

The Bulletin of the

UNIVERSITY OF MINNESOTA

College of Education

1952-1954

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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 in the College of Education, page 5
- Admission Requirements, page 6
- Graduation Requirements, page 8
- Procedures and Practices in the College of Education, page 9
- Services Available to Students, page 12
- College of Education Facilities and Services, page 12
- Awards and Scholarships, page 14
- Requirements for the Master of Education Degree, page 14
- Graduate Study in Education, page 14

Section II. Curricula (pages 16-64)—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 on the last page of this bulletin for specific page references.

Section III. Description of Courses (pages 65-92)—This section lists the undergraduate and graduate courses offered in the College of Education. A summary description of each course is provided.

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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 Science, Literature, and the Arts

Bulletin of the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine

Bulletin of the Graduate School

All of these bulletins are available at the information booth in the Administration Building or may be obtained by writing to the Office of Admissions and Records, University of Minnesota, Minneapolis 14.

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 (page 6 of this bulletin). 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.

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 to provide preparation for 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 train 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 American life. Toward these ends the College of Education utilizes all the resources of its own faculty and works in cooperation with other colleges of the University.

COURSES OF STUDY AND ADMISSION REQUIREMENTS*

Students in certain fields enter the College of Education as freshmen. Others take two years of preprofessional work in another college and enter the College of Education as juniors. This bulletin contains entrance and graduation requirements for the various courses of study in the College of Education. Study these requirements carefully. Detailed information concerning general entrance requirements, as well as university admission procedures and estimated expenses, will be found in the *Bulletin of General Information*. This will be sent upon request to the Dean of Admissions and Records, University of Minnesota.

Four-year Programs in the College of Education—Students who wish to prepare for teaching in the following fields register as freshmen in the College of Education and complete the whole undergraduate program in this college. In all of these fields an optional fifth year of study leading to the master of education degree is offered:

Elementary school teaching (including nursery school-kindergarten-primary teaching)
Art education
Industrial education
Music education
Physical education for men
Physical education for women
Recreation leadership and administration
Rural education
Teaching of exceptional children

Two-year Programs in the College of Education Requiring Two Years of College Preparation—Students who wish to prepare for teaching in high schools or other professional work in the following fields spend their freshman and sophomore years in the College of Sci-

ence, Literature, and the Arts taking prescribed preparatory work and then enroll in the College of Education as juniors:

Business and distributive education
The core curriculum
English
Geography
German
History
Journalism (minor field only)
Language Arts
Latin
Library science
Mathematics
Natural science
Political science
Public health (minor field only)
Romance languages
Social studies (history, political science, geography, economics, sociology)
Sociology
Speech
Speech pathology
Visiting teachers

Special Programs in Agriculture and Home Economics—Students who wish to prepare for careers in the teaching

* Procedures to be followed in application for admission, as well as other procedures and practices in the College of Education, are described on pages 9 to 11.

of agriculture or home economics register for freshman and sophomore years in the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine. Beginning with the junior year registration is a joint one—in the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine—and in the College of Education. An optional fifth year of study leading to the master of education degree is offered in each of these programs.

Special Program in Nursing Education—The course in nursing education is offered by the College of Education jointly with the School of Nursing and the College of Science, Literature, and the Arts. Nurses who have completed a program in an accredited school of nursing may enter this program with advanced standing.

Graduate Study in Education—(see page 14).

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: (1) the program in Military Science and Tactics (ROTC), leading to a commission in the Army Officers Reserve Corps; (2) the program in Naval Science; and (3) the program in Air Science and Tactics (Air ROTC), leading to a commission in the Air Force Reserve. 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.

General Admission Requirements in the College of Education (see page 9 for a description of admission procedures.)

1. 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 practice teaching, and at other points in the training that may be necessary in individual cases.

2. At the time of entrance to the college, whether as a freshman or as a student with advanced standing, the student must present a certificate from the Students' Health Service indicating that he has no physical defects or health conditions that would prevent successful pursuit of educational work.

3. Students applying for admission to

the College of Education must present a record of success in previous academic work.

a. Students entering the college as freshmen must have earned a percentile rank of 40 or higher in their high school graduating class. Such students will be admitted to the college without reference to the pattern of courses taken in high school, although graduation from high school is required.

b. Students entering the college with advanced standing must have earned at least a C+ (1.5) average in all college courses that will be counted toward their major in the College of Education, and at least a C average in all of their previous college work.

4. Students who intend to enter the College of Education as juniors after two years of preprofessional study in the College of Science, Literature, and the Arts must meet the freshman entrance requirements of the latter college. (See below.)

5. All students entering the College of Education after the freshman year should have completed the required work in physical education—5 credits for women and 3 credits for men.

6. Applicants for admission to the College of Education who do not fully meet all requirements may be referred to the admissions committee of the college for individual consideration.

Admission Requirements for Specific Programs in Education—Specific admission requirements have been established for certain courses of study in the college. The student who plans to enter the college should read carefully the requirements for the course of his choice. (See Section II of this bulletin, pages 16 to 64.)

Admission to the Four-year Curricula—Students ordinarily are admitted to the four-year curricula in education directly from high school although students who have completed some college work may seek to enter one of the four-year curricula. Some college credits earned before admission to the College of Education may be accepted toward completion of the required work if they have been in courses equivalent to those prescribed by the college; others may be counted as elective credits. (See 3b above.)

Requirements for Students with Two Years of Work at the University of Minnesota—Students who have taken two years of work in the College of

Science, Literature, and the Arts and are preparing to teach academic subjects in high school may be admitted to the College of Education upon satisfaction of the following requirements:

1. A minimum of 90 quarter credits, carried with an average of one honor point per credit (C average), is necessary for admission to the college.

2. A minimum of 15 credits in a major field carried with an average of one and one-half honor points per credit (C+ average), and at least 10 credits in each of two minor fields are necessary for admission.

3. The completion of the group requirements of the Junior College of the College of Science, Literature, and the Arts. With slight modifications the student may choose either Plan I or Plan II. For most students Plan II is preferable. (See **Bulletin of the College of Science, Literature, and the Arts.**)

Modifications are as follows:

a. In either plan Psychology 1 and 2, 6 credits, are required.

b. In either plan P.H. 3, Personal Health (or equivalent), and P.H. 4, Health Problems of the Community. Both requirements may be met by taking P.H. 50, Public and Personal Health, 3 credits.

c. In either plan the student must take a minimum of 9 credits in natural science, exclusive of psychology and mathematics. The science courses in General Studies are recommended.

d. The completion of three quarters of physical education with three credits for men and four quarters with 5 credits for women.

4. Students with two 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 enrolment, and in other cases adjustments may be possible after consultation with the chairman of the Committee on Students' Work.

5. Credit for courses taken in military science and tactics and naval science may be counted toward graduation. These credits are electives, however, and may not be used to fulfill major or minor requirements.

6. A maximum of 27 credits is elective from courses in agriculture and home economics except in the special curricula of those fields.

Students from Colleges Outside the University—Students who transfer from other colleges with advanced

standing but with less than two years of work and who are preparing for high school teaching will be requested to complete the freshman and sophomore requirements in the College of Science, Literature, and the Arts.

Students who have completed two full years of college work but lack the required number of credits or specific entrance requirements, such as language, science, or psychology, may register in the College of Education and make up deficiencies after admission. Such deficiencies, however, may delay graduation or necessitate extra summer work.

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 three 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. Such students cannot complete the required work for a degree and secondary school certificate in one year. The necessary sequence of professional courses requires five quarters in this college, three of which must be taken in the senior year. These courses are not available in the Summer Session. Transfer students who enter at the beginning of the winter quarter can complete their work in the winter and spring quarters of the junior year and the three quarters of the senior year provided they meet other requirements in that time.

Students from Schools of Nursing—Students who specialize in nursing education or a combined program in nursing education and public health nursing register in the College of Education for the last 45 credits of work. For a detailed statement of the program see the curricula in nursing education and public health nursing.

Students from Teachers Colleges—Graduates from the standard seven-quarter certificate course of the Minnesota state teachers colleges and other accredited teacher training institutions are admitted to the College of Education with 90 blanket credits. These credits are accepted in lieu of the Junior College requirements listed on pages 6 and 7, but a student in a specialized field will be held for all the work of his curriculum.

Students who transfer from the third or fourth year of the degree course offered in the Minnesota teachers col-

leges will receive credit for any part of their work in so far as such work is equivalent to courses offered in the College of Education (see Residence Requirement).

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 unclassified students. In order to become

candidates for a degree, however, they must be admitted as regular students.

Graduates of state teachers colleges will not be permitted to take for credit the courses in Freshman English, (Com. 1-2-3, Comp. 4-5-6, or Eng. A-B-C), or Psy. 1-2, General Psychology. Graduates of state teachers colleges should not take Ed. 71A-B-C without special permission.

REQUIREMENTS FOR GRADUATION

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

Amount and Quality of Work—A total of 186 credits and 186 honor points, including the required courses in physical education, is needed for graduation.* During the junior and senior years an honor point ratio of 1.0 (grade average of C) for all courses except those in the major must be maintained. In the student's major subjects an honor point ratio of 1.5 (grade average of C+) is required.

Students registered in four-year programs must have an honor point average of 1.0 in all work of the freshman and sophomore years to be admitted to the work of the junior year, and an honor point average of 1.5 (C+) in the major.

All students are required to have an honor point average of 1.5 in the major field to be admitted to student teaching except in elementary education.

Professional Requirements for Teachers of Secondary School Subjects—The professional course requirements in the four-year curricula are outlined in Section II of this bulletin. The requirements listed below are for students with two years of college preparation who are enrolled in the two-year College of Education curricula 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. To qualify for the degree and the certificate, students will 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, and social studies.

2. One or more minors in academic or special fields. Majors and minors must be selected from the subjects commonly taught in high schools. Students should select majors and minors early in their college course and with regard to the demands of high schools. By careful selection of courses students may complete two or more minors, thus qualifying them to teach in several different fields. 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, Introduction to Secondary School Teaching (10 cred.; prereq. Psy. 1-2).
- b. Methods and student teaching. In addition, the student must complete a course in methods and teaching in his major field (11 cred.; prereq. Ed. 55A-B). This course includes general methods, special methods, and student teaching. (See page 10 for specific procedures.)
- c. History and philosophy of education. Satisfactory completion of one three-credit course in history and philosophy of education, The School and Society (H.Ed. 180), is included in the professional requirements for graduation.

* In some specialized curricula 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, pages 16-64 of this bulletin.)

† A student who wishes to teach in some state other than Minnesota may have his program modified to meet the specific requirements of that state.

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. The following courses count as electives in education for students preparing for high school teaching: any course listed under General Courses or Secondary Education in the Departments of Curriculum and Instruction, Educational Administration, Educational Psychology, and History and Philosophy of Education; a methods course in the minor. All of these courses are described in Section III, Description of Courses.

Health Education—All students in the College of Education except those in nursing education and speech pathology are required to take a sequence of courses in (a) personal health, (b) community health, and (c) school health. A minimum of 6 or 7 credits is required. Courses which may be taken to meet this requirement are as follows:

- a. P.H. 3, Personal Health, 2 credits; G.C. 10C, Human Biology, 3 credits; P.H. 50, Public and Personal Health, 3 credits—this course meets the requirements for both (a) and (b).
- b. P.H. 4, Health Problems of the Community, 2 credits; P.H. 50, Public and Personal Health, 3 credits—this course meets the requirements for both (a) and (b); P.H. 51, Community Hygiene, 3 credits.
- c. P.H. 59, Health of the School Child, 3 credits (P.H. 57, Health of the Infant and Preschool Child in certain curricula).

Residence Requirements—A mini-

mum of 45 credits must be earned while in residence in the College of Education. Of these, 30 credits must be earned in the senior year. **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 cannot be completed in less time. As a rule, these courses are taught in only one quarter each year and must be taken in regular sequence, beginning in the fall quarter. Students who do not enter the College of Education in the fall of the junior year usually are not able to complete the requirements of their curricula in two years.

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

Students graduating from one of the five-year curricula 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 Personnel Office in 206 Burton Hall.

Admission Procedures—There is a different admission procedure for each of three principal groups of students entering the College of Education: (1) those without previous college training, (2) those transferring from another division of the University, and (3) those

transferring from another college institution.

1. Students without previous college training apply for admission as freshmen. They are referred to the **Bulletin of General Information** 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 instruction. 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 Window 5 of the Office of Admissions and Records, 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.

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 of 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 Students' Work.

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

Clearance for Admission to the Junior Year—Students who have been enrolled in the College of Education in the sophomore year obtain a clearance form at the information desk, 206 Burton Hall, during the winter quarter of the sophomore year and complete the required physical examination and psychological and speech tests according to printed instructions.

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 one 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 honor point ratio, 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 Students' Health Service and take the physical examination within one year of the date the degree is to be granted.

Application and Registration for Student Teaching—Students obtain applications for student teaching and instructions at the registration desk, 206 Burton Hall, during the first three weeks of spring quarter for beginning student teaching in the fall; and during advanced registration periods for winter and spring quarters; that is, in the quarter preceding that in which they expect to have a student teaching assignment. Applications must be filed with the director of laboratory experiences in 210 Burton promptly in accordance with the schedules posted.

Student teaching is required for two or three quarters depending upon the major field. Students should consult their major advisers to determine their program in their major field, and the time at which they should begin it. In some departments, students may enter student teaching without reference to a regular sequence, whereas in the academic fields it is necessary that the

student enter student teaching and special methods classes in the fall quarter and continue in sequence through winter and spring quarters.

Students in Agricultural Education, Home Economics Education, and Nursing Education consult advisers in the major departments to arrange their student teaching.

Students not enrolled in the University during spring quarter who wish to begin student teaching in the fall should apply to the director of laboratory experiences before June 1. Only limited student teaching is offered in the first term of Summer Session, and new applicants must file for this before June 1.

Assignment to a classroom place for student teaching is subject to the approval of the director of laboratory experiences, and involves 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 Ed. 55A-B for secondary education or Ed. 71A-B-C for elementary education, and the recommendation of the laboratory instructor; (3) a C+ average (1.5 honor points per credit) in the major, except in elementary education, where a C average (1.0) in all work taken is required; (4) completion of the College of Education psychological test battery given at the junior year level; (5) satisfactory report from the Students' 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; (6) satisfactory rating on the Speech and Hearing Clinic tests included in the requirements for junior standing.

A student may be required 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 for one quarter by the Committee on Students' Work. 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 one quarter.
2. An average less than C (1 honor

point for each credit taken) for all credits earned in any one year, and an average of less than C+ (1.5 honor points per credit) in courses in the major subject.

Students who fail to make satisfactory grades in their work after being on probation for one quarter are in danger of being dropped.

A student who is required to cancel his registration in student teaching during the second or third quarter may be allowed to graduate provided all other requirements have been met; however, he will not be eligible for a teacher's certificate which is issued by the Minnesota State Department of Education.

Teacher Certification—At the time of registration for the final quarter in the College of Education, the senior student is expected to apply for the teacher's certificate. He obtains the application form in 206 Burton Hall, attaches a check or money order for the one dollar certification fee (payable to Treasurer, State of Minnesota) and leaves the application and check at the Education window in the Administration Building. 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.

Placement Records—Seniors should obtain forms for placement credentials at the Bureau of Recommendations, 102 Burton Hall, or at the placement meeting held for seniors in the fall quarter. These records should be completed and filed with the Bureau of Recommendations at least two quarters prior to graduation. For further information, go to 102 Burton Hall.

Education Courses in the General Extension Division—For evening and correspondence study courses in education see the **Bulletin of the General Extension Division**. Teachers and others not regularly 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 Students' Work for permission to take for credit courses offered by the General Extension Division.

SERVICES AVAILABLE TO STUDENTS

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 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 problems. 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 Students' Work—A student who encounters difficulties in adjusting his program to his individual needs or background should seek the assistance of the Committee on Students' Work in 210 Burton Hall. A student who has trouble scheduling required courses, has had equivalent

courses here or elsewhere, has a pattern of work that does not fit the stated requirements, or for some reason cannot take certain courses, is urged to consult a member of the committee.

Orientation - Registration Program—An orientation program for all new students is offered by the University shortly before the opening of each quarter. Students are expected to attend 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 several student organizations in the College of Education maintain a joint office in 214 Burton Hall. Students interested in joining any of the education organizations or desirous of 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 on the Minneapolis Campus register and file credentials with the Bureau of Recommendations, 102 Burton Hall, during the fall quarter of the senior year. Majors in home economics education and agricultural education register with their respective departments. The fee, \$5.50, entitles the student to placement service for the annual period ending October 1. (See also page 13.)

COLLEGE OF EDUCATION FACILITIES AND SERVICES

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

Laboratory Schools—Two laboratory schools and a demonstration school are affiliated with the College of Education. Many senior students do

their directed teaching in the laboratory schools, others teach in the public schools of Minneapolis, St. Paul, and nearby communities.

1. University High School is a six-year secondary school maintained on the Minneapolis Campus to provide opportunity for observation, demonstration, experimentation, and research in secondary education.

2. University Elementary School on the campus provides similar facilities in nursery school, kindergarten, and the elementary grades.

3. Affiliated with the college for demonstration work in the elementary grades is Tuttle School of Minneapolis, located conveniently near the campus.

Bureau of Recommendations—Providing the necessary link between graduates of the College of Education and employment opportunities in the various teaching fields is the Bureau of Recommendations. This is the only place on the campus where complete descriptions of teaching ability and personal fitness of College of Education graduates can be assembled. These records are never destroyed and will be sent to prospective employers on request of the teacher or employer. Registration with the Bureau of Recommendations is required of all College of Education graduates except those in nursing education.

Frequent uses of the bureau's records are: (1) for placement in teaching and other school positions; (2) for shifts of position by experienced teachers seeking promotion; (3) for securing summer employment; (4) in connection with applications for appointment as exchange teachers or for overseas teaching during leaves of absence; (5) for part- or full-time employment in subsequent years by those who do not at first expect to teach; (6) for replying to inquiries of employers in fields other than teaching; (7) for placement of graduate students in college positions in all fields.

Bureau of Educational Research—Established by the College of Education as a central agency for investigating teaching and curriculum problems, the bureau serves five major purposes: (1) to facilitate research and field studies by members of the college faculty; (2) to contribute to the profession as a whole through study of fundamental and persistent problems in education; (3) to provide Minnesota educators a central office to which significant educational problems may be referred; (4) to provide graduate students apprentice training in techniques and execution of research; and (5) to cooperate in the study of educational problems

with other recognized state and national agencies. Bureau offices are in 211 Burton Hall.

Curriculum Laboratory—To facilitate research and developmental study in the area of school curriculum, the College of Education maintains the Curriculum Laboratory. With quarters and an extensive library on the seminar floor of the Library, the facilities and staff of the laboratory are available to students at the University and to all teachers and schools in the state.

Psycho-Educational Clinic—The Psycho-Educational Clinic, with offices and clinical quarters in Pattee Hall, serves three principal purposes: (1) to train teachers and school specialists in diagnosis and remediation of special problems of children; (2) to encourage and conduct research in child development; and (3) to provide special assistance for children who have educational problems due to academic, physical, mental, or emotional handicaps. Although the facilities of the center are used regularly 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 parents, teachers, and children. Teachers and parents concerned with obtaining diagnostic and remedial help for particular children apply to the director of the center for appointments.

Bureau of Field Studies and Surveys The Bureau of Field Studies and Surveys is maintained by the college 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 cooperates 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 200-A Burton Hall.

Publications—In addition to the numerous publications issued privately by its faculty members, the College of Education sponsors two series of monograph publications. These series, entitled **Modern School Practices and Studies in Education**, distributed by the University of Minnesota Press, include research monographs on curricu-

lum development, psychology of learning, methods of instruction, guidance, and studies in other areas of education.

Several new titles representing part of the research effort of the college faculty are added to the series each year.

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.

Bertha Weiskopf Memorial Scholarship—A scholarship of \$100 awarded annually 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 office of the dean of the College of Education, 204 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, 211 Eddy Hall.

REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE

The professional degree, master of education (M.Ed.), is granted to students who satisfactorily complete prescribed five-year programs. Although students ordinarily register in these curricula 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, providing his undergraduate training in the major is equivalent to that required in the College of Education.

The general requirements for this degree include: (1) 90 quarter credits in academic fields; (2) a teaching minor in an academic field; (3) a broad major field specialization, usually about 90 quarter credits; (4) advanced professional training, including one 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 above 100. In the course work of the fifth year a B average (2 honor 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 one year of the date the degree is to be granted.

Because teacher-certification requirements are being raised, with many states and cities requiring a Master's degree for supervisory or special work and for high school teaching, students are urged to take advantage of the five-year programs whenever possible.

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.

Note—The following section is a summary of the graduate program and requirements. For a complete description of graduate work in education, and for a full statement of regulations, consult the *Bulletin of the Graduate School*.

Prerequisites for Graduate Work in Education—Students who intend to pursue graduate study in education should make sure that their undergraduate programs include a minimum of 6 quarter credits in psychology, plus an additional total of not less than 18 quarter credits of undergraduate work in education, including Ed. 55A-B or Ed. 71A-B-C or the equivalent.

Language Requirements—Candidates for the Master's degree with a major in any field of education are exempt from the foreign language requirement. Candidates for the Doctor's degree in education may elect to (a) demonstrate reading proficiency in two foreign languages related to the professional literature in their fields, or (b) demonstrate reading proficiency in one foreign language and substitute for the second language an approved program of study in a field outside of education that is related to their major interest. Consult the **Bulletin of the Graduate School** for specific requirements.

Candidacy for a Degree—Students who have met the requirements for admission to the Graduate School, and who satisfy the prerequisites for the courses they elect to take, may register for graduate courses in education. **They are not candidates for a degree, however, until their formal application for candidacy has been accepted.** This application is not made until the student has completed part of his program of graduate study. The student's major adviser should be consulted about candidacy for a degree.

Majors and Minors in Graduate Study—For the master of arts degree,

the major (under Plan A with thesis) or the field of concentration (under Plan B without thesis) may be in any one of the following fields:

Agricultural education
Curriculum and instruction
Education
Educational administration
Educational psychology
History and philosophy of education
Home economics education
Industrial education
Physical education

Minor work for the Master's degree under Plan A (or related field work under Plan B) may be done in any of the above fields not included in the major, or in any other field of graduate study offered at the University of Minnesota which is obviously related to the student's major interest.

For the doctor of philosophy degree (Ph.D.) major work is offered in the following fields:

Education
Educational administration
Educational psychology

Minor work for the Doctor's degree may be chosen from any of the fields listed as majors for the Master's degree, or from any other field of graduate study offered at the University which is obviously related to the candidate's major interest.

Graduate Courses and Curricula in Education—Certain curricula in the College of Education, such as educational administration, are offered only at the graduate level. Education courses that carry graduate credit are to be found in the general list of course descriptions on pages 66 to 92. Graduate credit may be earned in courses with numbers above 99.

Section II. Curricula

AGRICULTURAL EDUCATION

Major adviser, Professor Milo J. Peterson

Students who have completed the required work of the agricultural education curriculum may qualify as agriculture instructors in the public schools, county extension agricultural agents, and related positions. Such students complete the junior and senior years in a combined curriculum of the College of Education and the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine. This curriculum leads to the degree of bachelor of science.

General Requirements

1. The student must complete the general requirements for all students in the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine.

2. This curriculum requires 204 credits for graduation. Credits are distributed in the following areas: agricultural economics, agricultural engineering and mathematics, agronomy, animal husbandry, bacteriology, botany, chemistry, dairy husbandry, education and agricultural education, entomology, horticulture, plant pathology, poultry husbandry, psychology, public health, rhetoric, rural sociology, soils, veterinary medicine, and zoology.

Students are urged to investigate the opportunities in the ROTC program. Credits earned in ROTC may be used as electives in this curriculum.

3. Entrance to this curriculum in the junior year requires the previous completion of the following courses: Agr. Econ. 1 and 2, Orient. 1, P.H. 3, Agr.Ed. 1 and college mathematics and physics. Students presenting a year of high school mathematics beyond the first year in algebra and a year of high school physics are exempted from the last two requirements.

4. An average honor point ratio of 1.5 is required in 18 of the following courses: Agr.Econ. 102, 103, and an elected course; Agr.Eng. 7, 41, 54, 55, 60, 67; Agron. 21, 23, 31; An.Husb. 56, 57, 112 or 113; Poul.Husb. 1 and an elected course; Dy.Husb. 1 and two elected courses; Ent. 5; Hort. 1 and

For. 10 or an elected course in horticulture; Pl.Path. 1, 3; Soils 4, 5, 111; Vet. Med. 52. For description of courses see **Bulletin of the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine.**

5. Certification requirements for teaching vocational agriculture in Minnesota require that applicants must have lived on a farm until the age of sixteen or have had two full years of farm experience after the age of sixteen.

FRESHMAN YEAR †

Agr.Ed. 1, Introduction to Agricultural Education, 1
Agr.Eng. 23, General Physics (not required of students who present a year of high school physics), 5
Agr.Eng. 7,* Farm Building Construction, 4
Agron. 1, General Farm Crops, 3
An.Husb. 1, Livestock Production, 4
Bot. 1, 2, General Botany, 6
Dy.Husb. 1, Elements of Dairying, 3
Hort. 1, General Horticulture, 3
Inorg.Chem. 1-2 or 4-5, General Inorganic Chemistry, 8
Math. 1,§ Higher Algebra, 5, or
Agr.Eng. 11, Applied Mathematics, 5
Orient. 1, College Orientation Lectures, 1
Rhet. 1, 2, 3, Communication I, II, III, 9

SOPHOMORE YEAR

Agr.Econ. 1, 2, Principles of Economics I, II, 8
Agr.Eng. 41, Metal Work, 3
Agron. 23, Forage Crops, 4
Agron. 31, Principles of Genetics, 4
Bact. 53, General Bacteriology, 5
Pl.Path. 3,* Weeds, 3
Poul.Husb. 1, Poultry Production, 4
Psy. A, Elementary Psychology, 5, or
Psy. 1-2, General Psychology, 6

Elective courses for students taking ROTC.

† For exemption possibilities in introductory courses consult adviser.

§ Students will be exempt from Math. 1 who pass an exemption test given by the Department of Mathematics. Students presenting a year of high school mathematics beyond the first course in algebra are exempt.

P.H. 3, Personal Health, 2
 Soc. 14A, Rural Sociology, 3
 Soils 4, Soils, 3
 Soils 5,* Soils Management, 3, or
 Soils 111,* Field and Laboratory Studies, 3
 Vet.Med. 52,* Hygiene of Domestic Animals, 3
 Zool. 14-15, General Zoology, 6

JUNIOR YEAR

Students in Agricultural Education will be registered, beginning with the junior year, in both the College of Education and the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine.

Special attention is called to the regulations for classification as a junior. Junior classification requires the completion of at least 90 credits with an honor point ratio of 1.0 or higher.

Freshman-sophomore courses not completed
 Ag.Bio. 1, Introduction to Organic Chemistry, 5
 Agr.Ed. 54, Rural Education, Community Leadership, 3, or
 Agr.Ed. 56, Rural Education Through Extension Methods, 3
 Agr.Ed. 81, Teaching Agriculture, 3
 Agr.Ed. 82, Methods in Teaching Agriculture, 3
 Agr.Eng. 55, Electricity in Agriculture, 2
 Agron. 21, Grain Crops, 4
 An.Husb. 56, Livestock Feeding I, 3
 An.Husb. 57, Livestock Feeding II, 3, or
 Dy.Husb. 103, Dairy Stock Feeding, 3
 Dy.Husb. 52, Dairy Herd Management, 2
 Dy.Husb. 101, Milk Production, 5
 Ed. 55B, Introduction to Secondary School Teaching, 5
 Pl.Path. 1, Plant Pathology, 5

SENIOR YEAR

Agr.Econ. 80, Farm Accounting, 3
 Agr.Econ. 102, Farm Organization, 3
 Agr.Econ. 103, Farm Operation, 3
 Agr.Ed. 91, Supervised Teaching Experience, 6
 Agr.Ed. 101, Young Farmer Education in Agriculture, 2
 Agr.Ed. 102, Adult Education in Agriculture, 2
 Agr.Ed. 103, Methods of Instruction in Mechanized Farming, 3
 Agr.Ed. 104, Planning Programs, 2
 Agr.Eng. 54, Farm Power and Machinery, 4
 Agr.Eng. 60, Soil and Water Control, 3
 Agr.Eng. 67, Rural Sanitation and Water Supply, 3
 An.Husb. 112, Animal Breeding, 3, or
 An.Husb. 113, Livestock Management, 3
 Ent. 5, Economic Entomology, 5
 For. 10, Farm Forestry, 3
 Poul.Husb. 52, Poultry Selection, 3
 Rhet. 22, Public Speaking, 3
 Rhet. 51, Exposition, 3

Recommended Electives

Electives to meet area requirements for graduation may be chosen from the following:

Advanced ROTC courses
 Agricultural Economics: 8, 40, 50, 144
 Agronomy: 22, 133
 Animal Husbandry: 8, 9, 54
 Dairy Husbandry: 3, 9, 52, 101, 104
 Educational Psychology: 120, 133
 History and Philosophy of Education: 180
 Horticulture: 6, 21, 22, 32, 135
 Poultry Husbandry: 153
 Agricultural Journalism: 53
 Sociology: 161
 Soils: 111

Fifth Year Leading to the Master of Education Degree

The College of Education and the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine 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 regulations 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 practice teaching required for graduates in the four-year curriculum, a period of internship will be required for which a 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 coordinated to the best advantage.

* Elective courses for students taking ROTC.

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 (pages 24-31). 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:

- Agr.Ed. 54, Rural Education and Community Leadership, 3
- Agr.Ed. 56, Rural Education through Extension Methods, 3
- Agron. 1, General Farm Crops, 3
- An.Husb. 1, Livestock Production, 4
- Hort. 1, General Horticulture, 3, or Hort. 36, Plant Propagation, 3, or Hort. 32, Vegetable Growing, 3
- Dy.Husb. 1, Elements of Dairying, 3
- For. 1A, Conservation of Natural Resources, 3
- For. 10, Farm Forestry, 3

ART EDUCATION

Major advisers, Professor Clifton Gayne, Jr.; Assistant Professors W. Reid Hastie, Mildred Page; Instructor Agnes Bratlee

For talented students interested in careers in art education and for those who wish to combine creative art careers with teaching, the choice of many outstanding artists, 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. On the successful completion of the four-year curriculum, the bachelor of science degree is granted, and the teaching certificate is awarded by the State Department of Education for teaching art in elementary and high schools, and for the variety of educational positions for which graduates are in demand.
5. On successful completion of the five-year curriculum, the master of education degree is granted.

Emphasis of the Department—Art education is "art for all," to enrich lives through our educational systems. Preparation for adult needs, although important, is not enough. Schools must provide experiences of immediate interest and of significance to cultural development. Non-verbal 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 serves specialists and nonspecialists alike, to the end that art may function more effectively in all educational programs through courses designed specifically for that purpose. The department coordinates 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.

Requirements for the Major in Art Education

Important: As art education offers four- and five-year curricula, candidates should consult art education advisers immediately on entering the University to avoid loss of time in meeting all requirements.

1. Art education courses:

- ArtEd. 14, Introduction to Art Education (Freshmen), 2
- ArtEd. 56, 57, 58, Basic Principles and Experiences in Art Education (Juniors), 15
- ArtEd. 86, 87, 88, Student Teaching and Supervision of Art (Seniors), 6
- ArtEd. 86A, 87A, 88A, The Teaching and Supervision of Art (Seniors), 6
- Total—29 credits

2. Art and related courses to include those recommended below or equivalents approved by major adviser:

- A. Art History and Theory (6 credits required)
 - Art 1, Principles of Art, 4
 - Elective, 2

B. Design and Its Application (28 credits required)

- Art 10, Photography, 3
- Art 23, Drawing and Design I, 5
- Art 33, Textile Design: Weaving, 3
- Art 50, Pictorial Design—Theory and Practice, 3
- Art 73, Presentation Techniques, 3
- Art 93, Ceramic Processes, 3
- Art 140, Metal Sculpture and Jewelry, 3
- Speech 34, Stagecraft—Construction and Painting, 3
- Elective, 2
- C. Drawing, Painting, Sculpture, and Printing (12 credits required)
- Art 40, Sculpture I, 3
- Art 60, 70, Drawing and Painting II and III, 6
- Art 90, Printmaking, 3
- Total—46 Credits

3. A teaching minor fulfilling the requirements of the department involved.

4. Professional education courses:

- Ed. 55A-55B, Introduction to Secondary School Teaching, 10
- H.Ed. 180, The School and Society, 3
- Methods in the minor, 3
- Education electives, 2
- Total—18 Credits

5. General education courses:

- Com. 1-2-3, Communication (or Comp. 4-5-6, or Eng. A-B-C, or exemption), 9-15
- Additional credits in Language Arts to total 18 credits
- Hum. 1-2-3, Humanities in the Modern World, 15, or
- Hist. 1-2-3, Civilization of the Modern World, 9
- Soc. 1, Introduction to Sociology, 3
- Psy. 1-2, General Psychology (N.B. Take before junior year), 6
- Physical Education, 3 or 5
- P.H. 59, Health of the School Child (and prerequisite courses. See page 9), 6 or 7

6. Electives to complete a total of 186 credits, selected from the sciences, languages, English, speech, general studies, social studies, etc. Recommended: Continuation of a language begun in high school; speech arts for use in teaching and in play production; courses in philosophy, history, sociology, and psychology; courses in sports and the dance; courses for the appreciation of music, literary classics, and the stage. Attendance at concerts, exhibitions, and plays is urged as a part of art education. Available electives may be gained profitably in the various art courses beyond the minimal requirement in a minor or in an academic field.

7. Quality standard—An average of C, honor point average of 1.0, in the minor and all courses outside the major; a C+ or honor point average of 1.5 in the major.

Requirements for the Minor in Art Education

Plan 1. For elementary school teachers. 27 credits:

- ArtEd. 17, Pictorial Expression for Elementary Education, 3
- ArtEd. 18, Design Activities for Elementary Education, 3
- ArtEd. 19, Functional Arts and Crafts for Elementary Education, 3
- ArtEd. 84, Teaching of Art in the Elementary School, 3
- Art 23, Drawing and Design, 5
- Electives, 10

Plan 2. For secondary school teachers. 28 credits:

- ArtEd. 14, Introduction to Art Education, 2
- ArtEd. 56, 57, Basic Principles and Experiences in Art Education, 10
- ArtEd. 87A, The Teaching and Supervision of Art, 2
- Art 1, Principles of Art, 4
- Art 23, Drawing and Design I, 5
- Electives, 5

Fifth Year Leading to the Master of Education Degree

A written application for admission to the fifth-year program must be presented to the Department of Art Education on forms available in the departmental office. This should be done to establish tentative candidacy before registration in any courses which are to be counted for credit at the graduate level. After 12 credits have been completed in graduate level courses with a B average, application may be made for approval of a total program.

The student must meet all the general requirements for the M.Ed. degree as described on page 14. In addition he must meet the special requirements listed below:

1. Art education major, including advanced courses in art, 24
2. Education courses, 9
3. Academic electives, 12
4. Satisfactory demonstration of teaching competence.
5. Comprehensive examinations in art education and education.

For Graduates of Other Institutions—The program for the fifth year leading to the M.Ed. degree is open to students from other institutions who have had an undergraduate major in art or in art education representing training equivalent to that offered at the Uni-

versity of Minnesota. 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 four-year program. The special requirements are as follows:

1. Art education major, including advanced courses in art, 24
2. Education courses, 12
3. Academic electives, 9
4. Satisfactory demonstration of teaching competence.
5. Comprehensive examinations in art education and education.

BUSINESS AND DISTRIBUTIVE EDUCATION

Major advisers, Professor Ray G. Price;
Associate Professor Warren G. Meyer

The following curricula are designed to prepare teachers of business subjects in secondary schools. Completion of one of these curricula leads to the bachelor of science degree. By a careful selection of electives it is possible to secure also one or two minors in academic subjects. Students should confer with major advisers as early as possible in order to plan their programs effectively.

The first two years' work is taken in the College of Science, Literature, and the Arts. The last two years' work is taken in the College of Education.

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

Students preparing for vocational certification may be exempt from part of B.A. 183, if they have had practical business experience. The extent of this exemption will depend on the quality, amount and recency of such experience.

Basic Course Requirements

The following courses constitute the basic material which must be covered by all students preparing to teach business subjects. In addition to these subjects there are required major sequences. Exemption from certain courses may be made in individual cases upon petition approved by the adviser and the Committee on Students' Work. The total required for graduation is 186 credits.

* This requirement may be met by taking P.H. 50, Public and Personal Health, in Senior College.

FRESHMAN AND SOPHOMORE YEARS

College of Science, Literature and the Arts:

- Com. 1-2-3, Communication (or Comp. 4-5-6 or Eng. A-B-C or exemption), 9-15
Soc. Sci. 1-2-3, Introduction to Social Science, 12
Psy. 1-2, General Psychology, 6
Geog. 41, Geography of Commercial Production, 5
P.H. 3 and 4,* Personal Health and Community Hygiene, 4
Econ. 3, Elements of Money and Banking, 5
Econ. 5, Elements of Statistics, 5
Econ. 6-7, Principles of Economics, 10
Econ. 24-25-26, Principles of Accounting, 9
Econ. 32, Beginning Typewriting, 1
Physical Education, 3-5

JUNIOR AND SENIOR YEARS

College of Education:

- Ed. 55A-B, Introduction to Secondary Education, 10
B.A. 51 and 53, Business Law, 6
B.A. 77, Survey in Marketing, 3
Econ. 73, Manpower Economics and Problems, 3
H.Ed. 180, The School and the Social Order, 3
Ind. 110, Vocational Guidance, 3, or Ed.Psy. 133, Basic Procedures in Student Personnel Work, 3
P.H. 59, Health of the School Child, 3

Major Sequences

1. Office and basic business education:

- Basic Course Requirements, 99-101
Econ. 33, Intermediate Typewriting, 1
Econ. 34, Typewriting Procedures, 2
Econ. 37-38-39, Shorthand, 9
Econ. 40-41, Advanced Shorthand and Secretarial Procedures, 6
Econ. 43, Shorthand Theory, 2
B.A. 86, Survey of Office Management, 3
B.A. 93, Accounting Laboratory, 1
B.A. 96, Business Equipment Laboratory, 1

P.H. 50, Public and Personal Health, in Senior

Ed.T. 73A-B-C, Student Teaching of Business Subjects, 6
 Ed.T. 80, The Teaching of Typewriting and Bookkeeping, 2
 Ed.T. 81, The Teaching of Shorthand, 2
 Ed.T. 82, The Teaching of Basic Business Subjects, 2
 Econ. 178, Economics of Consumption, 3
 B.A. 180-181E, Senior Topics: Office Management, 6
 Electives, 36-38

For the purpose of computing the C+ average (1.5 honor points per credit) the following are considered major courses: Econ. 3, 24-25-26, 34, 40-41, 43; B.A. 77, 86, 96, 180-181E.

2. Clerical and basic business education:

The same requirements as for Number 1 above with the exception of Econ. 37-38, 39, 40-41, 43, and Ed.T. 81. In place of these courses the student will take 19 credits of approved elective courses.

The C+ average (1.5 honor points per credit) is based on the following courses: Econ. 3, 24-25-26, 34; B.A. 77, 86, 96, 180-181E.

3. Distributive and basic business education:

In the broad sense distributive occupations are those that involve the marketing or merchandising of goods and services. The sequence below is planned to prepare teacher-coordinators for the teaching of distributive education and basic business subjects in the secondary schools.

Basic Course Requirements, 99-101
 Ind. 40 and 42, Analysis and Course Construction, 3 or 4, or
 Ind. 135, Industrial Course Organization, 3
 Ind. 60, Philosophy of Vocational Education, 2
 H.E. 52, Textiles, 3, or
 H.E. 56A, Applications of Color and Design, 3, or
 ArtEd. 85, Art for Integration in Secondary Education, 3
 B.A. 114, Retail Store Management, 3
 B.A. 182C, Senior Topics, Retailing, 3
 B.A. 183, Practice Course (Supervised Work Experience), 9
 B.A. 188, Advertising, 3
 Econ. 178, Economics of Consumption, 3
 Psy. 56, Psychology of Advertising, 3
 Ed.C.I. 136, Business and Distributive Education Under the Vocational Acts, 3

Ed.C.I. 139, Coordination Techniques, 3
 Ed T. 72A-B-C, Student Teaching of Distributive Education Subjects, 6
 Ed.T. 90A-B-C, The Teaching of Distributive Education Subjects, 6
 Electives, 28-32

For the purpose of computing the C+ average (1.5 honor points per credit) the following are considered major courses: Econ. 3, 24-25-26, 73, 178; B.A. 77, 114, 182C; Ed.C.I. 136, 139; Ind. 40-42 or Ind. 135, and 60.

4. Combination of clerical and distributive education:

Those desiring to qualify for certification in clerical and distributive education under the Federal Vocational Acts are required to take the courses in clerical and distributive programs. Eight quarter hours of student teaching are required. (See 1 and 2 above.)

For the purpose of computing the C+ average (1.5 honor points per credit) the following are considered major courses: Econ. 3, 24-25-26, 34; B.A. 77, 86, 114, 180E, 182C; Ed.C.I. 136, 139; Ind. 40-42 or 135.

5. Requirements for the minor in basic business:

Econ. 6-7, Principles of Economics, 10
 B.A. 51-53, Business Law, 6
 B.A. 77, Survey in Marketing, 3
 Geog. 41, Geography of Commercial Production, 5
 F.L. 20, Consumer Education, 3
 Ed.T. 82, Teaching Basic Business, 2
 Ed.T. 73A, Student Teaching of Business Subjects, 2
 Electives (Econ. and B.A. Courses), 12

Recommended Electives

In the Junior College the following are courses or areas especially recommended: consumer education, science, speech, social science, the home and its furnishings, geography, journalism, English, philosophy, logic, humanities.

