

*The Bulletin of the*  
**UNIVERSITY of MINNESOTA**

The College of Education  
Announcement of Courses for the Years  
1946-1948

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## GENERAL INFORMATION

The College of Education is organized to offer professional curricula in the field of education, to promote research in the problems of education, and to provide educational guidance for prospective teachers and other educational workers in the schools. The completion of satisfactory curricula in this college entitles graduates to receive certificates for school work from the Minnesota State Department of Education. Such certificates are issued only to those graduating from this college.

Courses of study in the College of Education are based on the requirements of the Minnesota State Department of Education. Since requirements for certification vary in the different states, students who desire to teach in states other than Minnesota, should familiarize themselves with the regulations of the state in which they expect to teach.

Among the important undergraduate curricula offered by the college are those relating to teaching in the following fields: academic subjects in elementary and junior and senior high schools, agriculture, art, business subjects, home economics, industrial arts, music, natural science, and physical education.

Work is also offered in the fields of library science, recreational leadership, school health work, teaching of handicapped children, work of the visiting teacher, nursery school and kindergarten education, nursing education, and public health nursing.

Five-year curricula leading to the master of education (M.Ed.) degree are offered in agricultural education, art education, home economics education, industrial education, music education, physical education for men, and physical education for women. These curricula are outlined in this bulletin. Other five-year curricula are available or will be available in the immediate future. These include early childhood education, elementary education, English education, natural science, recreational leadership, rural education, social studies. Information in regard to these programs may be secured from the advisers or from the dean of the college.

Undergraduate and graduate courses are available in adult education, agricultural education, art education, clinical psychology, comparative education, educational administration, educational psychology, educational and vocational guidance, elementary education, higher education, history and philosophy of education, home economics education, industrial education, music education, physical education, professional education of teachers, radio education, secondary education, supervision, theory and practice of teaching, and visual education. For graduate work in education with major emphasis on one of these fields see the five-year curricula listed in this bulletin, and the Bulletin of the Graduate School.

## THE PREPARATION OF THE TEACHER

A student planning to enter the teaching profession needs three general types of preparation: (1) a broad general education; (2) knowledge of fields in which he or she intends to teach; and (3) professional orientation and training. These cannot be separated arbitrarily, since some course work and related experiences may well contribute to all three ends. The work of a teacher must constantly integrate all of them. Most courses, however, will be pointed more specifically towards one or the other of these objectives with primary emphasis on general education in the first two years, and concentration on teaching fields and professional preparation in the last two years of college.

## TEACHING FIELDS

Extensive preparation in the fields to be taught is essential for effective teaching. This includes basic understanding of the general area of his teaching fields\* coupled with more intensive study of some particular topics in order to appreciate the methods of investigation, to acquire familiarity with the sources of knowledge, and to develop the attitudes essential to further independent learning. It also involves a training sufficiently broad to show the relation of his own field to other areas of knowledge and human activity. Good teaching is possible only in constant reference to the spirit and letter of scholarship.

## PROFESSIONAL ORIENTATION

The prospective teacher must also be oriented to the professional aspects of his vocation and through study and practice lay the foundations of orientation and training for his teaching activities. This involves: (1) an understanding of the history, organization, function, curriculum, student composition, problems, and issues of the school as a social institution in a democratic society; (2) an understanding of the intellectual, emotional, and social development of children and youth; (3) a knowledge of the principles and conditions which facilitate and motivate learning; (4) guided experience for elementary or secondary teaching, classroom management and counseling; (5) introduction to the professional practices and problems of his teaching fields; (6) the professional treatment of certain elements of his general education for teaching purposes; and (7) an appreciation of the teacher's personal and professional problems and relationships.

## GENERAL EDUCATION

As a complement to his specialized and professional learning, the prospective teacher should also acquire what may be termed a general education. General education should help the individual to gain an awareness and understanding of problems of contemporary living, the cultural, social, and technological heritage of his age, and to develop the ability to think critically, to weigh basic human values, and to appreciate the products of creative thought and expression. It should prepare him for effective participation in democratic society and at the same time stimulate and allow full scope to his individual interests and talents. General education should therefore provide for common development of understandings, skills, insights, and appreciations for the personal and social activities basic to normal human living in a free society.

General education may perhaps be better described in terms of outcomes or purposes to be achieved than in terms of certain bodies of subject-matter content to be mastered. The following is a rather simple statement of the outcomes that courses in general education should strive to build. No attempt has been made to arrange them in any order of importance, since the significance of these objectives will vary from student to student, depending on individual backgrounds, abilities, and purposes. Yet attainment of certain objectives, such as responsible citizenship, will undoubtedly involve more systematic and

\* In general, it is better to prepare broadly and as thoroly as possible in a whole teaching field such as natural science or social studies than in a specific subject such as chemistry or sociology.

extended classroom instruction than will be required for others. It should also be pointed out that in establishing these as tentative objectives of general education, it is understood that different students will achieve these outcomes in different degree. Attainment of each of these goals will normally be sought through a variety of courses and curricular activities. Since the task of most elementary and secondary school teachers is to advance the general education of their students, the prospective teacher may also adopt these goals as objectives for his own future teaching.

