-26 Classes excused (except Medical School and College of Veterinary Medicine)

December

- 5 Graduate School application deadline for winter quarter
- 8 Senate meeting, 3:30 p.m.
- 9 Review begins
- 10-16 Final examination period
- 17 Fall quarter closes
Commencement, 8 p.m.

WINTER QUARTER

December

- 26 Holiday (Christmas Day, December 25)
- 27-30 Registration resumes; winter quarter fees due for new students in all undergraduate colleges

January

- 2 Holiday (New Year's Day, January 1)
- 3 Winter quarter classes begin
- 6 Last day for registration and payment of fees for the Graduate School and teachers in service

February

- 2 Senate meeting, 3:30 p.m.
- 19-25 University of Minnesota Week
- 22 Holiday (Washington's Birthday)
- 23 Charter Day Convocation; IV hour classes excused
- 24 Graduate School application deadline for spring quarter

March

- 9 Senate meeting, 3:30 p.m.
- 10 Review begins
- 11-17 Final examination period
- 16 Spring quarter fees due for students in residence winter quarter in undergraduate colleges
- 18 Winter quarter closes
Commencement, 8:30 p.m.

SPRING QUARTER

March

- 20-23 Registration and payment of fees for new students in all undergraduate colleges
- 24 Holiday (Good Friday)
- 27 Spring quarter classes begin
- 31 Last day for registration and payment of fees for the Graduate School and for teachers in service

April

- 27 Senate meeting, 3:30 p.m.

May

- 10 Cap and Gown Day Convocation; IV hour classes excused
- 15 Graduate School application deadline for first term, Summer Session
- 30 Holiday (Memorial Day)

June

- 1 Senate meeting, 3:30 p.m.
- 2 Review begins
- 3-9 Final examination period
- 9 Baccalaureate service, 4 p.m.
- 10 Spring quarter closes
Commencement, 7:30 p.m.

FALL QUARTER

| | | | | | |
|------------------|------------------|------------|-----------|------------|-----------|
| ArEd 156 | ArEd 151 | EdAd 101 | EdAd 224 | EdAd 167 | EdAd 227 |
| CD 179†† | CD 179†† | EdAd 118 | EPsy 188 | EPsy 110 | EPsy 187 |
| EdAd 210 | EdAd 215 | EPsy 134 | EdCI 108 | EPsy 133 | EdCI 108 |
| EdAd 264 | EPsy 182 | EPsy 244 | EdCI 121 | EPsy 184 | EdCI 125 |
| EPsy 282A (I-IV) | EPsy 282A (I-IV) | EdCI 106 | EdCI 124 | EdCI 63 | EdCI 149A |
| EdCI 102 | EdCI 113 | EdCI 144 | EdCI 129 | EdCI 115 | EdCI 173 |
| EdCI 105 | EdCI 151 | EdCI 147¶ | EdCI 143A | EdCI 119 | EdCI 191 |
| EdCI 122 | EdCI 155 | EdCI 165A§ | EdCI 150 | EdCI 136¶ | EdCI 230 |
| EdCI 185 | EdCI 184 | EdCI 241 | EdCI 200 | EdCI 145 | HEd 155 |
| EdCI 195 | HEd 141 | Ind 35 | EdCI 233 | EdCI 153 | Ind 40 |
| EdCI 252 | PE 202 | MuEd 104 | Ind 107 | EdCI 165A§ | Ind 250 |
| PE 238 | | | MuEd 251 | EdCI 222 | PE 136† |
| | | | PE 136† | HEd 190 | |
| | | | | HEd 296 | |
| | | | | Ind 100 | |

WINTER QUARTER

| | | | | | |
|------------------|------------------|------------|-----------|-----------|------------|
| ArEd 189 | ArEd 284 | EdAd 201** | EdAd 200 | EPsy 159 | EdAd 274 |
| EPsy 282B (I-IV) | EdAd 216 | EPsy 159 | EPsy 183 | EPsy 188 | EdCI 109 |
| EdCI 121 | EdAd 242 | EPsy 244 | EdCI 105 | EPsy 190 | EdCI 135 |
| EdCI 131 | EPsy 133 | EdCI 109 | EdCI 114 | EdCI 139¶ | EdCI 155A |
| EdCI 149B†† | EPsy 134 | EdCI 145 | EdCI 127 | EdCI 143A | EdCI 169 |
| EdCI 168 | EPsy 282B (I-IV) | EdCI 241 | EdCI 156 | EdCI 143B | EdCI 180 |
| EdCI 189 | EdCI 119 | EdCI 291 | EdCI 206 | EdCI 153 | EdCI 192** |
| EdCI 250 | EdCI 149B†† | Ind 109 | EdCI 233 | EdCI 178 | EdCI 226* |
| EdCI 287 | EdCI 159 | PEM 71† | EdCI 243B | EdCI 222 | HEd 156 |
| EdCI 294 | EdCI 170 | PEW 76* | Ind 105 | EdCI 231 | Ind 101 |
| PE 130 | EdCI 257 | PE 135† | MuEd 252 | EdCI 264 | MuEd 125 |
| | EdCI 285 | | PE 224A† | HEd 131 | PE 224A† |
| | | | | HEd 297 | |
| | | | | Ind 251 | |
| | | | | PEW 76* | |
| | | | | PE 135† | |

SPRING QUARTER

| | | | | | |
|----------|-----------|------------|-----------|------------|-----------|
| EdAd 202 | EdAd 233 | EdAd 230 | EdAd 215 | EPsy 289 | EdAd 275 |
| EdCI 102 | EdCI 103 | EPsy 244 | EdAd 264 | EdCI 63 | EPsy 125§ |
| EdCI 122 | EdCI 143C | EdCI 107 | EPsy 125§ | EdCI 141¶ | EPsy 193§ |
| EdCI 153 | EdCI 150 | EdCI 142¶ | EPsy 186 | EdCI 149C§ | EdCI 104 |
| EdCI 158 | EdCI 160 | EdCI 149C§ | EPsy 193§ | EdCI 166 | EdCI 113 |
| EdCI 172 | EdCI 286 | EdCI 151 | EPsy 209 | EdCI 182 | EdCI 125 |
| EdCI 190 | | EdCI 194 | EdCI 124 | EdCI 194 | EdCI 145 |
| EdCI 251 | | EdCI 204 | EdCI 132 | EdCI 208 | EdCI 165B |
| EdCI 288 | | EdCI 241 | EdCI 143A | EdCI 222 | HEd 170 |
| PE 261A | | Ind 115 | EdCI 144 | EdCI 243C | Ind 110 |
| | | MuEd 102 | EdCI 203 | HEd 182 | |
| | | Hlth 114† | EdCI 233 | HEd 298 | |
| | | | EdCI 280 | Ind 44 | |
| | | | Ind 135 | Ind 155 | |
| | | | MuEd 253 | Hlth 114† | |

| KEY | | | |
|-----|------------|-----|------------|
| ° | 4:00- 5:00 | ¶ | 4:15- 6:30 |
| † | 4:00- 5:15 | ** | 4:15- 6:45 |
| ‡ | 4:00- 6:00 | †† | 9:00-11:30 |
| § | 4:15- 5:30 | ††† | 9:15-12:00 |