In the Senior College it is recommended that the following areas or courses be considered: advanced courses in business administration, visual aids, consumer education in the schools, guidance, conference leading, psychology of adolescence, philosophy of education.

THE CORE CURRICULUM

Major adviser, Professor Nelson L. Bossing

The purpose of this curriculum is to prepare teachers to teach in the core program or "common learnings" in junior and senior high schools. Teaching in the core curriculum involves

helping children to identify and study their problems, drawing upon subject matter from many fields in dealing with these problems. It means helping high school students to work together

cooperatively, to engage in effective communication, and to develop a philosophy of life.

A student following this curriculum will work out a balanced program in the fields of the humanities, social science, science, family life, and music and art. In addition he must have a minor field of concentration and 35 credits in education. Thirty-one to 34 credits are elective.

Each student should plan with his adviser a tentative program covering his four years of work. Students who enter the curriculum as juniors will have difficulty completing the requirements in two years unless their junior college courses have been carefully selected. Students will meet with their advisers once a week for a two-hour period (in Ed.C.I. 58) to discuss their common problems and to exchange ideas and experiences.

Students register for the first two years in the College of Science, Literature, and the Arts and meet the group requirements of that college. Starred courses are especially recommended in each area. An average grade of C+ (1.5 honor points) is required in both the major and minor fields of concentration and in the education courses.

Requirements for a Major in the Core Curriculum

1. Required of all students:

Com. 1-2-3*, Communication (or Comp. 4-5-6 or Eng. A-B-C), 9-15
 Psy. 1-2, General Psychology, 6
 Physical Education, 3 or 5
 Public Health (P.H. 3, 4 and 59, or 50 and 59), 6 or 7

2. Humanities area, 24 credits:

Hum. 1-2-3,* Humanities in the Modern World, 15, or
 Hum. 51-52-53,* Humanities in the Modern World, 15
 Hum. 11-12-13, The European Heritage, 15, or
 Hum. 61-62-63, The European Heritage, 15
 Hum. 21-22-23,* American Life, 9, or
 Hum. 71-72-73,* Humanities in the United States, 9
 Eng. 21-22-23, Introduction to Literature, 15
 Eng. 37-38-39, Modern Literature, 9
 Eng. 73-74, American Literature, 6
 Phil. 1, Problems of Philosophy, 5

* Course especially recommended.

3. Social science area, 18 credits:

Soc.Sci. 1-2-3,* Introduction to Social Science, 12
 Soc.Sci. 11-12-13,* International Relations, 9
 Anthrop. 1,* Introduction to Anthropology, 5, or
 Anthrop. 2,* Introduction to World Ethnology, 5
 Geog. 4, Human Geography, 5
 Hist. 1-2-3, Civilization of the Modern World, 9
 Hist. 20-21-22, American History, 9
 Pol.Sci. A-B-C, The State in the Modern World, 9
 Soc. 1, Introduction to Sociology, 3

4. Science area, 19 credits:

Nat.Sci. 1-2-3,* Orientation in Natural Science, 15, or
 Nat.Sci. 4-5-6,* The Physical World, 10
 Nat.Sci. 7-8-9,* General Biology, 10
 Phil. 81-82-83,* Science and Civilization, 9
 Nat.Sci. 171-172-173, The Development of the Sciences, 9

5. Family Life area, 9 credits:

G.C. 16, Selecting and Furnishing a Home, 3, or
 F.L. 15, The Home and Its Furnishing, 3
 H.E. 31, Introduction to Nutrition, 3
 G.C. 15, Clothing Selection, Purchase and Care, 3, or
 H.E. 1, Choice and Care of Clothing, 3
 G.C. 17, Income Management and Buying, 3, or
 F.L. 20, Consumer Education, 3
 G.C. 18, Principles of Child Care, 3, or
 F.L. 25, Child Development and Adjustment, 3
 F.L. 1, Preparation for Marriage, 3

6. Music and art appreciation area, 8 to 12 credits:

Art 1,* Introduction to Art, 4
 Mu. 10,* Introduction to Music, 4
 Phil. 4,* Introduction to the Philosophy of Art, 4
 Mu. 31-32-33, Music Literature, 2 to 6
 Art 66-67-68, Modern Art, 9

7. Minor field of concentration, 18 to 36 credits.

8. Education courses, 35 credits including professional requirements, pages 8 and 9), Ed.C.I. 58, and some work in guidance or other education courses.

9. Elective courses, 31 to 34 credits to complete the total of 186.

CURRICULUM AND INSTRUCTION

Major advisers, Professors Clifford P. Archer, Guy L. Bond, Nelson L. Bossing, Leo J. Brueckner, Walter W. Cook, Palmer O. Johnson, George H. McCune, Raymond G. Price, Dora V. Smith; Associate Professors Emma Birkmaier, Carl V. Goossen, Donovan Johnson, Warren G. Meyer; Assistant Professor Clarence Boeck

Graduate students interested in curriculum and instruction may secure graduate work in the field with special emphasis on elementary, secondary, or higher education. For 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 adviser, Professor Dora V. Smith

Note—See also five-year program in English Education.

English teachers may secure a master of arts degree in the Graduate School with a major in education or 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: Ed.C.I. 113, 122, 133, 169, 294, 296; Ed.Psy. 120, 158, 293. The seminar, Ed.C.I. 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.

For Teachers of Social Studies

Major advisers, Professors George H. McCune, Horace T. Morse

Note—See also the five-year program in Social Studies.

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, or sociology. Courses which are recommended as fitting into this plan are Ed.C.I. 168, 201, 204; H.Ed. 241; Ed.Psy. 208. The seminar, Ed.C.I. 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.

For Science Teachers

Major advisers, Professor Palmer O. Johnson; Assistant Professor Clarence Boeck

Note—See also the five-year program in Natural Science.

Science 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 in a science under Plan A, or with education or curriculum and instruction as a field of concentration and courses in one or more sciences and/or courses in education in fields other than those represented in the field of concentration under Plan B.

The seminar, Ed.C.I. 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.

EDUCATIONAL ADMINISTRATION

Major advisers, Educational Administration: Professor M. G. Neale;
Secondary School Administration and Supervision: Professors Charles W. Boardman, Robert J. Keller, Minard W. Stout; Elementary School Administration and Supervision: Professors Leo J. Brueckner, Paul R. Grim; Associate Professor Carl V. Goossen

The student who wishes to specialize in administration or administration and supervision for a position as superintendent of schools, elementary school

principal and supervisor, secondary school principal and supervisor, or for some other administrative position, must satisfactorily complete the re-

quirements for the master of arts degree.

The candidate for the master of arts degree in administration or administration and supervision should have completed, in his undergraduate years, one of the curricula preparing for secondary school teaching or the four-year curriculum in elementary education.

The work of the student will usually constitute a major in educational ad-

ministration and a minor in curriculum and instruction or educational psychology, but other combinations with subject-matter departments or a general major in education can be arranged, subject to the approval of the major adviser.

For statement of the general program and requirements for the M.A. or the Ph.D. degree see the **Bulletin of the Graduate School**.

EDUCATIONAL PSYCHOLOGY

Major advisers, Professors Guy L. Bond, Walter W. Cook, Willis E. Dugan, Marcia Edwards, Palmer O. Johnson, C. Gilbert Wrenn;
Associate Professor Marvin J. Van Wagenen;
Assistant Professors Ned A. Flanders, Maynard C. Reynolds

Students who plan to assume certain specialized duties in connection with public school work, and students who wish to specialize in the field of educational psychology, learning, group work, counseling, individual differences, mental hygiene, statistics, or measurement, may register in the Graduate School and elect a major or minor in educational psychology leading to the M.A. or to the Ph.D. degree.

The training for the master of arts degree is intended particularly for students who may perform the duties of counselor, dean, school psychologist,

supervisor of instruction, or specialist in tests, measurements and research in connection with their public school work. It is not the purpose of the courses for the master of arts degree to produce a person with highly specialized training, but to supply a basis for later professional growth as well as some immediate background for handling the problems involved in the several positions indicated.

Programs should be made in consultation with an adviser. 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 Clifford P. Archer, Guy L. Bond, Leo J. Brueckner, Paul R. Grim; Associate Professor Carl V. Goossen; Assistant Professor Jean H. Alexander; Nursery School—Kindergarten—Primary Education: Professor John E. Anderson; Associate Professor Elizabeth M. Fuller

The basic curricula outlined in this section prepare for all types of elementary school teaching from nursery school and kindergarten through the eight years of the elementary school. Upon graduation the student, depending on his choice of curriculum, is eligible for one of two certificates: (1) the **general elementary** certificate for teaching in the elementary school (grades 1 through 8); or (2) the **special nursery school-kindergarten-primary** certificate for teaching in nursery school, kindergarten and grades 1 to 3.

By taking additional courses in the junior and senior years or after graduation the student in the elementary

curricula may also qualify for junior high school teaching, or for an elementary school principalship or supervisorship when he has secured the necessary experience.

The various curricula listed below are for persons of different backgrounds of education, training, and experience. Curricula IA and IB are for regular college students who take four years of work; Curricula IIA and IIB are for teachers and others who have completed two years of training in a teachers college and already have a certificate for elementary school teaching; Curricula 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 curricula and assistance in making a choice may be secured at the Student Personnel Office, 206 Burton Hall.

The regular four-year student will follow Curriculum IA for elementary school teaching or Curriculum IB for nursery school - kindergarten - primary teaching.

Equivalent courses offered in the General College or equivalent courses taken elsewhere may be substituted for required courses in the various fields with the approval of the adviser and of the Committee on Students' Work of the College of Education.

Deficiencies due to transfer from other schools can be made up after entering the College of Education. The aim is broad functional contacts with cultural fields of knowledge essential for the general education of the teacher and as marginal resources for teaching the common and special subjects of the elementary school.

Curriculum IA and IB—Elementary Education and Nursery School—Kindergarten—Primary Education

FRESHMAN AND SOPHOMORE YEARS

- Com. 1-2-3, Communication (or Comp. 4-5-6 or Eng. A-B-C or exemption), 9-15
- Geog. 1, Physical Geography, 5, or Geog. 4, Human Geography, 5, or G.C. 38, General Geography, 5
- Nat.Sci. 7-8-9, General Biology (or General Botany, General Zoology, or both), 10, or Nat. Sci. 1-2-3, Orientation in the Natural Sciences, 15
- Spch. 1-2 or 5, Fundamentals of Speech, 5 or 6, or G.C. 32A-B, Speech Laboratory, 6
- Soc. 1, Introduction to Sociology, 3, and Soc. 49, Social Problems, 3, or Soc.Sci. 1-2-3, Introduction to Social Science, 12
- Social Studies, History of Political Science or both, 9
- ArtEd. 17-18, Survey of Art in Life and Education, 6
- Mu. 31 or 32 or 33, Music Literature, 2
- Mu.Ed. 50A,† Teaching Music in the Primary Grades (Prereq., Mu. 1, unless excused), 2
- Psy. 1-2, General Psychology, 6

- Phys.Ed. 1-4, General Courses in Physical Education (for women) and/or Phys.Ed. 45, 5-7, or Phys.Ed. 1-2-3, Sports Education (for men), 3
- Phys.Ed. 58,* Introduction to Elementary Physical Education Program, 3
- Phys.Ed. 60,† Principles of Play, 3
- Phys.Ed. 25,‡ First Aid, 1
- P.H. 3,§ Personal Health, 2
- P.H. 4,§ Health Problems of the Community, 2
- Electives to complete total of 96 credits, 9-23

Men in Curriculum IA may omit Mu. 31, or 32, or 33, Mu.Ed. 50A, and H.E. 30 or 31 or G.C. 14. Although Phys.Ed. 58 is open to both men and women, men may substitute for it Phys.Ed. 56, Nature and Function of Play, offered in the Department of Physical Education for Men. All women students are strongly urged to take Ind. 11, Special Class Woodwork, 2 credits, and Phys. Ed. 45, Laboratory for Physical Education in the Elementary School, either as a part of the general physical education or in addition to it. Men are urged to take Ind. 1, Basic Woodwork, 3 credits, and Ind. 5, Basic Drawing, 3 credits.

JUNIOR AND SENIOR YEARS—
CURRICULUM IA
(ELEMENTARY EDUCATION)

Academic Courses—Approximately half of the work of the junior and senior years is in courses other than education. These credits are elective (except for P.H. 59) and may be selected from any of the courses listed in the **Bulletin of the College of Science, Literature, and the Arts**. A minimum of 18 of these credits must be taken in Senior College, i.e., in courses numbered 50 or above. Additional courses in English, speech, humanities, natural science, social studies, and art or music are recommended. The course P.H. 59, The Health of the School Child, 3 credits (Prereq. P.H. 3 and 4, or 50), must be included.

Other courses such as those in agriculture, art education, home economics, industrial education, music education, and physical education may be allowed if selected in conference with the major adviser.

* Phys.Ed. 58 is to be taken by Elementary majors only.

† Phys.Ed. 60, Phys.Ed. 25 and Mu.Ed.50A are to be taken by nursery school, kindergarten and primary majors only. The Red Cross First Aid certificate may be substituted for Phys.Ed. 25.

§ P.H. 50. Public and Personal Health, 3 credits, may be taken in Senior College instead of P.H. 3 and 4.

Elementary education major:

Ed. 71A-B-C, Introduction to Elementary School Teaching; 71A, Individual Differences; 71B, Educational Psychology; 71C, The Elementary School Program, 15
 ArtEd. 84, Teaching of Art in the Elementary School, 3
 Mu.Ed. 50B, Teaching Music in the Intermediate Grades, 2
 Ed.C.I. 60, The Teaching of Reading in the Elementary Grades, 3
 Ed.C.I. 61, The Teaching of the Social Studies in the Elementary School, 3
 Ed.C.I. 62B, The Teaching of Arithmetic in the Intermediate Grades, 3
 Ed.C.I. 63, Children's Literature, 2
 Ed.C.I. 64, The Teaching of English in the Elementary School, 3
 Ed.C.I. 65, The Teaching of Science in the Elementary School, 3
 Ed.C.I. 66, Treatment of Learning Difficulties, 3 (1953-54)
 Ed.T. 54A-B, Student Teaching in the Elementary School, 10
 H.Ed. 180, The School and Society, 3
 Elective in General or Elementary Education, 2 or 3

A grade average of C is required in the elementary education major.

Junior High School Endorsement—Students pursuing Curriculum IA may secure endorsement for junior high school teaching on the certificate for the elementary school by meeting the following requirements:

1. The completion of a regular minor for teaching in the secondary schools.
2. The course Ed.Ad. 167, Junior High School, 3 cred.
3. A special methods course covering the junior high school level in the minor, which may be substituted for the elementary methods course in the field on the recommendation of the adviser.
4. Student teaching in grades 7, 8, or 9 (Ed.T. 52, 2 or 3 cred.), in addition to student teaching in the elementary school. Students who are not able to complete the work for junior high school teaching can do so in the first term of the Summer Session.

**JUNIOR AND SENIOR YEARS—
 CURRICULUM IB
 (NURSERY SCHOOL-KINDERGARTEN-
 PRIMARY EDUCATION)**

Students of sophomore standing or above are urged whenever possible to enter the nursery school-kindergarten-primary Curriculum IB at the beginning of the academic year (fall quarter). Courses are offered in two- and three-quarter sequences. Difficulties are encountered in program planning

where initial entry is made in the middle of the school year.

Ed. 71A-B-C, Introduction to Elementary School Teaching; 71A, Individual Differences; 71B, Educational Psychology; 71C, The Elementary School Program, 15
 C.W. 80, Child Psychology, 3
 Ed.T. 55, Principles of Early Childhood Education, 3
 Ed.T.56, Methods and Observation in the Kindergarten, 2
 Ed.T. 57, Nursery School-Kindergarten Laboratory in Art, Literature, and Social Studies, 5
 Ed.T. 58, Nursery School-Kindergarten Laboratory in Play Materials, Music, and Science, 5
 Ed.T. 59, Methods and Observation in the Nursery School, 3
 Ed.T. 76, The Teacher and the Parent, 3
 P.H. 57, Health of Infant and Preschool Child, 2, or
 P.H. 59, Health of the School Child, 3
 Ed.C.I. 60, The Teaching of Reading in the Elementary School, 3
 Ed.C.I. 61, The Teaching of the Social Studies in the Elementary School, 3
 Ed.C.I. 62A, The Teaching of Arithmetic in the Primary Grades, 2
 Ed.C.I. 63, Children's Literature, 2
 Ed.C.I. 64, The Teaching of English in the Elementary School, 3
 Ed.C.I. 65, The Teaching of Science in the Elementary School, 3
 Ed.C.I. 105, Audio-Visual Materials in Education, 3
 Ed.T. 77, Student Teaching in the Nursery School, 5
 Ed.T. 78, Student Teaching in the Kindergarten, 5
 Ed.T. 79, Student Teaching in the Primary Grades, 5
 H.Ed. 180, The School and Society, 3
 Electives to complete total of 186 credits, 16-18

A grade average of C is required in the following courses: C.W. 80; Ed.T. 55, 56, 57, 58, 59, 76, 77-78-79; Ed.C.I. 60, 61, 62A, 63, 64, 65.

Electives should be planned carefully with the adviser in order to have at least one area of concentration or, if possible, an academic minor.

**Curriculum IIA—Elementary
 Education for Teachers**

JUNIOR AND SENIOR YEARS

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

The College of Education allows a minimum of 90 credits for the two-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 two years. The curriculum leads to the advanced elementary teaching certificate. By a careful selection of courses or by taking additional courses before or after graduation, the student may also qualify for the Minnesota state principal's or supervisor's certificate as well. By substituting certain courses in the secondary field the certificate is made legal also for junior high school teaching.

Major in elementary education, 30 credits:

1. Required of all—14 or 15 credits.

- Ed.Psy. 60, Introduction to Measurement and Statistics, 2 or 3
- Ed.C.I. 119, Elementary School Curriculum, 3
- Ed.C.I. 150, Supervision and Improvement of Instruction, 3
- Ed.Ad. 115, Organization of the Elementary School, 3
(for junior high school endorsement substitute Ed.Ad.167 for this course)
- H.Ed. 180, The School and Society, 3

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

- Ed.C.I. 65, The Teaching of Science in the Elementary School, 3, or
- Ed.C.I. 103, The Teaching of Science in the Elementary School, 3
- Ed.C.I. 63, Children's Literature, 2
- Ed.C.I. 102, The Teaching of the Social Studies in the Elementary School, 3
- Ed.C.I. 143, The Teaching and Supervision of Reading in the Elementary School, 3
- Ed.C.I. 145, Reading Difficulties, 3
- Ed.C.I. 149, The Teaching and Supervision of Arithmetic in the Elementary School, 3
- Ed.C.I. 151, Diagnosis and Treatment of Learning Difficulties, 3
- Ed.C.I. 153, Supervision and Teaching of English in the Elementary School, 3
- Other courses in methods by petition.

3. Education electives—6 or 7 credits. These credits may be chosen from any of the above courses or from any of the courses listed under General Courses or Elementary Education.

The C+ average (1.5 honor points per credit) is based on the 30 credits in the elementary education major.

Note—Students may be required to take Practice Teaching, Ed.T. 54A-B, 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: P.H. 50, Public and Personal Health, 3 credits, and P.H. 59, Health of the School Child, 3 credits, prereq. P.H. 50.

2. A regular minor. Requirements for minors vary from 23 to 36 credits. Minors in the various fields are described in this section of the bulletin.

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 Science, Literature, and the Arts. Students must aim to supplement, and not to duplicate, courses taken elsewhere. Credit cannot be allowed for courses that are largely duplication. Child welfare 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 sciences (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—12-30 credits, 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 Science, Literature, and the 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 pro-

cedures 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 and with regard to transfer credits and any courses not a part of the curriculum.

Junior High School Endorsement—To secure junior high school endorsement on the certificate for elementary school teaching the following requirements must be met:

1. Completion of a regular minor for teaching a subject in the secondary schools. This is the requirement listed under 2 above.

2. A methods course in the minor covering the junior high school level. This course is to be included in the 9 credits in methods required in the major.

3. The course Ed.Ad. 167, Junior High School. This course is to be substituted for Ed.Ad. 115.

4. A satisfactory student teaching or experience in grades 7, 8, or 9.

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

JUNIOR AND SENIOR YEARS

This curriculum is for teachers and other students who have completed a two-year course of professional training and **already hold** a certificate for teaching in kindergarten and primary school, or in the elementary school, or in the high school.

The College of Education allows a minimum of 90 credits for the two-year diploma course 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 of the freshman and sophomore years and the following program represents the work necessary to earn the advanced special nursery school-kindergarten-primary certificate for teaching in nursery school, kindergarten and the primary grades.

A grade average of C+ (1.5 honor

points per credit) is required in the above major. The average is based on the 40 credits listed in the nursery school-kindergarten-primary education major.

Major in Nursery School-Kindergarten-Primary Education—Approximately 40 credits in the College of Education and the institute of Child Welfare as follows:

1. Required of all: 19 to 22 credits.
 - Ed.T. 55, Principles of Childhood Education, 3, or
 - C.W. 150, Childhood Education, 2
 - Ed.T. 56, Methods and Observation in Kindergarten, 2, or
 - Ed.T. 59, Methods and Observation in Nursery School, 3
 - Ed.T. 76, The Teacher and the Parent, 3, or
 - C.W. 170, Parent Education, 3
 - C.W. 140, Behavior Problems in Younger Children, 2
 - Ed.T. 77, Student Teaching in Nursery School, 5, and/or
 - Ed.T. 78, Student Teaching in Kindergarten, 5, and/or
 - Ed.T. 79, Student Teaching in Primary Grades, 5
 - (Choose two of these three courses.)
2. Eight or nine credits chosen from the following:
 - C.W. 80,* Child Psychology, 3
 - C.W. 130, Motor, Linguistic, and Intellectual Development, 3
 - C.W. 131, Personality, Emotional, and Social Development, 3
 - C.W. 141, Behavior Problems in Older Children, 2
 - C.W. 142, Psychology of Atypical Children, 2
 - C.W. 185, Children in a Changing World, 3
3. Twelve credits chosen from the following:
 - Ed.T. 57, Nursery School-Kindergarten Laboratory in Art, Literature, Social Studies, 5, or
 - Ed.T. 58, Nursery School-Kindergarten Laboratory in Play Materials, Music, Science, 5
 - Ed.C.I. 66, Treatment of Learning Difficulties, 3 (1953-54)
 - Ed.C.I. 60, Teaching of Reading in the Elementary School, 3, or
 - Ed.C.I. 143, Teaching and Supervision of Reading in the Elementary School, 3, or
 - Ed.C.I. 145, Reading Difficulties, 3
 - Ed.C.I. 61, Teaching of Social Studies in the Elementary School, 3, or
 - Ed.C.I. 102, Teaching of Social Studies in the Elementary School, 3
 - Ed.C.I. 107, Radio in Education, 3
 - Ed.C.I. 62A, Teaching of Arithmetic in the Elementary School, 3, or
 - Ed.C.I. 149, Teaching and Supervision of Arithmetic in the Elementary School, 3

* For students who lack an adequate background in child psychology.

- Ed.C.I. 64, Teaching of English in the Elementary School, 3, or
 Ed.C.I. 153, Teaching and Supervision of English in the Elementary School, 3
 Ed.C.I. 150, Supervision and Improvement of Instruction, 3, or
 Ed.C.I. 151, Diagnosis and Treatment of Learning Difficulties, 3
 Ed.Ad. 115, Organization of the Elementary School, 3
 H.Ed. 103, History of Modern Elementary Education, 3, or
 H.Ed. 155, History of Education in the United States, 3
 H.Ed. 176, Conflicting Issues in Modern Education, 3, or
 H.Ed. 180, The School and Society, 3
4. Academic courses and minor: 43 to 48 credits, selected as follows:
- Any regular minor listed in the **Bulletin of the College of Science, Literature, and the Arts**. Minors in special fields will be allowed only with the consent of the adviser.
 - P.H. 50, Public and Personal Health, 3
 P.H. 59, Health of the School Child, 3
 - Twelve credits in at least one of the academic fields, such as English, foreign language, library science, geography, humanities, science, social science, fine arts, mathematics, music, or in special fields approved by adviser.
 - Academic electives to complete the total of 186 credits. The exact amount of credit in academic courses will depend upon the number of transferred credits. At least 18 of the credits must be in **academic fields in courses numbered 50 or above**.
- Ed. 71A-B, Introduction to Elementary School Teaching; 71A, Individual Differences; 71B, Educational Psychology, 10
 Ed.C.I. 119, Elementary School Curriculum, 3
 Ed.Ad. 115, Organization of the Elementary School, 3, or
 Ed.C.I. 181, Foundations of Elementary School Methods, 3
 Ed.C.I. 60, The Teaching of Reading in the Elementary School, 3, or
 Ed.C.I. 143, Teaching and Supervision of Reading in the Elementary School, 3
 Ed.C.I. 61, The Teaching of the Social Studies in the Elementary School, 3, or
 Ed.C.I. 102, The Teaching of the Social Studies in the Elementary School, 3
 Ed.C.I. 62B, The Teaching of Arithmetic in Intermediate Grades, 3, or
 Ed.C.I. 149, The Teaching and Supervision of Arithmetic in the Elementary School, 3
 Ed.C.I. 63, Children's Literature, 2, or
 Ed.C.I. 122, Literature for Adolescents, 2
 Ed.C.I. 64, The Teaching of English in the Elementary School, 3, or
 Ed.C.I. 153, Supervision and Teaching of English in the Elementary School, 3
 Ed.C.I. 65, The Teaching of Science in the Elementary School, 3, or
 Ed.C.I. 103, The Teaching of Science in the Elementary School, 3
 Ed.T. 54A-B, Student Teaching in the Elementary School, 10
 Mu.Ed. 50B, Teaching of Music in the Intermediate Grades, 2
 ArtEd. 84, Teaching of Art in the Elementary School, 3
- Total—48 Credits

Junior high school endorsement in most fields can be secured by taking additional work in the first term of the Summer Session. For junior high school endorsement, credits in secondary school methods in the minor will be substituted for elementary methods; the requirements for a minor in a secondary teaching field must be met through previous or additional work; and the student must add 2 credits in Ed.T. 52, Student Teaching in the Secondary School, and 3 credits in Ed.Ad. 167, The Junior High School.

Admission to this curriculum will be on the same basis as that for any student in elementary education.

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 he must add P.H. 50, Public and Personal Health, 3 credits, to the above program.

The student will not be held for any other general requirements, the previous B.A. or B.S. program being substituted for all other work.

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.

Students must 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 47 or 48 credits and a C+ average (1.5 honor points per credit) on the total is required.

On the completion of Curriculum IIIA 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.

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 must 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. 71A-B-C, Introduction to Elementary School Teaching; 71A, Individual Differences; 71B, Educational Psychology; 71C, The Elementary School Program, 15
- Ed.C.I. 60, The Teaching of Reading in the Elementary School, 3
- Ed.C.I. 61, The Teaching of the Social Studies in the Elementary School, 3
- Ed.C.I. 62A, The Teaching of Arithmetic in the Primary Grades, 2
- Ed.C.I. 63, Children's Literature, 2
- Ed.C.I. 64, The Teaching of English in the Elementary School, 3
- Ed.C.I. 65, The Teaching of Science in the Elementary School, 3
- C.W. 80, Child Psychology, 3
- Ed.T. 55, Principles of Early Childhood Education, 3
- Ed.T. 56, Methods and Observation in the Kindergarten, 2
- Ed.T. 57, Nursery School-Kindergarten Laboratory in Art, Literature, and Social Studies, 5
- Ed.T. 58, Nursery School-Kindergarten Laboratory in Play Materials, Music and Science, 5
- Ed.T. 59, Methods and Observation in the Nursery School, 3
- Ed.T. 76, The Teacher and the Parent, 3
- Ed.T. 77, Student Teaching in the Nursery School, 5
- Ed.T. 78, Student Teaching in the Kindergarten, 5
- Ed.T. 79, Student Teaching in the Primary Grades, 5
- Mu.Ed. 50A, Teaching Music in the Primary Grades, 2

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

Admission to this curriculum will be on the same basis as that for any student in elementary education.

Completion of Psy. 1-2, General Psychology, is required in addition to the

above if it has not been included in the student's previous Bachelor's degree program.

The student will not be held for any other general requirements, the previous B.A. or B.S. program being substituted for all other work.

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

The College of Education, in cooperation with the Institute of Child Welfare, has outlined a five-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 welfare 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 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 coordinated to the best advantage.

In addition to the general requirements for the M.Ed. degree the specific requirements in early childhood education are as follows: (1) a total of 45 credits beyond the requirements for the Bachelor's degree in the nursery school-kindergarten-primary education curriculum; (2) a period of internship for which a maximum of 8 credits will be given; (3) a distribution of credits for the fifth year in accordance with an approved pattern, including the internship and courses in child welfare and 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 five-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 four-year curriculum in elementary education,

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.

Fifth Year in the Graduate School

Graduates of the elementary and nursery school - kindergarten - primary education curricula may take courses in the Graduate School and pursue work leading to the degrees of master of arts and doctor of philosophy. Various fields of study are elementary school administration and supervision, teacher training, early childhood education, and general elementary education.

Graduate programs in childhood education are offered by the Institute of Child Welfare and by the College of Education. Graduate advisers are Professor John E. Anderson and Associate Professor Elizabeth M. Fuller.

Graduate students in elementary education will pursue work in accordance with their specialization, interests, and needs. Graduate advisers in elementary education are Professors Clifford P. Archer, Guy L. Bond, Leo J. Brueckner, Paul R. Grim; Associate Professor Carl L. Goossen.

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**.

ENGLISH

Major advisers, Professor Dora V. Smith; Assistant Professor Harold B. Allen

Students who wish to major in English for high school teaching are strongly urged to consider the language arts curriculum described on pages 37-38. Students who major in English take the first two years in the College of Science, Literature, and the Arts and meet the group requirements of that college. They should include in their programs the Junior College courses listed below. The general and professional requirements of the College of Education are described on pages 8-9.

English as a major subject:

Eng. 22-23, Introduction to Literature, 10
 Eng. 55-56, Shakespeare, 6
 Eng. 73-74, American Literature, 6
 Eng. 165, Introduction to Modern English, 3
 Comp. 27-28, Advanced Writing, 6
 Spch. 1-2, Fundamentals of Speech, 6
 Electives in courses numbered 100 or above, 3

Students with a major in English are required to take Ed.C.I. 122, Literature for Adolescents, 2 credits, which is counted in the professional requirement. For student teaching and special methods in English they register in Ed.T. 75, Student Teaching in the

Language Arts, and Ed.T. 75A-B-C, The Teaching of the Language Arts.

English as a minor subject: Eng. 22-23, 55-56, and 73-74; and Comp. 27-28.

Five-Year Program Leading to the Master of Education Degree

The College of Education has outlined a five-year curriculum leading to the professional degree of master of education for teachers of English. The curriculum includes specific recommendations for Junior College 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 the statement on page 14, regarding work in the Graduate School.

GEOGRAPHY

Major adviser, Associate Professor John R. Borchert

Because of the many demands made upon the teachers of the social studies, because of the necessity of teaching more than one subject or general

courses in the field, and because of the difficulties of placement, students are strongly urged to follow the social studies curriculum, pages 60-61.

The first two years of this curriculum are taken in the College of Science, Literature, and the Arts and the student meets the group requirements of that college. Professional and general requirements of the College of Education are described on pages 8-9.

Geography as a major subject for high school teaching: 33 to 35 credits.

Geog. 1, Geography of Physical Resources, 5

Geog. 4, Human Geography, 5, and/or
Geog. 41, Geography of Commercial
Production, 5
Geog. 112, Western Anglo-America, 3
Geog. 113, Eastern Anglo-America, 3
Geog. 143 and/or 144, Political Geography,
3-5
Geol. 8, Earth Features and Their
Meaning, 5
Elective courses in geography, 6-9

Geography as a minor subject: 23
credits including Geog. 1 and 4.

GERMAN

Major adviser, Professor Frank H. Wood

The student registers during the first two years in the College of Science, Literature, and the Arts and meets the group requirements of that college, as well as the prerequisites for Senior College courses in German. The general and professional requirements for the College of Education are described on pages 8-9.

German as a major subject for high school teaching:

Ger. 50-51-52, Composition, 6

Ger. 53-54-55, Conversation, 6
Ger. 56-57, Essay Writing, 6
Ger. 58, German Pronunciation, 2
Ger. 71 or 72, Survey of Literature, 3
Ger. 90-91-92, German Civilization and
Culture (any two quarters), 6
Electives in courses numbered 50 or above.

German as a minor subject, 23 college credits of which 17 credits will be in courses numbered above 4, including 50-51-52, 53-54, and 58.

HIGHER EDUCATION

Major advisers, Professors Ruth E. Eckert, Paul R. Grim, M. G. Neale, C. Gilbert Wrenn

Qualified graduate students may select courses preparing them for service in colleges and universities. Some students will be majoring in education, others will be specializing in some other academic or professional disci-

pline. Unusual facilities are provided for laboratory work in higher education through the cooperation of the University's instructional, research, and service departments.

HISTORY

Major adviser, Professor A. C. Krey

Because of the many demands made upon the teachers of the social studies, because of the necessity of teaching more than one subject or general courses in the field, and because of the difficulties of placement, students are strongly urged to follow the social studies curriculum, pages 60-61.

The first two years of this curriculum are taken in the College of Science, Literature, and the Arts and students meet the group requirements of that college. They should include in their programs not less than 18 credits in Junior College history courses. The general and professional requirements

of the College of Education are described on pages 8-9.

History as a major subject for high school teaching:

A total number of 45 credits of which at least 18 must be in Senior College courses.

History as a minor subject:

A minimum of 23 credits of which no fewer than 9 are in Senior College courses.

No major recommendation to teach history will be given unless the student has taken at least the general course in American History, Hist. 20-21-22, or equivalent.

HISTORY AND PHILOSOPHY OF EDUCATION

Major advisers, Professor Robert H. Beck; Assistant Professor
Jean H. Alexander

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 ad-

viser 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 Clara B. Arny, Ella J. Rose; Associate Professor
Roxana Ford; Assistant Professor Hedda Kafka

The College of Agriculture, Forestry, Home Economics, and Veterinary Medicine and the College of Education cooperate in the preparation of teachers of home economics. Satisfactory completion of the following curricula will lead to the B.S. degree and will provide the necessary training for qualification for a certificate for teaching home economics in secondary schools in Minnesota. Completion of this curriculum qualifies for teaching in federally aided home economics departments.

During the first two years the student is registered in the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine. When the student has earned a minimum of 90 credits and at least one honor point per credit (junior classification) and has indicated her specialization as the teachers' or the extension curriculum, she becomes a registrant also in the College of Education. At the beginning of the junior year, the student is required to take the examinations given in the College of Education.

Prior to registration for supervised teaching, the student must have completed the following requirements:

1. The College of Education examinations.
2. Home experience in those areas of home economics in which the student feels a need for additional experience.
3. Certain home economics courses with a grade of at least C.
4. Home economics courses required in the teaching curriculum with an honor point ratio of 1.5.

In order to be recommended for graduation from the teaching specialization, the student must have (a) 1.5 honor points per credit in 40 credits

of home economics work in the curriculum for general home economics teaching, (b) an average of one honor point per credit in all other courses pursued during the junior and senior years.

By proper selection of courses, students qualifying for the degree of bachelor of science may qualify for teaching in more than one field. This is desirable since some beginning teachers in public schools are expected to teach another subject in addition to home economics.

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

Teaching Home Economics*—The following courses are required for those preparing for teaching general home economics:

FRESHMAN COURSES

- Orient. 1, College Orientation Lectures, 1
- H.E. 1, Choice and Care of Clothing, 4
- H.E. 3, Clothing Construction A, 3
- H.E. 17, Personal and Family Living, 3
- H.E. 20, Introduction to Related Art, 4
- H.E. 21, 22, Color and Design I and II, 6
- H.E. 31, Introduction to Nutrition, 3
- H.E. 40, Food Preparation, 5
- Com. 1-2-3, Communication, 9
- Zool. 14-15, General Zoology, 6, and
Physiol. 4, Human Physiology, 4, or
G.C. 10A-B, Human Biology, 6
- Dy.Husb. 20, Household Microbiology
(or Bact. 53), 4
- Chem. 1-2, or 4-5, or 6-7, or 9-10, General
Inorganic Chemistry, 8-10, or
G.C. 7C, Physical Science Elements of
Chemistry, 5
- G.C. 7A, Physical Science Elements of
Physics, 5, or
Agr.Eng. 35, Household Physics, 5

* For the General Home Economics Teaching specialization a grade of at least C is required for the following courses: H.E. 3, 4, 21, 22, 27, 34 (or 76 or 170), 40, 41.

Soc. 1, Introduction to Sociology, 3
Phys.Ed.,† Physical Education, 3

SOPHOMORE COURSES

H.E. 4, Clothing Construction B, 3
H.E. 27, Related Art Problems, 3
H.E. 34, Nutrition Problems (or 76 or 170, 171), 4-6
H.E. 41, Food Management and Marketing, 5
H.E. 49, Household Equipment, 3
Psy. 1-2, General Psychology, 6
H.E.Ed. 90, Child Training, 3
Rhet. 22, Public Speaking, 3
Rhet. 31, or 32, Survey of English Literature I or II, 3 or 5, or
Rhet. 33, American Life in American Literature, 3 (or Rhet. 60, 3)
Bact. 53, General Bacteriology (or Dy.Husb. 20), 5
Agr. Biochem. 1, Introduction to Organic Chemistry, 5
Agr.Econ. 3, Principles of Economics, 5, or Econ. 6-7, Principles of Economics, 10

JUNIOR AND SENIOR COURSES

H.E. 50, Textiles, 3
H.E. 53, Advanced Clothing, 3
H.E. 76, Nutrition (or 34 or 170, 171), 4-6
H.E. 85, Home Management: Principles, 3
H.E. 86, Home Management: Laboratory, 4
H.E. 170-171, Nutrition of the Family, Child Nutrition (or H.E. 34 or 76), 6
H.E. 180, Home Planning and Furnishing, 5
P.H. 52A-B, Health Care of the Family (lect. 2 cred.; lab. 1 cred.), 3
P.H. 59, Health of the School Child, 3
Rhet. 51, Exposition (exemption by examination), 3
Rhet. 60, Contemporary Literature (or Rhet. 31 or 32 or 33), 3
Ed. 55A-B, Introduction to Secondary School Teaching, 10
Agr.Econ. 126, Economics of Consumption, 3
H.E. 180, The School and Society, 3
H.E.Ed. 91,§ Observation, Materials, Teaching in Home Economics, 5
H.E.Ed. 92, Teaching Problems in Home Economics, 2
H.E.Ed. 93, 94,§ Supervised Teaching in Home Economics, 9
H.E.Ed. 192, Evaluation in Home Economics, 2
H.E.Ed. 194A, Adult Education in Home Economics, 3

Additional social science to total 18 credits. See all-college requirements in the **Bulletin of the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine.**

Those whose interests lead them into further specialization in the teaching field may choose one of the following groups. The student should plan her program early in her college course to

be certain that she has the necessary prerequisites.

Teaching textiles and clothing—To the requirements in general teaching add:

H.E. 54, Problems in Clothing Construction, 3
H.E. 102, Advanced Textiles, 3
H.E. 115, Economic and Social Aspects of Clothing, 3
H.E. 120, Art History, 3
Bot. 1, General Botany, 4

Teaching foods—To the requirements in general teaching add:

H.E. 45, Quantity Cookery, 6
H.E. 70, Advanced Food Preparation, 3
H.E. 142, Experimental Cookery, 3
Agr.Biochem. 2, Quantitative Methods, 5

Teaching nutrition—Omit from the requirements in general teaching the following courses: H.E. 3, 4, 21, 22, 27, 34, 53, 180, G.C. 10A-B, 7A-C, and Agr. Econ. 126.

To the requirements in general teaching add:

H.E. 24, Problems in Home Planning and Furnishing, 5
H.E. 142, Experimental Cookery, 3
H.E. 173, Nutrition in Disease, 4
H.E. 179, Readings in Nutrition, 2

Teaching related art—Those interested in teaching related art should:

1. Select the minimum credit requirement in science when there is an option.

2. Omit Agr.Econ. 126.

3. Add the following:

H.E. 23, Advanced Design, 3
H.E. 25, Design Applied to Crafts, 3
H.E. 120, Art History, 3
H.E. 122, Advanced Interior Design, 3, or
H.E. 125, Advanced Costume Design, 3
H.E.Ed. 197, Organization and Methods for Related Art Teaching, 1-3

Six credits in art from the following:

Art 1, Introduction to Art, 4
Art 20, 21, Drawing and Painting I, II, 2 α qtr.

Home Economics Extension—A combined curriculum with the College of Education. See all-college requirements for students in the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine.

Some students will be interested in preparation for home economics positions in the Agricultural Extension Service, such as home agent, 4-H Club agent, or homemaking specialist.

The student following this curriculum should have a real interest in

† This requirement may be completed any time during the four years of residence. See also footnote under Home Economics Extension, page 34.

§ Plans for the home experience prerequisite for H.E.Ed. 91 and 93 should be made with adviser in home economics education.

rural life and rural people and ability to get along well with them. A sense of humor, good health, a high degree of initiative, good standards for personal appearance, good judgment, and ideals for rural family living are important qualities for the extension worker. Organization ability and clear expression of ideas, written and oral, are necessary. She should be a person alert to social situations and the need for continuous learning on a job. Residence in rural areas and some contact with extension work before coming to college is desirable in order that the student will have an understanding of farm conditions.

This curriculum is planned to give the future worker understandings and skills in homemaking activities, an understanding of physical and social science as it relates to rural areas, use of oral and written materials, ability to organize and administer adult and youth programs, and an understanding of educational principles and techniques suitable for rural groups.