#### ELEMENTS OF GENERAL EDUCATION

The elements of general education may be rather simply stated. They should enable the student:

1. To understand other persons' ideas through reading and listening, and, in turn, to express his own ideas effectively to others.
2. To attain a balanced emotional and social adjustment through an understanding of human behavior, the enjoyment of social relationships, and the experiences of working co-operatively with others.
3. To acquire the knowledge and attitudes necessary to come to intelligent decisions about personal and community health problems.
4. To acquire the knowledge and attitudes basic to a satisfying family life.
5. To acquire the knowledge and attitudes essential for participation as a responsible and informed citizen in the discussion and the solution of the social, economic, and political problems of American and international life.
6. To have a general knowledge of the history of scientific advance and to appreciate its impact upon the material and intellectual life of man; to understand and appreciate the scientific method and to use it in the solution of personal and social problems.
7. To understand and enjoy literature, music, the arts, and other cultural and recreational activities as an expression of personal and social experience, and, if possible, to participate in some form of creative activities.
8. To develop a set of principles for the direction of personal and social behavior through the recognition and critical examination of the values implicit in his own conduct.
9. To think critically and constructively on a wide range of personal, social, intellectual, and practical problems.
10. To choose a socially useful and personally satisfying vocation that will enable him to utilize his particular interests and abilities to the full.

#### SPECIALIZATION—MAJORS AND MINORS

The undergraduate student should specialize in the two fields of teaching in which he is most interested and which he finds he will enjoy most. He should, however, also consider the demands of the teaching profession and the probability of securing a position. Placement in nearly all fields is good but for a number of years there have been greater demands than we can supply in elementary education, in physical education for women, in home economics, in general science, in business education, and in mathematics.

The selection of one or two suitable minors to supplement a teaching major is important. Some combinations are more frequently requested than others. The most frequent combinations can be learned from an adviser or from mimeographed material available in the Bureau of Recommendations, 208 Burton Hall. Students who have majors in broad fields are more easily placed than those with one-subject majors and minors in unrelated subjects. Experience in student activities on the campus is a decided asset in securing a position and such participation is highly recommended to prospective teachers. Teachers with an academic major and with minors in special subjects such as home economics, music, art, physical education, and library work are in great demand in schools where the first experience must take place. Further specialization in single fields or subjects for teaching can take place as graduate work during Summer Sessions.

## ADMISSION

**General admission requirements**—There are two main divisions of teacher training in the College of Education. The *academic curricula* require two years of preprofessional college work for entrance. These curricula include the high school academic subject fields such as mathematics, social studies, English, etc., and library methods. The *specialized curricula* may be entered by freshmen who qualify for the four-year fields of training which include industrial, physical, music and art education, recreational leadership, and elementary, kindergarten-primary and nursery school teaching. In the specialized curricula in agricultural and home economics education, the students register for the first two years in the College of Agriculture, Forestry, and Home Economics, and register jointly for the junior and senior years in that division and in the College of Education.

1. Students desiring to enter as freshmen in the College of Education in one of the specialized curricula must meet the following standards of admission:
  - a. Satisfy the general University requirements for admission on the basis of (1) graduation from an accredited high school or (2) by examination.
  - b. Applicants for admission as freshmen in one of the specialized curricula of Art Education, Industrial Education, Music Education and Physical Education must possess a high school rank percentile of 25 or above.
  - c. Applicants for admission as freshmen in the curricula for Elementary Education, Kindergarten and Primary Education must possess a high school rank percentile of 40 or above.
2. Transfer students from other colleges of the University or from colleges outside the University within the United States to all curricula of the College of Education except Art Education, Music Education, Industrial Education, Agricultural Education, Home Economics Education, and Physical Education must possess
  - a. A high school rank percentile of 40 or above and a minimum grade point average of 1.0 in previous college work—*or*
  - b. An A.C.E. percentile of 40 or above (University entrance norms) and a minimum grade point average of 1.0 in previous college work—*or*
  - c. If neither high school rank nor A.C.E. score is available, a grade point average of 1.3 in previous college work is required for admission to advanced standing. Students with grade point averages of 1.0 to 1.3 may be referred to the college for consideration on an individual basis.
3. Transfer students from other colleges of the University or from colleges outside the University within the United States to the specialized curricula, excepted in paragraph 2 above, of the College of Education must possess
  - a. A high school rank percentile of 25 or above and a minimum grade point average of 1.0 in previous college work—*or*
  - b. An A.C.E. percentile rank of 25 or above (University entrance norms) and a minimum grade point average of 1.0 in previous work—*or*
  - c. If neither high school rank nor A.C.E. score is available, a grade point average of 1.3 is required for admission to advanced standing. Students with grade point averages of 1.0 to 1.3 may be referred to the college for consideration on an individual basis.

## ALL STUDENTS

1. At the time of entrance to the University a student must present a certificate from the Students' Health Service indicating that he is free from physical defects which would prevent him from the successful pursuit of educational work.