An organized program of home experience must be completed before the end of the junior year. This should be planned and approved by the member of the Home Economics Education section responsible for teacher training of adults.

Students following this curriculum will receive guidance from a committee of the Home Economics Extension Service and the home economics education faculty. Qualified students will be recommended for a period of supervised pre-extension field experience to be arranged during the summer following the junior year. Approval for this field service must be secured from the director of the Agricultural Extension Service.

Those in this curriculum should:

Omit from the requirements in general home economics teaching the following courses: H.E. 53, Agr.Biochem. 1, Rhet. 51, H.E.Ed. 92, 94, 192, Agr. Econ. 126.

Add to the requirements in general home economics teaching:*

- Soc. 2, Intermediate Sociology, 3, or
- Soc. 14A, Rural Sociology, 3, or
- Soc. 91, Case Method Applied to the Study of Human Problems, 3, or
- Soc. 95, Introduction to Public Welfare, 3, or
- Soc. 140, Social Organization, 3
- Agr.Jour. 53, Publicity, 3

* The required 3 credits in physical education are to be chosen from the Dance (country, folk, modern, or social) and recreational games.

- H.E.Ed. 95, Field Experience for Home Agents, 6
- H.E.Ed. 194A, Adult Education in Home Economics, 3
- Agr.Econ. 8, Rural Economics, 3, or
- Agr.Econ. 126, Economics of Consumption, 3

Five-Year Curriculum Leading to the Master of Education Degree

A five-year program in home economics education, leading to the master of education degree is provided for those who wish to make additional preparation prior to their entrance to teaching and for those who wish to continue their professional work following the completion of the requirements for a Bachelor's degree. The five-year curriculum qualifies a person for high school teaching and for some college positions. The attainment of added training should facilitate professional promotion.

The best results may be anticipated when plans for the extended training are made during the student's junior year in residence so that the fifth year may be integrated with the four-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 one quarter in a home economics department in a secondary 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, extracurricular, and community problems met during the internship.

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

- Additional academic courses, 8-24
- Home economics, 17-25
- General education, 4-9
- Home economics education, 5-9
- Certification of competence in teaching in the major field.

Students with a Bachelor's degree with a major in home economics edu-

cation from other accredited institutions, upon fulfilling the requirements or their equivalents of the five-year

curriculum, will receive the master of education degree with a major in home economics education.

INDUSTRIAL EDUCATION

Major advisers, Professors Homer J. Smith, William J. Micheels

The following curriculum has been designed for persons who desire to prepare for teaching positions in the fields of industrial education and to gain background for later courses of an administrative and supervisory nature. The satisfactory completion of the four years of work here specified entitles the student to the bachelor of science degree and provides the training necessary for the Minnesota high school standard special certificate.

Certain departmental courses of professional or classroom type are acceptable for vocational certification under the Smith-Hughes and George-Barden federal acts, leading to service in trade schools and classes—day, evening, and part-time. The State Supervisor of Trade and Industrial Education assures himself of 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 should not be confused.

The Department of Industrial Education offers many courses not shown in the following curriculum. (See pages 80-81.) In addition to the campus schedules, it conducts off-campus courses in centers scattered throughout the state, offerings made through cooperation of officials in the State Department of Education. 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 personnel officers who have instructional responsibilities, and to public school authorities.

The four-year curriculum is as follows:

† Prerequisites are advanced junior or full senior status, taking of psychological examinations, courses Ind. 70 and 80, and a C+ average (1.5 honor points per credit) in the major. The C+ average is based on all courses in industrial education, shop and drawing courses included. It is assumed that 30 of the 48 shop and drawing credits will have been completed.

FRESHMAN YEAR

Com. 1-2-3, Communication (or Comp. 4-5-6 or G.C. 31A-B-C), 9-12
 Soc.Sci. 1-2-3, Introduction to Social Science, 12
 Ind. 1, Basic Woodwork, 3
 Ind. 2, Machine Woodwork, 3
 Ind. 5, Basic Drawing, 3
 Ind. 10, Basic Electricity, 3
 Ind. 15, Basic Graphic Arts, 3
 Ind. 20, Craft Work-A, 3
 Agr.Eng. 40, Mechanical Training, 3
 Phys.Ed. 1-2-3, Sports Education, 3

SOPHOMORE YEAR

G.C. 8, Fundamentals of Mathematics (or Math. 1, 5 credits), 4
 Psy. 1-2, General Psychology, 6
 Geog. 1, Physical Resources, 5
 Nat.Sci. 1-2-3, Orientation in Natural Sciences, 15
 Ind. 3, Shop Finishing, 3
 Ind. 6, Applied General Drawing, 3
 Carpentry, 3
 Agr.Eng. 41, Metal Work, 3
 Ind. 60, Philosophy of Vocational Education, 2
 Ind. 61, Practices in Vocational Education, 2
 Ind. 80, Introduction to Industrial Arts, 2

JUNIOR YEAR

Hum. 1-2-3, Humanities in the Modern World, 15
 Ed. 55A-B, Introduction to Secondary School Teaching, 10
 Ind. 40, Analysis, 2
 Ind. 42, Course Organization, 3
 Ind. 44, Equipment and Management, 3
 Ind. 70, Teaching of Industrial Subjects, 3
 Ind. 50A,† Student Teaching, 3
 Machine Shop, 3
 Foundry Practice, 3
 Electives in shopwork or drawing, 3

SENIOR YEAR

H.Ed. 180, The School and Society, 3
 P.H. 50, Public and Personal Health (or P.H. 3 and 4), 3
 P.H. 59, Health of the School Child, 3
 Ind. 50B-C, Student Teaching, 6
 Ind. 101, Tests in Industrial Subjects, 3
 Ind. 110, Vocational Guidance, 3
 Electives in academic courses, 18
 Electives in shopwork or drawing, 6

A degree candidate is privileged to complete his work under the curriculum form which was current when he entered. Those who can accept the form herewith will find it more convenient.

Many of the required and elective courses may be pursued through extension and correspondence study arrangements. All required courses are brought into the summer programs by rotation.

It is recommended that elective academic courses be selected toward the completion of minors in chosen subject fields.

Requirements above are classified as follows: 90 credits in academic subjects, 25 in education, 23 in industrial

education, 48 in shopwork and drawing. Total credit requirement, 186.

Fifth Year Leading to the Master of Education Degree

The College of Education awards the master of education degree (M.Ed.) under plans X and Y to students who satisfactorily complete a fifth year of work in industrial education and who meet all the requirements of the college for the professional degree.

The Graduate School provides the M.A. degree with major work in this field, with and without thesis, Plans A and B. Persons desiring to do work beyond the Master's degree are invited to confer or to correspond with major advisers.

JOURNALISM

Minor Adviser, Associate Professor Fred L. Kildow

Journalism is a desirable minor for teachers who are called upon to supervise the school paper and to teach subjects related to the field. It is recommended as a minor for students in the language arts and social studies curricula and as a **second** minor for those with an English major.

Journalism as a minor subject:

Jour. 11, Introduction to Reporting, 3
 Jour. 41, Editing for Nonmajors, 3
 Jour. 69, Newspaper and Magazine Articles, 3
 Jour. 82, Supervision of School Publications, 3

Nine additional credits chosen from Jour. 55, 90, 103, 111, 120, 121, and 130. Ed.T. 74, The Teaching of Journalism, is also required.

THE LANGUAGE ARTS

Major advisers, English: Professor Dora V. Smith, Assistant Professor Harold B. Allen; Speech: Professor Howard Gilkinson, Assistant Professor Kenneth L. Graham

The new course of study in the language arts for the secondary schools of Minnesota requires a teacher proficient in the broad area of the language 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 studies. 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 Science, Literature, and the Arts for the first two years and should include in his program the required Junior College courses of the curriculum. Com. 1-2-3, Communication, is recommended in place of Freshman English A-B-C or Comp. 4-5-6, but not required. The student will be held 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 Ed. C.I. 122, Literature for Adolescents, 2 credits, which will count in the professional requirement. Participation in extracurricular speech activities is important.

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 42 credits in this field.

2. The student must also complete 23 or 24 credits in the second field. Not more than 30 credits will be accepted in this field.

3. In addition 12 or 13 credits are required in journalism or library science, or in both. This requirement is listed under **Journalism and Library Science**.

English

English as the core subject,
34 credits:

Eng. 22-23, Introduction to Literature, 10
Eng. 55-56, Shakespeare, 6
Eng. 73-74, American Literature, 6
Eng. 165, Introduction to Modern English, 3
Comp. 27-28, Advanced Writing, 6
Elective in a course numbered 100 or above, 3

English as the second field with speech as the core subject, 23 credits:
Eng. 23, 73-74, and 165; Comp. 27-28; and Eng. 57, Shakespeare for Language Arts Minors, 3 credits.

Speech

Speech as the core subject, 35 or 36 credits:

Spch. 1-2 or 5, Fundamentals of Speech, 5-6
Spch. 31, Introduction to the Theater, 3
Spch. 67, Phonetics, 3, or
Spch. 119, Introduction to Speech
Correction, 3
Electives, 24

Electives may be selected from the following courses with not less than 9 credits in each area. For descriptions of these courses and the ones listed under Journalism and Library Science, consult the **Bulletin of the College of Science, Literature, and the Arts**.

1. Public Address and Speech Science: Spch. 51, 55, 56, 57, 61, 67, 97, 101, 102, 103, 106, 119, 143, 169.

2. Theater and Interpretation: Spch. 32, 33, 66, 71, 72, 73, 81, 82, 131.

Speech as the second field with English as the core subject: Spch. 1-2 or 5 and 31; and 15 credits of electives with not less than 6 credits in each of the two core subject areas.

Journalism and Library Science

All language arts majors will take Jour. 90, Mass Communications and the News, 3 credits. In addition they will take 9 or 10 credits in either library science or journalism. Course requirements are Lib. Sci. 60, 62, 70, and 74; or 9 credits selected from Jour. 11, 41, 82, 103, 109-110, 111, 120, 121, and 130-131.

LATIN

Major adviser, Professor Norman J. DeWitt

Latin as a major subject for high school teaching:

Lat. 73, Prose Composition, 2
Lat. 81-82-83, Survey of Roman Literature, 9
Latin courses numbered above 100, 6
Hist. 14A-15A-16A, Ancient Civilization with Basic Readings, 15

Latin as a minor subject, 23 college credits of which 17 credits will be in courses numbered above 4, including 73, 81-82-83 and Hist. 14A-15A-16A.

Sequence of Courses in Latin—Students who have had no Latin in high school will take Courses 1, 2, 3, 30 and 40 leading to the 81-82-83 sequence.

Students entering the University with one year of high school Latin may, with the permission of the department, take Latin 1 and 2 for credit, or they may enter Latin 3. Students entering with two years of Latin may, with permission of the department, take Latin 1, 2, and 3 for credit, or they may enter Latin 21, followed by 30 and 40. Students entering with three years of Latin may take 30 and 40, or with the permission of the department, enter the sequence 81-82-83. Students with four years of Latin may enter 81-82-83 directly.

The first two years are taken in the College of Science, Literature, and the

Arts and students meet the group requirements of that college. They should include in their programs the Junior College courses in Latin prerequisite

to registration in Latin 81-82-83. The general and professional requirements of the College of Education are described on pages 8-9.

LIBRARY SCIENCE*

Major adviser, Associate Professor C. Irene Hayner

The following curricula have been arranged in cooperation with the Division of Library Instruction to offer professional library education to persons who desire to do library work in elementary and secondary schools:

1. A four-year program leading to the degree of B.S. with a major (36 credits) in library science.

2. A minor of 23 credits in library science for students desiring to fill positions as teacher-librarians.

3. A five-year program leading to the degree of B.S. in L.S. (bachelor of science in library science).

4. A program leading to the Master's degree with a major in library science offered in the Graduate School.

In each of the first three programs, students qualify for a teaching certificate by completing requirements for an academic major or two minors in subjects commonly taught in Minnesota high schools. Such students are required to take special methods and student teaching in the academic major or one of the minors in addition to practice work in a school library.

Graduates of the College of Education or other four-year teacher training institutions who already hold a Bachelor's degree and a teaching certificate may, upon completion of 45 credits in library science and approved related subjects, be eligible for the degree of B.S. in L.S. Application for admission to the program must be made to the Student Personnel Office of the College of Education at the time of entrance in order to become candidates for a degree.

An average grade of C+ based on the 45 credits of library science must be maintained for graduation.

The tuition fees for full-time students who are enrolled in this specialized curriculum are \$45 per quarter for residents of Minnesota and \$100 per quarter for nonresidents. Unclassed students, auditors, and others carrying

less than full work in library instruction (15 credits per quarter) pay a tuition fee of \$3.75 per credit for residents and \$8.50 per credit for nonresidents, for all courses under the supervision of the Division of Library Instruction, irrespective of their registration in courses in other subjects.

Four-Year Program Leading to the Bachelor of Science Degree with a Major in Library Science

Students should enroll in the College of Science, Literature, and the Arts and fulfill the general requirements for entrance to the College of Education, earning a total of 96 credits. By the end of the junior year they must have completed sufficient work in their teaching major or two minors to be eligible for student teaching.

JUNIOR YEAR

- Lib.Sci. 50, Libraries and Society, 3
- Lib.Sci. 60, Sources of Information about Library Materials, 3
- Lib.Sci. 62, Reference I, 2
- Lib.Sci. 63, Reference II, 3
- Lib.Sci. 70, Reading Guidance, 3
- Ed. 55A-B, Introduction to Secondary School Teaching, 10
- Elective or required courses in education, 2-5
- P.H. 59, Health of the School Child (Prereq. P.H. 3 and 4, or 50), 3
- Continuation of required and elective academic courses including courses in a teaching major or two minors, 10-15

SENIOR YEAR†

- Lib.Sci. 53, School Library Management, 4
- Lib.Sci. 74, Library Materials in the School's Instructional Program, 2
- Lib.Sci. 81, Bibliographical Description of Library Materials, 3
- Lib.Sci. 82, Subject Organization of Library Materials, 3
- Lib.Sci. 157, School Library Problems, 3
- Lib.Sci. 171, Principles and Problems in Reading Guidance for Children, 3

* Prospective students who are interested in the curriculum should obtain the special bulletin issued by the Division of Library Instruction.

† Taking the psychological examinations and a C+ average (1.5 honor points per credit) in the major are prerequisites to these courses.

Lib.Sci. 172, Principles and Problems in Reading Guidance for Adolescents, 3
 Special Methods and Student Teaching, 11
 H.Ed. 180, The School and Society, 3
 Electives in library science and academic courses, 7
 Electives in education (if not taken previously), 3

Minor in Library Science

For a minor in library science students should take Lib.Sci. 53 (4 credits to include practice work), 60, 62, 70, 74, 171, and 172 and additional courses to total 23 credits.

Five-Year Curriculum for the Degree of Bachelor of Science in Library Science

Students enroll in the College of Science, Literature, and the Arts and fulfill the general requirements for entrance to the College of Education, earning a total of 96 credits. By the end of the junior year they must have completed sufficient work in their teaching major or two minors to be eligible for student teaching.

JUNIOR YEAR

Lib.Sci. 50, Libraries and Society, 3
 Lib.Sci. 62, Reference I, 2

Lib.Sci. 63, Reference II, 3
 Ed. 55A-B, Introduction to Secondary School Teaching, 10
 P.H. 59, Health of the School Child, 3
 Continuation of required and elective academic courses including courses in a teaching major or two minors, 24

SENIOR YEAR†

Lib.Sci. 53, School Library Management, 4
 Lib. Sci. 60, Sources of Information about Library Materials, 3
 Lib.Sci. 70, Reading Guidance, 3
 Lib.Sci. 74, Library Materials in the School's Instructional Program, 2
 Special Methods and Directed Teaching, 11
 H.Ed. 180, The School and Society, 3
 Elective courses in education, 2
 Continuation of required and elective academic courses to total 186 credits, 17

FIFTH YEAR

Lib.Sci. 81, Bibliographical Description of Library Materials, 3
 Lib.Sci. 82, Subject Organization of Library Materials, 3
 Lib.Sci. 157, School Library Problems, 3
 Lib.Sci. 171, Principles and Problems in Reading Guidance for Children, 3
 Lib.Sci. 172, Principles and Problems in Reading Guidance for Adolescents, 3
 Elective courses in library science, 10
 Continuation of required and elective academic courses, 15
 Elective courses in education, 5

MATHEMATICS

Major adviser, Professor W. L. Hart

Students take the first two years in the College of Science, Literature, and the Arts and meet the Junior College requirements of that college. They should include in their programs the Junior College courses, and perhaps the courses in calculus, listed below. The general and professional requirements of the College of Education are described on pages 8-9.

Mathematics as a major subject:

Prerequisite courses: Solid Geometry (entrance credit or its equivalent)§; Higher Algebra taken either in high school or college. Mathematics 20 (The Mathematics of Investment) is strongly recommended as an elective. With the permission of the major adviser Math.

15-16, Elementary Mathematical Analysis, 10 credits, may be accepted for Math. 6 and 7. Math. 49, 50a, and 51a may be substituted for 30, 50, and 51 without special permission.

Math. 6, Trigonometry, 5
 Math. 7, College Algebra, 5
 Math. 30, Analytic Geometry, 5
 Math. 50, Calculus I—Differential Calculus, 5
 Math. 51, Calculus II—Integral Calculus, 5
 Math. 60, Synthetic Metric Geometry, 3
 Additional credits in courses numbered over 51, 5

Mathematics as a minor subject:

Prerequisite courses: Solid Geometry (entrance credit or its equivalent)§; Higher Algebra taken either in high

† Taking the psychological examinations and a C+ average (1.5 honor points per credit) in the major are prerequisites to these courses.

§ Those who did not present solid geometry for entrance may meet this requirement in one of the following ways: (1) by taking the subject in the General Extension Division in night school or by correspondence study; (2) by passing a college entrance examination or a special examination given by the Department of Mathematics. The student is advised to satisfy this requirement at least two quarters before graduation.

school or college. With the permission of the adviser Math. 15-16 may be accepted for Math. 6 and Math. 7. Math. 49 and 50a may be substituted for 30 and 50 without special permission.

Math. 6, Trigonometry, 5
 Math. 7, College Algebra, 5
 Math. 30, Analytic Geometry, 5
 Math. 50, Calculus I—Differential Calculus, 5
 Math. 60, Synthetic Metric Geometry, 3

MUSIC EDUCATION

Major advisers, Professor Paul M. Oberg; Assistant Professor Paul S. Ivory

The course in music education is a four-year course leading to the degree of bachelor of science, in which the theoretical and practical courses in music are combined with a general education and professional training. The object is to provide a well-rounded course for candidates for the bachelor of science degree in music education.

For graduation, students must earn 186 credits and 186 honor points. They must earn 24 credits in Practical Music (11-27), 18 of which shall be the minimum requirement for their major subject and 6 of which must be in a second field other than the major. Students not majoring in piano shall be required to take one year of Piano (11 or 11C), 2 credits per quarter. Students not majoring in voice will be required to take one year of Voice (12 or 12C). It is recommended that the practical music requirements be met by the end of the junior year.

A teaching minor in one academic secondary school subject is required of all music education students for graduation.

In addition to the practical and theoretical studies in music, this course includes such cultural subjects as English, psychology, sociology, and history, and the professional courses which are prescribed by the College of Education. The music studies are distributed between the instrumental and vocal courses so that, on graduation, a student is prepared to be an instrumental music instructor, vocal music instructor, or general supervisor of school music.

Observation and student teaching are provided for in the Minneapolis and St. Paul grade schools, and in the Minneapolis, St. Paul, and University high schools.

Courses upon which the required C+ average is based are Mu.Ed. 4-5-6, 50A-B, 53, 59, 65, 67, 68; Mu. 1T-2T-3T-4T-5T-6T, 34 35, 36; Major: Mu. 11-27, up to 18 credits; Minor: Mu. 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.

Following are the specific regulations and requirements applying to this curriculum.

For Entrance—All students wishing to register for the course in music education must, upon matriculation, choose a major in applied music and pass an entrance examination in that major before a committee of the faculty of the Music Department. Entrance requirements for a music major are:

Piano—Any minor or major scale in octaves, thirds, sixths, or tenths, M.M. quarter notes—108; Bach Invention or dances from one of the suites; a sonata by Haydn or Mozart; a modern composition of equal difficulty with the sonata.

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 and also have a promising voice. Some knowledge of piano is urgently recommended.

Violin—Major and minor scales, arpeggios; the simple Kreutzer Etudes; a sonata by Handel, Haydn, Mozart, or Schubert; a more modern work displaying special technique peculiar to the violin.

Organ—Same as piano. Students not majoring in piano will be examined concerning requirements to be met in piano.

Fees—For statement of special fees see Music in the *Bulletin of the College of Science, Literature, and the Arts*.

Four-Year Curriculum in Music Education

FRESHMAN AND SOPHOMORE YEARS

Comp. 4-5-6, Freshman Composition, 9
 Mu. 1T-2T-3T-4T-5T-6T, Music Theory, 21
 Mu.Ed. 59, Choral Literature and Conducting, 1
 Physical Education, 3-5

Practical Music, 12-18
 Psy. 1-2, General Psychology, 6
 Mu.Ed. 4-5-6, Applied Instrumental
 Technique, 6
 Mu. 34-35-36, History of Music, 6
 Hist. 11-12-13, Medieval History, 9, or
 Hist. 1-2-3, Civilization of Modern World, 9,
 or
 Soc.Sci. 1-2-3, Introduction to Social
 Science, 12
 Soc. 1, Introduction to Sociology, 3
 Academic electives (minor), 6-11
 P.H. 3, Personal Health, 2, and P.H. 4, Health
 Problems of the Community, 2, or
 P.H. 50, Personal and Community
 Health, 3
 All music education majors must take at least
 one year each of piano and voice.

JUNIOR AND SENIOR YEARS

Mu.Ed. 50A, Teaching Music in the Primary
 Grades, 2
 Mu.Ed. 50B, Teaching Music in the
 Intermediate Grades, 2
 Mu.Ed. 53, Teaching Music in the
 Secondary School, 3
 Mu.Ed. 65, Instrumentation, 3
 Mu.Ed. 59, Choral Literature and Conducting
 (jr. yr. 1 credit; sr. yr. 2 credits), 3
 Mu. 60-61-62, Instrumental Ensemble, 2, or
 Mu. 63-64-65, Vocal Ensemble, 2
 Mu. 76, Form and Analysis, 3
 Mu. 40-41-42, Orchestra, or
 Mu. 43-44-45, University Chorus, or
 Mu. 46-47-48, Concert Band (Maximum of
 6 credits in Band)
 Ed. 55A-B, Introduction to Secondary School
 Teaching, 10
 Mu.Ed. 67, Teaching of Instrumental Music
 in the Elementary School, 2
 Mu.Ed. 68, Teaching of Instrumental Music
 in the Secondary School, 2
 Mu.Ed. 60-61-62, Music Supervision and
 Student Teaching, 9
 Special Methods (academic minor), 4
 Practical Music, 6-12
 H.Ed. 180, The School and Society, 3
 Electives in Education, 3
 P.H. 59, Health of the School Child, 3
 Academic electives (minor), 21-30

Minor in Music Education

A minimum of 25 credits in music
 and music education to include the fol-
 lowing subjects:

Mu. 1T-2T, Music Theory, 6
 Mu. 36, History of Music, 2
 Mu.Ed. 50A, Teaching Music in the Primary
 Grades, 2, or
 Mu.Ed. 50B, Teaching Music in the
 Intermediate Grades, 2, or
 Mu.Ed. 53, Teaching Music in Secondary
 Schools, 3
 Mu.Ed. 4-5 or 6, Applied Instrumental
 Technique, 2-4
 Mu. 11-27, Practical Music, 2-6

The remaining credits to be selected
 from the following courses:

Mu. 40-41-42, Orchestra, 6, or
 Mu. 43-44-45, University Chorus, 1-3
 Mu. 60, 61, 62, Instrumental Ensemble, 2, or
 Mu. 63, 64, 65, Vocal Ensemble, 2
 Mu.Ed. 59, Choral Literature and Conducting,
 2, or
 Mu.Ed. 67-68, Teaching of Instrumental
 Music in Elementary-Secondary Schools, 4

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

The five-year curriculum in music
 education leading to the master of edu-
 cation degree is designed to give a
 higher standard of professional compe-
 tence in music as well as a larger
 scope of general academic education.
 It includes about two years of general
 education, a minor in a teaching field
 other than music, more adequate train-
 ing in applied music, advanced phases
 of musical theory or musicology at the
 graduate level, work in music educa-
 tion covering both vocal and instru-
 mental music, basic courses in psy-
 chology, educational psychology, and
 education, and supervised institutional
 practice teaching plus one quarter of
 internship.

The work of the fifth year is inte-
 grated with that of the first four years
 described above. The fifth year will
 provide opportunity for those inter-
 ested to concentrate in either vocal or
 instrumental music if they desire to
 do so. Encouragement will be given to
 those students possessing outstanding
 talent in music and demonstrated scho-
 lastic ability.

Students with a Bachelor's degree
 with a major in music education from
 other accredited institutions, upon ful-
 filling the requirements or their equiv-
 alents of the five-year course, will re-
 ceive the master of education degree
 with a major in music education.

In addition to the honor point re-
 quirements for the four-year curricu-
 lum an honor point ratio of 2 (a B av-
 erage) must be attained in all fifth
 year work. The work of the fifth year
 is described below.

The designation "E" after a course
 number over 100 signifies that the
 course is of graduate level in the Col-
 lege of Education but does not carry
 credit in the Graduate School.

Electives in academic major or minor
 (or closely related field), 9 to 17 credits.
 Courses must be numbered 100 or
 above.

Music major, 12 credits selected from the following:

- Mu. 104-105-106, American Music, 2-4-6
- Mu. 121-122-123, Advanced Harmony, 2-4-6
- Mu. 124-125-126, History of Opera, 3-6-9
- Mu. 127-128-129, Composition, 2-4-6
- Mu. 134-135-136, History of Church Music, 2-4-6
- Mu. 141-142-143, Orchestration, 2-4-6
- Mu. 144-145-146, Bach through Beethoven, 3-6-9
- Mu. 154-155-156, Music in the Middle Ages and Renaissance, 2-4-6
- Mu. 164-165-166, Music in the Baroque Era, 2-4-6
- Mu. 197-198-199, Advanced Counterpoint, 2-4-6
- Mu. 200-201-202, Basis of Musical Expression, 3, 6 or 9
- Mu. 204, Graduate Applied Music, 3, 6 or 9
- Mu. 209-210-211, Advanced Topics of Musical Analysis, 3, 6 or 9
- Mu. 212, Special Problems in Music, 3, 6 or 9
- Mu. 227-228-229, Seminar in Composition and Orchestration, 3, 6 or 9

Music Education, 10 credits selected from the following:

- Mu.Ed. 103, Psychological Foundations of Music Education, 3

- Mu.Ed. 104, Advanced Topics in Vocal Music Education, 3
- Mu.Ed. 105, Advanced Topics in Instrumental Music Education, 3
- Mu.Ed. 150, Realization and Supervision of Vocal-Instrumental Music in Elementary Schools, 3
- Mu.Ed. 224, Seminar and Individual Research Problems in Music Education, 3-9
- Ed.C.I. 199E, Internship, 4-8

Education, 6 credits selected from the following:

- Ed.Psy. 293, Psychology of Learning, 3
- Ed.C.I. 113, High School Curriculum, 3, or Ed.C.I. 119, Elementary School Curriculum, 3
- Ed.C.I. 150, Supervision and Improvement of Instruction, 3, or Ed.C.I. 266, High School Supervision, 3

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

NATURAL SCIENCE

General advisers, Professor Palmer O. Johnson; Assistant Professor Clarence H. Boeck; special advisers, Botany: Associate Professor Allan H. Brown; Chemistry: Professor M. Cannon Sneed; Physics: Professor J. William Buchta; Zoology: Professor Dwight E. Minnich

Students preparing to teach science in Minnesota high schools must qualify to give instruction in two or more sciences, since almost all positions open to graduates require teaching in at least two fields. As a matter of fact, most Minnesota schools now require instruction in general science and biology and an increasing number of schools offer generalized physical and biological science courses in the senior high school for which the teacher must be trained in both biological and physical sciences. The following special curriculum in natural science is for those persons preparing for the teaching of junior and senior high school science.

Students register for the first two years in the College of Science. Literature, and the Arts and complete the group requirements of that college. They should also include in their pro-

gram the Junior College courses of this curriculum in so far as possible. For the general and professional requirements of the College of Education see pages 8-9.

Requirements for the Major in Natural Science

1. Completion of a sequence of thirty hours in one of the four natural sciences: chemistry, physics, botany, or zoology. This is referred to as the core subject.*
2. Completion of at least fifteen hours in another science (excepting the one chosen under 1) selected from the following: physics, geology, botany, zoology, chemistry.
3. Completion of at least ten credits in physics, botany, chemistry, and zoology when these subjects are not used

* A C+ average is required in the core subject and a C average in all science outside of the core.

to satisfy requirements 1 and 2. In addition a minimum of 5 credits in geology and 5 credits in astronomy are required.

The requirements under 1 and 2 for the several sciences are:

Group A. Botany:

1. Bot. 1-2-3, General Botany, 10, or Bot. 4-5, General Botany, 10
Bot. 12, Plants Useful to Man, 3
Bot. 50, General Plant Ecology, 3
Bot. 51, General Plant Physiology, 4
Bot. 52, Elementary Taxonomy, 3
Bot. 53, Introductory Plant Anatomy, 3
Bot. 54, Survey of the Plant Kingdom, 5
2. Courses 1-2-3, or 4-5, and 6 additional credits chosen from Courses 12, 50, 51, 52.

Group B. Chemistry:

1. Inorg.Chem. 9-10,† General Inorganic Chemistry, 10, or Inorg.Chem. 6-7, General Inorganic Chemistry, 10
Inorg.Chem. 12, Semimicro Qualitative Analysis, 5
Anal.Chem. 7, Quantitative Analysis, 4
Org.Chem. 61-62-63, Elementary Organic Chemistry, 11
2. Inorganic Chemistry, courses 9-10 and 12.

Group C. Physics:

1. Phys. 7-8-9, General Physics, 15
Phys. 107-109-111, Modern Physics, 9
Electives, 6
2. Courses 7-8-9.

Group D. Zoology:

1. Zool. 1-2-3, General Zoology, 10
Zool. 52, Introductory Entomology, 5

- Zool. 53, Fauna of the Central United States, 5
Zool. 83, Introduction to Genetics and Eugenics, 3
Physiol. 4, Human Physiology, 4
Elective, 3
2. Courses 1-2-3 and 53.

Requirements for the Minor in Natural Science

1. Completion of at least 15 quarter hours selected from courses under requirement B in one of the four natural sciences: botany, chemistry, physics, or zoology.
2. Completion of at least 10 quarter hours in each of the sciences listed above not selected to meet the requirement in 1. In addition 5 credits in geology and 5 credits in astronomy are required.
3. Completion of Ed.T. 68M, The Teaching of Secondary School Science (3 credits).

Five-Year Program Leading to the Master of Education Degree

The College of Education offers a five-year program leading to the professional degree of master of education for teachers of natural sciences in high schools. For specific information confer or correspond with the major adviser.

NURSING EDUCATION

Major advisers, Professors Katharine J. Densford and Ruth Harrington;
Instructor Rena E. Boyle

The following courses are arranged so as to indicate the minimum requirements for students wishing to secure a bachelor of science degree in the College of Education with a major in nursing education. The courses are planned to prepare the student for administrative, supervisory, and teaching positions in schools of nursing, hospitals, and other health agencies.

**Curriculum for Graduate Nurses
Leading to the Degree of
Bachelor of Science**

This curriculum is open to those who meet entrance requirements of the College of Education for the nursing

education programs. Applicants are required to submit their high school and nursing school records to the Office of Admissions and Records for evaluation and are required to take preadmission tests: a college aptitude test and the Graduate Nurse Qualifying Examination of the National League of Nursing Education. The latter test may be taken at the University of Minnesota Student Counseling Bureau or through the National League of Nursing Education, Department of Measurement and Guidance, 2 Park Avenue, New York. Advanced credit for the professional nursing courses will be determined by the Committee on Evaluation of Nursing Credentials, which will indicate the number of

† Students who did not have chemistry in high school will take Chem. 6-7; others register for 9-10.

credits allowed and any additional clinical services to be completed before credit is granted. Such clinical experiences should be completed as soon as possible and must be completed before the beginning of the senior year. Forty-five credits represent approximately the average advanced standing granted for a satisfactory course of study in a hospital school of nursing; 53 credits for a course in a hospital school having its pre-nursing sciences taught in the University of Minnesota; 55 credits for graduates from three-year programs of other university schools; and 60 credits for graduates from the University of Minnesota School of Nursing. If an honor point average of 1.0 was not maintained in the basic biological sciences, however, not more than 45 credits will be granted.

Students register in the College of Education and conform to the College of Education regulation relative to total credits and honor points. Candidates must also meet the graduation requirements of the College of Education (see pages 8-9). They are, however, exempt from Public Health 4 and 59 of the health education requirement.

Students must meet the general education course requirements and the nursing education major course requirements as listed below. Substitutions, when needed, may be made by petition upon the recommendation of the major adviser. Minors in nursing education or in related fields may be elected.

The graduate nurse who wishes a combined program in nursing education and public health nursing should register in the College of Education and complete the courses required for the nursing education major and the courses required for the public health nursing major (see **Bulletin of the School of Public Health**, Public Health Nursing).

Advanced standing granted to graduate nurses for basic nursing courses usually places the beginning graduate nurse student in the sophomore class. Courses of a general cultural nature, courses prerequisite to education courses and to other Senior College

courses should be taken in the sophomore and junior years. Programs in advanced clinical nursing should be elected in the junior year.

General Requirements

Com. 1-2-3, Communication (or Eng. A-B-C; or Comp. 4-5-6; or exemption), 9-15
 Soc. 1, Introduction to Sociology, 3
 Soc. 49, Social Problems, 3
 Psy. 1-2, General Psychology, 6
 C.W. 40, Child Training, 3, or
 C.W. 80, Child Psychology, 3
 Sciences—General inorganic chemistry (Chemistry 1-2, 4-5, or 6-7) and general zoology (Zoology 1-2-3, or 14-15) are highly recommended and are prerequisite to many courses in biological science. A minimum of four credits in biological science is required, to be selected from the following fields: anatomy, bacteriology, physiology, physiological chemistry, and zoology (other than Zoology 1-2-3 or 14-15), 4-6
 Physical education, 5

Course Requirements for the Nursing Education Major

Of the following courses Ed. 55B and Nurs.Ed. 69 may be taken in the junior year. In the case of students entering the program with senior standing, Ed. 55B and Nurs.Ed. 69 should be taken in the first quarter of the senior year. All other courses here listed should be taken in the senior year.

Ed. 55B, Introduction to Secondary School Teaching, 5
 Ed.T. 51A,B,† The Teaching of Nursing, 10
 Nurs.Ad. 160, Ward Administration, 5
 Nurs.Ed. 69, Survey of Conditions and Trends in Nursing, 3
 Nurs.Ed. 171, The Curriculum of the School of Nursing, 3
 H.Ed. 180, The School and Society, 3
 Elective in nursing education, 3
 Total, 32

The graduate nurse has usually from 60 to 75 elective credits available in the B.S. curriculum. These electives may be chosen from any course offerings in the University for which the student meets the prerequisites. It is appropriate to elect courses in natural sciences, social sciences, humanities, arts, and other fields of special interest

† Requirements for registration in Ed.T. 51A,B are as follows:

1. A passing grade in Ed. 55B.
2. Taking the College of Education test battery.
3. Attainment of a scholastic average of 1.5 in completed courses in the nursing education major including the field in which practice teaching is to be done. A major portion of the work in the teaching field should be completed.
4. The recommendation of the subject-matter department in the major field.
5. A satisfactory rating on the required speech test.
6. Completion of required clinical experiences.

to the student. The graduate nurse will also wish to review the elective offerings of the nursing education department and other related professional fields such as education, public health nursing, and child welfare. She may wish to elect a program of three quarters in clinical nursing or a minor in ward administration, science teaching, or child care. A description of the available minors in nursing education follows.

Course Requirements for the Ward Administration Minor

Minor adviser, Assistant Professor
Margaret F. Grainger

The ward administration minor[§] is designed to provide the student with a theoretical background and supervised ward experience in the activities and responsibilities of the hospital head nurse.

Nurs. 165, Analysis of Nursing Care, 4
Nurs.Ad. 161, Principles of Economics in Nursing Service Administration, 1
Nurs.Ad. 67, Field Practice in Ward Administration, 6, or
Nurs.Ad. 167, Studies and Experience in Ward Administration, 8
Total, 11-13

Course Requirements for the Science Teaching Minor

Minor adviser, Assistant Professor
Myrtle H. Coe

The science teaching minor is designed to provide a broad background in biological sciences for the teaching of basic sciences and clinical subjects in schools of nursing.

Students interested in this program should consult the minor adviser before beginning any program of study. The sequence of courses is such that much time will be wasted unless early and careful planning is done.

Physiol.Chem. 50, Physiological Chemistry, 4
Phys. 60, Human Physiology, 6
Bact. 53, General Bacteriology, 5
Bact. 102, Medical Bacteriology, 5
Zool. 21, Histology, 5
Zool. 22, Comparative Anatomy, 5
Nurs.Ed. 74, Science in a School of Nursing Curriculum, 5
General Inorganic Chemistry, 8
General Zoology, 6-10
Total, 49-53

Course Requirements for the Child Care Minor

Minor advisers, Professor John E. Anderson; Instructor Beulah T. Gautefald

The child care minor is designed to prepare the student for the position of nurse in a nursery school or kindergarten.

C.W. 80, Child Psychology, 3
C.W. 170, Parent Education, 3
Ed. 71C, Introduction to Elementary School Teaching, 5
Ed.T. 55, Principles of Early Childhood Education, 3
Ed.T. 56, Methods and Observation in Nursery School and Kindergarten, 5
Ed.T. 57, Nursery School-Kindergarten Laboratory in Arts, Literature, and Social Studies, 5, or Ed.T. 58, Nursery School-Kindergarten Laboratory in Permanent Play Materials, Music and Science, 5.
Ed.T. 77, Student Teaching in the Nursery School, 4
Mu.Ed. 50A, Teaching Music in the Primary Grades, 2
Total, 30

Course Requirements for the Advanced Clinical Minor

Minor adviser, Assistant Professor
Myrtle H. Coe

The advanced clinical minor is designed for those students who wish to include in their curriculum advanced study in one of the following clinical fields:

Medical Nursing
Nursing of Children
Obstetric Nursing
Operating Room Nursing
Psychiatric Nursing
Rural Hospital Nursing
Surgical Nursing
Tuberculosis Nursing

Clinical experience is chosen to meet the needs and major interests of each student. The hourly schedule of experience is planned on an individual basis to provide the best possible clinical opportunities compatible with the schedule of academic classes. Clinical courses include patient care, lectures, conferences, seminars, and tours, as well as observation or participation in work of the out-patient department, nursery schools, settlement houses, community health agencies, special hospitals, parent study groups, and other community organizations. Clini-

[§] Enrolment is limited; permission required.

cal study is intended to emphasize scientific principles and the art of applying them to the problems of health and illness. For prerequisites of these programs see the *Bulletin of the School of Nursing*.

Although the student's program is modified in consideration of the interests and needs of the individual student, certain required courses are included in the minor unless they have been completed prior to the time of enrolment in the minor. The minor course requirements should be taken in the junior year.

Nurs. 165, Analysis of Nursing Care, 4
 Nurs. 150, Foundations of Clinical Nursing Specialties, 3
 P.H. 100, Elements of Preventive Medicine and Public Health, 5

Clinical Field:

Medical Nursing
 Nurs. 151A-B-C† Advanced Medical Nursing, 15

Obstetric Nursing
 Nurs. 152A-B-C† Advanced Obstetric Nursing, 15
 P.H. 58, Maternal and Child Health, 3

Operating Room
 Nurs. 153A-B-C† Advanced Operating Room Nursing, 15

Nursing of Children
 Nurs. 154A-B-C† Advanced Pediatric Nursing, 15
 C.W. 40, Child Training, 3
 C.W. 80, Child Psychology, 3, or
 C.W. 140, Behavior Problems in Younger Children, 2
 C.W. 132, Later Childhood and Adolescence, 3

Psychiatric Nursing
 Psy. 144-145, Abnormal Psychology, 6
 Nurs. 155A-B-C† Advanced Psychiatric Nursing, 15

Rural Hospital Nursing
 Soc. 14, Rural Sociology, 3
 Nurs. 156A-B† Advanced Course in Rural Nursing, 30

Surgical Nursing
 Nurs. 157A-B-C† Advanced Surgical Nursing, 15

Tuberculosis Nursing
 P.H. 60, Tuberculosis and Its Control, 2
 Nurs. 158A-B-C† Advanced Tuberculosis Nursing, 24

Curriculum Leading to the Degree of Bachelor of Science and Graduate in Nursing

Students are required to complete 186 credits for graduation. The curriculum is divided into three parts: five quarters in the College of Science,

Literature, and the Arts; ten quarters in the School of Nursing; three quarters in the College of Education. **This combined curriculum will be discontinued when students now registered for it in the College of Education or the School of Nursing will have completed the nursing education requirements for graduation.** For nursing education major course requirements and suggested minors see description under preceding section, Curriculum for Graduate Nurses Leading to the Degree of Bachelor of Science. For information regarding new basic professional nursing curriculum leading to a Bachelor of Science degree, see *Bulletin of the School of Nursing*.

Master of Education Program in Nursing Education

Major advisers, Professors Katharine J. Densford and Ruth Harrington

The purpose of the program is to prepare teachers for basic professional schools of nursing and for advanced clinical programs in nursing through a broad program of study and experience based upon undergraduate study and experience in nursing education.

The candidates for this program will have completed before admission a major in nursing education leading to a Bachelor's degree or will include the equivalent within the master of education program.

The program requires a minimum of 45 quarter credits distributed as follows:

Nursing, 5-10 (minimum of 5)
 Nursing education, 12
 Education, 9
 Field experience in teaching, 8
 Electives, 6-11
 Total, 45

Variation in the distribution of credits requires approval of the major adviser and the School of Nursing Committee on Graduate Students.

The following courses are required of all candidates:

Nurs. 190, Foundations of Nursing, 5
 Nurs.Ed. 197E-198E, Advanced Teaching of Nursing, 6
 Ed.C.I. 199E, Internship, 8

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

† To receive credit for any part of course a student must complete parts preceding dagger.

from fields other than nursing and education.

Candidates who did not complete the following courses or equivalent as part of a program leading to the Bachelor's degree in an accredited university will be required to include them in the master of education program in addition to the 45 credits described above.

Nurs.Ed. 171, The Curriculum of the School of Nursing, 3

Ed. 55B, Introduction to Secondary School Teaching, 5

Ed.T. 51A-B, The Teaching of Nursing, 10
Introductory Statistics, 3

Candidates must meet the general requirements for the master of education degree as described on page 14, with the exception of a teaching minor in an academic field.

Graduate Study

Among the fields recommended for graduate study are education, curriculum and instruction, educational administration, educational psychology (including guidance and personnel work), history and philosophy of education, psychology, sociology, and biological sciences.

PHYSICAL EDUCATION FOR MEN

Major advisers, Professors Louis F. Keller, Carl L. Nordly, Ralph A. Piper;
Lecturer Gerald B. Fitzgerald

The following curricula 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 a B.S. degree and to a Minnesota high school standard special certificate.

Four-Year Curriculum in Physical Education for Men†

FRESHMAN YEAR

Com. 1-2-3, Communication (or Comp. 4-5-6 or Eng. A-B-C), 12
Soc. 1, Introduction to Sociology (or Soc. Sci. 1-2-3), 3
G.C. 10A-B-C, Human Biology (or Zool. 1-2-3 and P.H. 3), 9
Phys.Ed. 4A-B-C, Fundamentals of Sports, 3
Phys.Ed. 5A-B-C, Physical Education Activities, 3
Phys.Ed. 32, Introduction to Physical Education, 3
Phys.Ed. 25, First Aid (or Phys.Ed. 26, 27 or 59), 1
General electives, 14

SOPHOMORE YEAR

Chem. 1-2 or 4-5, General Inorganic Chemistry (or Chem. 6-7 or 9-10 or G.C. 7A-C), 8
Spch. 5, Fundamentals of Speech (or Spch. 1-2), 5
Psy. A, General Psychology (or Psy. 1-2), 5
Phys.Ed. 6A-B-C, Intramural Sports, 3
Phys.Ed. 7A-B-C, Recreational Games and Sports, 3
Anat. 57, Human Anatomy (or Phys.Ed. 50), 4

Phys.Ed. 8, Tennis and Golf, 1
P.H. 4, Health Problems of the Community (or P.H. 50 or 51), 3
General electives, 16

JUNIOR YEAR

P.H. 91, 92, Principles of Human Function, 8
P.H. 59, Health of the School Child, 3
Phys.Ed. 9A-B, Folk, American Country, and Social Dance, 2
Phys.Ed. 51, Mechanics of Movement, 3
Phys.Ed. 55, Methods and Materials in Physical Education, 4
Phys.Ed. 56, Introduction to Community Recreation, 3
Phys.Ed. 60A, Prevention and Care of Injuries, 3
Ed. 55A-B, Introduction to Secondary School Teaching, 10
General electives, 11

SENIOR YEAR

Phys.Ed. 60B, Prevention and Care of Injuries Laboratory, 1
Phys.Ed. 63, Organization and Administration of Physical Education, 3
Phys.Ed. 65, Adapted Physical Education, 3
Phys.Ed. 66, Officiating Football and Basketball, 3
Phys.Ed. 67, Football Coaching, 2
Phys.Ed. 68, Basketball Coaching, 2
Phys.Ed. 69, Track Coaching, 2
Phys.Ed. 72, Baseball Coaching, 2
Phys.Ed. 73-74-75, Directed Teaching, 6
Phys.Ed. 101, Principles of Physical Education, 3
Phys.Ed. 83, Methods and Materials in School Health Education, 3
H.Ed. 180, The School and Society, 3
One additional education course and general electives to complete total of 186 credits.

† Physical Education 1A-B-C, sports education courses, are required of all freshmen in the College of Education except physical education majors and minors. Physical Education 2A-B-C are elective courses. See *Class Schedule* for activities and hours.

The C+ average is based on the following courses: Phys.Ed. 4A-B-C, 5A-B-C, 6A-B-C, 7A-B-C, 8, 9A-B, 25, 32, 51, 55, 56, 60A-B, 63, 65, 66, 67, 68, 69, 72, and 101.

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 physical education as listed above; (2) a total of 27 credits in education including student teaching in physical education, methods in the minor, Ed. 55A-B, and H.Ed. 180; (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 carried with a C average; (5) an average of C+ (1.5 honor points per credit) in designated physical education courses, a C average in the minor, and a C average in all other courses taken during the junior and senior years.

Minor in Physical Education for Men

A total of 30 credits is required as follows:

Group A, all required:

- Phys.Ed. 5C, Physical Education Activities, 1
- Phys.Ed. 7A-B-C, Recreational Games and Sports, 3
- Phys.Ed. 55, Methods and Material in Physical Education, 4
- Phys.Ed. 56, Introduction to Community Recreation, 3
- Phys.Ed. 60A, Prevention and Care of Injuries, 3
- Phys.Ed. 63, Organization and Administration of Physical Education, 3
- Phys.Ed. 101, Principles of Physical Education, 3

Group B, four credits required:

- Phys.Ed. 67, Football Coaching, 2
- Phys.Ed. 68, Basketball Coaching, 2
- Phys.Ed. 69, Track Coaching, 2
- Phys.Ed. 72, Baseball Coaching, 2

Group C, six credits required:

- Phys.Ed. 5A-B, Physical Education Activities, 2
- Phys.Ed. 6A-B-C, Intramural Sports, 3
- Phys.Ed. 8, Dual Spring Sports, 1
- Phys.Ed. 9A-B, Folk, American Country, and Social Dance, 2

Graduate Study in Physical Education

Advanced work in physical education is offered in both the College of Education and the Graduate School.

Students desirous of obtaining 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. An official transcript in duplicate should accompany the application in either case.

For descriptions of courses available at the graduate level, see pages 87-88.

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 academic (other than education or physical education) courses. A maximum of 41 credits is allowed in education, excluding all courses in physical education.
3. During the last two years a minimum of 45 credits with an average grade of B 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.
 - c. A health examination within one year prior to graduation.
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 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 when 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.

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: (Students with a Bachelor's degree from institutions other than the University of Minnesota will not be held for the academic minor.)

1. Physical Education 101.
2. Twenty-one 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.
5. Items 4, 5, 6, and 7 listed under A above.

The transfer credits and University of Minnesota credits (a) should include at least 90 credits in academic (other than education) courses, (b) should not

exceed a total of 41 credits in education (other than physical education) courses.

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 above under B and the following **undergraduate** work:

Personal and community hygiene, 3-6
Human anatomy, physiology, applied anatomy (*Mechanics of Movement, Kinesiology*), 9

Physical education activities, 12
Professional physical education courses other than activities, 18-21
Minimum total, 45

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. The requirements for the M.A. degree with a major in physical education are explained in the **Bulletin of the Graduate School**. Plan A requirements include a thesis; those for Plan B do not (see pages 14-15).

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. and Ph.D. requirements see the **Bulletin of the Graduate School**.

PHYSICAL EDUCATION FOR WOMEN

Major advisers, Professor Gertrude M. Baker; Associate Professor Marjorie U. Wilson; Assistant Professors Dorothy L. Ericson, Eloise M. Jaeger

The Department of Physical Education for Women offers the following curricula 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 five-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. with a major in education and an emphasis in physical education in the Graduate School.

3. Curriculum for teaching minor in physical education.

4. Curriculum for a teaching minor in school health education (see page 60 for a description of this curriculum).

The curricula offered by the Department of Physical Education for Women are designed to prepare graduates for the responsible direction of physical

education at the elementary, secondary, and college levels and to provide the training necessary to meet the certification standards of the state of Minnesota for teaching physical education in the elementary and secondary schools.

Students desiring to register for the professional curriculum or any of the above curricula should consult with the major advisers. Inquire at 101 Norris Gymnasium 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 physical education as listed below; (2) a total of 28 credits in education including student teaching in physical education, methods in the minor, Ed. 55A-B, Ed.Psy. 158, and H.Ed. 180; (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 carried with a C average; (5) an average of C+ (1.5 honor points per credit) in physical education courses, a C average in the minor, and a C average in all other courses taken during the junior and senior years.

FRESHMAN YEAR

- Hist. 1-2, Civilization of the Modern World, 6
 Com. 1-2-3, Communication (or Eng. A-B-C, or Comp. 4-5-6; or G.C. 31A-B-C; or exemption), 9-15
 Zool. 1-2-3, General Zoology, 10; or G.C. 10A-B, Human Biology, 6
 Soc. 1, Introduction to Sociology, 3
 Phys.Ed. 20, 21, 22, Physical Education Activities, 9
 Phys.Ed. 25, American Red Cross First Aid, 2
 P.H. 3, Personal Health, 2

SOPHOMORE YEAR

- P.H. 4, Health Problems of the Community, 2
 Chem. 1-2, General Inorganic Chemistry, 8, or G.C. 7A, Elements of Physics, 5, and G.C. 7C, Elements of Chemistry, 5
 Spch. 1-2, Fundamentals of Speech, 6
 Psy. 1-2, General Psychology, 6
 Phys.Ed. 40-41-42, Physical Education Activities, 6
 Anat. 57, Elementary Anatomy, 4

- Phys.Ed. 48-49, Teaching Techniques in Physical Education, 5
 General Electives, 9-11

JUNIOR YEAR

- Phys.Ed. 51, Mechanics of Movement, 3
 Ed. 55A-B, Introduction to Secondary School Teaching, 10
 P.H. 91-92, Principles of Human Function, 8
 Phys.Ed. 47, 77A-B, Teaching Techniques in Physical Education, 5
 Phys.Ed. 86, Advanced Physical Education, 1
 P.H. 59, Health of the School Child, 3
 Phys.Ed. 61,* History of Physical Education, 3
 Phys.Ed. 83, Methods and Materials of School Health Education, 3
 Phys.Ed. 85, Remedial Activities in Physical Education, 3
 Phys.Ed. 90A, Student Teaching in Physical Education, 2
 General Electives, 6

SENIOR YEAR

- Ed.Psy. 158, Psychology of Adolescence, 3
 Phys.Ed. 53, The Role of the Physical Educator in Recreation, 3
 Phys.Ed. 82, Principles of Physical Education, 3
 Phys.Ed. 84, The Physical Education Program for the Elementary and Secondary School, 3
 Phys.Ed. 95, Administration of Physical Education, 3
 Phys.Ed. 90B-C, Student Teaching in Physical Education, 6
 Phys.Ed. 135, Tests and Measurements in Physical Education, 3
 H.Ed. 180, The School and Society, 3
 Education electives, 4
 General electives to complete total of 186 credits

Minor in Physical Education for Women

I. Elementary and Intermediate Physical Education Skill courses, 7 credits.

Note—Recognition of up to 3 credits will be given for credits earned in fulfilling the regular physical education requirement in college classes. The remaining 4 credits must be earned in professional courses, Phys.Ed. 20, 21, 22, 40, 41 or 42. Choice of courses should lead to a distribution of experience in the following areas: team sports, individual sports, body building, rhythm, and aquatics.

II. Required Health and Physical Education Theory courses, 15 credits.

- Phys.Ed. 62, The Teaching of Physical Education Activities, 3

* Offered in Department of Physical Education for Men.

- Phys.Ed. 82,* Principles of Physical Education, 3
 Phys.Ed. 83,* Methods and Materials of School Health Education, 3
 Phys.Ed. 84,* Physical Education Program for the Elementary and Secondary Schools, 3
 Phys.Ed. 95,* Administration of Physical Education, 3

III. Student Teaching: (Required)

- Phys.Ed. 90A, Student Teaching, 2

IV. Electives selected from the list below: 3 credits

- Phys.Ed. 25, First Aid, 1
 Phys.Ed. 53, The Role of the Physical Educator in Recreation, 3
 Phys.Ed. 54, Camp Leadership, 3
 Phys.Ed. 70, Introduction to Physical Education in the Elementary School, 3
 Phys.Ed. 85, Remedial Activities, 3
 Phys.Ed. 113, Physical Education in the Elementary School, 3
 Phys.Ed. 114, The School Health Program, 3

Dance Concentration

The following sequence of advanced courses in dance is open to all students in the College of Education who are particularly interested in dance and who wish to concentrate in this field.

Consultation should be held with the rhythm activity adviser as early as possible in order to plan for individual needs.

I. Required courses:

- Phys.Ed. 76, Advanced Folk Dance, 2
 Phys.Ed. 80, Principles of Rhythm, 3
 Phys.Ed. 87, Advanced Dance Composition, 2
 Phys.Ed. 88, Problems in Dance Composition, 2

II. Electives to be chosen from the following: (6 to 7 credits)

- Phys.Ed. 89, Dance Production, 3
 Phys.Ed. 47, The Teaching of Rhythmic Activities and Dance, 3
 ArtEd. 85, Art in Life and Education, 3
 Mu. 10, Introduction to Music, 4
 Spch. 31, Introduction to the Theater, 3
 Spch. 32, Beginning Acting, 3

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 the completion of their second year as majors in physical education in order

that the work of their next three 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 (1) by having a completed major in physical education from an accredited institution; or (2) by meeting the equivalent of a physical education major while completing the M.Ed. degree requirements. Candidates are expected to demonstrate average or above average motor skill in basic activities as attested by Motor Ability Tests and demonstration of performance level.

The programs for candidates for the M.Ed. degree are arranged in conference with the departmental adviser according to the interests and backgrounds of the students. Application should be made to the Office of Admissions and Records for admission to the College of Education. An official transcript in duplicate should accompany each application.

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 two activity areas (sports, aquatics, rhythms, 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 page 14).

For graduate courses offered in the department see Description of Courses, page 91.

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

* May be taken by correspondence study (see *Bulletin of the General Extension Division*).

† Courses in physical education numbered over 100 may be taken either in the Department of Physical Education for Women or in the Department of Physical Education for Men.

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.

POLITICAL SCIENCE

Major advisers, Professor Asher N. Christensen;
Associate Professor George A. Warp

Because of the many demands made upon teachers of the social studies, because of the necessity of teaching more than one subject or general courses, and because of the difficulty of placement, students are strongly urged to follow the social studies curriculum, pages 60-61.

Students with a political science major take the first two years in the College of Science, Literature, and the Arts and meet the Junior College requirements of that college. They should include in their programs at least 15 credits in political science courses. For the general and profes-

sional requirements of the College of Education, see pages 8-9.

Political Science as a major subject—A minimum of 36 credits including Pol.Sci. 1-2-3, American Government and Politics, 9 credits, A-B, The State in the Modern World, 6 credits, and 25, World Politics, 3 credits, and not less than 18 credits in Senior College courses.

Political Science as a minor subject—A minimum of 23 credits including Pol.Sci. 1-2-3 or A-B-C, and 25 and not less than 11 credits in Senior College courses.

PUBLIC HEALTH

Minor advisers, Associate Professors Ruth E. Grout,
Stewart C. Thomson

The minor in public health is open to elementary education majors and as an additional minor for secondary education majors. It cannot be substituted for any minor requirement in the secondary fields.

Public health as a minor subject:

P.H. 50, Public and Personal Health, 3; or
P.H. 51, Community Hygiene, 3

P.H. 57, Health of the Infant and Preschool Child, 2

P.H. 59, Health of the School Child, 3

P.H. 75, Introduction to Environmental Sanitation, 3

Bact. 53, General Bacteriology, 5

Physiol. 2, Elements of Physiology, 4; or

Physiol. 4, Human Physiology, 4; or

P.H. 91-92, Principles of Human Function, 8

RECREATION LEADERSHIP

Major advisers, Lecturer Gerald B. Fitzgerald;
Assistant Professor H. R. Giles

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 four 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 the 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.

FRESHMAN AND SOPHOMORE YEARS

Students register in the College of Education. Lower division courses are selected from offerings in the College of Science, Literature, and the Arts, the General College, and from the four-year curricula in physical education, music education, art education, industrial education, home economics education, and agricultural education.

Group A: Natural Science, 15 credits:

Nat. Sci. 1-2-3, Orientation in the Natural Sciences, 15; or
15 credits in natural science.

Group B: Psychology and Health, 8 credits:

Psy. 1-2, General Psychology, 6
P.H. 3,† Personal Health, 2

Group C: Social Science, 21 to 24 credits:

Soc.Sci. 1-2-3, Introduction to Social Science, 12
Hist. 20-21-22, American History, 9
Or a total of 21-24 credits in the following fields: sociology, political science, economics, history, geography and social science.

Group D: English Composition, Literature, and Speech, 15 credits:

Com. 1-2-3, Communication (or Comp. 4-5-6; or Eng. A-B-C; or G.C. 31A-B-C; or exemption), 9-15
Spch. 1-2-3 or 5-6, Fundamentals of Speech, 6-10

Group E: Skill Techniques, 22 credits:

Music, 4 credits
Mu. 1, Ear Training, 2
Mu. 31 or 32 or 33, Music Appreciation, 2; or G.C. 24A-B-C, Music Today, 2
Arts and Crafts, 9 credits
Art 4, 5, General Design, 6; or Art 43, General Crafts, 3
Courses in design or crafts, 6
Dramatics, 3 credits
Spch. 31, Introduction to the Theater, 3
Games, Rhythms, and Sports (men), 6 credits
Phys.Ed. 4A-B-C, Fundamentals of Athletic Sports, 2
Phys.Ed. 6A-B-C, Intramural Sports, 2
Phys.Ed. 8, Dual Spring Sports, 1
Phys.Ed. 9A-B, Rhythms, 2
Phys.Ed. 25, First Aid, 1
Games, Rhythms, and Sports (women), 6 credits
Phys.Ed. 1-2-3, College Program in Physical Education—selected from Aquatics, Individual Sports, and Rhythms, 5
Phys.Ed. 25, First Aid, 1

Group F: Recreation, 9 credits:

Phys. Ed. 11A-B-C, Survey of Recreation Activities, 3
Phys.Ed. 23A-B-C, Introduction to Recreation Leadership, 3
Phys.Ed. 49, Social Aspects of Leisure, 3

Group G: General electives to total 96 credits.

Students transferring from other institutions who desire to major in recreation will be permitted some devia-

tion from the lower division pattern listed above, but must meet specific course requirements in Groups B, E, and F unless exempted by the major adviser in recreation and the Committee on Students' Work.

All students desiring to enter or to continue in the recreation leadership major, which begins with the junior year, must have in addition to the course requirements the following: (1) a passing mark in the special entrance examination in recreation, and (2) experience for at least one summer as a play leader or camp counselor.

Students who transfer from other institutions desiring to major in recreation may register in that curriculum in the fall quarter, but with the provision that this is a tentative registration only. Application should be made only when the student has some assurance of meeting the entrance requirements (1) and (2) above.

A student may graduate with or without a teaching certificate. No teaching certificate is used for the recreation major, and 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 practice teaching must be taken. For students desiring a teaching certificate, selection of a teaching major, or two teaching minors, is recommended. No minor is required in this curriculum, although students who plan to teach must meet the above listed requirements.

JUNIOR AND SENIOR YEARS**Education, 18 credits required:**

Ed. 55A-B, Introduction to Secondary School Teaching, 10
Ed.C.I. 104, Adult Education, 2
Ed.C.I. 105, Audio-Visual Materials in Education, 3
H.Ed. 180, The School and Society, 3

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

Soc. 50, Areas of Social Work, 4
Phys.Ed. 52, Leadership of Social Activities, 2
Phys.Ed. 54 or 46, Camp Leadership, 2
Phys.Ed. 57, The Organization and Conduct of Recreation Centers, 3
Phys.Ed. 58, Leadership in Community Recreation, 3
Phys.Ed. 78, Scout Leadership, 2
Phys.Ed. 105, Conservation of Natural Resources, 2
Phys.Ed. 107, Camp Administration, 3

† Requirement may not be met by exemption examination.

- Phys.Ed. 110, Recreation Surveys, 3
 Phys.Ed. 111, Recreation Areas and Facilities, 3
 Phys.Ed. 112, Programming in Recreation, 3
 Phys.Ed. 116, Community Recreation Resources and Organization, 3
 Phys.Ed. 121, Principles of Recreation Method, 3
 Phys.Ed. 141, Introduction to Hospital Recreation, 3

Skill Techniques, 21 credits required, to be chosen from the following courses:

- Music, 4 credits
 Mu.Ed. 50A, Teaching Music in the Primary Grades, 2
 Mu.Ed. 59, Choral Literature and Conducting, 2
 Art, 3 credits
 Art 43, General Crafts, 3; or
 Art 83, Sculpture, 3; or
 Art 93, Ceramics, 3
 Dramatics, 6 credits
 Spch. 32-33, Beginning Acting, 6
 Nature, 4 credits
 Phys.Ed. 64A-B, Leadership in Nature Recreation, 4
 Games, Rhythms, and Sports (men), 4 credits
 Phys.Ed. 5A-B-C, Physical Education Activities, 3
 Phys.Ed. 7A-B-C, Recreational Games and Sports, 3
 Games, Rhythms, and Sports (women), 4 credits
 Phys.Ed. 47, Teaching of Dance and Rhythmic Activities, 3
 Phys.Ed. 48, Teaching of Individual and Dual Sports, 2
 Phys.Ed. 57A-B, Teaching of Aquatics, 4
 Phys.Ed. 62, Teaching of Physical Education Activities, 3
 Phys.Ed. 64, Teaching of Group Gymnastics, 1

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

- Ed.T. 84A-B-C, Practice and Field Work in Recreation, 6
 Ed.T. 85A-B-C, Practice and Field Work in Recreation, 6
 Special Methods and Directed Teaching in minor (if teaching certificate is desired), 11
 Public Health, 6 credits required:
 P.H. 51,† Community Hygiene, 3
 P.H. 59, Health of the School Child, 3
 General electives to be selected from Senior College courses in consultation with major adviser.

The C+ average is based on the following courses: Phys.Ed. 54 or 46, 57, 58, 78, 110, 111, 112, 116, 121; and 16 credits in skill techniques spread over

at least three different fields using no more than 6 credits in any one skill.

Minor in Recreation Leadership

- Phys.Ed. 25, First Aid, 1
 Ed.T. 85A-B-C, Practice and Field Work in Recreation, 3
 Recreation Leadership (Courses to be chosen in consultation with major adviser), 12
 Skill Techniques (To be chosen in consultation with major adviser), 12
 Elective—one course to be selected from the following:
 Psy. 140, Social Psychology, 3
 Ed.C.I. 104, Adult Education, 2
 Ed.C.I. 169, Extracurricular Activities, 4
 Ed.Psy. 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

The College of Education will award 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 are:

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 with 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 spread over the fields

† Requirement may not be met by exemption examination.

of music, art, dramatics, nature recreation, games, sports and rhythms. Demonstrated proficiency may be substituted for the requirement on advice and 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. A satisfactory report on health examination within one year prior to obtaining the M.Ed. degree.

6. Distribution of credits for the fifth year as follows: Education, 6-9; Recreation, 24-28; Electives, 8-15.

Courses are selected in consultation with major adviser. For graduate courses in recreation see Description of Courses on pages 87-88.

The College of Education will award the master of education degree with a major in hospital recreation to those who qualify for and successfully complete the program herein described.

The curriculum is intended as a specialized professional program with internship. An average of "B" is required for 45 credits in courses numbered above 100. The examination regularly required for the M.Ed. degree will apply for this curriculum with the comprehensive written examination covering the three areas of the curriculum—professional specialization in hospital recreation, mental hygiene and adjustment, and related professional fields. A satisfactory health examination is required on admission to the University and also within one year prior to date of receiving degree.

Admission to the curriculum is based on:

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. Undergraduate introductory courses in psychology, sociology and science.

3. Twenty-six quarter hours of skill techniques spread over the fields of music, art, dramatics, nature recreation, physical education and social recreation. Demonstrated proficiency may be substituted for this requirement or for parts of it on advice and consent of the major adviser. Those who do not meet this requirement will be held for undergraduate skill courses on 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.

Course requirement: Internship is required in the amount of 6 to 9 credits and extends from three to six months depending on the previous experience of the individual student. The assignment may or may not be carried on a paid basis.

Distribution of credits is as follows: Internship, 6-9; Specialization in Hospital Recreation, 12-18; Mental Hygiene and Adjustment, 3-9; Related Professional Fields, 6-10; Electives, 6-9.

Plan II. Recreation Activity Leaders Training Course

The recreation activity leaders training course is a four-year program set up by the College of Education to prepare qualified individuals for recreation activity positions in recreation and other agencies 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. Enrolment in the curriculum is limited and the first two years are taken in the General College.

The program is set up for students who have special abilities in various fields of recreational activities, such as games and sports, music, handcrafts, drama, 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. However, to be eligible for continuance in the curriculum, the student must maintain a C average in all work completed at the University of Minnesota.

FRESHMAN AND SOPHOMORE YEARS

Courses taken while enrolled in the General College:

Group A: Natural Science, 18 credits required:

G.C. 7A-B-C-D, Physical Sciences, 15; or
Nat.Sci. 1-2-3, Orientation in Natural Sciences, 15
G.C. 10A-B, Human Biology, 6

G.C. 10C, Human Biology, 3; or
P.H. 3, Personal Health, 2

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

G.C. 31A-B-C-D, Writing Laboratory, 9; or
Com. 1-2-3, Communication, 12; or
Comp. 4-5-6, Freshman Composition, 9
G.C. 32A-B-C-D, Oral Communication Speech
Laboratory, 8; or
Spch. 1-2, Fundamentals of Speech, 6; or
Spch. 5, Fundamentals of Speech, 5
G.C. 30A-B-C-D-E, Literature Today, 3

Group C: Social Sciences, 24 credits to be selected from the following courses:

G.C. 4, Problems of Contemporary Society, 5
G.C. 37, Social Trends and Problems, 5
G.C. 38, General Geography, 5
G.C. 39, General Anthropology, 5
G.C. 43A, Background of the Modern World, 5
G.C. 43B, Historical Biography, 3
G.C. 44B, Current History, 2-4
G.C. 45A, The U.S. in World Civilization, 5
G.C. 45C, Minnesota and the Upper
Midwest, 5
G.C. 45D, Community Problems, 3
G.C. 46A-B-C, Government Studies, 3-9
Pol.Sci. 1-2, American Government and
Politics, 6
Soc.Sci. 1-2-3, Introduction to Social
Science, 4-12
Hist. 1-2-3, Civilization of the Modern
World, 3-9
Hist. 20-21-22, American History, 3-9

Group D: Psychology, 5 credits required:

G.C. 41, Practical Applications of Psychology,
5; or
Psy. A, Elementary Psychology, 5

Group E: Recreation Theory, 9 credits required:

Phys.Ed. 11A,B,C, Survey of Recreation
Activities, 3
Phys.Ed. 23A,B,C, Introduction to Recreation
Leadership, 3
Phys.Ed. 49, Social Aspects of Leisure, 3

Group F: Recreation Skills, 19 credits required:

G.C. 22A,B,C, Art Today, 3-9
G.C. 23A, Art Laboratory, 3
G.C. 24A,B,C, Music Today; or
G.C. 25A,B,C, Music Today, 2-9
G.C. 25X, Music Laboratory, 2-3
Phys.Ed. 4A,B,C, Fundamentals of Sports
(men); or
Phys.Ed. 1,2,3, College Program in
Physical Education (women), 1-3
Phys.Ed. 25, First Aid, 1
Phys.Ed. 6C, Aquatics (men), 1; or
Phys.Ed. 11, Aquatics (women), 1

JUNIOR AND SENIOR YEARS

Courses taken while enrolled in the
College of Education:

Group A: Recreation Theory, 35 credits required:

Phys.Ed. 57-58, Introduction to Community
Recreation, 6
Phys.Ed. 52, Leadership of Social Activities, 2
Phys.Ed. 78, Scout Leadership, 2
Phys.Ed. 54, or 46, Camp Leadership, 2
Phys.Ed. 105, Conservation of Natural
Resources, 2
Phys.Ed. 107, Camp Administration, 3
Phys.Ed. 110, Recreation Surveys, 3
Phys.Ed. 111, Recreation Areas and
Facilities, 3
Phys.Ed. 112, Programming in Recreation, 3
Phys.Ed. 116, Community Recreation
Resources and Organization, 3
Ed.T. 84A-B-C, Field Practice in Recreation,
Junior Year, 6
Ed.T. 85A-B-C, Field Practice in Recreation,
Senior Year, 6
Phys.Ed. 121, Principles of Recreation
Methods, 3
Phys.Ed. 141, Introduction to Hospital
Recreation, 3

Group B: Recreational Skills, 22 credits required:

Ind. 1, Basic Woodwork, 3
Ind. 20 or 21, Craft Work, 3
Phys.Ed. 64A-B, Leadership in Nature
Recreation, 4
Recreational Dramatics, 6
Recreational Music, 6

Physical Education (men), 10 credits required from the following:

Phys.Ed. 5C, Stunts, Contests, Softball,
Baseball, 1
Phys.Ed. 7A, Games and Relays, 1
Phys.Ed. 7C, Recreational Games, 1
Phys.Ed. 8, Tennis and Golf, 1
Phys.Ed. 9A-B, Rhythms, 2
Phys.Ed. 66, Officiating Football and
Basketball, 3
Phys.Ed. 68, Basketball Coaching, 2
Phys.Ed. 69, Track Coaching, 2

Physical Education (women), 10 credits required from the following:

Phys.Ed. 21A-B-C, Elementary Physical
Education, 2-6
Phys.Ed. 41A-B-C, Intermediate Physical
Education, 3-9
Phys.Ed. 57A-B, Technique of Teaching
Aquatics, 2
Phys.Ed. 61A-B, Technique of Teaching Team
Sports, 2
Phys.Ed. 48, Technique of Teaching
Individual and Dual Sports, 2
Phys.Ed. 62, Teaching of Physical Education
Activities, 3

Group C: General Courses, 5 or 6 credits required:

Agr.Ed. 56, Rural Youth Leadership, 3

P.H. 4, Health Problems of the Community, 2; or
P.H.51, Community Hygiene, 3

Group C: General Electives, 20 or 21 credits selected from Senior College courses in consultation with a major adviser, to complete total of 186 credits.

Minor in Camping and Outdoor Education

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

Phys.Ed. 46, Camp Leadership, 2
Phys.Ed. 45, Camp Craft, 3
Phys.Ed. 107, Camp Administration, 3
Phys.Ed. 105, Conservation of Natural Resources, 2
Phys.Ed. 43, Camp Aquatics, 2
Ed.Psy. 158, Psychology of Adolescence, 3
Phys.Ed. 64A-B, Leadership in Nature Recreation, 4
Phys.Ed. 52, Leadership in Social Activities, 2
Phys.Ed. 121, Principles of Recreation Methods, 3
Recreational Music, 3
Recreational Dramatics, 3
Handcrafts, 3
Recreational Games and Sports, 3
Phys.Ed. 43 or 11, Aquatics, 1
Phys.Ed. 25, First Aid, 1
Field Work in Camping (one summer's experience)

ROMANCE LANGUAGES

Major advisers, French: Associate Professor H. E. Clefton;
Spanish: Professor R. L. Grismer

Students wishing to major in French or Spanish take the first two years in the College of Science, Literature, and the Arts and meet the Junior College requirements of that college. They should include in their programs the prerequisite courses and some of the Senior College courses listed below. For general and professional requirements of the College of Education, see pages 8-9.

French as a major subject, 35 credits in courses numbered above 4 including:

Fr. 70-71-72, Survey of French Literature (or 73-74), 9
One other literary course, 3-9
Fr. 50, French Pronunciation, 3
Fr. 53, French Composition, 3 and
Fr. 54, French Conversation, 3; or
Fr. 20, Oral and Written French, 5
Fr. 55, French Conversation, 3
Fr. 63, Advanced French Composition, 3
Fr. 103-104-105, French Syntax and Composition, 3

French as a minor subject, 23 college credits of which 17 credits will be in courses numbered above 4, including 70-71-72 or 73-74.

Spanish as a major subject, 35 credits in courses numbered above 4 including:

Sp. 65-66-67, Survey of the Literature of Spain, 9; or
Sp. 68-69, Survey of the Literature of Spain, 10; or
Sp. 74-75-76, Survey of the Literature of Latin America, 9
Sp. 53, Spanish Composition, 3 and
Sp. 54, Spanish Conversation, 3; or
Sp. 20, Oral and Written Spanish, 5
Sp. 55, Spanish Conversation, 3
Sp. 60, Advanced Spanish Composition, 3

At least 8 credits chosen from the following:

Sp. 56, Spanish Phonetics and Diction, 5
Sp. 70-71-72, Latin-American Civilization and Culture, 3-9
Sp. 103-104-105, Spanish Syntax and Composition, 3
Sp. 171-172-173, History of the Spanish Language, 3

Spanish as a minor subject, 23 college credits of which 17 credits will be in courses numbered above 4, including 65-66-67 or 68-69 or 74-75-76.

RURAL EDUCATION

Major adviser, Professor Clifford P. Archer

The College of Education offers a four-year and a five-year program for students who wish to specialize in

rural education and administration and supervision of rural schools. The first two years of the curriculum are

the same as for elementary education, page 24. However, modifications may be made in individual cases in conference with the major adviser, and many of the courses under 1 should be taken in the freshman and sophomore years. Students register in the College of Education beginning with the freshman year and should consult the major adviser at the time of their first registration.

Requirements for a Major in Rural Education

1. Specialization in Rural Life, 40 to 45 credits required:

Agr.Econ. 3, Principles of Economics, 5
Agr.Econ. 8, Rural Economics, 3
Soc. 14, Rural Sociology, 3
Agr.Ed. 54, Rural Education and Community Leadership, 3; or
Agr.Ed. 56, Rural Youth Leadership, 3
Agron. 1, General Farm Crops, 3
An.Husb. 1, Livestock Production, 4
Hort. 6, Fruit Growing, 3; or
Hort. 32, Vegetable Growing, 3; or
Hort. 56, Plant Propagation, 3
Dy.Husb. 1, Elements of Dairying, 3

A minimum of 14 credits from the following:

H.E. 1, Choice and Care of Clothing, 3, or
G.C. 15A, Clothing Selection, Purchase, and Care, 3
H.E. 30 or 31, Introduction to Nutrition, 2, or
G.C. 14A, Food Selection and Purchase, 3
H.E. 20, Introduction to Related Art, 3, or
H.E. 24, Problems in Home Planning and Furnishing, 3, or
G.C. 16A, Selecting and Maintaining a Home, 5
H.E. 50, Textiles, 3, or
H.E. 2, Introduction to Textiles, 3
G.C. 17, Income Management and Buying, 3

Certain substitutions for the above courses may be made by men students in consultation with the adviser.

2. General and Elementary Education:

Ed. 71A-B-C, Introduction to Elementary School Teaching, 15
Art Ed. 84, The Teaching of Art in the Elementary School, 3
Mu.Ed. 50B, Teaching Music in the Intermediate Grades, 2
Ed.T. 54A-B, Student Teaching in the Elementary School, 10
Ed.C.I. 60, The Teaching of Reading in the Elementary School, 3
Ed.C.I. 61, The Teaching of the Social Studies in the Elementary School, 3
Ed.C.I. 62B, The Teaching of Arithmetic in Intermediate Grades, 3

Ed.C.I. 63, Children's Literature, 2
Ed.C.I. 64, The Teaching of English in the Elementary School, 3
Ed.C.I. 65, The Teaching of Science in the Elementary School, 3
H.Ed. 180, The School and Society, 3

3. Additional courses to complete the total of 186 credits, including P.H. 59, Health of the School Child, prereq. 3 and 4, or 50.

Recommended courses are: Soc. 160, Rural Community Organization, 3 credits; Soc. 162, Rural Social Institutions, 3 credits; For. 10, Farm Forestry, 3 credits; additional courses in home economics; additional courses in curriculum and instruction and in educational psychology; Ed.C.I. 117, Rural Education for Administrators and Teachers.

Fifth Year in Rural Education

A fifth-year program in rural education leading to the master of education degree is provided for those who wish additional preparation for administrative or supervisory positions. All the general requirements for the M.Ed. degree apply to this program. The specific requirements are as follows:

1. Sociology—6 credits (unless these courses were taken in the four-year curriculum):

Soc. 160, Rural Community Organization, 3
Soc. 162, Rural Social Institutions, 3

2. Education—24 credits:

Ed.C.I. 117, Rural Education for Administrators and Teachers, 3
Ed.C.I. 150, Supervision and Improvement of Instruction, 3
Ed.C.I. 151, Diagnosis and Treatment of Learning Difficulties, 3
Ed.Psy. 120, Basic Principles of Measurement, 3
Ed.Psy. 293, Psychology of Learning, 3

Nine credits to be selected from courses in school administration, organization, and supervision and problems in rural education.

3. Internship in supervision of rural schools—maximum 8 credits.

4. Graduate courses in agriculture, horticulture, forestry, home economics, or other approved fields—8 credits.

Note—Where prescribed courses in the fifth year have been taken in the undergraduate curriculum, equivalent credits should, as a rule, be selected in the fields listed under 4.

SCHOOL HEALTH EDUCATION

Minor adviser, Assistant Professor Dorothy L. Ericson

The minor in school health education is open to elementary education majors and as an additional minor for secondary education majors. It cannot be substituted for any minor requirement in the secondary fields.

Minor in School Health Education

Group A. Basic Course: 17-18 credits required

- G.C. 10A-B, Human Biology, 6
 G.C. 10C,† Human Biology, 3; or
 P.H. 3, Personal Health, 2 and P.H. 4,
 Health Problems of the Community, 2; or
 P.H.50, Personal and Community Health,
 3; or
 P.H. 51, Community Hygiene, 3

- P.H. 59, Health of the School Child, 3
 P.H. 133, Mental Hygiene, 3
 Phys.Ed. 25, American Red Cross First Aid, 2

Group B. School Health Education Theory: 8 credits required

- Phys.Ed. 83, Methods and Materials of School Health Education, 3; or
 Phys.Ed. 117, Advanced Course in School Health Instruction, 3
 Phys.Ed. 114, The School Health Education Program, 3
 Ed.C.I. 129, Principles and Problems of Teaching Social Hygiene, 3

Group C. Directed Teaching: 2 credits required

- Phys.Ed. 94, Student Teaching in School Health Education, 2

SOCIAL STUDIES

Major adviser, Assistant Professor Edith West

The secondary teacher of social studies is seldom given an opportunity to devote his entire schedule to one subject. Consequently, prospective teachers should prepare themselves in as many different social studies fields as possible. It would be wise to take at least one introductory course in each of the areas mentioned below. In addition, work in anthropology and social psychology would strengthen the candidate's background for teaching social studies in the secondary field. The candidate must take at least 23 credits in history in order to teach history in Minnesota high schools. Students are urged to consult an adviser in building their college course.

Requirements for a Major in the Social Studies

The course requirements for a major in the social studies are prescribed under 1-3 below:

1. The student must select one of the five fields listed and must complete the course requirement indicated. This is referred to as the **core subject**.
 - a. Economics, 30 credits including Courses 6-7 and 20 additional credits, of which 12 must be in courses numbered above 100.
 - b. Geography, 30 credits.

- c. History, 36 credits, 18 of which must be from the Senior College.
- d. Political science, 30 credits.
- e. Sociology, 30 credits.

2. In addition to the requirements set forth under 1, the student must complete courses in other subjects as follows:

- a. With economics, geography, political science, or sociology as the core subject: the student must secure 23 credits in history plus 18 credits divided among at least two subjects listed under 1 other than the core and history. Not fewer than 5 credits may be chosen from any one field.
- b. With history as the core subject: the student must secure 30 credits divided among at least three subjects listed under 1 other than history. No fewer than 5 credits may be chosen from any one field.

3. The student must include in his program as outlined above at least one course on the Far East and one on Russia. These courses may be taken in any of the social science departments.

The C+ average is based on all courses taken in the five fields listed above. For professional and public health requirements, see pages 8-9.

† For selection of courses consult adviser; see also the statement of prerequisites.

Requirements for a Minor in the Social Studies

Those who major in some subject or field other than the ones listed under 1 may secure a minor in the social studies. The course requirements for a minor in the social studies are 46 credits, 23 in history and 23 divided between at least two other subjects selected from the five listed under 1 above. No fewer than 5 credits in any one subject will be counted toward the requirement of 23 credits in other subjects.

Five-Year Program Leading to the Master of Education Degree

The College of Education offers a five-year program leading to the professional degree of master of education for teachers of the social studies. For general requirements for the M.Ed. degree, see page 14. For specific requirements for this curriculum confer or correspond with the major adviser.

Teachers of the social studies who are interested in further study may secure an M.A. degree in the Graduate School. Such students will usually major in curriculum and instruction or in education. See statement on page 23.

SOCIOLOGY

Major adviser, Instructor Arthur L. Johnson

Because of the many demands made upon teachers of the social studies, because of the necessity of teaching more than one subject or general courses, and because of the difficulty of placement, students are strongly urged to follow the social studies curriculum, see page 60.

Students with a major in sociology take the first two years in the College of Science, Literature, and the Arts and meet the Junior College requirements of that college. They should include in their programs at least 15 credits in sociology courses. For general and professional requirements of

the College of Education, see pages 8-9.

Sociology as a major subject:

Soc. 1, Introduction to Sociology, 3
Soc. 14, Rural Sociology, 3
Soc. 49, Social Problems, 3
Additional credits, 27

Students majoring in sociology must complete two teaching minors. Teachers of experience who already hold a teacher's certificate and do not desire further certification may be relieved of this requirement upon petition.

Sociology as a minor subject:

A minimum of 23 credits including Soc. 1, 14, and 49, is required.

SPEECH AND THEATER ARTS

Major advisers, Professors Howard Gilkinson, Frank M. Whiting;
Assistant Professors Kenneth Graham, Donald K. Smith

Students interested in speech are strongly urged to consider the Language Arts curriculum described on pages 37-38. For curriculum in speech pathology, see page 62.

Students majoring in speech register for the first two years in the College of Science, Literature, and the Arts and meet the Junior College requirements. For general and professional requirements of the College of Education, see pages 8-9.

Speech as a major subject:

Spch. 1-2, Fundamentals of Speech, 6; or
Spch. 5, Fundamentals of Speech, 5
Spch. 31, Introduction to the Theater, 3

Spch. 32, Beginning Acting, 3
Spch. 61, Personal Development through Speech, 3
Spch. 67, Phonetics, 3
Spch. 71-72-73, Play Production: Problems of Dramatic Production in Secondary Schools, 9
Spch. 81-82, Interpretative Reading, 6
Spch. 101-102, Argumentation and Persuasion, 6
Spch. 119, Introduction to Speech Correction, 3

Speech as a minor subject—Students minoring in speech are required to take Speech 1-2 or 5 plus other speech courses totaling 27 credits. These courses are to be selected with the

aid of an adviser according to the needs of the student.

All students majoring or minoring in speech are expected to participate in one or more co-curricular activities such as debating, dramatics, radio, public reading, and public speaking.

Because of the close relation between English and speech in the high schools of Minnesota, students majoring in speech must have a minor in English as well as one other minor. Modification of the minor require-

ment may be made on the recommendation of the departmental adviser with the approval of the Committee on Students' Work.

Students majoring in speech will register in Ed.T. 75A-B-C, Teaching of the Language Arts, and in Ed.T. 75, Student Teaching in the Language Arts, for the professional work of the senior year. Students minoring in speech will register for Ed.T. 75C for the methods course in the minor.

SPEECH PATHOLOGY

Major adviser, Professor Bryng Bryngelson

This program of study has been arranged for those students who are interested in persons with speech disorders. The training in this specialized field is designed to qualify students for professional work in speech correction in schools, hospitals and private clinics.

The program is arranged for four or more years of study. At the end of four years a certificate in special education and a B.S. degree are granted. Advanced study for the M.S. and Ph.D. degrees is possible. (See *Bulletin of the Graduate School*.) The required courses are listed below. Students interested in this field should consult the major adviser before registering. All electives selected to complete the work for a degree should have the approval of the adviser.

Students register for the first two years in the College of Science, Literature, and the Arts and complete the Junior College courses listed below.

FRESHMAN AND SOPHOMORE YEARS

Com. 1-2-3, Communication (or Comp. 4-5-6; or Eng. A-B-C; or exemption), 9-15
 Zool. 1-2-3, General Zoology, 10; or
 Nat. Sci. 7-8-9, General Biology, 10
 Psy. 1-2, General Psychology, 6
 Spch. 1-2 or 5, Fundamentals of Speech, 5-6
 Psy. 4.5, Introductory Laboratory Psychology, 4
 Physiol. 4, Elements of Physiology, 4
 Anat. 3 or 4, Elementary Anatomy, 4-5
 Physical Education, 3-5
 Electives to complete total of 96 credits.

JUNIOR YEAR

Spch. 61, Personal Development through Speech, 3
 Spch. 67, Phonetics, 3
 Spch. 119, Introduction to Speech Correction, 3
 Spch. 162-163, Speech Pathology, 6
 Psy. 144-145, Abnormal Psychology, 6
 Ed. 71A-B-C, Introduction to Elementary School Teaching, 15; or
 Ed. 55A-B, Introduction to Secondary School Teaching, 10
 C.W. 80, Child Psychology, 3
 C.W. 132, Later Childhood and Adolescence, 3

SENIOR YEAR

Spch. 152, Hearing Disorders, 3
 Spch. 153, Audiometry and Hearing Aids, 3
 Spch. 155, Lip Reading and Lip Reading Methods, 3
 Ed.Psy. 120, Basic Principles of Measurement, 3
 Ed.Psy. 142, Individual Mental Testing, 3
 Ed.C.I. 174-175-176, Clinical Methods and Practice in Speech Pathology, 9
 H.Ed. 180, The School and Society, 3
 Electives to complete total of 186 credits.
 Suggested electives are: Ed.C.I. 145, Reading Difficulties, 3; Soc. 91, Case Method Applied to the Study of Human Problems, 3; Courses in the fields of humanities, philosophy, anthropology, etc.

The C+ average is based on the following courses: Spch. 61, 67, 119, 152-153, 155, 162-163; Ed.C.I. 174-175-176.

STUDENT PERSONNEL WORK

Major advisers, Professors Marcia Edwards, Willis E. Dugan,
C. Gilbert Wrenn

Work leading to the M.A. or Ph.D. degree can be taken with a concentration in this field. Preparation is possible for technical or administrative positions at either the secondary school or college level. A major in educational psychology is most frequently advised with a minor in either psychology, education, or sociology.

In this field heavy stress is laid upon training that leads to an adequate understanding of the individual student. Emphasis is also placed upon clinical practice or internship experience in active school, university, or

social agency guidance programs, provided for under Ed.Psy. 281 and 282, Practice in Personnel Work. Basic courses are Ed.C.I. 125 and 135; Ed.Psy. 120, 133, 134, 141, 159, 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 certain courses in psychology and sociology, and, if doctorate candidates, to take advanced courses in statistics and measurement, and to probe research problems in the student personnel field.

TEACHING OF EXCEPTIONAL CHILDREN

Major adviser, Assistant Professor Maynard C. Reynolds

The State Department of Education requires special certificates for teachers of the various classes for exceptional children, such as classes for the deaf and hard of hearing, the crippled, the mentally retarded, the visually handicapped, and those with speech defects. The speech pathology curriculum (page 62) trains special teachers in speech correction. Students inter-

ested in other areas of work with exceptional children complete a regular curriculum leading to certification for kindergarten-primary, elementary or secondary school teaching and in addition take special courses depending upon the area in which certification is desired. Students in areas other than speech pathology arrange their programs individually with the adviser.

VISITING TEACHERS

Major adviser, Assistant Professor Edith West

The work of the visiting teacher is social work in the schools for the welfare and development of the individual child through adjustment of school-home problems. This work utilizes accurate and extensive psychological knowledge of the pupil, knowledge of and experience in the school, knowledge of and training in social work. It is assumed that to the four-year program outlined below there should be added experience in teaching and graduate work in the field of social work. This four-year undergraduate program will permit a student to teach in the field of social studies in **secondary schools** as well as to perform visiting teacher duties if such are in de-

mand, but a fully trained visiting teacher must have further professional training. The curriculum below provides undergraduate preparation for graduate work in the field of social work as well as the basic training for teaching in the social studies field. Elementary school teachers and those desiring to work in that field should consult an adviser in elementary education. See page 24.

The first two years are taken in the College of Science, Literature, and the Arts.

FRESHMAN AND SOPHOMORE YEARS

Com. 1-2-3, Communication (or Comp. 4-5-6 or Eng. A-B-C or exemption), 9-15

Hist. 1-2-3, Civilization of the Modern World, 9
 Nat. Sci. 7-8-9, General Biology, 10; or
 G.C. 10A-B-C, Human Biology, 9
 Soc. 1, Introduction to Sociology, 3
 Soc. 2, Intermediate Sociology, 3
 Soc. 49, Social Problems, 3
 Econ. 6-7, Principles of Economics, 10
 Hist. 20-21-22, American History, 9
 Pol.Sci. 1-2-3, American Government and Politics, 9
 Psy. 1-2, General Psychology, 6
 P.H. 3, Personal Health, 2
 P.H. 4, Health Problems of the Community, 2
 Physical Education, 3-5
 Electives to complete total of 96 credits

JUNIOR AND SENIOR YEARS

Ed. 55A-B, Introduction to Secondary School Teaching, 10
 Ed.Psy. 60, Introduction to Measurement and Statistics, 2-3
 Ed.Psy. 120, Basic Principles of Measurement, 3
 Ed.Psy. 158, Psychology of Adolescence, 3; or
 C.W. 132, Later Childhood and Adolescence, 3
 Ed.Psy. 159, Personality Adjustment and Mental Hygiene, 3
 Ed.Psy. 182, Education of Exceptional Children, 2
 Ed.Psy. 184, Education of the Slow-Learning Child, 2
 Ed.T. 69 and 69A-B-C, The Teaching of the Social Studies and Student Teaching, 11
 H.Ed. 180, The School and Society, 3
 C.W. 140, Behavior Problems in Younger Children, 2
 C.W. 141, Behavior Problems in Older Children, 2
 Soc. 50, Areas of Social Work, 3
 Soc. 53, Elements of Criminology, 3
 Soc. 91, Case Method Applied to the Study of Human Problems, 3
 Soc. 103, Juvenile Courts and Probation, 3
 Econ. 73, Manpower Economics and Problems, 3
 P.H. 59, Health of the School Child, 3
 Electives to total 186 credits

Section III. Description of Courses

This section contains descriptions of the courses offered in the College of Education and in certain schools and divisions in which some students take a major portion of their work. Courses in agriculture and home economics are described in the **Bulletin of the College of Agriculture, Forestry, Home Economics, and Veterinary Medicine**. Other courses representing general requirements, majors and minors in high school subjects, and general electives are described in the **Bulletin of the College of Science, Literature, and the Arts**.

The descriptions include the number of the course, the quarter or quarters when the course is usually offered (fall, winter, spring), the number of credits, the prerequisite courses, and the name of the instructor. 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. Since there are many changes from year to year and from quarter to quarter students will need to check carefully with the **Class Schedule** for the exact course offerings for each quarter.

Junior College courses, primarily for freshmen and sophomores, are numbered from 1 to 49; Senior College courses, primarily for juniors and seniors, are numbered from 50 to 99; courses numbered above 200 are for graduate students only. Courses designated with a capital "E" are at a graduate level and carry credit toward the master of education degree, but do not carry credit in the Graduate School.

An asterisk (*) after a graduate course number indicates that the course may be taken for independent work under Plan B for the Master's degree.

A dagger (†) indicates that all quarters of the course must be completed before credit is given for any quarter.

COURSE FEES

The following courses require payment of course fees as indicated.

Agricultural Education

\$1.50 per cred.—82, 91, 199E

Art Education

\$1.50 per qtr.—17, 18, 19

2.00 per cred.—84, 86, 86A, 87, 87A,
88, 88A, 185

3.00 per qtr.—56, 57, 58, 81

Curriculum and Instruction

\$2.00 per cred.—all courses

Education

\$2.00 per cred.—51A, 51B, 51C, 55A,
55B, 71A, 71B, 71C

Educational Psychology

\$1.00 per qtr.—217, 218

1.50 per cred.—142, 143, 144, 150

1.50 per qtr.—216A, 217A, 218A

Home Economics Education

\$2.00 per cred.—91, 93, 94, 197, 199E

Industrial Education

\$1.50 per cred.—1, 2, 3, 5, 6, 7, 10,
11, 12, 15, 16, 20, 21, 25, 26

2.00 per cred.—50A, 50B, 50C, 70, 75

Library Science

\$3.75 per cred. (max. \$45.00)—for all
courses for resident students, ex-
cluding Lib. 1

8.50 per cred. (max. \$100.00)—for

all courses for nonresident students, excluding Lib. 1

Note—Students paying maximum fee may take other courses with no college tuition charge.

Methods and Student Teaching

\$2.00 per cred.—all courses

Music Education

\$1.50 pr cred.—4, 5, 6, 59, 63, 64, 65

2.00 per cred.—50A, 50B, 53, 60, 61, 62

30.00 for one (2 cred.), \$60.00 for two (4 cred.) lessons per week—225E

Physical Education (men)

\$1.00 per cred.—1A, 1B, 1C, 2A, 2B, 2C

1.50 per cred.—4A, 4B, 4C, 5A, 5B, 5C, 6A, 6B, 6C, 7A, 7B, 7C, 8, 9A, 9B, 60B

2.00 per cred.—55, 73, 74, 75

Note—Towel and locker fee for students using Physical Education

facilities for activity, \$2.50 per qtr. payable at dept. Uniforms for class or recreational activity, \$2.00 per qtr. payable at dept.

Physical Education (women)

\$2.00 per cred.—47, 48, 57A, 57B, 90A, 90B, 90C, 94

2.00 per qtr.—50, 51 (or both)

2.50 per qtr. (max. \$5.00 per qtr.)—

All nonprofessional, 20A, 20B, 20C, 21A, 21B, 21C, 21D, 21E, 22A, 22B, 22C, 40A, 40B, 40C, 41A, 41B, 42

Public Health

\$1.00 per cred.—65, 66, 67, 119, 129, 138, 139, 173

1.00 per qtr.—80, 125, 140, 150

1.50 per qtr.—121, 122, 131

2.00 per qtr.—111, 181

3.00 per qtr.—143, 144, 184, 185, 186, 187, 188

\$100.00 per qtr.—169, 190

EDUCATION

General Courses

Ed.51A-B-C. Introduction to Secondary School Teaching. Not offered. See Ed.55A-B.

Ed.55A.f.w. Introduction to Secondary School Teaching. A basic course in secondary education. The pupil: development, individual differences, guidance; the public secondary school: purposes, status, history; the teaching profession: its evolution, organizations, ethics, problems. 5 cred.; prereq. Psy. 1-2. Mork and staff.

Ed.55B.w.s. Introduction to Secondary School Teaching. Basic secondary education continued. Measurement and evaluation, teacher-made and standardized tests and interpretation, statistics, marking and promotion; psychology of learning; curriculum, general methods, extra-curricular activities. Both Ed.55A and 55B must be completed before student teaching. 5 cred.; prereq. 55A; for nurs. ed. majors, Psy. 1-2. Mork and staff.

Ed.71A.f-Bw-Cs. Introduction to Elementary School Teaching. Students should enter the course in the fall, but in special cases students who have not had 71A may be admitted to 71B on recommendation of adviser.

71A.f. Individual Differences and Measurement. Basic course in individual and trait differences in relationship to educational practices; including basic principles of measurement and descriptive statistics. 5 cred.; prereq. Psy. 1-2. Cook.

71Bw. Educational Psychology. Basic course in child growth and development during the elementary school years; including principles of learning, adjustment, and special problems of educational disabilities. 5 cred.; prereq. 71A. Bond.

71Cs. The Elementary School Program. Basic course in modern school practices; including methods of instruction, curriculum development, school organization, and the relationship to other educational agencies. 5 cred.; prereq. 71A-B. Brueckner.

Ed.81f.w.s. Introduction to Education for Public Health Nurses. Principles, methods, and materials in education as applied to public health nursing situations. Group work emphasized. Not open to candidates for a degree in the College of Education. 3 cred. Grout.

AGRICULTURAL EDUCATION

- Agr.Ed.1f. Introduction to Agricultural Education.** An orientation course for students who are interested in exploring the opportunities in agricultural education. Qualifications of teachers and an overview of agricultural education in Minnesota. 1 cred. Ar.
- Agr.Ed.54w. Rural Education and Community Leadership.** An appraisal of community educational agencies; the process of and responsibilities for community leadership; the role of the school in the rural community; coordination of the school with non-school educational agencies. 3 cred.; prereq. soph., jr., sr. Ar.
- Agr.Ed.56s. Rural Education through Extension Methods.** Role of the Extension Service in rural education; methods and techniques of instruction in nonschool educational programs. 3 cred.; prereq. soph., jr., sr. Ar.
- Agr.Ed.81w.s. Teaching Agriculture.** Principles of learning applied to vocational agriculture. Use of the home, farm, and community in teaching agriculture. Guidance for rural youth. The Minnesota plan for vocational agriculture. 3 cred.; prereq. Ed.55B, jr., sr. Ar.
- Agr.Ed.82s. Methods in Teaching Agriculture.** Fundamentals of teaching vocational agriculture to high school students. The Future Farmers of America and use of *Minnesota Vo-Ag Planning and Record Book*. 3 cred.; prereq. 81, jr., sr. Ar.
- Agr.Ed.91f.w.s. Supervised Teaching Experience.** Supervised experience in work of agriculture instructor. Development of individual farming programs, contacting parents, program analysis of community needs, conducting classes, community activities, Future Farmers, and case studies. 6 cred.; prereq. 82 and C plus average in major, sr. Ar.
- Agr.Ed.101f.w. Young Farmer Education in Agriculture.** Organizing a continuing program of educational activities for farm youth not in school and not established in an occupation. Methods and techniques of instruction. Observation of young farmer programs. 2 cred.; prereq. 81 or cons. of instr., jr., sr. Ar.
- Agr.Ed.102f.w. Adult Education in Agriculture.** Systematic instruction for established farmers. Analysis of the farming situation with emphasis on improved farm management. Methods and techniques of instruction, and observation of adult education program. 2 cred.; prereq. 81 or cons. of instr., jr., sr. Ar.
- Agr.Ed.103f. Methods of Instruction in Mechanized Farming.** Methods of teaching mechanized farming including organization of shop program, equipment, and management of farm shop. Preparation and use of job sheets, instruction units, and demonstrations in presenting materials and problems. 3 cred.; prereq. 81 or cons. of instr., jr., sr. Ar.
- Agr.Ed.104f.w.s. Planning Program.** Developing a program of agricultural education in a community school. Integration with total school program. Administrative relationships and professional improvement. 2 cred.; prereq. last qtr. undergraduate registration or cons. of instr. Ar.
- Agr.Ed.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 cred.; prereq. sr. or cons. of instr. Ar.
- Agr.Ed.141f. Supervised Farm Practice in Vocational Agriculture.** Selection, planning, supervising, and summarizing of individual farming programs. Adaptation to meet needs of high school F.F.A. students, young farmers, and adults. 3 to 9 cred. per qtr.; prereq. 10 cred. in education, grad. or cons. of instr. Ar.
- Agr.Ed.145w. The Integrated Course of Study in Agriculture.** The philosophy, organization and administration of instruction in agriculture departments in the secondary schools. 2 cred.; prereq. 10 cred. in education, sr. Ar.
- Agr.Ed.154w.* Rural Education and Community Leadership.** Same as Agr.Ed. 54 but with additional reading or special problem required. 3 cred.; prereq. grad. or cons. of instr. Ar.
- Agr.Ed.199E. Internship.** Cred. ar.
- Agr.Ed.221f.w.s. Field Problems.** Making investigations, gathering data, and formulating plans regarding agricultural education. 3 cred. Peterson, Kitts.
- Agr.Ed.232f.w.s.* Research in Agricultural Education.** Introduction to investigational work in problems of teaching agriculture in high schools. Experience in selecting problems, preparation of bibliographies, analyzing and interpreting data and preparing manuscripts. Cred. ar.; Prereq. 15 cred. in education. Peterson, Kitts.
- Agr.Ed.250f.w.s. Supervision of Vocational Agriculture.** Supervision of vocational agriculture at the secondary level. Objectives, functions, responsibilities of state and local supervision; role of supervision in the teaching-learning process; organizing supervisory activities; aids to effective supervision. 1 to 3 cred.; prereq. cons. of instr. Peterson, Kitts.
- Agr.Ed.286w. Current Issues in Agricultural Education.** Analysis and discussion of significant issues. Opportunity for intensive study of problems related to local school programs. Cred. ar.; prereq. cons. of instr. Peterson, Kitts.
- Agr.Ed.291f.w.s. Seminar in Agricultural Education.** Cred. ar. Peterson, Kitts.

ART EDUCATION

- ArtEd.14f.s. Introduction to Art Education.** For art education majors previewing career opportunities, basic problems of teachers, professional qualifications, and guidance in making the most efficient use of educational resources at the University towards developing professional competence. 2 cred. Ar.
- ArtEd.17f.w.s. Pictorial Expression for Elementary Education.** Provides a background survey of art in life and education. Materials, techniques, and ideas important to children's art expression, relationship to adult expression, and significance in educational growth. 3 cred. Ar.
- ArtEd.18f.w.s. Design Activities for Elementary Education.** (See 17) Relationships between art and nature. Problems in invention, arrangement and decoration, color, lettering, posters, bulletin board displays, etc. 3 cred. Ar.
- ArtEd.19s. Functional Arts and Crafts in Elementary Education.** (See 17) Influence of art on modern life. Typical opportunities for integrated experiences. Clothing, architecture and interior design, community planning, commercial and industrial design, puppetry, dramatics, intercultural relations, holiday projects, etc. 3 cred. Ar.
- ArtEd.56f,57w,58s. 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 cred. per qtr.; prereq. concurrent reg. in Ed. 55A-55B. Page, Hastie.
- ArtEd.81w.s. Puppetry in Education.** Use of simple puppetry as a teaching technique and problems of motivation and correlation with school subjects. Construction, manipulation, and stage techniques related to typical school situations. 3 cred. Ar.
- ArtEd.84f.w.s. Teaching Art in the Elementary School.** Place and content of art in elementary school curriculum. Methods for securing optimum educational outcomes from art activities. 3 cred.; prereq. 17, 18. Gayne.
- ArtEd.85w. Art for Integration in Secondary Education.** A course for secondary teachers with no previous art training. Prepares teachers to appreciate and use art for furthering the objectives of their own fields. 3 cred. Ar.
- ArtEd.86f,87w,88s.† Student Teaching and Supervision of Art.** For seniors who are majors in art education. Observation, participation, practice teaching, and supervisory experiences with various types and levels of classes which art teachers teach and coordinate in educational systems. Concurrent registration for each quarter for ArtEd. 86A-87A-88A is required. Successful completion of the work for each quarter in both ArtEd. 86-87-88 and 86A-87A-88A is necessary for continuance in these courses. 2 cred. per qtr., 6 cred. required; prereq. Ed. 55A-55B, ArtEd. 56-57, approval of director of student teaching. Hastie and others.
- ArtEd.86A-87A-88Af.w.s.† The Teaching and Supervision of Art.** Assignments, class work, discussions, and the evaluation of specific experiences and problems illustrating art education as it is and as it might become. Concurrent registration in ArtEd. 86-87-88 is required and successful completion of the work for each quarter in both ArtEd. 86-87-88 and ArtEd. 86A-87A-88A is necessary for continuance in these courses. 2 cred. per qtr., 6 cred. required; prereq. 56-57, Ed. 55A-55B, approval of director of student teaching. Hastie and others.
- ArtEd.151w-152s-153. Curriculum Building in Art Education.** Functions of art in society for educational potentialities toward social improvement. Selection, evaluation, and organization of subject matter for the purpose of creating original teaching units, projects, etc. 3 cred. per qtr. Ar.
- ArtEd.156s. Intercultural Education through Art.** Approaches to international understanding and cooperation through recognition of esthetic contributions of diverse peoples to American life. 3 cred. Gayne.
- ArtEd.158s. Art Education in Europe.** Examination of current practices, problems, and achievements in art education in countries of Western Europe with particular reference to sources for and comparisons with practices in American art education. 3 cred. Gayne.
- ArtEd.184f. Advanced Course in the Teaching and Supervision of Art in the Elementary School.** Improving current practices through critical evaluation and utilization of research findings and introduction of new materials. Development of closer cooperation between classroom teachers and art education specialists. 3 cred. Gayne.
- ArtEd.185s. Advanced Course in the Teaching of Art in the Secondary School.** For experienced teachers of art and advanced students planning to teach in secondary schools. Emphasis on general research and critical examination of high school art programs. 3 cred. Hastie.
- ArtEd.189f. Application of Esthetic Theory in Education.** Contemporary theories of art, their psychological and philosophical foundations with experimental evidence. Open to teachers, supervisors, and administrators concerned with making art function in general education at all levels. 3 cred. Hastie.
- ArtEd.284w. Research in Art Education.** Application of research techniques to the field of art education, with experience in locating, defining, and studying basic problems through the use of objective tools of research. 2 cred. Gayne.

- ArtEd.295f,w.s. Problems in Art Education.** Individual specialization and creative projects selected. Projects may include advanced studio practice or technical solution of problems involving research or reading in a chosen field. Registration by special permission of major adviser. Cred. ar. Gayne and staff.
- ArtEd.296f,w.s. Seminar in Art Education.** Reports, evaluation of problems, recent literature. Participation by art education staff and guest specialists from related departments and from off campus. Open to advanced students in education. No cred. Art education staff.

CHILD WELFARE

- C.W.10s. Introduction to Child Study.** Orientation in child development through a survey of the nursery school, parent education, and mental hygiene approaches. 2 cred.; prereq. 3rd qtr. fr., soph. Cummings.
- C.W.40f,w.s. Child Training.** The development and training of young children. Observations in demonstration schools. (Not open to majors in the Nursery School-Kindergarten Curriculum.) 3 cred.; prereq. Psy. 1-2, soph., jr., sr. Fuller, Peterson.
- C.W.80f,w.s. Child Psychology.** The science of child development and its applications. 3 cred.; prereq. Psy. 1-2. Harris, Brieland.
- C.W.130f. Motor, Linguistic, and Intellectual Development of the Child.** Interpretation of the scientific literature. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Anderson and staff.
- C.W.131w. Personality, Emotional, and Social Development of the Child.** Interpretation of the scientific literature. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Anderson and staff.
- C.W.132s. Later Childhood and Adolescence.** Growth; mental, social, emotional, and personality development. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Harris.
- C.W.140f,w. Behavior Problems in Younger Children.** Types, origin, development, and treatment. 2 cred.; prereq. 12 cred. psy., ed. psy., or soc., sr., grad. Blodgett.
- C.W.141w.s. Behavior Problems in Older Children and Adolescents.** Types, origin, development, and treatment. 2 cred.; prereq. 12 cred. psy., ed. psy., or soc., sr., grad. Blodgett.
- C.W.142s. The Psychology of Atypical Children.** Physical and mental deviations and handicaps. Personal, social, and vocational adjustment. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Blodgett.
- C.W.143f. Problems of Mental Deficiency.** Diagnosis, care, training; social and vocational problems, legal aspects. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Blodgett.
- C.W.150f-151w-152s. Childhood Education.** 150f, History and Philosophy; 151w, Organization and Administration; 152s, Methods and Materials. 2 cred. per qtr.; prereq. 12 cred. in ed. or equiv., sr., grad. Fuller.
- C.W.160s. Physical Growth and Motor Development.** From early fetal life to maturity. 3 cred.; prereq. 12 cred. psy. or equiv., sr., grad. Roff.
- C.W.166f. Maturity and Aging.** Developmental changes in the aging and the aged; adjustment and care. 2 cred.; prereq. 12 cred. psy., ed., or soc., sr., grad. Anderson.
- C.W.170s. Parent Education.** Programs, materials, methods, organization and administration. Demonstrations of group procedures. 3 cred.; prereq. 15 cred. child welfare, home ec. ed., psy., soc. or pub. health, sr., grad. Cummings.
- C.W.185s. Children in a Changing World.** Effects of social change, depressions, wars, and catastrophes upon children. 3 cred.; prereq. 12 cred. psy., ed., or soc., sr., grad. Templin.
- C.W.190w. Use and Interpretation of Tests for Children.** Survey of mental testing for teacher, social worker, etc. 2 cred.; prereq. 12 cred. psy., ed. psy., or soc., sr., grad. Roff.
- C.W.200f,w.s. Observation and Study of Children.** Introduction to research and practical work. Required of all majors. 1 cred.; prereq. 12 cred. psy. and 3 cred. stat. Harris and staff.
- C.W.210s. Advanced Developmental Psychology.** Principles governing the development, organization and integration of behavior. 2 cred.; prereq. 130-131 or equiv., cons. of instr. Anderson.
- C.W.220f-221w-222s. Seminar in Current Research.** Reports, discussions. 1 cred. per qtr.; prereq. cons. of instr. Roff.
- C.W.223f-224w-225s.* Seminar in Developmental Theory.** Efficacy of various theories in interpreting developmental material. 1 cred. per qtr.; prereq. cons. of instr. Anderson.
- C.W.226w. Seminar in Projective Methods with Children and Adolescents.** Demonstrations, critical analysis and discussions of research tools as clinical devices. 2 cred.; prereq. cons. of instr. Harris.
- C.W.227s. Multiple Factor Analysis.** Mathematical rationale and concrete applications. 2 cred.; prereq. 3 qtrs. stat. and mental measurement. Roff.

- C.W.230f-231w-232s. Seminar in Recent Literature.** Reviews of current scientific articles. Attendance of candidates for degrees required. 1 cred. per qtr. Anderson.
- C.W.233w-234s. Research Methods.** Experimental, observational and statistical procedures in the study of children. 2 cred. per qtr.; prereq. 12 cred. psy. or ed. psy. including stat. Roff.
- C.W.240f-241w-242s. Practicum in Behavior Problems.** Supervised experience in the application of diagnostic and remedial procedures to children's behavior problems. Cred. ar.; prereq. 140-141, cons. of instr. Harris, Blodgett.
- C.W.250f,w.s. Internship in Professional Work with Children.** Practical experience under qualified supervision. Cred. ar.; prereq. cons. of instr. Anderson.
- C.W.260f-261w-262s. Seminar in Developmental Research and Practice.** Open only to students who have completed a year of graduate study. Required of Ph.D. candidates. 2 cred. per qtr. Staff.
- C.W.270f-271w-272s.* Readings and Research in Child Development.** Reports based on independent readings, research or projects in any field pertaining to child development or childhood education that meets the approval of the listed instructors. Required for M.A. Plan B students, but open to other graduate students. Cred. ar. Anderson, Fuller, Harris, Roff, Templin.
- C.W.274w-275s. Technique and Field Work in Parent Education.** Organization and methods of teaching parent groups. Lesson plans, observations, and field work. Cred. ar.; prereq. 170, cons. of instr. Cummings.
- C.W.290w-291s. Mental Examination of Preschool Children.** Intensive training and practice in the administration and interpretation of individual tests. Registration limited. 290w, Minnesota, Merrill-Palmer, Arthur; 291s, Stanford-Binet. 4 cred. per qtr.; prereq. 12 cred. in mental measurement, cons. of instr. Blodgett.

CURRICULUM AND INSTRUCTION

General Courses

- Ed.C.I.104s. Adult Education.** A survey course of the field of adult education dealing with agencies, programs, philosophies, history, and trends. Each student may devote some time to a field of special interest. 3 cred. Nolte.
- Ed.C.I.105f,w.s. Audio-Visual Materials in Education.** Characteristics, advantages, limitations, and practical schoolroom use of visual materials of nonprojection and projection types. Practice in operation of projection machines. 3 cred.; sr., grad. Ar.
- Ed.C.I.106w. Coordinating an Audio-Visual Education Program.** For persons having part-time or full-time responsibility for an audio-visual program. Criteria of equipment, facilities, and materials, in-service training of teachers, and special problems encountered in small and large systems. 3 cred.; prereq. 105 or cons. of instr. Ar.
- Ed.C.I.107w.s. Radio in Education.** Effective use of radio in the classroom. Production, techniques of classroom use, selection of equipment, teaching appreciation, and the administration of radio in the schools. 3 cred.; prereq. 9 cred. in ed. Tyler.
- Ed.C.I.107-108. Radio in Education.** Same content as Ed.C.I. 107 but expanded somewhat and offered during two quarters in alternate years. 2 cred. per qtr. Tyler. Not offered in 1952-53.
- Ed.C.I.109f,w.s. Audio-Visual Materials and Equipment Laboratory.** Practice in planning and making materials for audio-visual education and in the use of machines and equipment. 3 cred.; prereq. 105 or concurrent reg. or cons. of instr. Ar.
- Ed.C.I.117s. Rural Education for Administrators and Teachers.** 3 cred. Archer.
- Ed.C.I.129. Principles and Problems of Teaching Social Hygiene.** Social hygiene or sex education in its broadest aspects: physical, sociological, and psychological. Methods of social hygiene education and integration of material with total health curriculum. Primarily for teachers. 3 cred.; prereq. 9 cred. in ed. Pearce and others.
- Ed.C.I.133f. Consumer Education in the Schools.** Need for consumer education. Organizing a program in the school. Contribution of various subject-matter areas at secondary and elementary levels. 3 cred. Price.
- Ed.C.I.145f.s. Reading Difficulties.** Study of reading difficulties—their causes, prevention, and correction. Remedial practices in reading useful to the classroom teacher, school counselor, and reading specialist. 3 cred.; prereq. course in reading or basic training in counseling or school psychological work. Bond.
- Ed.C.I.151w. 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 cred. Brueckner.
- Ed.C.I.152. Adjustment of Schools to Individual Differences.** 3 cred.; prereq. 10 hrs. in ed. Ar.
- Ed.C.I.171f,w.s. Curriculum Laboratory Practice.** A practice course in the analysis and construction of units, courses of study, and curricula according to needs, interests, level, and specialization. 2 cred. per qtr.; prereq. 170A or B, cons. of instr. Bossing, Cook, Archer.

- Ed.C.I.174f,w.s-175f,w.s-176f,w.s.** **Clinical Methods and Practice in Speech Pathology.** Case history and analysis; testing and diagnosis of speech defects; techniques and work programs for treatment; practical clinical work. 3 cred. per qtr.; prereq. Spch. 61, 67, 119, 162, and 163 or concurrent reg. Bryngelson.
- Ed.C.I.205f,w.s.*** **Problems in Audio-Visual Education.** Cred. ar.; prereq. cons. of instr. Ar.
- Ed.C.I.207f,w.s.*** **Problems in Radio Education.** Individual problems for students whose work in Ed.C.I. 107 has indicated an aptitude and interest in the field. 1 to 3 cred.; prereq. 107. Tyler.
- Ed.C.I.215f,w.s.*** **Problems in the School Health Education Program.** For advanced students who wish to pursue independent study and experimentation in school health education. Cred. ar.; prereq. cons. of instr. Grouit.
- Ed.C.I.216f,w.s.*** **Field Work in the School Health Education Program.** Practical field experience in school health education under the supervision of qualified health educators. Details worked out in accordance with individual needs. Cred. ar.; prereq. cons. of instr. Grouit.
- Ed.C.I.217f,w.s.** **Seminar in the School Health Education Program.** Discussion and reports on current problems in school health education. Cred. ar.; prereq. cons. of instr. Grouit.
- Ed.C.I.227f,w.s.*** **Problems in Rural Education.** Cred. ar.; prereq. 117. Archer.
- Ed.C.I.243s.** **Recent Research in Reading.** Critical analysis of methodology and findings of current research in the field of reading. Appraising research methods, population limitations, and educational implications. 3 cred.; prereq. cons. of instr. Bond.
- Ed.C.I.271f,w.s.*** **Problems in Curriculum Construction.** Special problems in the field of the student's individual choice. 3 cred. per qtr.; prereq. cons. of instr. Archer, Bossing, Cook, Birkmaier, D. Johnson.
- Ed.C.I.273f,w.s.*** **Problems in Reading.** Recent problems, issues, studies, and findings. For those with previous training in reading who have a special problem, or who wish to survey the most recent literature. 3 cred. per qtr.; prereq. 143 or 144 or cons. of instr. Bond.

Elementary Education

- Ed.C.I.60f.s.** **The Teaching of Reading in the Elementary School.** Teaching reading in the elementary school with emphasis on the intermediate and upper elementary grades. Includes reading readiness, word recognition techniques, the development of basic study skills, development of word meanings, comprehension abilities, and interests and tastes in reading. 3 cred.; prereq. Ed. 71B. Bond.
- Ed.C.I.61f.s.** **The Teaching of the Social Studies in the Elementary School.** 3 cred.; prereq. Ed. 71C. Chase.
- Ed.C.I.62Af.** **The Teaching of Arithmetic in the Primary Grades.** The modern arithmetic program, the arithmetic curriculum, methods, evaluation of outcomes, diagnosis, instructional materials for young children. 2 cred.; prereq. Ed. 71B. Brueckner.
- Ed.C.I.62Bf,w.s.** **The Teaching of Arithmetic in the Intermediate Grades.** The modern arithmetic program, the arithmetic curriculum, methods, evaluation of outcomes, diagnosis, instructional materials. 3 cred.; prereq. Ed. 71B. Brueckner.
- Ed.C.I.63f,w.s.** **Children's Literature.** Extensive survey of old and new materials for children's reading in the elementary school program. 2 cred. D. V. Smith
- Ed.C.I.64w.s.** **The Teaching of English in the Elementary School.** Deals with development of language power in the elementary school in relation to all activities of the school day. 3 cred.; prereq. Ed. 71B. D. V. Smith (w), ar. (s).
- Ed.C.I.65f,w.s.** **The Teaching of Science in the Elementary School.** Objectives, content, materials, philosophy, and methods of instruction and evaluation of science teaching in the elementary school, with particular attention to practical applications to the classroom situation. 3 cred.; prereq. Ed. 71B, 10 hrs. nat. sci. Boeck, Goossen.
- Ed.C.I.66f,w.s.** **Treatment of Learning Difficulties.** Classroom procedures in diagnosis and treatment of learning difficulties at the elementary school level. Special consideration given to arithmetic, reading and other language arts. Taken concurrently with student teaching and requires development of case study in the schools. 3 cred.; prereq. concurrent registration for student teaching. Staff.
- Ed.C.I.102f.** **Teaching the Social Studies in the Elementary School.** Primarily for teachers in service. 3 cred.; prereq. Ed. 71C or equiv. Ar.
- Ed.C.I.119w.** **Elementary School Curriculum.** Principles underlying the selection and organization of subject matter for courses in the elementary school and a survey of the methods, problems, and findings of research by subjects. 3 cred.; prereq. Ed. 71C or equiv. Goossen.
- Ed.C.I.143f.** **Teaching and Supervision of Reading in the Elementary School.** Objectives, materials, and teaching procedures in lower and intermediate grades; survey of current practices and curricula; class and individual projects; observation of reading techniques and materials in the demonstration school. 3 cred.; prereq. 9 cred. in ed. Bond.

- Ed.C.I.146. Current Developments in Language Expression in the Elementary School.** Materials, methods, and current philosophies of language instruction in the elementary school. 2 cred.; prereq. Ed. 71C or equiv. Not open to students who have had Ed.C.I. 64. Archer.
- Ed.C.I.149w. Teaching and Supervision of Arithmetic in the Elementary School.** Function of arithmetic instruction; curriculum studies; development of socialized units; measurement and diagnosis; experimental research on methods of arithmetic instruction; literature on arithmetic. 3 cred.; prereq. Ed. 71C or equiv.; not open to those with cred. in Ed.C.I. 62A or B. Brueckner.
- Ed.C.I.150f. Supervision and Improvement of Instruction.** Functions and duties of a supervisor as related to the improvement of instruction; specific supervisory technique; objective analysis of classroom activity; concrete applications to present-day problems; case studies. 3 cred.; prereq. Ed. 71C or equiv. Brueckner.
- Ed.C.I.153. Supervision and Teaching of English in the Elementary Schools.** Improvement of instruction in language, grammar, spelling, and handwriting. 3 cred.; prereq. Ed. 71C or equiv. Archer.
- Ed.C.I.157f,w,s. Practice in Supervision.** Individual research on special supervisory problems; especially for supervisors in training. 3 cred. per qtr.; prereq. cons. of instr. Brueckner.
- Ed.C.I.170A. Curriculum and Course of Study Construction.** A study of the principles and methods for the selection and organization of units, courses of study, and curricula at the elementary school level. 3 cred.; prereq. 119 or cons. of instr. Ar.
- Ed.C.I.173As. Organizing Units of Instruction in the Elementary School.** Principles and procedures involved in the organization of units; utilizing natural science and social studies in the development of skills in reading and study, oral and written composition, arithmetic, and the arts. 3 cred.; prereq. 119 or teaching experience. Cook.
- Ed.C.I.181w. Foundations of Elementary School Methods.** Survey of current philosophy and research which form the bases for improvement of elementary school instruction. 3 cred.; prereq. 9 cred. in ed. Brueckner.
- Ed.C.I.226f,w,s. Seminar in Elementary School Problems.** No cred. Brueckner, Bond, Cook, Archer.
- Ed.C.I.261f,w,s.* Special Problems in the Improvement of Instruction.** Primarily for graduate students majoring in supervision and others qualified to make intensive studies of specific problems related to school supervision. Fall, surveys of instruction; winter, construction of tests for measuring the extent to which objectives are achieved; spring, problems in the evaluation of teaching. Cred. ar.; prereq. cons. of instr. Brueckner.
- Ed.C.I.263w.* Research in Arithmetic Instruction.** Recent research in curriculum, graduation of subject matter, methods, materials, and supervision of arithmetic. 3 cred. Brueckner.
- Ed.C.I.264s.* Research in Educational Diagnosis.** Recent research in methods of diagnosis in education, and techniques of preventive and remedial teaching. 3 cred. Brueckner.
- Ed.C.I.265f,w,s.* Research in Supervision.** Recent research in supervision, teacher rating, surveys of instruction, and school and community relations. Cred. ar.; prereq. cons. of instr. Brueckner.

Secondary Education

- Ed.C.I.58f,w,s. Core Curriculum Foundations.** A study of the methods of teaching applicable to the core curriculum. Special attention will be given to problem solving and the preparation of units of instruction. For sophomores and juniors in the core curriculum program. 1 cred.; prereq. cons. of instr. Bossing.
- Ed.C.I.113f,w. High School Curriculum.** Viewpoints and curriculum issues; reorganization trends; typical research findings by subjects and analysis of state and local curricula. 3 cred.; prereq. Ed. 55A-B or equiv. Bossing.
- Ed.C.I.122s. Literature for Adolescents.** Background for pupil guidance in extensive reading in junior and senior high schools. 2 cred.; prereq. Ed. 55B or junior-senior high school teaching experience. D. V. Smith.
- Ed.C.I.125f,w,s. Occupational Information Laboratory.** Experience in using, reviewing and evaluating occupational information. Study of sources and types of material, occupational filing plans and practical techniques at the secondary school level. 3 cred.; prereq. cons of instr. Dugan.
- Ed.C.I.131f. Advanced Course in Teaching the Technical Business Subjects.** Recent research and trends in teaching the technical business subjects. 3 cred. Price.
- Ed.C.I.132s. Teaching the Basic Business Subjects.** Recent trends and developments in teaching junior business training, economic geography, marketing, business law, consumer education, and bookkeeping. 3 cred. Price.
- Ed.C.I.134s. Materials and Methods in Consumer Education.** Development of teaching units, emphasis on teaching methods, and recent aids and materials. 3 cred.; prereq. cons. of instr. Price.

- Ed.C.I.135s. Group Procedures in Guidance.** Problems of group work in guidance in secondary schools. Content and materials for home room groups, occupations units, and other guidance courses in junior and senior high school. 3 cred.; prereq. 9 cred. in ed., Ed.Psy. 133 or cons. of instr. Dugan.
- Ed.C.I.136f. Business and Distributive Education under the Vocational Acts.** Principles, practices and legislation followed in developing cooperative part-time, extension part-time and evening school programs under Smith-Hughes and George Barden Acts. Basic course for teacher-coordinators and vocational administrators. 3 cred. Meyer.
- Ed.C.I.137A. Materials and Methods in Cooperative Part-Time Classes.** Related vocational materials and methods for cooperative part-time distributive, office, miscellaneous trades and diversified occupations classes. 3 cred. Meyer.
- Ed.C.I.137B. Advanced Materials and Methods in Cooperative Part-Time Classes.** Individual and group work on related vocational materials. New methods of teaching cooperative part-time distributive, office, miscellaneous trades and diversified occupations classes. 3 cred.; prereq. cons. of instr. Meyer.
- Ed.C.I.138. Training Store and Office Supervisors.** Supervisory training problems and elementary training techniques used in stores and offices. Enables coordinator to conduct short unit courses for store and office supervisors. 3 cred.; prereq. cons. of instr. Meyer.
- Ed.C.I.139w. Coordination Techniques.** Practical problems encountered by the coordinator in his daily work concerning the cooperative part-time program. Guidance and selection; placing students in work stations; assisting adjustments; developing the training program. 3 cred. Meyer.
- Ed.C.I.141s. Cooperative Part-Time Work Experience Programs.** Planning, organizing, curriculum building, plant and equipment, promoting and evaluating cooperative part-time distributive, office, miscellaneous trades and diversified occupations programs. 3 cred. Meyer.
- Ed.C.I.142. Business and Distributive Programs for Adults.** Selection and training of evening school instructors, planning and promoting evening school distributive education classes. 3 cred. Meyer.
- Ed.C.I.144w. Teaching of Reading in Secondary Schools.** Teaching procedures, objectives and materials, with special consideration for the teaching of reading in the various subject-matter fields. 3 cred.; prereq. 9 cred. in ed. Bond.
- Ed.C.I.154. Materials and Methods in Adult Distributive Education Classes.** Survey of course outlines, reference materials and teaching aids. Construction of units of instruction. 3 cred.; prereq. cons. of instr. Meyer.
- Ed.C.I.155s. Materials Laboratory for Social Studies Teachers.** A seminar in the study of printed and audio-visual materials, with reference to their use in social studies classes. 3 cred.; prereq. cons. of instr. McCune, West.
- Ed.C.I.156s. Trends in Business Education.** Historical development of business education; trends in philosophy, curriculum, and teaching procedures. 3 cred. Price.
- Ed.C.I.161s. Curriculum Construction in Business Education.** Curriculum problems in business education, including organization, with emphasis on preparation of teaching units. 3 cred.; prereq. 113. Price.
- Ed.C.I.168f. Current Developments in the Social Studies.** A survey of contemporary literature, curricular trends, and developments in methods. 2 cred.; grad. McCune.
- Ed.C.I.169w. Extracurricular Activities.** Types of activities in junior and senior high schools; aims and values; practices in organizing, administering, and supervising; methods of evaluation. 4 cred.; prereq. Ed. 55A-B or equiv. Bossing.
- Ed.C.I.170B. Curriculum and Course of Study Construction.** Principles and methods for selection and organization of units, courses of study, and curricula. 3 cred.; prereq. 113 or 119 or cons. of instr. Bossing.
- Ed.C.I.173B. Organizing Units of Instruction in the Secondary School.** Development of principles and procedures for construction and teaching of units of instruction. 3 cred.; prereq. 113 or cons. of instr. Bossing.
- Ed.C.I.191s. Advanced Course in the Teaching and Supervision of Secondary Mathematics.** Present practices in methods, materials, and curriculum development in secondary mathematics; principles of learning applied to mathematics; review of research; preparation and evaluation of units, tests, and materials of instruction. 3 cred. D. Johnson.
- Ed.C.I.199Ef.w.s. Internship.** Advanced supervised teaching and practice work at the graduate level for candidates for the master of education degree. Cred. ar. Grim.
- Ed.C.I.201f.w.s.* Problems in Teaching the Social Studies.** Each student studies one problem intensively and gives oral reports and a final written report. 3 cred. per qtr.; prereq. 168, 204 or cons. of instr. Morse, McCune, West.
- Ed.C.I.204w. Social Studies Curriculum.** Review of techniques and practices of curriculum-making in the social studies at all grade levels. 3 cred. McCune.

- Ed.C.I.222f,w.s. Seminar—Current Problems in the Techniques of High School Instruction.** Required with or without credit for candidates for M.A. or Ph.D. in the secondary field. Prereq. Ed. 55A-B and senior methods. Bossing, Boardman, R. Keller, D. V. Smith, Stout.
- Ed.C.I.225f,w.s.* Special Problems in Supervision of Instruction in Secondary Schools.** Special problems in supervision primarily for graduate students and supervisors in schools who are qualified to make intensive studies. Cred. ar.; prereq. cons. of instr. Boardman, Keller, Stout.
- Ed.C.I.238f,w.s.* Problems in Distributive Education.** Investigation of particular problems in the field of distributive education. Cred. ar.; prereq. cons. of instr. Meyer.
- Ed.C.I.239f,w.s.* Problems in Business Education.** Special investigations in the field of the student's interest. Cred. ar.; prereq. cons. of instr. Price.
- Ed.C.I.266s. Supervision of High School Instruction.** The present status of high school supervision; its proper scope and function. Combines principles and their application to improving high school instruction. 3 cred.; prereq. Ed.Psy. 293 or cons. of instr. Boardman.
- Ed.C.I.287f.* Advanced Course in the Teaching of Science.** A study of recent developments in the teaching of science and a critical evaluation of the investigations dealing with science teaching. 3 cred.; grad. P. O. Johnson.
- Ed.C.I.294f,w.* Advanced Course in Curriculum and Methods in Secondary School English.** Evaluates present content and method in the light of research and recent trends in teaching. 2 cred. per qtr.; prereq. Ed.T. 75A-B-C or equiv. D. V. Smith.
- Ed.C.I.296f,w.s.* Special Problems in Teaching English.** Special research problems in the field of the student's individual choice. Cred. ar. D. V. Smith.

Higher Education

- Ed.C.I.184f. Supervision of Student Teaching.** Designed for persons planning to supervise or administer student teaching and other professional laboratory experiences in elementary and secondary education. 3 cred.; prereq. 15 cred. in ed. or cons. of instr. Grim.
- Ed.C.I.228f,w.s.* Problems of Higher Education and Teacher Education.** Problems of student personnel, college curricula and instruction, organization and administration. Offered as a seminar one quarter a year and as an individual problems course each quarter. Cred. ar.; prereq. cons. of instr. Cooper, Eckert, Grim.
- Ed.C.I.250f,w. Higher Education in the United States.** A study of the development, present status and outlook for American colleges. Topics considered include: the purposes of higher education; types of program provided; trends in curriculum, instruction, and administration; and the evaluation of outcomes. 3 cred.; prereq. a year of grad. study in any field or 18 cred. in ed. Eckert.
- Ed.C.I.251w. Curriculum Trends in American Colleges.** A study of basic principles involved in the development of college programs. After examining the curriculum as a whole, certain recurrent problems in designing general education courses and sequences will be studied critically. 3 cred.; prereq. a year of grad. study in any field or 18 cred. in ed. Eckert.
- Ed.C.I.252s. Effective College Teaching.** A review of the philosophical and psychological bases of instruction, followed by careful study of methods currently employed to encourage, guide and appraise students' learning. The college teacher's status and services are also examined. 3 cred.; prereq. a year of grad. study in any field or 18 cred. in ed. Eckert.
- Ed.C.I.253f,w.s. Seminar on the Improvement of College Instruction.** Planned for instructors, teaching assistants, and mature graduate students from various departments of the University and instructors from other institutions. Current problems, research, and trends in the area of instruction. Offered with cooperating staff of various teaching departments. Emphasis determined by immediate and future needs of the students enrolled. Cred. ar. or non-credit; prereq. cons. of instr. Eckert, Wrenn, and others.
- Ed.C.I.254f,w.s. Directed Experience in College Instruction.** An individualized program under guidance of an instructor or department. Planned to provide understandings, procedures and skills related to application of instructional theory, curriculum development, observation, and evaluation practices. Offered with cooperating staff of various teaching departments. Prereq. cons. of instr. Cred. ar. Eckert, Wrenn, and others.
- Ed.C.I.284f,w.s.* Problems in Student Teaching.** Research problems in the supervision, organization, and administration of student teaching and laboratory experiences on the elementary and secondary levels. 3 to 9 cred.; prereq. cons. of instr. Grim.
- Ed.C.I.285w,286s. The Professional Education of Teachers.** For instructors, administrators, and personnel workers in teacher educating institutions. First quarter is general and can be taken independently; second quarter is for persons planning to work in the professional curriculum of teacher education. Status of teacher education, selection, curriculum, certification, graduate programs, trends, and re-

search. 3 cred. per qtr.; prereq. Ed.C.I. 285—15 cred. in ed. including H.Ed. 182 or Ed.C.I. 184 and Ed.C.I. 250 or Ed.Psy. 250 or cons. of instr.; Ed.C.I. 286—Ed.C.I. 285 or cons. of instr. Grim.

EDUCATIONAL ADMINISTRATION

General Courses

- Ed.Ad.124f. Public School Administration.** The organization, administration, and general support of public schools in state and local school districts. 3 cred.; prereq. 9 cred. in ed., sr. Neale.
- Ed.Ad.210s.* Financial Aspects of Public School Business Administration.** Financial program planning, budgeting, accounting, cost finding, income and expenditure control; and the preparation and analysis of financial reports. 3 cred.; prereq. 227. Neale.
- Ed.Ad.225f.* Pupil Personnel Administration.** Child accounting records and reports, attendance department, school census, pupil adjustment and progress, pupil health and safety and legal aspects of pupil personnel administration. 3 cred.; prereq. 124. Neale.
- Ed.Ad.226s.* School Plant Planning and Management.** Plant program planning and financing, including operation and maintenance of public school buildings. 3 cred.; prereq. 227. Neale.
- Ed.Ad.227w.* Teacher and Employee Administration.** Selection and placement of school employees, salary schedules, conditions of service, records and reports, and legal aspects of teacher and employee personnel administration. 3 cred.; prereq. 225. Neale.
- Ed.Ad.228f,w,s.* Special Problems in Educational Administration.** Designed primarily for superintendents and principals qualified to make intensive studies of specific problems related to the administration of a school system. 1 to 3 cred.; prereq. 225. Neale.
- Ed.Ad.230f.* Public Relations for Schools.** Theory and practice of educational interpretation. Principles involved; machinery and personnel; techniques of working with groups; the teacher's contacts with the community; the role of the pupil; professional and lay organization. 3 cred.; prereq. 225. Neale.
- Ed.Ad.235f,w,s. Seminar in Educational Administration.** Enrolment limited to candidates for Master's degrees under Plan A and candidates for Ph.D. degrees in educational administration. No cred. Neale.

Elementary Education

- Ed.Ad.115w. Organization of the Elementary School.** Problems relating to the organization for instruction and classification of pupils in elementary schools with critical examination of current practices. 3 cred.; prereq. 9 cred. in ed. Neale.

Secondary Education

- Ed.Ad.133f. Basic Procedures in Student Personnel Work.** Basic principles and current practices in the development and operation of a student personnel program. Emphasis on broad areas of guidance services and related techniques. 3 cred.; prereq. 9 cred. in ed. Dugan.
- Ed.Ad.167s. Junior High School.** Sources of the movement; purposes, functions, and limitations; types of reorganization; fundamental problems of reorganization; reorganization of subject matter. 3 cred.; prereq. 9 cred. in ed., sr., grad. Bossing.
- Ed.Ad.218f,w,s. Recent Literature in Secondary Education.** Seminar on current problems and literature in secondary education. Cred. ar. Boardman, Bossing, Stout.
- Ed.Ad.263f. Organization of the Secondary School.** Organization of secondary school units, internal organization for administration and supervision. 3 cred. Boardman.
- Ed.Ad.264w. Administration of Instructional Activities in the Secondary School.** Curriculum, teacher selection, schedule making, extracurricular activities, guidance, pupil control. 3 cred. Boardman.
- Ed.Ad.265s. Administration of Noninstructional Activities in the Secondary School.** Housing forms, records, marks, finance, reports, and community relationships. 3 cred. Boardman.
- Ed.Ad.270f,w,s.* Special Problems in Secondary Education.** Primarily for those qualified to undertake research. Cred. ar., maximum 9; prereq. cons. of instr. Boardman, Bossing, Keller, Stout.

Higher Education

- Ed.Ad.253. Administration in Higher Education.** Control faculty and employee personnel administration, budget making and administration, financial accounting and reporting, protection of college funds, public relations. 3 cred.; prereq. cons. of instr. Neale. Not offered 1952-53.
- Ed.Ad.274w. The Junior College.** Present status of the junior college, its development, purposes and functions, organization, curriculum, and probable trends. 3 cred. Boardman.
- Ed.Ad.290. Financing Higher Education.** 3 cred.; prereq. cons. of instr. Neale. Not offered 1952-53.
- Ed.Ad.291. Public Relations for Colleges and Universities.** 3 cred.; prereq. cons. of instr. Neale. Not offered 1952-53.

EDUCATIONAL PSYCHOLOGY

General Courses

- Ed.Psy.60f.s. Introduction to Measurement and Statistics.** A study of measures of central tendency, variability, and correlation as well as principles of test construction. 2 or 3 cred.; prereq. 6 cred. in psy. Van Wagenen.
- Ed.Psy.120f.s. Basic Principles of Measurement.** Principles of measurement applied to the construction and evaluation of tests and to the interpretation of scores. 3 cred.; prereq. 60 or equiv. Cook.
- Ed.Psy.125f.w. Social Structure of Student Groups.** Survey of selected literature on group dynamics; practical application of social-psychological concepts to the analysis of group behavior by experimentation. 3 cred.; sr., grad. Flanders.
- Ed.Psy.126s. Advanced Analysis of Behavior in Groups.** Practice in the analysis of group behavior by laboratory experimentation. 3 cred.; prereq. 125, sr., grad. Flanders.
- Ed.Psy.133f. Basic Procedures in Student Personnel Work.** (See Ed.Ad. 133.) 3 cred. Dugan.
- Ed.Psy.140w. Instruments and Techniques of Measurement.** An intensive study of selected instruments for measuring intelligence, achievement, interests, attitudes, and personality traits with emphasis upon their use in educational guidance, personnel work, administration, and supervision. 3 cred.; prereq. 120 or equiv., sr., grad. Cook.
- Ed.Psy.142f.w. Individual Mental Testing.** Revised Stanford-Binet and Wechsler-Bellevue Adult or Wechsler Intelligence Scale for Children. Student supplies materials for at least one test. Full day or two mornings per week required for practice administration of tests. 3 cred.; prereq. 120 or equiv., sr., grad. Reynolds.
- Ed.Psy.143s. Advanced Individual Mental Testing.** Development of proficiency in administering and interpreting three or four selected individual mental tests. 3 cred.; prereq. 142 and cons. of instr. Reynolds.
- Ed.Psy.148w.s. Clinical Diagnosis of Reading Difficulties.** Study of the psychology of reading difficulties, emphasis on clinical diagnosis of reading problems, their relationship to psychological factors, and their clinical remedial correction. 3 cred.; prereq. Ed.C.I. 145 and 9 hrs. of psy. or ed. psy. Bond.
- Ed.Psy.150f.w.s. Clinical Practice in Remedial Teaching.** Practice in remedial tutoring of individual children who have experienced difficulty in school learning. 3 cred.; prereq. Ed.C.I. 145 or 151 and cons. of instr. Bond, Reynolds.
- Ed.Psy.151f.w.s. Clinical Practice in Educational Diagnosis.** Practice in diagnosis of school learning problems. Includes measurement, interview technique, preparation of case reports, etc. Work with children referred to the Psycho-Educational Clinic. 2 to 6 cred.; prereq. 142 or Ed.C.I. 145 and cons. of instr. Bond, Reynolds.
- Ed.Psy.159f.s. Personality Development and Mental Hygiene.** Survey course emphasizing understanding of personality and development and mental hygiene for self and others. 159f for seniors and first year graduate students only—special reference to elementary and secondary classroom conditions. 159s for graduate students only—attention given to basic theory, group and individual procedures in treatment. 3 cred. Wrenn.
- Ed.Psy.182f. Education of Exceptional Children.** Overview of the field of special education. Especially for classroom teachers, counselors, supervisors, and administrators; also the initial course for students working for special class certificates. 3 cred.; prereq. Ed. 55B or 71C or equiv. Reynolds.
- Ed.Psy.183s. Education of Gifted Children.** A study of the abilities and characteristics of intellectually gifted children and adults. 2 cred.; prereq. Ed. 55B or 71C or equiv. Van Wagenen.

Ed.Psy.184s. Education of the Slow-Learning Child. 2 cred.; prereq. 182. Reynolds.

Note: Courses 185, 186, 187, pertaining to the education of the auditorially handicapped child, the visually handicapped child, and the crippled child are offered periodically in Summer Sessions.

Ed.Psy.208w.* Methods in Educational Research. A study of the methods and techniques employed in the investigation and report of educational problems. Suggested for all candidates for graduate degrees. 3 cred.; grad. P. O. Johnson.

Ed.Psy.216f-217w-218s. Statistical Methods in Education. Designed to lay the foundations of statistical theory and to give practice in applying the theories in the solution of educational and psychological problems. 3 cred. per qtr.; grad. P. O. Johnson.

Ed.Psy.216af-217aw-218as. Statistical Methods in Education—Laboratory. For students who wish more experience in the solution of problems and the use of machines than is obtained in the lecture course 216-217-218. 2 cred. per qtr. P. O. Johnson, Moonan.

Ed.Psy.219f. Design and Analysis of Statistical Investigations. For students who desire a functional knowledge of modern principles of designing efficient experiments and other types of observational programs, improved sampling techniques, and the correspondingly appropriate methods of analyzing observational results. 3 cred.; prereq. 218 or cons. of instr. P. O. Johnson.

Ed.Psy.220w-221s. Advanced Theory of Measurement. The principles underlying construction and use of psychological and educational measuring instruments and of the limitations of tests for purposes of measurement in experimentation and evaluation of students' work. 2 cred. per qtr.; prereq. 60 or 120, 216 or equiv. Van Wagenen.

Ed.Psy.225w.* Diagnosis as a Phase of Counseling. An advanced course covering the personality concepts involved in diagnosis, essential skills and common errors, principles of diagnosis. 3 cred. per qtr.; prereq. 140 (or taken concurrently), 133, or 250, or Psy. 130. Wrenn.

Ed.Psy.226s.* Interviewing Procedures in Counseling. An advanced course covering various philosophies and approaches in counseling, interviewing skills, concepts of therapy, analysis of student and counselor attitudes in counseling. 3 cred. per qtr.; prereq. 140, 133 or 250, or Psy. 130 and 225 or equiv. Wrenn.

Ed.Psy.233f.w.s.* Problems in Guidance and Personnel Work. Investigations of particular problems in the personnel field on an individual basis. No class meetings. 1 to 9 cred. Edwards, Dugan, Wrenn.

Ed.Psy.240f.w.s.* Problems in Measurement. Intensive study and individual research in problems of educational measurement. 3 cred. per qtr. P. O. Johnson.

Ed.Psy.243f.w.s.* Problems in Statistics for Students in Education and Psychology. A problems course devoted to recent developments in statistical science with special reference to their application to educational and psychological problems. 3 cred. per qtr. P. O. Johnson.

Ed.Psy.253f.w.s.* Research Problems. Cred. ar.; prereq. cons of instr. Staff.

Ed.Psy.260f.w.s. Educational Psychology Seminar. For all Ph.D. majors in educational psychology. Purposes include: integrating course work in all areas of educational psychology and related fields, analyzing new developments, and presenting Ph.D. dissertation outlines. No cred. Staff.

Ed.Psy.280f.w.s. Practicum in Group Leadership. Supervised practice in leading a discussion or activity group. 3 cred.; prereq. cons. of instr. Flanders.

Ed.Psy.290s. Individual Differences. A study of group and individual differences and their relations to educational practice. 3 cred. Flanders.

Ed.Psy.293w.* Psychology of Learning. Principles and research in human learning and their implications for curriculum and instruction. 3 cred.; prereq. 12 cred. in psy. and ed.psy. Mork.

Ed.Psy.294s.* Recent Theory and Research in Human Learning. 3 cred.; prereq. cons. of instr. Mork.

Elementary Education

Ed.Psy.113f-114w-115s. Psychology of Elementary School Subjects. Research studies in the field of psychology of elementary school subjects. 2 cred. per qtr.; prereq. 9 cred. in ed. and psy. Van Wagenen.

Secondary Education

Ed.Psy.134w. School Counseling Procedures. Principal emphasis upon basic principles and practices related to the work of counselors in the public schools. Lectures, discussion, audio-visual aids, practice in case study analysis and interviewing. 3 cred.; prereq. 120, 133 and cons. of instr. Dugan.

Ed.Psy.158s. Psychology of Adolescence. A study of changes characterizing the transition from childhood to adult life. 3 cred.; prereq. Ed. 55B or equiv. Edwards.

Ed.Psy.282f.w.s. Practice in High School Personnel Work. Experience in counseling, testing, and related personnel work procedures in the high school program. 3 cred.; prereq. cons. of instr. Dugan.

Higher Education

- Ed.Psy.250f. College Student Personnel Work—Development and Administration.** For advanced students planning to become personnel workers, teachers, or administrators in college or university. Place of student personnel program in the institution and administration of program. 3 cred.; prereq. one course in higher ed. or cons. of instr. Wrenn.
- Ed.Psy.251f.w.s.* College Student Personnel Work.** Weekly seminar discussions of specialized phases of college student personnel and noneducational personnel work. Fall: student activities; winter: personnel services; spring: coordination with non-academic personnel procedures. 1-3 cred.; prereq. 250 or other course in higher ed. Wrenn.
- Ed.Psy.254s. Measurement and Evaluation in Higher Education.** A consideration of the examination program in American institutions of higher learning; principles of examination construction at the college level; the design of investigations and the critical evaluation of investigations in higher education. 3 cred.; grad. P. O. Johnson.
- Ed.Psy.281f.w.s. Practice in Personnel Work.** Supervised experience in counseling at college and adult levels. Student Counseling Bureau section, three consecutive quarters beginning fall; other assignments any quarter. 3 cred. per qtr.; prereq. 225-226 or cons. of instr. Edwards, Wrenn, Hagenah.

HISTORY AND PHILOSOPHY OF EDUCATION

"Philosophy of education" is the deliberate effort to think as critically and adequately as possible regarding the work of the schools. An examination of the courses listed below will reveal that they fall into a certain pattern; also that they suggest increasing complexity and depth as the numbers increase. The *basic sequence* of courses in philosophy of education includes H.Ed. 76, H.Ed. 180, H.Ed. 141 and H.Ed. 242. The other courses offered represent more intensive developments of certain crucial problems encountered in the *basic sequence*.

General Courses

- H.Ed.71f.w.s. Brief Course in History of Education.** Current school problems and educational theories in the light of their history. Emphasis upon eighteenth and nineteenth centuries; work of great educators, and education in the United States. 3 cred. Alexander.
- H.Ed.76f. Introduction to Philosophy of Education.** Basic presuppositions involved in defining the aims of education, its relation to state and individual, and its organization and administration. The development of an adequate personal philosophy of education. 3 cred. Beck.
- H.Ed.101f. Historical Foundations of Modern Education.** Historical analysis and interpretation of important elements in modern education derived from the Greeks, Romans, Middle Ages, and Renaissance. 3 cred. Alexander.
- H.Ed.102w. History of Modern Secondary and Higher Education.** Historical study of the origin, aims, growth of existing types of American and European secondary schools. 3 cred. Alexander.
- H.Ed.103. History of Modern Elementary Education.** The development of educational theory and the evolution of the common schools. Not open to those with cred. in H.Ed. 71. 3 cred. Alexander. Not offered in 1952-53.
- H.Ed.110w.s. Intercultural Education.** A study of racial, religious, and nationality problems with special reference to their importance for the schools. 3 cred. Ar.
- H.Ed.131w. Comparative Education.** This course compares European, Asiatic, and American systems and philosophies of education. Emphasis placed on exploring the possibilities of international education. 3 cred. Beck.
- H.Ed.141f. Critical Issues in Contemporary Education.** Designed to introduce graduate students to ideas involved in current theory and practice. 3 cred. Beck.
- H.Ed.155s. History of Education in the United States.** Development of elementary and secondary schools in the United States with emphasis on the nineteenth century. 3 cred. Alexander.
- H.Ed.178. Education and the Problems of American Democracy.** An exploration of the possibilities of building a democratic discipline in the schools. 3 cred. Ar. Not offered in 1952-53.
- H.Ed.179f. Critical Thinking for Teachers.** Examination of typical education materials for the purpose of increasing the ability of teachers to think more logically, to read and listen more critically, and to convey these abilities to students. 3 cred. Ar.

- H.Ed.180f.w.s. The School and Society.** Selected readings in social science and philosophy give the student an opportunity to integrate points of view in thinking about the roles that the school plays in present-day society. 3 cred.; prereq. Ed. 55A-B or 71A-B-C, sr. Beck and others.
- H.Ed.182s. Comparative Philosophies of Education.** An intensive examination of competing philosophies of education. 3 cred.; prereq. 76 or 141. Beck.
- H.Ed.241f.w.s.* Problems in the History and Philosophy of Education.** For graduate students interested in research and original work in these areas. Cred. ar.; prereq. cons. of instr. Beck, Alexander.
- H.Ed.242s. Seminar in Educational Philosophy.** For advanced students of educational philosophy; critical study and discussion of special problems in educational philosophy. 3 cred.; prereq. cons. of instr. Beck.

HOME ECONOMICS EDUCATION

- H.E.Ed.90f.s. Child Training.** Growth and development of children and problems in training. Emphasis on the pre-school child. Observations of children. 3 cred.; prereq. Psy. 1-2, soph., jr., sr. Peterson.
- H.E.Ed.91f.w.s. Observation, Materials, Teaching in Home Economics.** Philosophy of the home economics program; students' needs and interests; teaching materials; curriculum guides and unit construction; development of home economics in the school program. 5 cred.; prereq. H.E. 4, 21, 22, 41, Ed. 55A-B, home experience, jr., sr.; parallel H.E.Ed. 93. Rose, Ford, Kafka.
- H.E.Ed.92f.w.s. Teaching Problems in Home Economics.** Study of teaching procedures; management of homemaking department, space and equipment; relationship of teacher to school, community, and profession. 2 cred.; prereq. 91, 93, sr.; parallel with H.E.Ed. 94, 192, and 194A. Rose.
- H.E.Ed.93f.w.s-94f.w.s. Supervised Teaching in Home Economics.** Observation, participation, and actual teaching experience under supervision in different home economics situations and on different age levels. In the second quarter the student spends a month in a selected school in the state. 9 cred.; prereq. H.E. 4, 21, 22, 41, Ed. 55A-B, jr., sr.; students must have completed home experience work in home economics. Rose and others.
- H.E.Ed.95f.w.s. 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 cred.; prereq. 91, 93; jr., sr.; cons. of head of Home Economics Education and the director of Agricultural Extension. Rose and others.
- H.E.Ed.192f.w.s. Evaluation in Home Economics.** Measuring progress toward important goals in different areas of home economics; available tests and other evaluation materials; construction and refinement of various evaluation instruments. Elementary statistical techniques useful to home economics teachers. 3 cred.; prereq. Ed. 55A-B, H.E.Ed. 91, 93, sr., grad. Army, Rose.
- H.E.Ed.193As. Home Economics Curriculum (secondary level).** Contributions of home economics at elementary and secondary levels; techniques employed in curriculum planning and reconstruction. 3 cred.; prereq. 94 or cons. of instr. Army, Rose.
- H.E.Ed.193Bw.s. Home Economics Curriculum (college level).** The place of home economics in higher education and problems which are acute today; curriculum offerings; teaching schedules and load; appropriate reference materials. 3 cred.; prereq. cons. of instr. Army, Rose.
- H.E.Ed.194Af.w.s. Adult Education in Home Economics.** Objectives of adult education in homemaking; problems affecting community and family life; methods of helping adults and out-of-school youth in solving problems in home living. 3 cred.; prereq. 91, 93 or equiv. Ford.
- H.E.Ed.194Bf.w.s. Adult Education in Home Economics.** Planning a community program; teaching procedures; special problems. Planned for teachers and supervisors of adult education. 3 cred.; prereq. 91, 93, 194A, sr., grad. Ford.
- H.E.Ed.195s. Space, Equipment, Furnishings and Materials for Home Economics Departments.** Study of remodeling old and planning new departments, and equipping and furnishing them. Review of research; investigation of special problems. Designed for graduate students and adult specials, but open to seniors by cons. of instr. 3 cred.; prereq. 91, 93, H.E. 49. Rose, Kafka.
- H.E.Ed.197f.w.s. Organization and Methods of Related Art Teaching.** Aims to develop a working philosophy of related art. Courses planned and methods studied to relate art and home economics subject matter in various aspects of home and community life. 1 to 3 cred.; prereq. 91, H.E. 180 or equiv., sr. Esteros.
- H.E.Ed.199E. Internship.** Directed teaching and practice work at the graduate level for candidates for the master of education degree. Prereq. cons. of instr. Rose.
- H.E.Ed.243f.w.s. Trends in Home Economics.** The place of home economics in the educational program today; the ways in which content and procedures are being modified to meet changing conditions. 3 cred.; prereq. cons. of instr. Rose.

- H.E.Ed.292s.* Problems in Evaluation.** A continuation of 192, with emphasis upon individual problems in the field of evaluation. 3 cred.; prereq. cons. of instr. Army.
- H.E.Ed.293f,w.s.* Problems in Home Economics Education.** Designed to meet the needs of advanced students for independent study of current educational problems. 1 to 9 cred.; prereq. 294 recommended, cons. of instr. Army, Rose, Ford, Esteros.
- H.E.Ed.294f,w.s.* Research Methods.** Study of methods used in collection, treatment, and interpretation of data in areas of home economics; the writing of a technical report. 3 to 6 cred.; prereq. 192, cons. of instr. Army, Rose.
- H.E.Ed.295f,w.s.* Seminar in Home Economics Education.** Discussion and reports on problems in the field of home economics education. 1 cred. per qtr. Army, Rose, Esteros, Ford.

INDUSTRIAL EDUCATION

The manipulative and classroom courses here listed are offered under requirement or election as indicated in the Four-Year Curriculum. Other courses of laboratory nature, in great number and variety, are offered in other colleges, divisions and departments of the University. Students may arrange to take shopwork, drawing and related courses, day or evening, academic year or summer, at the William Hood Dunwoody Industrial Institute, without fees other than those paid at the University.

A maximum of 48 credits in shopwork and drawing is strictly enforced. Credits in excess of 48 may be recorded but they will not be counted toward the graduation requirement. Advanced students may pursue manipulative courses but credits so earned will not be considered parts of the programs for graduate degrees.

- Ind.1f. Basic Woodwork.** An introduction to woodwork with emphasis on the use of common hand tools. 3 cred. Nelson.
- Ind.2w. Machine Woodwork.** Use and maintenance of the common woodworking machines. 3 cred.; prereq. 1 or equiv. Nelson.
- Ind.3s. Shop Finishing.** Study and application of the materials and processes used in the finishing of woods, metals and other media. 3 cred.; prereq. 1-2 or equiv. Nelson.
- Ind.5f. Basic Drawing.** Introduction to drawing as an area of industrial arts. Fundamental skills in sketching, lettering, use of instruments, orthographic projection, and pictorial representation. 3 cred. Ar.
- Ind.6w. Applied General Drawing.** Orthographic projection, pictorial representation, sheetmetal developments and blueprint reading. 3 cred.; prereq. 5 or equiv. Ar.
- Ind.7s. Building Construction Drawing.** Application of the theory of orthographic projection and pictorial representation to building construction. 3 cred.; prereq. 5, 6 or equiv. Ar.
- Ind.10f. Basic Electricity.** Introduction to electricity as an area of industrial arts; covers theories, fundamental skills, processes, projects, and jobs. 3 cred. Kavanaugh.
- Ind.11. Special Class Woodwork.** For teachers of art, primary and elementary work, exceptional classes, etc. 2 cred. Ar. Not offered 1952-53.
- Ind.12w. Electricity and Radio.** Continues Ind. 10 to further applications of electricity and radio appropriate in industrial arts; emphasis in radio on theories, fundamental skills, analysis of circuits and practical jobs. 3 cred.; prereq. 10. Kavanaugh.
- Ind.15w. Basic Graphic Arts.** Introduction to the graphic arts through five fundamental units—typesetting and presswork, stencil processes, linoleum engraving, photography, and general duplicating. 3 cred. Nelson.
- Ind.16. Advanced Graphic Arts.** Stresses the letter press processes; additional experiences in etching, engraving, book binding and silk screen. 3 cred.; prereq. 15. Nelson.
- Ind.20f. Craft Work—A.** Manipulative experiences in media suitable for industrial arts courses, clubs and activities; art metal, leather, plastics, etc. 3 cred. Nelson.
- Ind.21w. Craft Work—B.** Fabrication, decoration and finishing of clay; cutting, grinding and polishing of semiprecious gems, and work in silver. 3 cred.; prereq. 20. Nelson.
- Ind.25. Machine Shop.** An introduction to machine tool operations; performance, application of processes and solution of related problems. 3 cred. Ar. Not offered 1952-53.
- Ind.26. Advanced Machine Shop.** Continues Ind. 25 with emphasis on fundamental skills, machine set-ups, tool grinding, shop theory and practice. 3 cred. Not offered 1952-53.
- Ind.40f. Analysis.** Necessity for, and types of, instructional analysis; individual work upon selected fields, for course construction purposes. 2 cred. Micheels.
- Ind.42w. Course Organization.** Development of techniques for selection and arrangement of instructional materials. 3 cred.; prereq. 40. Micheels.

- Ind.44s. Equipment and Management.** Sources, purchases, costs, and inventories; installation, upkeep, and safe operation; storage and issue of tools and supplies; financial accounts, bills of material, and disposal of products. 3 cred. prereq. 40, 42. Widdowson.
- Ind.50Af-Bw-Cs. Student Teaching.** Three quarters or nine credits required. 3 cred. per qtr.; prereq. Ed. 55B, Ind. 70 or 100, 80, 1.5 H.P.R. Anderson.
- Ind.60f. Philosophy of Vocational Education.** Development and characteristics of vocational training; conservation of human and material resources; social and economic significance; results and weaknesses; current theories. 2 cred. Widdowson.
- Ind.61w. Practices in Vocational Education.** Plans of organization and control; types of schools and classes; state and federal aid; teacher preparation and certification. 2 cred.; prereq. 60. Widdowson.
- Ind.70s. Teaching of Industrial Subjects.** General techniques of methods particularized for school shop situations. 3 cred.; prereq. 42, Ed. 55B. Micheels.
- Ind.80f. Introduction to Industrial Arts.** Orientation to the teaching of industrial arts; overview of origins, aims, offerings, techniques, schedules, equipments. 2 cred. Nelson.
- Ind.100w. Industrial Instruction.** Concepts and techniques of instruction in three phases of industrial teaching—industrial arts, trade and industrial schools and classes, and training-within-industry programs. 3 cred.; prereq. 42, Ed. 55B, jr., sr., grad.; not open to those with credit in Ind. 70. Smith.
- Ind.101s. Tests in Industrial Subjects.** Study and application of principles of evaluation to shop and drawing subjects. 3 cred.; prereq. Ed. 55B, jr., sr., grad. Micheels.
- Ind.102w. The General Shop.** (Not a shop course.) Purpose of general shop organization; current practice as to types of shops, equipment, instructional materials and procedures, pupil personnel plans, etc. 2 cred.; jr., sr., grad. Nelson.
- Ind.103w. Instructional Aids.** Consideration of various instructional aids; planning, constructing, using. 3 cred.; prereq. 70 or equiv., jr., sr., grad. Micheels.
- Ind.105s. Administration of Industrial Education.** General and vocational phases considered; objectives, programs and practices; laws, rulings, and standards for aid; significant literature. 3 cred.; prereq. 61, 80 or equiv., jr., sr., grad. Smith.
- Ind.107f. Coordination.** Province and duties of coordinators in trade schools, part-time programs, and the cosmopolitan high schools. Information, guidance and training for those having interest in this new type of work. 3 cred.; prereq. 60, 61, or 105 or cons. of instr., jr., sr., grad. Widdowson.
- Ind.109w.s. Conference Leading for Industry.** Purposes, advantages and limitations of conference method. Instruction in techniques of conference procedure. Experience in planning, leading and evaluating conferences and in writing summaries. 3 cred.; prereq. cons. of instr. Widdowson.
- Ind.110w. Vocational Guidance.** History of the 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 cred.; prereq. Ed. 55B, jr., sr., grad. Smith.
- Ind.115. Supervision of Industrial Education.** Principles of creative supervision applied in industrial teaching; analysis of duties, organization for supervision. 3 cred.; prereq. 60, 80, or 105. Micheels.
- Ind.125s. Philosophy and Practice of Industrial Education.** History, objectives, development, and current practices of the field. Industrial arts as general education and school preparation and upgrading for trade pursuits. 3 cred.; jr., sr., grad.; not open to those with cred. in Ind. 60, 61. Widdowson.
- Ind.135f. Industrial Course Construction.** Principles and techniques of course construction and unit development; experience in planning, organizing and building a teaching guide. 3 cred.; jr., sr., grad.; not open to those with cred. in Ind. 40, 42. Micheels.
- Ind.172s. Part-time Education.** Covers justification of part-time education; social and economic background; organization of classes; study of special student groups; courses of study; typical schools, comparative state legislation and plans; reimbursement. 3 cred.; prereq. 60-61 or 125, jr., sr., grad. Smith.
- Ind.200f,w.s.' Research Problems.** Independent work for the degrees, master of arts, Plan B, and master of education, Plan Y. 3, 6, or 9 cred. per qtr.; prereq. approval of candidacy. Individual conf. Smith, Micheels.
- Ind.205f,w.s. Seminar in Industrial Education.** No credit. Required of all candidates for advanced degrees. Staff.
- Ind.250f-251w. Literature of Industrial Education.** Survey of printed reports; critical analysis; selection of thesis problems; formulation of work plans; reports of progress; organization and presentation; acquaintance with types of literature. 6 cred.; prereq. cons of instr. Smith.
- Dunwoody f.w.s. Shopwork; Drawing.** Cred. ar. Smith.
- Off-Campus Courses f.w.s.** Services in conference leader training and instructor training; with or without credit and fee; consultation on industrial training programs. Widdowson.

LIBRARY SCIENCE

- Lib.Sci.50f. Libraries and Society.** History of libraries. 3 cred. Shove.
- Lib.Sci.53w. School Library Management.** Principles and methods. 3-4 cred. Hayner.
- Lib.Sci.60f. Sources of Information about Library Materials.** 3 cred. Ar.
- Lib.Sci.61f.w.s. Library Practice.** 3 cred.; prereq. 18 cred. in library science or satisfactory library experience. Shove, Hayner.
- Lib.Sci.62f. Reference I.** General reference tools; theory and practice of reference work. 2 cred. Russell.
- Lib.Sci.63w. Reference II.** Reference work in subject fields. 3 cred.; prereq. 62. Shove.
- Lib.Sci.70w. Reading Guidance.** Types of readers, reading interests, methods of working with readers. 3 cred. Ar.
- Lib.Sci.74f. Library Materials in the School's Instructional Program.** Methods of co-operation between teachers and librarians. 2 cred. Hayner.
- Lib.Sci.81f. Bibliographical Description of Library Materials.** 3 cred. Simonton.
- Lib.Sci.82w. Subject Organization of Library Materials.** 3 cred.; prereq. 81. Simonton.
- Lib.Sci.85w.s. Special Problems.** Individual study on library problems for advanced students in library science. 1-3 cred.; prereq. cons. of instr. Shove, Hayner.
- Lib.Sci.151f. Invention and Spread of Printing to 1600.** 2 cred. Shove.
- Lib.Sci.152w. History of Printing to Modern Times.** 2 cred. Shove.
- Lib.Sci.154s. Principles of Public Library Administration.** 3 cred.; prereq. cons. of instr. Ar.
- Lib.Sci.155s. Administrative Problems in the College and University Library.** 3 cred.; prereq. cons. of instr. Shove.
- Lib.Sci.157s. School Library Problems.** 3 cred.; prereq. cons. of instr. Hayner.
- Lib.Sci.164s. Reference III.** Specialized reference tools; government publications; administration of the reference department. 2 cred.; prereq. 62, 63. Russell.
- Lib.Sci.165w. Advanced Bibliography.** Specialized trade and national bibliographies, domestic and foreign. 2 cred. Shove.
- Lib.Sci.171w. Principles and Problems in Reading Guidance for Children.** 3 cred.; prereq. 70 or concurrent reg. Hayner.
- Lib.Sci.172s. Principles and Problems in Reading Guidance for Adolescents.** 3 cred.; prereq. 70. Hayner.
- Lib.Sci.173s. Principles and Problems in Adult Reading Guidance.** 3 cred.; prereq. 70. Ar.
- Lib.Sci.184s. Advanced Cataloging.** 3 cred.; prereq. 81, 82. Simonton. Not offered 1952-53.
- Lib.Sci.255f-256w-257s. Seminar in Library Administration.** 9 cred. Ar.
- Lib.Sci.260f-261w-262s. Seminar in Advanced Bibliography.** 9 cred. Shove, Russell.
- Lib.Sci.271f-272w-273s. Seminar in Library Work with Children and Young People.** 9 cred. Hayner.
- Lib.Sci.274f-275w-276s. Seminar in Reading Guidance.** 9 cred. Ar.

METHODS AND STUDENT TEACHING

Admission to Methods and Student Teaching—Approval of director of laboratory experiences is required for registration in all student teaching and special methods courses. Continuation is dependent upon satisfactory work each quarter in both student teaching and methods courses. A grade average of C+ (1.5 honor points per credit) in the major, core, or the subject in which student teaching is done is required for registration in all special methods and student teaching courses except those in elementary education, where a C average is required. For description of the requirements and procedures for admission to student teaching, see pages 10 and 11. For Clinical Methods and Practice in Speech Pathology see Ed.C.I. 174-175-176. For methods and student teaching in special subjects see the department concerned.

Nursing Education

- Ed.T.51Asu.f.w.Bf.w.s. The Teaching of Nursing.** Principles underlying clinical and classroom teaching in schools of nursing. Planning and evaluation of instruction. Observation and study of principles of teaching applied in the nursing school situation. Supervised practice in teaching of nursing subjects. 10 cred.; prereq. Ed. 55B. Ar.

Recreation Leadership

- Ed.T.84Af-Bw-Cs. Practice and Field Work in Recreation Leadership.** Students are assigned to selected agencies. To be taken during junior year. 2 cred.; prereq. recreation majors. Giles.

Ed.T.85Af-Bw-Cs. Practice and Field Work in Recreation. Students are assigned to selected agencies. To be taken during senior year. 1-2 cred.; prereq. recreation majors or minors. Giles.

Elementary Education

Ed.T.53Af,w,s.† The Teaching of Handicapped Children. Opportunity to observe work with the special classes, and to teach under direction. Conducted in cooperation with the public schools of Minneapolis and St. Paul. 5 cred. per qtr., total 10 cred.; prereq. cons. of instr. Reynolds.

Ed.T.54Af,w,s.-Bf,w,s.† Student Teaching in the Elementary School. Five half-days a week in classroom participation and teaching under supervisor in the elementary school. 5 cred. per qtr., total 10 cred. Ar.

Ed.T.55f. Principles of Early Childhood Education. Development, aims, and organization of kindergarten and nursery school education. Curriculum and methods. 3 cred.; prereq. C.W. 80 or concurrent reg. Fuller.

Ed.T.56f.s. Methods and Observation in Kindergarten. Directed observations of kindergarten children and procedures. 2 cred.; prereq. 55 or concurrent reg. Headley.

Ed.T.57w. Nursery School-Kindergarten Laboratory in Art, Literature and Social Studies. Lectures and laboratory work on methods and materials for children 2 to 6 in relation to nursery school, kindergarten, and home. 5 cred.; prereq. 55, 56. Headley.

Ed.T.58s. Nursery School-Kindergarten Laboratory in Play Materials, Music, and Science. Lectures, laboratory work and excursions on permanent and plastic play materials, music, and science for children 2 to 6 in relation to nursery school, kindergarten, and home. 5 cred.; prereq. 55, 56, 57. Peterson.

Ed.T.59f,w. Methods and Observation in the Nursery School. Directed observations of nursery school children and procedures. 3 cred.; prereq. 55 or concurrent reg. Peterson.

Ed.T.76f. The Teacher and the Parent. Parent education methods. Observations and practice in interviewing parents and in projects for parents. Reports. 3 cred.; prereq. 55, 56, 57, 58. Cummings.

Ed.T.77f,w,s. Student Teaching in the Nursery School. Five half-days each week supervised in classroom participation. 5 cred.; prereq. approval of major adviser and director of student teaching. Fuller.

Ed.T.78f,w,s. Student Teaching in the Kindergarten. Five half-days each week in supervised classroom participation in public or private schools. 5 cred.; prereq. approval of major adviser and director of student teaching. Fuller.

Ed.T.79f,w,s. Student Teaching in the Primary Grades. Five half-days each week in supervised classroom participation in public or private schools. 5 cred.; prereq. approval of major adviser and director of student teaching. Fuller.

Secondary Education

Ed.T.52f,w,s. Student Teaching. Supervised teaching at University High School and public high schools. Registration limited to students who have completed special methods courses or have had teaching experience. Student teaching in academic subjects is normally combined with special methods courses in a one-year course beginning in fall quarter. Cred. ar. Grim.

Ed.T.61. Teachers' Course in Norwegian. Not offered.

Ed.T.62.† Teachers' Course in Swedish. Not offered.

Ed.T.67f,w,s.† Student Teaching in Mathematics. Concurrent registration required in Ed.T. 67A-B-C senior year. Successful completion of work each quarter in both Ed.T. 67A-B-C and in Ed.T. 67 necessary for continuation. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.

Ed.T.67Af-Bw-Cs.† The Teaching of Secondary School Mathematics. Discussion of procedures in selecting and organizing materials and in teaching secondary school mathematics. Courses must be taken in sequence throughout the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. D. Johnson.

Ed.T.67Af. The Teaching of Secondary School Mathematics. 3 cred.; prereq. minors only. D. Johnson.

Ed.T.68f,w,s.† Student Teaching in Natural Science. Concurrent registration required in Ed.T. 68A-B-C senior year. Successful completion of work each quarter in both Ed.T. 68A-B-C and Ed.T. 68 necessary for continuation. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.

Ed.T.68Af-Bw-Cs.† The Teaching of Secondary School Science. Procedures in selecting and organizing materials and in teaching secondary school science. Must be taken in sequence throughout the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. Boeck.

Ed.T.68Ms. The Teaching of Secondary School Science. 3 cred.; prereq. minors only. Boeck.

- Ed.T.69f.w.s.† Student Teaching in the Social Studies.** Concurrent registration required in Ed.T. 69A-B-C senior year. Successful completion of work each quarter in both Ed.T. 69A-B-C and Ed.T. 69 necessary for continuance. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.
- Ed.T.69Af-Bw-Cs.† The Teaching of the Social Studies in the Secondary School.** Courses must be taken in sequence throughout the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. West.
- Ed.T.69Ms. The Teaching of the Social Studies in the Secondary School.** 3 cred.; prereq. minors only. West.
- Ed.T.70f.w.s.† Student Teaching of the Modern Languages.** Concurrent registration required in Ed.T. 70A-B-C senior year. Successful completion of work each quarter in both Ed.T. 70A-B-C and Ed.T. 70 necessary for continuance. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.
- Ed.T.70Af-Bw-Cs.† The Teaching of the Modern Languages.** Discussion of procedures in selecting and organizing materials and in teaching the modern languages. Courses must be taken in sequence throughout the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. Birkmaier.
- Ed.T.70Af. The Teaching of Modern Languages.** 3 cred.; prereq. minors only. Birkmaier.
- Ed.T.71f.w.s.† Student Teaching in Latin.** Concurrent registration required in Ed.T. 71A-B-C senior year. Successful completion of work each quarter in both Ed.T. 71A-B-C and Ed.T. 71 necessary for continuance. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.
- Ed.T.71Af-Bw-Cs.† The Teaching of Latin.** Discussion of procedures in selecting and organizing materials and in teaching Latin. Courses must be taken in sequence through the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. Birkmaier.
- Ed.T.71Af. The Teaching of Latin.** 3 cred.; prereq. minors only. Birkmaier.
- Ed.T.72A-B-C.f.w.s.† Student Teaching in Distributive Education Subjects.** Required of all students majoring in distributive education. 2 cred. per qtr., total 6 cred.; prereq. Ed. 55B and cons. of instr. Meyer.
- Ed.T.73A-B-C.f.w.s.† Student Teaching in Business Subjects.** Required of all students majoring in business education. 2 cred. per qtr., total 6 cred.; prereq. Ed. 55B and cons. of instr. Price.
- Ed.T.74w. The Teaching of Journalism.** A study of methods and techniques of presenting journalism to students of less than college level. Required of all students with a minor in journalism. 3 cred.; prereq. Jour. 41 or 51 and Ed. 55B, or cons. of instr. Kildow.
- Ed.T.75f.w.s.† Student Teaching in the Language Arts.** Concurrent registration required in Ed.T. 75A-B-C senior year. Successful completion of work each quarter in both Ed.T. 75A-B-C and Ed.T. 75 necessary for continuation. Students admitted only in the fall. 2 cred. per qtr., total 6 cred. Ar.
- Ed.T.75Af-Bw-Cs.† Teaching the Language Arts in Secondary Schools.** Required of all majors in speech, English, and language arts. Content and method in teaching reading and literature, writing and related problems of grammar, usage, and spelling, speech, and listening. Third quarter emphasizes speech, dramatics, debate, and discussion. Courses must be taken in sequence throughout the senior year. 3 cred. fall, 1 cred. winter, 1 cred. spring, total 5 cred. D. V. Smith, Ballet.
- Ed.T.75As. Teaching the Language Arts in Secondary Schools.** Overview of method and content in secondary school English and speech. 3 cred.; prereq. minors only. D. V. Smith.
- Ed.T.80s. The Teaching of Typewriting and Bookkeeping.** General methods and techniques in teaching typewriting and bookkeeping. 2 cred.; prereq. Ed. 55B or concurrent reg. Price.
- Ed.T.81w. The Teaching of Shorthand.** Examination and evaluation of various methods of teaching shorthand. Application of psychological principles to teaching. 2 cred.; prereq. Ed. 55B or concurrent reg. Price.
- Ed.T.82f. The Teaching of Basic Business Subjects.** Developments in content and method in teaching basic business subjects in the junior high school. 2 cred.; prereq. Ed. 55B or concurrent reg. Price.
- Ed.T.90Af-Bw-Cs.† The Teaching of Distributive Education Subjects.** Methods of teaching distributive education subjects in high schools and junior colleges. 2 cred. per qtr.; prereq. cons. of instr. Meyer.

MUSIC EDUCATION

Note—For description of courses in music and statement of fees, see *Bulletin of the College of Science, Literature, and the Arts.*

- Mu.Ed.4f-5w-6s. Applied Instrumental Technique.** Divided into three quarters, strings, brass (and percussion), and woodwinds. Theory and technical development of the instruments, elementary instruction in instrument playing, with special attention to the routine of class instruction. 2 cred. per qtr.; prereq. mu. ed. major. Ivory, Prescott.

- Mu.Ed.50Af.w. Teaching Music in the Primary Grades.** Practical methods for teaching music in the nursery school, kindergarten, and grades one, two, and three. The child's voice, rote singing, note reading, new practice and materials. 2 cred.; prereq. Mu. 1. Ar.
- Mu.Ed.50Bw. Teaching Music in the Intermediate Grades.** Music methods in grades four, five, and six; rhythmic and melodic problems; voice testing, two- and three-part singing; integration. 2 cred.; prereq. 50A. Ar.
- Mu.Ed.53s. High School Methods.** Organization and methods of teaching chorus, glee clubs, and voice classes. Attention to the changing voice, various voice combinations, procedures, and materials for public appearances. 3 cred.; prereq. 50B, Ed. 55B. Ar.
- Mu.Ed.59w.† Choral Literature and Conducting.** Intimate contact with vocal materials and actual practice in conducting. 2 cred. for sr., others 1 cred. Ar.
- Mu.Ed.60-61-62f.w.s. Supervision and Teaching of Music.** Experience in carrying forward, under supervision, activities of the elementary music teacher as well as types of music activities in junior and senior high school. 9 cred.; prereq. 50B, 53, Ed. 55B, sr., cons. of instr. Ar.
- Mu.Ed.63w. Band Conducting.** Designed to give practical experience in conducting recommended band literature of all grades. 2 cred.; prereq. 4-5-6. Prescott.
- Mu.Ed.64s. Band Organization.** Dealing with the organization, promotion, curriculum, administration, equipment, and other problems of the school band. 3 cred.; prereq. 4-5-6, cons. of instr. Prescott.
- Mu.Ed.65f.w. Instrumentation.** Involves a 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 cred.; prereq. Mu. 6T, sr. Ivory.
- Mu.Ed.67s. The Teaching of Instrumental Music in the Elementary School, Grades 1 through 8.** 2 cred.; prereq. cons. of instr. Ivory.
- Mu.Ed.68s. The Teaching of Instrumental Music in Secondary Schools.** Training directors of orchestra and band ensembles, and a critical survey of available music materials adaptable to school music purposes. Laboratory practice. Program planning and efficient management of rehearsals. 2 cred.; prereq. 65, sr. Ivory.
- Mu.Ed.103f. Psychological Foundations of Music Education.** 3 cred.; prereq. sr., cons. of instr. Ar.
- Mu.Ed.104s. Advanced Topics in Vocal Music Education.** Designed for experienced teachers and qualified students. 3 cred.; prereq. sr., cons. of instr. Ar.
- Mu.Ed.105w. Advanced Topics in Instrumental Music Education.** Designed for experienced teachers and qualified students. 3 cred.; prereq. sr., cons. of instr. Ivory.
- Mu.Ed.150. Realization and Supervision of Vocal-Instrumental Music in Elementary Schools.** 3 cred.; prereq. 6 cred. in Mu.Ed., 9 cred. in Mu. and 6 cred. in Gen. Ed., sr. Ivory and others.
- Mu.Ed.224f.w.s. Seminar and Individual Research Problems in Music Education.** A knowledge of elementary statistics is required. Individual projects; guidance; remedial procedures; interrelationships. 3 cred. per qtr. Ivory, Ar.
- Mu.Ed.225Ef.w.s. Advanced Applied Music.** 2 to 4 cred. Ar.

NURSING EDUCATION

Note—For description of courses in Nursing and Nursing Administration see *Bulletin of the School of Nursing*.

- Nurs.Ed.62su. Introduction to Personnel Work in Nursing.** Introduction to principles, techniques, and application of personnel point of view to nursing. Psychological principles; individual differences; counseling techniques appropriate for the nursing staff and faculty. 3 cred. Johnston.
- Nurs.Ed.68f. Construction and Use of Examinations and Other Measurement in Basic Nursing Courses.** Criteria for judging and improving methods of educational measurement; examinations as aids to student progress; relation of examination scores to grading systems. Practice in making and scoring course examinations. 3 cred. Johnston.
- Nurs.Ed.69f.s. Survey of Conditions and Trends in Nursing.** A study of conditions existing in nursing as revealed in literature and reports. 3 cred. Densford and staff.
- Nurs.Ed.72f. Application of Principles of Learning to Clinical Instruction.** Study of learning situations in the basic professional program in nursing. Sources and selection of materials and organization of instruction. Evaluation of student learning in clinical situations. 3 cred. Boyle.
- Nurs.Ed.74w. Sciences in a School of Nursing Curriculum.** Objectives, course content, methods of instruction, choice of textbooks, integration of subject matter, and schedule planning as applied to the teaching of sciences in schools of nursing. This course should be carried during the winter quarter of the fifth year, but may not be carried in the same quarter as Ed.T. 51B. 5 cred.; prereq. cons. of instr. Coe.

† Four credits are required in Mu.Ed. 59. The course should be repeated until all four credits are earned.

- Nurs.Ed.162w. Personnel Work in Nursing.** Principles and techniques of personnel work applied to problems in nursing. Individual differences, human behavior, psychological tests, personnel records, orientation periods, remedial programs, and counseling interviews, etc. 3 cred. Johnston.
- Nurs.Ed.165w. Problems in Nursing Care.** An introduction to research in nursing; each student works on a problem of her own selection. 3 cred.; prereq. cons. of instr. Hanson.
- Nurs.Ed.171f.w.s. The Curriculum of the School of Nursing.** Principles of curriculum development applied to educational programs in nursing. 3 cred.; prereq. 69, Ed.T. 51A-B or concurrent reg. Harrington.
- Nurs.Ed.190f. The Survey in Nursing Education.** Survey techniques in evaluating an educational situation, as related to present programs, expanding programs and new programs. 3 cred.; prereq. cons. of instr. Harrington.
- Nurs.Ed.197Ew-198Es. Advanced Teaching of Nursing.** Problems related to the teaching of nursing for students registered in the master of education program in nursing education. 2 cred., 197E; 4 cred., 198E; prereq. cons. of instr. and introduction to statistics. Harrington.
- Nurs.Ed.271f. Problems in Curriculum.** Special problems related to curricula in basic professional nursing, advanced professional nursing and practical nursing. Each student works on a problem of her own choice. 3 cred.; prereq. 171, cons. of instr. Harrington.

PHYSICAL EDUCATION FOR MEN

Nonprofessional Courses

- Phys.Ed.1A-B-C,2A-B-C. Sports Education.** Elective specialized courses in physical education including instruction in advanced swimming, diving, lifesaving, bowling, boxing, wrestling, weight lifting, badminton, basketball, golf, softball, handball, squash rackets, skating, dancing, archery, gymnastics, fencing, volleyball, and adapted activities for the handicapped. 1 cred. per qtr. Staff.

Professional Courses

- Phys.Ed.4Aw. Football Fundamentals.** Demonstrations and practice in football fundamentals for all positions on a football team. 1 cred. Svendsen.
- Phys.Ed.4Bf. Basketball Fundamentals.** Demonstrations and practice in such fundamentals as footwork, passing, dribbling, goal throwing, individual and team defensive tactics. 1 cred. Vancisin.
- Phys.Ed.4Cs. Track Fundamentals.** Demonstrations and practice in all track and field events. 1 cred. Kelly.
- Phys.Ed.5Af. Touch Football, Calisthenics, Tactics.** Includes touch football, six-man football, calisthenic nomenclature, conditioning drills, posture exercises, mimetics, story plays, reconditioning exercises, grass drills, marching tactics. 1 cred. Piper, Ostrander.
- Phys.Ed.5Bf.w. 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 cred. Ostrander.
- Phys.Ed.5Cs. Stunts, Contests, Softball, Baseball.** Individual double and triple stunts; combative stunts; mass contests; weight lifting; softball; baseball fundamentals. 1 cred. Ostrander, Siebert.
- Phys.Ed.6Af. Intramural Sports.** Soccer, speedball, and volleyball fundamentals and team play. 1 cred. Ar.
- Phys.Ed.6Bw. Intramural Sports.** Ice hockey, handball, and squash rackets. 1 cred. Svendsen.
- Phys.Ed.6Cf.w.s. Aquatics.** Advanced swimming, diving, lifesaving, and small crafts. 1 cred. Thorpe.
- Phys.Ed.7Af. Games and Relays.** Low organized games for gymnasiums, playgrounds, camps, etc.; social games for recreation; progressive game parties; relays. 1 cred. Piper, Ostrander.
- Phys.Ed.7Bw. Boxing and Wrestling.** 1 cred. Ar.
- Phys.Ed.7Cs. Recreational Games.** Badminton, aerial darts, deck tennis, paddle tennis, table tennis, tether ball, bowling, horseshoes, box hockey, and archery. 1 cred. Piper, Ostrander, Osell.
- Phys.Ed.8s. Tennis and Golf.** 1 cred. Brain, Bolstad.
- Phys.Ed.9Aw. Fundamental Rhythms.** Basic steps and folk dances. 1 cred. Piper.
- Phys.Ed.9Bs. Folk, Square, and Ballroom Dancing.** Instruction in circle, line, square, mixer, and couple dances. 1 cred. Piper.
- Phys.Ed.11Af-Bw-Cs. Survey of Recreation Activities.** Requires the student to search out, analyze, and classify recreation opportunities on the campus and in the Twin Cities area. 1 cred. per qtr. Starr.

- Phys.Ed.23A1-Bw-Cs. Introduction to Recreation Leadership.** Provides an opportunity to study and participate in group recreation programs in Coffman Memorial Union. 1 cred. per qtr. Starr.
- Phys.Ed.32f. Introduction to Physical Education.** An orientation course covering briefly the history, vocational aspects, and fundamental principles of physical education. 3 cred. Piper.
- Phys.Ed.43f. Camp Aquatics.** Designed to prepare camp counselors to administer a waterfront and to give practice in the basic skills in the use of small craft. 2 cred. Ostrander.
- Phys.Ed.45a. Camp Craft.** Practical experience in various phases of camping and outdoor education. 2 cred. Ostrander.
- Phys.Ed.46s. Camp Leadership.** Introduction to the field of camping for prospective counselors. 2 cred. Osell, Ostrander.
- Phys.Ed.49f. Social Aspects of Leisure.** Sociological consideration of leisure and recreation as parts of our total socio-economic structure. 3 cred. Fitzgerald.
- Phys.Ed.50f. Human Anatomy.** A study of the human body with emphasis on the bones, nerves, and muscles and their significance in physical education. 3 cred. Osell.
- Phys.Ed.51f. Mechanics of Movement.** A study of the structure of the body and the principles and mechanics of bodily movements. 3 cred.; prereq. 50 or Anat. 57. Osell.
- Phys.Ed.52w. Leadership in Social Activities.** The technique of leadership in social games, parties, dances, outings, etc. 3 cred. Ostrander.
- Phys.Ed.55f.w. Methods and Materials in Physical Education.** The application of principles of methodology in the teaching of physical education class activities and in coaching. Includes three hours per week in observation and practice in leadership in activities classes. 4 cred.; prereq. 5A-B-C, 6A-B-C, 7A-B-C. Piper and staff.
- Phys.Ed.56f. The Nature and Function of Play.** A study of the biological play drives and the theory and philosophy of play and recreation. 3 cred.; soph. Giles.
- Phys.Ed.57w. The Organization and Conduct of Recreation Centers.** Operation, management, facilities, equipment and programs of recreation centers. 3 cred.; prereq. 23A-B-C. Giles.
- Phys.Ed.58s. Leadership in Community Recreation.** Breadth and scope of leadership consideration in recreation. 3 cred.; prereq. 57. Giles.
- Phys.Ed.59s. Instructor's Course in First Aid.** Designed to prepare students to teach the standard course in first aid. 3 cred.; prereq. 25 or 26. Osell.
- Phys.Ed.60As. Prevention and Care of Injuries.** Policies for conditioning of athletes in interscholastic and intercollegiate sports, safety controls, and care and prevention of injuries in physical education activities. 3 cred.; prereq. 50 or Anat. 57, 51. Stein.
- Phys.Ed.60B1.w.s. Athletic Training Laboratory.** Thirty hours of practical experience in the training room under supervision. 1 cred.; prereq. 60A. Stein.
- Phys.Ed.61s. History of Physical Education.** The 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 cred. Keller.
- Phys.Ed.63s. Organization and Administration of Physical Education.** Problems of organization, administration, and supervision in required and elective courses, intramural and interschool athletics. 3 cred.; prereq. 32 or 101, 55. Piper.
- Phys.Ed.64Aw-Bs. Leadership in Nature Recreation.** This course aims at an understanding of the identity and scope of the nature recreation field. Includes classwork and field trips. 4 cred.; prereq. 15 cred. in nat. sci. Fitzgerald.
- Phys.Ed.65w. Adapted Physical Education.** Philosophy, principles, and techniques of adapting the physical education program to meet the needs of handicapped pupils. 3 cred.; prereq. 51, Anat. 57. Osell.
- Phys.Ed.66f. Officiating Football and Basketball.** Qualifications of officials, officiating ethics, discussion of rules, and officiating techniques. Three hours per week in officiating practice under supervision. 3 cred.; prereq. 4A-B. Nordly.
- Phys.Ed.67s. Football Coaching.** Theory, strategy, generalship, styles of offense and defense, methods of organizing practices, and handling of men. 2 cred.; prereq. 4A or one year of experience on squad. Fesler.
- Phys.Ed.68f. Basketball Coaching.** Theory, styles of offense and defense, the conditioning and handling of players. 2 cred.; prereq. 4B. Cowles.
- Phys.Ed.69f. 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 cred.; prereq. 4C. Kelly.
- Phys.Ed.72w. Baseball Coaching.** The theory of playing each position, batting, coaching on bases, and team play; study of the rules; officiating methods and practice; organization of practices. 2 cred. Siebert.
- Phys.Ed.73.74.75f.w.s. Directed Teaching.** Six hours per week. One quarter devoted to coaching, two quarters to teaching physical education classes including experience at two of the three school levels. 2 cred. per qtr. Piper and staff.
- Phys.Ed.78w. Scout Leadership.** An orientation course for students who are interested in the Boy Scout program. 2 cred. Osell.
- Phys.Ed.101w. Principles of Physical Education.** The aims and scope of physical education with special treatment of its place in education. 3 cred.; prereq. 55. Keller.

- Phys.Ed.103s. Physical Inspection.** The responsibility of the physical education instructor in the examination of pupils, assisting the physician, follow-up procedures, and keeping of records. 3 cred.; prereq. 51, Anat. 57, P.H. 91, 92. Osell.
- Phys.Ed.105f. Conservation of Natural Resources.** To develop an understanding of the importance of our natural resources and of their relation to recreation and outdoor education. 2 cred.; prereq. 64A-B, sr. Keller.
- Phys.Ed.107w. Camp Administration.** To help prepare personnel qualified for responsibilities of camp administration. 3 cred.; prereq. 46, cons. of instr. Osell, Ostrander, Thorpe.
- Phys.Ed.110w. Recreation Surveys.** The techniques of and practice in making community recreation surveys. 3 cred.; prereq. 57, 58. Fitzgerald.
- Phys.Ed.111f. Recreation Areas and Facilities.** A study of orientation, design, planning and standards for recreation buildings and areas. 3 cred.; prereq. 57, 58. Giles.
- Phys.Ed.112s. Programming in Recreation.** Principles of program planning for an organized offering of recreation opportunities. 3 cred.; prereq. 57, 58. Giles.
- Phys.Ed.116s. Community Recreation Resources and Organizations.** Presentation of community recreation agencies; interpretation of relationships among agencies in the field of recreation. 3 cred.; prereq. 110-111-112. Ostrander.
- Phys.Ed.121s. Principles of Recreation Method.** Stresses leadership methodology in all aspects of recreation. 3 cred.; prereq. Ed.T. 84A-B-C. Fitzgerald.
- Phys.Ed.131f. Industrial Recreation.** History, scope, place and relationship of management-employee recreation. 3 cred.; prereq. cons. of instr. Fitzgerald.
- Phys.Ed.135s. Tests and Measurements in Physical Education.** Critical analysis of existing tests and testing methods in physical education. Use of tests in physical activity programs. Application of the principles of test construction to specific problems. 3 cred.; prereq. 10 cred. in phys. ed., Ed.Psy. 60 or equiv. Keller.
- Phys.Ed.141w. Introduction to Hospital Recreation.** The general field of recreation in hospitals as background for the recreation leader, hospital administrator and other personnel. 3 cred.; prereq. cons. of instr. Ar.
- Phys.Ed.142w. Leadership in Hospital Recreation.** The purpose is to develop an understanding of the application of leadership methodology to recreation in hospitals. 3 cred.; prereq. 141. Ar.
- Phys.Ed.143s. Programming in Hospital Recreation.** All aspects of planning recreation programs for various types of hospital patients. 3 cred.; prereq. 141, 142. Ar.
- Phys.Ed.155s. Instructional Aids in Health, Physical Education and Recreation.** Evaluation, construction and use of instructional materials including audio-visual aids. 3 cred. Ar.
- Phys.Ed.233w.* Administrative Problems in Physical Education in Secondary Schools.** Staff organization; supervision; required and adapted programs; intramural and interscholastic athletic problems; legal aspects; professional and public relations. 3 cred.; prereq. 63 or equiv. Nordly.
- Phys.Ed.234s. The Secondary School and College Curriculum in Physical Education.** Practical applications of principles of curriculum construction and evaluation to physical education. 3 cred.; prereq. 63, 101 or equiv. Nordly.
- Phys.Ed.236f. Recent Literature and Research in Physical Education and Recreation.** Research methods applied to physical education; the selection, analysis and preparation of outlines of research problems. 3 cred. Nordly.
- Phys.Ed.238f.* Administration of Physical Education in Colleges and Universities.** Problems connected with the administration of the facilities and programs in physical education and athletics in institutions of higher education. 3 cred.; prereq. 63 and 233 or cons. of instr. Keller.
- Phys.Ed.240f. Legal and Financial Aspects of Recreation.** Federal, state and local recreation laws; sources of funds for public and private recreation agencies; and agency liability. 3 cred. Fitzgerald.
- Phys.Ed.241w. Administration of Public Recreation.** Basic principles in the administration of recreation as a governmental service. 3 cred. Fitzgerald.
- Phys.Ed.242s. Community Organization for Recreation.** Nature, scope, principles, and procedures in community organization with particular attention to those principles and practices that have reference to community organization for recreation. 3 cred.; prereq. cons. of instr. Fitzgerald.
- Phys.Ed.247f.w.s.* Problems in Physical Education and Recreation.** Independent study on current problems. Individual conferences with instructor. Cred. ar.; prereq. 236. Nordly.
- Phys.Ed.250w. The Administration of Health Education, Physical Education and Recreation.** Current problems of school administrators. For those not majoring in physical education. 3 cred. Nordly and others.
- Phys.Ed.261As. Seminar in Contemporary Problems in Physical Education.** 3 cred.; prereq. cons. of adviser. Nordly and others.
- Phys.Ed.261Bf. Seminar in Contemporary Problems in Recreation.** 3 cred.; prereq. cons. of adviser. Fitzgerald and others.

PHYSICAL EDUCATION FOR WOMEN

Courses for Undergraduate Students

Phys.Ed. General Course in Physical Education. Students register for this course without number. This course, offered by the Department of Physical Education for Women, provides a wide program of sports and other activities to meet the varying interests and needs of women students. The program offers an opportunity to take courses for the purpose of body building and conditioning and for the acquisition of personal and recreational skills. This program permits choice, based on guidance of the faculty advisers in the following:

Aquatics

Canoeing: elementary
Swimming: beginning, advanced beginning, intermediate, advanced, and synchronized
Lifesaving: American Red Cross senior course
Water safety: American Red Cross water safety instructors' course
Diving: beginning springboard diving

Rhythms

Folk and square dance
Modern dance: elementary, intermediate, advanced
Social dance
Tap dance

Body Building

Individual body building

Individual Sports

Archery: elementary and intermediate
Badminton: elementary and intermediate
Bowling
Fencing
Golf: elementary, intermediate, advanced
Horseback riding: elementary
Rifle marksmanship
Skating: plain
Skiing
Social games and mixers
Tennis: elementary, intermediate, advanced

Team Sports

Basketball
Field hockey
Softball
Volleyball

Recreational Activities for Which No Registration Is Required. Inquire at 101 Norris Gymnasium for Women as to hours.

Archery
Badminton
Basketball
Bowling
Exercises for body building
Fencing
Golf
Modern dance

Riding
Rifle marksmanship
Skating
Softball
Swimming
Tennis
Volleyball

Professional Courses for Undergraduate Majors

Phys.Ed.20ABCf-21ABDEw-22ABCs. Physical Education Activities. *Fall:* (20A) badminton, ½ cred.; (20B) skills and officiating of fall teamsports, 1 cred.; (20C) recreational activities, social games, archery, bowling, 1 cred. *Winter:* (21A) advanced basketball, ½ cred.; (21B) rhythmic fundamentals and elementary folk dance, 1 cred.; (21D) stunts and tumbling, 1 cred.; (21E) winter sports, ½ cred. *Spring:* (22A) folk and ballroom dance, 1 cred.; (22B) golf, track and field, 1 cred.; (22C) tennis, 1 cred. Ar.

Phys.Ed.25f.s. American Red Cross First Aid (standard course). Lectures, demonstrations, and practice in emergencies and first aid treatment. Emphasis on care of injuries in physical education. American Red Cross Standard Certificate in First Aid received upon successful completion of course. 2 cred. Ar.

Phys.Ed.26w. American Red Cross First Aid (advanced course). Advanced first aid techniques. Emphasis on ability to assume leadership in emergency situations. American Red Cross Advanced Certificate is received upon completion of this course. 1 cred.; prereq. phys. ed. majors. Ar.

Phys.Ed.27s. Instructor's Course in First Aid. Techniques of teaching first aid. Emphasis on instruction at the junior-senior high school level. American Red Cross Instructor's Certificate received upon the successful completion of the course. 1 cred.; prereq. 26. Jaeger.

Phys.Ed.40ABCDf-41ABw-42As. Physical Education Activities. *Fall:* (40A) modern dance, 1 cred.; (40B) skills and officiating of softball and volleyball, 1 cred.; (40C) apparatus and functional exercise, 1½ cred. *Winter:* (41A) advanced aquatics, 1 cred.; (41B) officiating basketball, ½ cred.; prereq. 21A advanced basketball. *Spring:* (42A) life saving and camp water safety, 1 cred.; prereq. 41A advanced aquatics. Ar.

- Phys.Ed.45w.s. Introduction to the Elementary Physical Education Program.** Laboratory course for Phys.Ed.70. Experience with graded activities for the elementary school child. Problems of organization and teaching progressions considered. Student teaching within the group. 2 cred.; prereq. elem. ed. majors only. Hauptfuehrer.
- Phys.Ed.47f. The Teaching of Dance and Rhythmic Activities.** Methods in the teaching of creative rhythmic activities, singing games, folk and ballroom dance. The former includes an approach to children's rhythms and modern dance. 3 cred.; prereq. 21B, 22A, 40A. Bockstruck.
- Phys.Ed.48w. The Teaching of Individual and Dual Sports.** Special techniques and methods of teaching archery, badminton, bowling, golf, and tennis. Student teaching within the group. Organization of competitive and recreational programs. 3 cred.; prereq. cons. of instr. Jaeger.
- Phys.Ed.49s. The Teaching of Team Sports.** Special techniques for each sport and methods of teaching. Organization of extracurricular activities. Practice in skills and student teaching within group. 2 cred. Hauptfuehrer.
- Phys.Ed.51f.w. Mechanics of Movement.** Principles of mechanics of movement with laboratory studies involving the kinesiological analysis of sport techniques. 3 cred.; prereq. Anat. 57. Wilson.
- Phys.Ed.53w. The Role of the Physical Educator in Recreation.** Designed to prepare the physical education teacher for her function in school and community recreation. Planning and organizing activities for a variety of recreational situations. 3 cred.; prereq. phys. ed. majors, jr. Tinker.
- Phys.Ed.54f.s. Camp Leadership.** Committee projects and practical work in camp craft. Organization and administration of the camp program; responsibilities and duties of a counselor; current trends in camping. 3 cred. Tinker.
- Phys.Ed.62f. The Teaching of Physical Education Activities.** Designed for students minoring in physical education. Methods in team and individual sports, rhythms, and self testing. Special emphasis given to junior-senior high school program. 3 cred.; prereq. phys. ed. minors and rec. majors. Hauptfuehrer.
- Phys.Ed.70f.w.s. Introduction to the Elementary Education Program.** Designed to help the elementary teacher assume responsibility in teaching physical education. Emphasis given to planning and methods of instruction in physical education with implications for health education and recreation. 3 cred.; prereq. 3rd qtr. soph., elem. ed. majors. Lampe.
- Phys.Ed.71. Applied Physiology.** Lectures and laboratory problems demonstrating the physiological bases for objectives and content of the physical education program. Not offered in 1952-53.
- Phys.Ed.76s. Advanced Folk Dance.** Theory and practice of folk dance with emphasis on national and racial origins and the relationship of dance to other folk arts. 2 cred.; prereq. cons. of instr. Bell, Bockstruck.
- Phys.Ed.77Aw-Bs. The Teaching of Aquatics.** 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 cred.; prereq. 41A, 42A. Spears.
- Phys.Ed.79. Massage and Therapeutic Exercises.** Principles of massage and study of conditions especially applicable to physical education, including athletic injuries, foot disorders, paralysis, and certain functional and nervous disorders, etc. Visits to Twin Cities physiotherapy departments. Not offered in 1952-53.
- Phys.Ed.80s. Principles of Rhythm.** History and philosophy of dance; also relation to allied arts and the place of rhythm in physical education. 3 cred.; prereq. cons. of instr. Bockstruck.
- Phys.Ed.82f. Principles of Physical Education.** Philosophy of physical education and principles underlying curriculum building, methods of teaching, measurement, and outcomes. 3 cred.; sr. Wilson.
- Phys.Ed.83w. Methods and Materials of School Health Education.** Study of methods, materials, problems and evaluation of health education in preparation for health teaching. Allocation and gradation of health subject matter. 3 cred.; prereq. P.H. 59. Ericson.
- Phys.Ed.84f. The Physical Education Program in the Elementary and Secondary School.** Curricular problems in the field of physical education. 3 cred.; sr. Jaeger.
- Phys.Ed.85s. Remedial Activities in Physical Education.** Adapting the physical education program to needs of the atypical child. Principles and techniques in correction of postural defects. 3 cred.; jr. Wilson.
- Phys.Ed.86. Advanced Physical Education.** Fundamentals in physical education as applied in the elementary school. 1 cred.; jr. Jaeger.
- Phys.Ed.87w. Dance Composition.** Advanced modern dance theory and practice. Emphasis on principles of composition with practical application. 2 cred.; prereq. cons. of instr. Bell.
- Phys.Ed.88s. Advanced Problems in Dance Composition.** Various approaches to dance composition will be studied. 2 cred.; prereq. cons. of instr. Bockstruck.

- Phys.Ed.89s. Dance Production.** Various phases of dance production in schools and colleges. Emphasis on the dance recital, the dance demonstration and the folk festival. Elements of stagecraft and costuming. 3 cred.; prereq. cons. of instr. Bell.
- Phys.Ed.90ABf-ABCw-ACs. Student Teaching in Physical Education.** 2 cred. (fall), 3 cred. (winter), 3 cred. (spring), total 8 cred.; prereq. Ed. 55A-B. Jaeger, Hauptfuehrer.
- Phys.Ed.91. Principles of Play.** Nature and function of play, factors influencing play interests, a brief consideration of the organization and administration of play, and experience in selected playground activities. 3 cred.; prereq. NKP majors, jr. Tinker.
- Phys.Ed.94f.w.s. Student Teaching in School Health Education.** 2 cred.; prereq. 83, sr., cons. of instr. Ericson.
- Phys.Ed.95s. 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 cred.; sr. Baker.
- Phys.Ed.113w. Physical Education in the Elementary School.** The elementary school child, curriculum, adaptations of instructional procedures, classification, evaluation, and the influence of modern educational thinking upon problems commonly met at this level. 3 cred.; prereq. experience with the elementary school age level or cons. of instr. Baker.
- Phys.Ed.114s. School Health Education Program.** Curriculum construction; health supervision and guidance; relationships between the public schools and governmental health organizations and agencies; and evaluation. Guidance in the solution of individual professional problems. 3 cred.; prereq. 83, P.H. 50 or equiv., or cons. of instr., sr. Ericson.
- Phys.Ed.115f. Recent Literature and Research in Mechanics of Movement.** Techniques of mechanics and kinesiology of movement; consideration of a variety of skills; an evaluation of pertinent methods and devices used in current research; application to individual projects. 3 cred.; prereq. undergraduate course in kinesiology or cons. of instr. Wilson.
- Phys.Ed.117w. Advanced Course in School Health Instruction.** Instructional problems in school health education at all levels. Application of course to individual problems. 3 cred.; prereq. 83, or cons. of instr. Ericson.
- Phys.Ed.118Ef.w.s.† Problems in Teacher Education in Health, Physical Education and Recreation.** An individual problems course for M.Ed. students who are interested in the conduct and development of professional teacher education programs or problems pertinent to these interests. Prereq. cons. of instr. Baker, Ericson, Wilson.
- Phys.Ed.123f. An Advanced Course in Methods of Teaching Physical Education.** Current best thinking on teaching procedures as they apply to physical education; method problems at every curricular level; findings of studies and research. 3 cred.; prereq. cons. of instr. Baker, Ericson.
- Phys.Ed.124s. Supervision of Physical Education.** Function, organization, and administration of supervision in physical education; adaptations of accepted procedures for observation, guidance and training of teachers in the field; problems peculiar to supervision of physical education. 3 cred.; prereq. cons. of instr. Baker, Ericson.
- Phys.Ed.135w. Tests and Measurements in Physical Education.** Critical analysis of existing tests and testing methods in physical education including all levels. Use of tests in physical activity programs. Application of the principles of test construction to specific problems. 3 cred.; prereq. sr., Ed.Psy. 60 or equiv. Wilson.
- Phys.Ed.221. Seminar in Physical Education.** Discussion of individual projects and current problems in physical education. Consult adviser. No cred.
- Phys.Ed.224f.w.s.* Research Problems in School Health Education and Physical Education for Women.** Individual problems in areas of philosophy, methods, curriculum, evaluation and measurement; all curricular levels. Cred. ar.; prereq. cons of instr. Baker, Ericson, Wilson.

SCHOOL OF PUBLIC HEALTH

- P.H.3f.w.s.§ Personal Health.** Normal body function; causes of disease; ways in which disease may be avoided. 2 cred.; fr., soph.; not open to students who have taken G.C. 10C. Thomson.
- P.H.4s.§¶ Health Problems of the Community.** Personal health and prevention of disease in the family; relation to community health and disease control, important diseases and their prevention. 2 cred.; prereq. 3 or G.C. 10C. Students exempted from P.H. 3 on the basis of military service will not be accepted in this course. Fox.

† The designation "E" after a course number over 100 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.

‡ No credit granted for this course in major sequence in public health nursing.

¶ No student may receive credit for both Courses 4 and 50, or for 4 and 51, or for 4 and 52, or for 50 and 52, or for 50 and 51, or for 51 and 52.

- P.H.50f.w.§¶ Personal and Community Health.** Causes of diseases and of physical defects; fundamental principles and working methods of health conservation and disease prevention. 3 cred.; not open to students who have taken 3, 4, 51, 52, 100 or G.C. 10C. Thomson.
- P.H.51f.w.§¶ Community Hygiene.** Elementary concepts of development, spread, and prevention of preventable diseases; community programs for their control. 3 cred.; prereq. 3 or G.C. 10C, jr., sr.; not open to students who have taken 4, 50, 52, or 100. Students exempted from P.H. 3 on the basis of military service will not be accepted in this course. Cowan.
- P.H.52af.s.§¶ Health Care of the Family.** Factors affecting the health of the family as a unit; environmental factors; prevention of accidents; communicable diseases, pre-natal and infant hygiene and care; principal problems in preschool and school hygiene. For home economics students. 2 cred.; prereq. Bact. 53, Hum. Physiol. 4, jr., sr.; not open to students who have taken 4, 50, or 51; to be taken in conjunction with 52b. Todd.
- P.H.52bf.w.s.§¶ Home Nursing and Family Care.** Care and observation of the patient ill at home; the sick room at home; home nursing care for communicable diseases and the chronically ill. Maternal and infant hygiene and care of the mother and baby. 1 cred.; to be taken in conjunction with or following 52a. Sandve.
- P.H.57f.§ Health of Infant and Preschool Child.** Maternal and child health in public health program, problems of infant and maternal mortality, growth and development, care and feeding, prevention and correction of physical defects. 2 cred.; prereq. 4 or 50, or 51, or 52, jr., sr. Boynton.
- P.H.59w.s.§ Health of the School Child.** Mental and physical growth; prevention and control of diseases; health appraisal; correction of physical defects; emotional problems; care of handicapped; the school environment and its effect on child health. 3 cred.; prereq. 3 and 4, or 3 and 51, or 4 and G.C. 10C, or 51 and G.C. 10C, or 50, or 52. Exemption from P.H. 3 on the basis of military service will not be accepted as substitute for suitable course in personal health. Thomson, Anderson.
- P.H.60f.s. Tuberculosis and Its Control.** History of tuberculosis movement and campaign in the United States; early diagnosis and sanatorium treatment; tuberculosis in children; psychology of tuberculosis; supervision of returned sanatoria patients; state programs; legislation. 2 cred.; prereq. 4, or 50, or 51, or 52, or 100 and 62, nurses, others admitted by special permission. Myers.
- P.H.75w. Introduction to Environmental Sanitation.** Principles of urban and rural sanitation relating to water, food, wastes, housing, air, insects, rodents. 3 cred.; prereq. 3 cred. in public health. Bond.
- P.H.91f.‡ Principles of Human Function.** Tissues, physiochemical forces, metabolism, digestion, respiration, neuromuscular functions, circulation. 4 cred.; prereq. 8 cred. in chem. and 4 cred. in human anat. or equiv., jr., sr.; primarily for students in physical education and public health. Brozek.
- P.H.92w.‡ Principles of Human Function.** Endocrines, excretion, reproduction, special senses, central nervous system, growth and senescence. 4 cred.; prereq. 91 or equiv., jr., sr.; primarily for students in physical education and public health. Taylor.
- P.H.100f.s. Elements of Preventive Medicine and Public Health.** Susceptibility and resistance to disease; occurrence and prevention of communicable, degenerative, and industrial diseases; protection of food, water, and milk; school health work; vital statistics. 5 cred.; prereq. 3 or 50, or equiv. and a course in bacteriology. Anderson, Thomson.
- P.H.125s. The Community Health Education Program.** An introductory course for graduate students in public health, education, and related fields. Development of community-wide health education programs, group procedures, including community organization, media commonly employed in health education. 3 cred.; prereq. 100, or 104 and 106, or to be taken concurrently with 106. Grout.

For other graduate courses in public health, see the *Bulletin of the College of Science, Literature, and the Arts*, the *Bulletin of the Graduate School*, or the *Bulletin of the School of Public Health*.

‡ Both quarters (91, 92) must be completed for credit except with special permission of instructor.

§ No credit granted for this course in major sequence in public health nursing.

¶ No student may receive credit for both Courses 4 and 50, or for 4 and 51, or for 4 and 52, or for 50 and 52, or for 50 and 51, or for 51 and 52.

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The Bulletin of the
UNIVERSITY of MINNESOTA

The College of Education Announcement
of Late Afternoon and Saturday Morning Classes
1952-1953



Volume LV, Number 35

August 25, 1952

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UNIVERSITY CALENDAR, 1952-1953

DAY CLASSES

1952			<i>Fall Quarter</i>
August 4-September 26			Fall registration. ¹ Orientation program for new students. Dates for the various colleges will be announced in the press and in mailed instructions. Students are urged to register early. It is expected that all students who can do so will register in August
September 1	Monday		Labor Day; holiday
September 18	Thursday		Fall quarter fees due for students registered through September 12
September 22-26			New Students' Week; program of orientation. Details will be announced in instructions issued at registration. All new students are expected to attend
September 26	Friday		Last day for registration ¹ and payment of fees for the undergraduate colleges
September 29	Monday		Fall quarter classes begin 8:30 a.m. ²
October 2	Thursday		Opening convocation, 11:30 a.m.; IV hour classes excused
October 3	Friday		Last day for registration and payment of fees for the Graduate School, and for teachers in service
October 13	Monday		(Sunday October 12, Columbus Day); holiday
November 1	Saturday		Homecoming Day
November 8	Saturday		Dads Football Game
November 11	Tuesday		Armistice Day; holiday
November 20	Thursday		Senate meeting, 3:30 p.m.
November 27	Thursday		Thanksgiving Day; holiday
November 28, 29	Friday, Saturday		Classes excused
December 12, 13 and 15-18			Final examination period
December 18	Thursday		Commencement, 8:00 p.m.
December 20	Saturday		Fall quarter closes
			<i>Winter Quarter</i>
December 25	Thursday		Christmas Day; holiday
December 26	Friday		Winter quarter fees due for students in residence fall quarter in undergraduate colleges
1953			
January 1	Thursday		New Year's Day; holiday
January 2	Friday		Orientation and registration for new students in undergraduate colleges
January 3	Saturday		Orientation continues
January 5	Monday		Registration resumes; last day for registration and payment of fees for new students in undergraduate colleges; winter quarter classes begin 8:30 a.m. ²
January 9	Friday		Last day for registration and payment of fees for the Graduate School, and for teachers in service

UNIVERSITY CALENDAR, 1952-53

Day Classes

February	12	Thursday	Lincoln's Birthday; holiday
February	19	Thursday	Senate meeting, 3:30 p.m.
February	23	Monday	(Sunday February 22, Washington's Birthday); holiday
February	22-28		University of Minnesota Week
February	26	Thursday	Charter Day convocation, 11:30 a.m.; IV hour classes excused
March 13, 14 and 16-19			Final examination period
March	19	Thursday	Spring quarter fees due for students in residence winter quarter in undergraduate colleges. Commencement, 8:00 p.m.
March	21	Saturday	Winter quarter closes

Spring Quarter

March	26, 27	Thursday, Friday	Orientation program; registration ¹ and payment of fees for new students in all undergraduate colleges
March	30	Monday	Spring quarter classes begin 8:30 a.m. ²
April	2	Thursday	Last day for registration and payment of fees for the Graduate School, and for teachers in service
April	3	Friday	Good Friday; holiday
April	16	Thursday	Parents Day
May	21	Thursday	Cap and Gown Day Convocation, 11:30 a.m.; IV hour classes excused; Senate meeting, 3:30 p.m.
May	30	Saturday	Memorial Day; holiday
June 6 and 8-12			Final examination period
June	7	Sunday	Baccalaureate service, 3:00 p.m.
June	13	Saturday	Spring quarter closes. Commencement, 8:00 p.m.

Summer Session

June	15, 16	Monday, Tuesday	Registration ¹ for new students not already registered. First term fees due for students in all colleges
June	17	Wednesday	First term Summer Session classes begin 8:30 a.m. ²
July	4	Saturday	Independence Day; holiday
July	23	Thursday	Commencement, 8:00 p.m.
July	25	Saturday	First term closes
July	27	Monday	Registration ¹ for new students not already registered. Second term fees due for students in all colleges
July	28	Tuesday	Second term classes begin 8:30 a.m. ²
August	27	Thursday	Commencement, 8:00 p.m.
August	29	Saturday	Second term closes

¹ Registration subsequent to the date specified will necessitate the approval of the college concerned. See privilege fees for late registration or late payment of fees, page 32, *Bulletin of General Information*.

² First hour classes begin at 8:00 a.m. on St. Paul Campus.

³ This date does not refer to correspondence study courses, which may be started at any time during the year.

BOARD OF REGENTS

The Board of Regents is composed of The Honorable Ray J. Quinlivan, St. Cloud, First Vice President and Chairman; The Honorable George W. Lawson, St. Paul, Second Vice President; The Honorable James F. Bell, Minneapolis; The Honorable Daniel C. Gainey, Owatonna; The Honorable Richard L. Griggs, Duluth; The Honorable J. S. Jones, St. Paul; The Honorable Lester A. Malkerson, Minneapolis; The Honorable Charles W. Mayo, Rochester; The Honorable E. E. Novak, New Prague; The Honorable A. J. Olson, Renville; The Honorable Herman F. Skyberg, Fisher; and The Honorable Sheldon V. Wood, Minneapolis.

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DIRECTORY—COLLEGE OF EDUCATION ADMINISTRATION

(University of Minnesota Telephone—Main 8158)

Walter W. Cook, Dean of the College of Education	204Bu
Marcia Edwards, Assistant Dean of the College of Education	204Bu
William H. Edson, Director of Student Personnel	206Bu
Jean H. Alexander, Chairman, Committee on Student Scholastic Standing	210aBu
Paul R. Grim, Director of Student Teaching	210cBu
Arnold Woestehoff, Director, Bureau of Recommendations	102Bu

See list of major advisers on pages 14-15.

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 curricula for high school and elementary teachers, or in the specialized curricula. All courses numbered 100 or above may apply toward advanced degrees if approved by advisers as part of the graduate program. Students expecting to qualify for a degree should secure a copy of the *College of Education Bulletin* which contains a statement of general requirements for graduation and lists required courses in majors and minors and in the specialized curricula. Attention is called to the fact that courses are offered for the M.A. and the Ph.D. degrees in the Graduate School and also in many fields for the M.Ed. in the College of Education. The M.Ed. degree is offered in all special subject teaching fields such as physical education, art education, music education, home economics education, agricultural education, recreation leadership, and also in elementary education, rural education, English, science, and social studies. Students should consult a major adviser as early in their program as possible. Failure to do so often delays graduation and makes extra work necessary. Graduate students should consult the *Bulletin of the Graduate School*.

Bulletin changes and room schedules will be posted each quarter on the official bulletin board outside the door of Room 206 Burton Hall.

The fee for part-time registration in the College of Education is \$2.75 per credit for residents of the state and \$8.50 per credit for nonresidents. Other fees include special course fees and a \$5 deposit in all colleges except Graduate School where it is \$3. If six or more credits are taken, an incidental fee of \$18.85 is also required. Auditors pay the same fees as students registered for credit.

Telephone requests for information about College of Education matters should be made to Main 8158, Ext. 6703.

REGISTRATION

Teachers in service may register from Monday through Friday of the first week of the quarter, if it is *impossible* for them to come in during the regular pre-registration period. Registration materials should be secured from the Office of Admissions and Records.

ADMISSION TO DEGREE PROGRAM

A teacher in service or another person who plans to proceed with a program of study leading to the B.S. degree in education should apply for admission to the College of Education as a regular student during the first quarter in which he or she registers for six or more credits in regular classes. Application for such admission should be made through the Office of Admissions and Records in the Administration Building of the University. Procedures for admission as a regular student include the satisfactory completion of a number of 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 at the Student Personnel Office, 206 Burton Hall, by teachers in service and others who are unable to attend during the regular class week.

SCHOLASTIC STANDARDS

An average of C+ in specified courses of the major field is required for admission to methods courses and practice teaching and for graduation. An average of C is required in secondary school teaching minors for all undergraduate students beginning their work for a degree after June 15, 1941. This also applies to the one regular minor required of students majoring in elementary education.

ADDITIONAL COURSES

There are also some late afternoon and Saturday morning academic courses offered in the various teaching fields. Persons who desire to take work in any such department should get the necessary information by securing the bulletin entitled *Class Schedule* for each quarter.

Additional courses in education, educational psychology, physical education, and other subject-matter areas are offered in the Extension Division. The announcement of the Extension Division will be sent by the Office of Admissions and Records on request without charge.

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. Alumni and other students who have completed thirty quarter hours of work in residence are eligible for registration. The fee is \$5.50 for each placement season during which service is desired. The bureau receives a great many requests for experienced, as well as inexperienced, teachers each year. The office is in 102 Burton Hall.

SUMMARY OF CLASS SCHEDULES

On page 16 will be found a summary of class schedules by quarters, days, and hours of offering. This will help to simplify the planning of programs for the year and quarters.

COURSE FEES

The following courses require payment of course fees as indicated.

Agricultural Education
\$1.50 per cred.—82, 91, 199E

Art Education
\$2.00 per cred.—185
3.00 per qtr.—81

Curriculum and Instruction
\$2.00 per cred.—all courses

Educational Psychology
\$1.50 per cred.—142, 150

Home Economics Education
\$2.00 per cred.—197, 199E

Music Education
\$2.00 per cred.—60, 61, 62
30.00 for one (2 cred.), \$60.00 for two
(4 cred.) lessons per week—225E

PROGRAM OF COURSES

~~SYMBOLS~~

The following symbols and explanations are used throughout the bulletin:

* Course may be taken with consent of the instructor irrespective of prerequisites listed.

† To receive credit for this course, you must complete all courses listed after the †.

§ Credit is not given if the equivalent course listed after the § has been taken for credit.

** This course may be taken for independent study under Plan B for the Master's degree.

E The designation "E" after a course number over 100 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.

The small letter *f* after a course number indicates fall quarter; *w* indicates winter quarter; *s* indicates spring quarter.

AGRICULTURAL EDUCATION (AGED)

Persons interested in courses to be arranged by the Department of Agricultural Education should write directly to Head of the Department of Agricultural Education, 205 Horticulture Building, University Farm, St. Paul 1, Minn.

ART EDUCATION (ARED)

~~Fall Quarter, 1952~~

- 184 Advanced Course in the Teaching and Supervision of Art in the Elementary School (3 cred.) III-IV S, 213 TNUH, Gayne
- 189 Application of Esthetic Theory in Education (3 cred.) III-IV S, 109J, Hastie
- 284 Research in Art Education (2 cred.) IX-X T, 109J, Gayne
- 295 Problems in Art Education (Cred. ar.; prereq. consent of major adviser) Ar., ar., Gayne

~~Winter Quarter, 1953~~

- 151 Curriculum Building in Art Education (3 cred.) III-IV S, Ar., Hastie
- 156 Intercultural Education through Art (3 cred.) III-IV S, Ar., Gayne
- 296 Seminar in Art Education (No cred.) IX-X Th, Ar., Staff

~~Spring Quarter, 1953~~

- 81 Puppetry in Education (3 cred.) IX-X MWF, Ar., Page
- 152 See 151w, Gayne
- 185 Advanced Course in the Teaching of Art in the Secondary School (3 cred.) III-IV S, Ar., Hastie
- 296 See 296w

CURRICULUM AND INSTRUCTION (EDCI)

~~Fall Quarter, 1952~~

- 102 Teaching the Social Studies in the Elementary School (3 cred., prereq. Ed. 71C or equiv.) I-II S, 207NH, Jarolimek
- 105 Audio-Visual Materials in Education (3 cred.; prereq. sr., grad.) IX-X T, 206WeH, Pearson

- 107 Radio in Education (3 cred.; prereq. 9 cred. in ed.) III-IV S, 302MurH, Tyler
- 109 Audio-Visual Materials and Equipment Laboratory (3 cred.; prereq. *105 or concurrent regis.) IX W and 2 hrs. ar., 206WeH, Pearson
- 113 High School Curriculum (3 cred.; prereq. Ed. 55A-B, or equiv.) I-II S, 112Bu, Bossing
- 119 Elementary School Curriculum (3 cred.; prereq. Ed. 71C or equiv.) III-IV S, 211NH, Goossen
- 131 Advanced Course in Teaching the Technical Business Subjects (3 cred.) IX-X Th, 5ShH, Price
- 133 Consumer Education in the Schools (3 cred.) I-II S, 202Pt, Price
- 136 Business and Distributive Education under the Vocational Acts (3 cred.) IX-X W and 1 hr. ar., 5ShH, Haines
- 143 Teaching and Supervision of Reading in the Elementary School (3 cred.; prereq. 9 cred. in ed.) IX-X M, 213NH, Bond
- 145 Reading Difficulties (3 cred.; prereq. course in reading or basic training in counseling or school psychological work) IX-X T, 213NH, Bond
- 153 Supervision and Teaching of English in the Elementary Schools (3 cred.; prereq. Ed 71C or equiv.) III-IV S, 207NH, Chase
- 168 Current Developments in the Social Studies (2 cred.; prereq. grad.) IX-X F, 214NH, McCune
- 171 Curriculum Laboratory Practice (2 cred.; prereq. *170A or B.) Ar., Bossing
- 184 Supervision of Student Teaching (3 cred.; prereq. *15 cred. in Ed.) I-II S, 111Bu, Grim
- 199E Internship (Cred. ar.) Ar., Grim
- 201** Problems in Teaching the Social Studies (3 cred.; prereq. *168, 204) Ar., Morse, McCune, West
- 205** Problems in Audio-Visual Education (Cred. ar.; prereq. cons. of instr.) Ar., Pearson
- 207** Problems in Radio Education (1-3 cred.; prereq. 107) Ar., Tyler
- 215** Problems in the School Health Education Program (Cred. ar.; prereq. cons. of instr.) Ar., Grout
- 216** Field Work in the School Health Education Program (Cred. ar.; prereq. cons. of instr.) Ar., Grout
- 217 Seminar in the School Health Education Program (Cred. ar.; prereq. cons. of instr.) Ar., Grout
- 222 Seminar—Current Problems in the Techniques of High School Instruction (Cred. ar.; prereq. Ed 55A-B and senior methods) IX-X W, 111Bu, Ar., Bossing, Boardman, R. Keller, D. V. Smith
- 225** Special Problems in Supervision of Instruction in Secondary Schools (Cred. ar.; prereq. cons. of instr.) IX-X W, 111Bu, Boardman, R. Keller
- 226 Seminar in Elementary School Problems (No cred.) IX-X Th, 206 UHS, Bond, Goossen
- 227** Problems in Rural Education (Cred. ar.; prereq. 117) Ar., Milo Peterson
- 228** Problems of Higher Education and Teacher Education (Cred. ar.; prereq. cons. of instr.) Ar., Cooper, Eckert, Grim
- 238** Problems in Distributive Education (Cred. ar.; prereq. cons. of instr.) Ar., Haines
- 239** Problems in Business Education (Cred. ar.; prereq. cons. of instr.) Ar., Price
- 253 Seminar on the Improvement of College Instruction (Cred. ar.; prereq. cons. of instr.) IX-X W, 307 JohH, Eckert, Wrenn

- 261** Special Problems in the Improvement of Instruction (Cred. ar.; prereq. cons. of instr.) Ar., Goossen
- 271** Problems in Curriculum Construction (3 cred.; prereq. cons. of instr.) Ar., Bossing, Birkmaier, D. Johnson
- 273** Problems in Reading (3 cred.; prereq. *143 or 144) Ar., Bond
- 284** Problems in Student Teaching (3 to 9 cred.; prereq. cons. of instr.) Ar., Grim
- 287** Advanced Course in the Teaching of Science (3 cred.; grad.) III-IV S and 1 hr. ar., 111Bu., P. O. Johnson
- 294** Advanced Course in Curriculum and Methods in Secondary School English (2 cred.; prereq. Ed.T. 75A-B-C or equiv.) IX-X M, 111Bu, D. V. Smith
- 296** Special Problems in Teaching English (Cred. ar.) Ar., D. V. Smith

Winter Quarter, 1953

- 105 Audio-Visual Materials in Education (3 cred.; prereq. sr., grad.) I-II S and 1 hr. ar., Ar., Pearson
- 106 Coordinating an Audio-Visual Education Program (3 cred.; prereq. *105) IX-X Th, Ar., Pearson
- 107 Radio in Education (3 cred.; prereq. 9 cred. in ed.) IX-X W, Ar., Tyler
- 109 Audio-Visual Materials and Equipment Laboratory (3 cred.; prereq. *105 or concurrent registration) IX W and 2 hrs. lab. ar., Ar., Pearson
- 113 High School Curriculum (3 cred.; prereq. Ed. 55A-B or equiv.) IX-X Th, Ar., Bossing
- 139 Coordination Techniques (3 cred.) IX-X W, Ar., Haines
- 144 Teaching of Reading in Secondary Schools (3 cred.; prereq. 9 cred. in ed.) III-IV S, Ar., Bond
- 150 Supervision and Improvement of Instruction (3 cred.; prereq. Ed. 71C or equiv.) III-IV S, Ar., Goossen
- 161 Curriculum Construction in Business Education (3 cred.; prereq. 113) IX-X Th, Ar., Price
- 171 Curriculum Laboratory Practice (2 cred.; prereq. *170A or B) Ar., Ar., Bossing
- 181 Foundations of Elementary School Methods (3 cred.; prereq. 9 cred. in ed.) IX-X M, Ar., Goossen
- 199E See 199Ef
- 201** See 201f
- 204 Social Studies Curriculum (3 cred.) IX-X F, Ar., McCune
- 205** See 205f
- 207** See 207f
- 215** See 215f
- 216** See 216f
- 217 See 217f
- 222 See 222f
- 225** See 225f
- 226 See 226f
- 227** See 227f
- 228** See 228f
- 238** See 238f
- 239** See 239f
- 250 Higher Education in the United States (3 cred.; prereq. a year of grad. study in any field or 18 cred. in ed.) I-II S, Ar., Eckert
- 261** See 261f
- 271** See 271f
- 273** See 273f
- 284** See 284f
- 285 The Professional Education of Teachers (3 cred.; prereq. *15 cred. in ed. including H.Ed. 182 or Ed.C.I. 184 and Ed.C.I. 250 or Ed.Psy. 250) III-IV S, Ar., Grim
- 294** See 294f
- 296** See 296f

Spring Quarter, 1953

- 66 Treatment of Learning Difficulties (3 cred.; prereq. concurrent registration in student teaching) IX-X W, Ar., Bond, Reynolds
- 132 Teaching the Basic Business Subjects (3 cred.) IX-X Th, Ar., Price
- 134 Materials and Methods in Consumer Education (3 cred.; prereq. consent of instr.) I-II S, Ar., Price
- 141 Cooperative Part-time Work Experience Programs (3 cred.) IX-X W, Ar., Haines
- 145 Reading Difficulties (3 cred.; prereq. course in reading or basic training in counseling or school psychological work) IX-X M, Ar., Bond
- 149 Teaching and Supervision of Arithmetic in the Elementary School (3 cred.; prereq. Ed. 71C or equiv. §62A or B) III-IV S, Ar., Curtis
- 155 Materials Laboratory for Social Studies Teachers (3 cred.; prereq. consent of instr.) IX-X F, Ar., McCune, West
- 170B Curriculum and Course of Study Construction (3 cred.; prereq. *113) I-II S and 1 hr. ar., Ar., Bossing
- 171 Curriculum Laboratory Practice (2 cred.; prereq. *170A-B) Ar., Bossing, Archer
- 173A Organizing Units of Instruction in the Elementary School (3 cred.; prereq. 119 or teaching experience) III-IV S and 1 hr. ar., Ar., Ar.
- 173B Organizing Units of Instruction in the Secondary School (3 cred.; prereq. *113) III-IV S, Ar., Bossing
- 199E See 199Ef
- 201** See 201f
- 205** See 205f
- 207** See 207f
- 215** See 215f
- 216** See 216f
- 217 See 217f
- 222 See 222f
- 225** See 225f
- 226 See 226f
- 227** See 227f
- 228** See 228f
- 238** See 238f
- 239** See 239f
- 252 Effective College Teaching (3 cred.; prereq. 18 cred. in ed. or a year of graduate study in any field) I-II S, Ar., Eckert
- 261** See 261f
- 271** See 271f
- 273** See 273f
- 284** See 284f
- 286 The Professional Education of Teachers (3 cred.; prereq. *285) III-IV S, Ar., Grim
- 296** See 296f

EDUCATIONAL ADMINISTRATION (EDAD)

Fall Quarter, 1952

- 115 Organization of the Elementary School (3 cred.; prereq. 9 cred. in ed.) I-II S, 213 NH, Neale, Cramer
- 133 Basic Procedures in Student Personnel Work (3 cred.; prereq. 9 cred. in ed.) III-IV S and 1 hr. ar., BuAud, K. Hoyt
- 167 Junior High Schood (3 cred.; prereq. 9 cred. in ed.) III-IV S, 5ShH, Bossing
- 218 Recent Literature in Secondary Education (Cred. ar.) IX-X W, 111Bu, Boardman, Bossing
- 228** Special Problems in Educational Administration (1 to 3 cred.; prereq. 225) Ar., Ar., Neale
- 270** Special Problems in Secondary Education (Cred. ar.; prereq. consent of instr.) Ar., Ar., Boardman, Bossing, Keller

Winter Quarter, 1953

- 218 See 218f
- 228** See 228f
- 230** Public Relations for Schools (3 cred.; prereq. 225) I-II S, Ar., Neale
- 270** See 270f

Spring Quarter, 1953

- 210** Financial Aspects of Public School Business Administration (3 cred.; prereq. 227) IX-X W and 1 hr. ar., Ar., Neale
- 218 See 218f
- 226** School Plant Planning and Management (3 cred.; prereq. 227) I-II S, Ar., Neale
- 228** See 228f
- 270** See 270f

EDUCATIONAL PSYCHOLOGY (EPSY)

Fall Quarter, 1952

- 113 Psychology of Elementary School Subjects (2 cred.; prereq. 9 cred. in ed. and psy.) IX-X W, 109Psy, Van Wagenen
- 133 Basic Procedures in Student Personnel Work (3 cred.; prereq. 9 cred. in ed.) III-IV S and 1 hr. ar., BuAud, K. Hoyt
- 150 Clinical Practice in Remedial Teaching (3 cred.; prereq. *Ed.C.I. 145 or 151) Ar., Ar., Bond, Reynolds
- 151 Clinical Practice in Educational Diagnosis (2 to 6 cred.; prereq. *142 or Ed.C.I. 145) Ar., Ar., Bond, Reynolds
- 182 Education of Exceptional Children (3 cred.; prereq. Ed. 55B or 71C or equiv.) III-IV S, 202Pt, Reynolds
- 233** Problems in Guidance and Personnel Work (1 to 9 cred.) Ar., Dugan, Edwards, Wrenn
- 240** Problems in Measurement (3 cred.) Ar., Ar., P. O. Johnson
- 243** Problems in Statistics for Students in Education and Psychology (3 cred.) Ar., Ar., P. O. Johnson
- 253** Research Problems (Cred. ar.; prereq. consent of instr.) Ar., Ar., Staff
- 281 Practice in Personnel Work (Cred. ar.; prereq. *225-226) Ar., Edwards, Wrenn, Hagenah

Winter Quarter, 1953

- 114 See 113f
- 142 Individual Mental Testing (3 cred.; prereq. 120 or equiv.) III-IV S and ar., Ar., Reynolds
- 148 Clinical Diagnosis of Reading Difficulties (3 cred.; prereq. Ed.C.I. 145 and 9 cred. in psy. or ed. psy.) IX-X T, Ar., Bond, Reynolds
- 150 See 150f
- 151 See 151f
- 220 Advanced Theory of Measurement (2 cred.; prereq. 60 or 120, 216 or equiv.) IX-X T, Ar., Van Wagenen
- 233** See 233f
- 243** See 243f
- 253** See 253f
- 281 See 281f

Spring Quarter, 1953

- 115 See 113f
- 133 Basic Procedures in Student Personnel Work (3 cred.; prereq. 9 cred. in ed.) III-IV S and ar., Ar., K. Hoyt

- 150 See 150f
 151 See 151f
 184 Education of the Slow-Learning Child (2 cred.; prereq. 182) III-IV S,
 Ar., Reynolds
 221 See 220w
 233** See 233f
 240** See 240f
 254 Measurement and Evaluation in Higher Education (3 cred.) III-IV S, Ar.,
 P. O. Johnson
 281 See 281f

243** See 243f
 253** See 253f

HISTORY AND PHILOSOPHY OF EDUCATION (HED)

Fall Quarter, 1952

- 141 Critical Issues in Contemporary Education (3 cred.) IX-X Th, 202WeH,
 Beck
 178 Education and the Problems of American Democracy (3 cred.) IX-X M,
 105JohH, Ellis
 241** Problems in the History and Philosophy of Education (Cred. ar.; prereq.
 consent of instr.) Ar., Ar., Beck, Alexander

Winter Quarter, 1953

- 131 Comparative Education (3 cred.) IX-X Th, Ar., Beck
 179 Critical Thinking for Teachers (3 cred.) IX-X M, Ar., Ellis
 241** See 241f

Spring Quarter, 1953

- 110 Intercultural Education (3 cred.) IX-X M, Ar., Ellis
 182 Comparative Philosophies of Education (3 cred.; prereq. 76 or 141) IX-X
 Th, Ar., Beck
 241** See 241f

HOME ECONOMICS EDUCATION (HEED)

Fall Quarter, 1952

- 192 Evaluation in Home Economics (2-3 cred.; prereq. 93, Ed. 55B) Ar., Army,
 Rose
 194A Adult Education in Home Economics (3 cred.; prereq. *sr., 91, 93) Ar.,
 Ford
 197 Organization and Methods of Related Art Teaching (1-3 cred.; prereq. *sr.,
 91, H.E. 180, or concurrent regis.) Ar., Esteros
 199E Internship (Cred. ar.; prereq. *grad.) Ar., Rose
 243 Trends in Home Economics (3 cred.; prereq. consent of instr.) III-IV S,
 114HE, Rose
 293** Problems in Home Economics Education (1-3 cred.; prereq. consent of
 instr.) Ar., Rose, Esteros, Army, Ford
 294** Research Methods (3-6 cred.; prereq. consent of instr.) Ar., Army
 295** Seminar in Home Economics Education (1 cred.) IX Th, 114HE, Army,
 Rose

Winter Quarter, 1953

- 192 See 192f
 193A Home Economics Curriculum (secondary level) (3 cred.; prereq. *sr.)
 Ar., Army, Rose

194A See 194Af
197 See 197f
199E See 199Ef

243 See 243f
293** See 293f
295** See 295f

Spring Quarter, 1953

192 See 192f
193As See 193Aw
193B Home Economics Curriculum (college level) (3 cred.; prereq. consent of instr.) Ar., Army, Rose
194A See 194Af
194B Adult Education in Home Economics (3 cred.; prereq. 91, 93, 194A, grad.) IX MF and ar., Ar., Ford
195 Space, Equipment, Furnishings, and Materials for Home Economics Departments (3 cred.; prereq. *91, 93, H.E. 49) Ar., Rose, Kafka
197 See 197f
199E See 199Ef
292** Problems in Evaluation (3 cred.; prereq. consent of instr.) Ar., Army
293** See 293f
295** See 295f

INDUSTRIAL EDUCATION (IND)

Fall Quarter, 1952

40 Analysis (2 cred.) IX-X W, 202TNUH, Micheels
60 Philosophy of Vocational Education (2 cred.) IX-X M, 202TNUH, Widdowson
80 Introduction to Industrial Arts (2 cred.) IX-X F, 202TNUH, Nelson
107 Coordination (3 cred.; prereq. *60, 61, or 125) IX-X T, 202TNUH, Widdowson
205 Seminar in Industrial Education (No cred.) IX-X M, 116TNUH, Micheels, others

Winter Quarter, 1953

42 Course Organization (3 cred.; prereq. 40) IX-X F, Ar., Micheels
61 Practices in Vocational Education (2 cred.; prereq. 60) IX-X M, Ar., Widdowson
70 Teaching of Industrial Subjects (3 cred. §100; prereq. 42, Ed. 55B) IX-X W and ar., Ar., Nelson
205 See 205f

Spring Quarter, 1953

40 See 40f
44 Equipment and Management (3 cred.; prereq. 40, 42) IX-X M, Ar., Widdowson
102 The General Shop (2 cred.; prereq. jr., sr., grad.) IX-X Th, Ar., Nelson
115 Supervision of Industrial Education (3 cred.; prereq. 60, 80, or 105) IX-X T, Ar., Widdowson
125 Philosophy and Practice of Industrial Education (3 cred.; prereq. jr., sr., grad. §Ind. 60, 61) IX-X F, Ar., Smith
205 See 205f

MUSIC EDUCATION (MUED)

Fall Quarter, 1952

60 Supervision and Teaching of Music (3 cred.; †60-61-62; prereq. *sr., 50B, 53, Ed. 55B) IX-X W and 5 hrs. ar., 4ScH, Ivory
61 See 60f
62 See 60f

- 224 Seminar and Individual Research Problems in Music Education (3 cred.)
Ar., Ivory
- 225E Advanced Applied Music (2-4 cred.) Ar., Ivory
- | | |
|-----------------------------|-----------------------------|
| Winter Quarter, 1953 | Spring Quarter, 1953 |
| 60 See 60f | 60 See 60f |
| 61 See 60f | 61 See 60f |
| 62 See 60f | 62 See 60f |
| 224 See 224f | 224 See 224f |
| 225E See 225Ef | 225E See 225Ef |

PHYSICAL EDUCATION (PE)

- Fall Quarter, 1952**
- 118E Problems in Teacher Education in Health, Physical Education, and Recreation (Cred. ar.; prereq. consent of instr.) Ar., Baker, Ericson, Wilson
- 224** Research Problems in School Health Education and Physical Education for Women (Cred. ar.; prereq. consent of instr.) Ar., Baker, Ericson, Wilson
- 247** Problems in Physical Education and Recreation (Cred. ar.; prereq. 236) Ar., Nordly
- Winter Quarter, 1953**
- 107 Camp Administration (3 cred.; prereq. *46) IX-X W, Ar., Osell, Ostrander, Thorpe
- 118E See 118Ef
- 224** See 224f
- 247** See 247f
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| | Spring Quarter, 1953 |
| | 118E See 118Ef |
| | 224** See 224f |
| | 247** See 247f |

MAJOR ADVISERS

1952-53

Subject	Name of Instructor	Room
General Advisers	Jean H. Alexander, Chairman, Committee on Student Schol- astic Standing	210aBu
	William H. Edson, Director, Student Personnel	206Bu
New Extension Courses	J. M. Nolte	152NH
Educational Fields		
Agricultural Education	Milo J. Peterson	205Hr (StP)
Art Education	Clifton Gayne	106J
	W. Reid Hastie	106J
	Mildred Page	106J
Business and Distributive Educa- tion	Ray G. Price	109TNUH
Curriculum and Instruction	Emma Birkmaier (Languages)	111UHS
	Clarence Boeck (Science)	11UHS
	Guy L. Bond (Elementary)	212Bu
	Nelson L. Bossing (Secondary)	226Bu
	Carl V. Goossen (Elementary)	220Bu
	Donovan Johnson (Mathe- matics)	205UHS
	Palmer O. Johnson (Science)	216Bu
	George H. McCune (Social Studies)	214NH
	Dora V. Smith (English)	201Bu
Educational Administration	C. W. Boardman (Secondary)	106Bu
	Robert J. Keller (Secondary)	211Bu
	M. G. Neale (General)	224Bu

Subject	Name of Instructor	Room
Educational Psychology	Guy L. Bond	212Bu
	Walter W. Cook	204Bu
	Willis E. Dugan	219Bu
	Marcia Edwards	204Bu
	Ned A. Flanders	488ForH
	Palmer O. Johnson	216Bu
	Maynard Reynolds	108Pt
	M. J. Van Wageningen	360Psy
	C. Gilbert Wrenn	109Bu
Elementary Education	Jean H. Alexander	210aBu
	Guy L. Bond	212Bu
	Carl V. Goossen	220Bu
Health Education	Ruth Grout	121MH
Higher Education	Ruth E. Eckert	203Bu
	Paul R. Grim	210cBu
	M. G. Neale	224Bu
C. Gilbert Wrenn	109Bu	
History and Philosophy of Education	Jean H. Alexander	210aBu
	Robert H. Beck	215Bu
Home Economics Education	Clara B. Army	202HE (StP)
	Ella J. Rose	115HE (StP)
Industrial Education	William J. Micheels	105TNUH
	Homer J. Smith	101TNUH
Library Training	C. Irene Hayner	6Lib
Methods and Directed Teaching	Paul R. Grim	210cBu
Music Education	Paul Ivory	214ScH
	Paul Oberg	106ScH
Nursery School and Kindergarten Education	John Anderson	101Pt
	Elizabeth M. Fuller	2aCWI
Nursing Education	Katharine J. Densford	125 OWI
Physical Education for Men	Louis F. Keller	220bCH
	Carl L. Nordly	217CH
	Ralph A. Piper	219CH
Physical Education for Women	Gertrude Baker	104NGW
Radio Education	Tracy F. Tyler	301JohH
Recreation Leadership	Gerald B. Fitzgerald	221CH

Subject-Matter Fields

Botany	See Natural Science	
Chemistry	See Natural Science	
English	Harold B. Allen	317F
	Dora V. Smith	201Bu
Geography	John Borchert	222ForH
German	F. H. Wood	210F
History	A. C. Krey	205ForH
Journalism	Fred L. Kildow	106MurH
Latin	Norman J. De Witt	118F
Mathematics	William L. Hart	119F
Natural Science	Clarence Boeck	11UH
	Palmer O. Johnson	216Bu
Physics	See Natural Science	
Political Science	Asher Christensen	389ForH
	George Warp	364ForH
Romance Languages	R. L. Grismer (Spanish)	319F
	H. E. Clefton (French)	200aF
Scandinavian	Alrik Gustafson	13F
Social Studies	George H. McCune	214NH
	Edith West	214UHS
Sociology	Arthur Johnson	446ForH
Speech and Theater Arts	Howard Gilkinson	309bF
	Kenneth Graham	308NH
	Donald K. Smith	401F
	Frank Whiting	232NMA
	Bryng Bryngelson	410F
Speech Pathology	Bryng Bryngelson	410F
Zoology	See Natural Science	

SUMMARY OF CLASS SCHEDULES

Saturday I-II	Saturday III-IV	Monday IX-X	Tuesday IX-X	Wednesday IX-X	Thursday IX-X	Friday IX-X
FALL						
Ed.C.I.102 Ed.C.I.113 Ed.C.I.133 Ed.C.I.184 Ed.Ad.115	ArtEd.184 ArtEd.189 Ed.C.I.107 Ed.C.I.119 Ed.C.I.153 Ed.C.I.287 Ed.Ad.133 Ed.Ad.167 Ed.Psy.133 Ed.Psy.182 H.E.Ed.243	Ed.C.I.143 Ed.C.I.294 H.Ed.178 Ind.60 Ind.205	ArtEd.284 Ed.C.I.105 Ed.C.I.145 Ind.107	Ed.C.I.109* Ed.C.I.136 Ed.C.I.222 Ed.C.I.225 Ed.C.I.253 Ed.Ad.218 Ed.Psy.113 Ind.40 Mu.Ed.60-61-62	Ed.C.I.131 Ed.C.I.226 H.Ed.141 H.E.Ed.295*	Ed.C.I.168 Ind.80
WINTER						
Ed.C.I.105 Ed.C.I.250 Ed.Ad.230	ArtEd.151 ArtEd.156 Ed.C.I.144 Ed.C.I.150 Ed.C.I.285 Ed.Psy.142 H.E.Ed.243	Ed.C.I.181 Ed.C.I.294 H.Ed.179 Ind.61 Ind.205	Ed.Psy.148 Ed.Psy.220	Ed.C.I.107 Ed.C.I.109* Ed.C.I.139 Ed.C.I.222 Ed.C.I.225 Ed.Ad.218 Ed.Psy.114 Ind.70 Mu.Ed.60-61-62 P.E.107	ArtEd.296 Ed.C.I.106 Ed.C.I.113 Ed.C.I.161 Ed.C.I.226 H.Ed.131 H.E.Ed.295*	Ed.C.I.204 Ind.42
SPRING						
Ed.C.I.134 Ed.C.I.170B Ed.C.I.252 Ed.Ad.226	ArtEd.152 ArtEd.185 Ed.C.I.149 Ed.C.I.173A Ed.C.I.173B Ed.C.I.286 Ed.Psy.133 Ed.Psy.184 Ed.Psy.254 H.E.Ed.243	ArtEd.81 Ed.C.I.145 Ed.C.I.294 H.Ed.110 H.E.Ed.194B* Ind.44 Ind.205	Ed.Psy.221 Ind.115	ArtEd.81 Ed.C.I.66 Ed.C.I.141 Ed.C.I.222 Ed.C.I.225 Ed.Ad.210 Ed.Ad.218 Ed.Psy.115 Ind.40 Mu.Ed.60-61-62	ArtEd.296 Ed.C.I.132 Ed.C.I.226 H.Ed.182 H.E.Ed.295* Ind.102	ArtEd.81 Ed.C.I.155 H.E.Ed.194B* Ind.125

* Meets IX hour only or IX hour and additional time to be arranged. See Program of Classes.