2. At the time of entrance to the College of Education the student will be given a general examination designed to show his capacity to pursue professional curricula in education.

3. All students entering the College of Education after the freshman year must have the required physical education work.

## STUDENTS IN SPECIALIZED CURRICULA

Students who did not enter as freshman and who are following one of the specialized curricula (pages 26-84) in which the work of the freshman and sophomore years is prescribed, should present for entrance the Junior College courses listed in their curriculum. Two years of work representing 93 credits for men and 95 credits for women carried with

an average of one honor point per credit are required. For men 3, and for women 5, of these credits shall be in physical education.

Students with two years of college training who are lacking certain specific Junior College courses may be admitted to the College of Education and will make up deficiencies after enrolment in the College of Education. Such deficiencies, however, may delay graduation or necessitate extra summer work. All courses of a special curriculum or equivalents should be completed, altho it may not always be possible to complete the courses in the order listed.

**STUDENTS WITH TWO YEARS OF WORK AT THE UNIVERSITY OF MINNESOTA**

For students who have taken two years of work in the College of Science, Literature, and the Arts or equivalent work in a liberal arts college or junior college, and are preparing to teach academic subjects in high school, entrance to the College of Education will be conditioned upon meeting the general and specific requirements outlined on pages 6-7.

1. In the freshman and sophomore years, men must complete three quarters of physical education; women must complete four quarters of physical education. For men 3 credits, and for women 5 credits, to be counted toward graduation from the College of Education, will be granted for the completion of the requirement in physical education. The total number of credits required for graduation is 183 for men and 185 for women. Students will receive credit for courses in military and naval science and tactics.

2. All students in the College of Education are required to take a sequence of courses in personal health, community health, and school health. Some of these courses should be taken during the freshman and sophomore years. See page 9.

3. A minimum of 93 credits for men and 95 credits for women carried with an average of one honor point per credit. For men 3, and for women 5, of these credits shall be in physical education. The remaining 90 credits shall be earned in the following groups of college courses:

- Group A English
- Group B Foreign languages: Classics, German, Romance Languages, Scandinavian
- Group C Social sciences: Anthropology, Economics, Geography, History, Political Science, Sociology
- Group D Natural sciences: Astronomy, Botany, Chemistry, Geology and Mineralogy, Physiology, Physics, Psychology, Zoology
- Group E Mathematics
- Group F Journalism, Philosophy, Speech, Fine Arts, or such courses in other colleges or departments of the University as are approved by the College of Education

4. Within the general requirements listed above, the student during his high school and Junior College years must have completed the required work indicated under A, B, C, and D below, and at least 20 credits in Groups B, C, and D must be completed in college.

SUBJECT	IN HIGH SCHOOL	IN COLLEGE
A. English	3 years	and 9 credits in composition*
B. Language	3 years in one language	or 20 credits in the same language
	or	
	2 years in one language	and 9 or 10 credits in same language
C. Social sciences	or	
	1 year in one language	and 15 credits in same language
	2 years	or 9 or 10 credits in one department
D. Natural sciences	2 years	or 9 or 10 credits in one department

NOTE—In lieu of the specific course requirements indicated in the language group a student may elect a comprehensive examination in a chosen language to be conducted by a committee appointed by the dean of the College of Education. Special adjustments will be made for veterans.

\* At the University of Minnesota this requirement may be met by completing English A-B-C, Freshman English or Comp. 4-5-6, Freshman Composition or Com. 4-5-6, Communication. Some students are exempt from the requirement. See "Regulations Applying to Freshman English," Bulletin of the College of Science, Literature, and the Arts.

5. Within the total credits stipulated under No. 4 a student must meet in fields of study which are represented in prevailing high school curricula, the following requirements: at least 15 credits in a major field and at least 10 credits in each of two minor fields. The purpose of this requirement is to prepare the student for the study of the advanced courses necessary to the completion of satisfactory teaching majors and minors.

6. The student must have completed 6 credits in general psychology.

7. Students with two years of college training who are lacking certain entrance requirements, such as science, language, or psychology, may be admitted to the College of Education and will make up all deficiencies after enrolment in the College of Education. Such students should consult the chairman of the Students' Work Committee.

8. Students in the College of Education may elect toward a degree a maximum of 24 hours in military training of which 6 credits are to be in the Basic Course and 18 credits from advanced R.O.T.C. courses. (See page 15.)

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

**Students in Agriculture and Home Economics**—Students expecting to receive certificates upon graduation to teach agriculture or home economics shall be registrants in the College of Education beginning with the junior year. Students in the College of Agriculture, Forestry, and Home Economics desiring a teacher's certificate in home economics or in agriculture shall, in addition to their registration in that college, register also in the College of Education. No formal application for transfer is necessary if such transfer is made at the beginning of the junior year. At least 90 credits, and honor points equal to the number of credits are required for admission to the junior class.

#### STUDENTS FROM OTHER COLLEGES

Students who transfer from other colleges with advanced standing are required to complete the work of the freshman and sophomore years as outlined in their curriculum or as outlined above in Junior College requirements (page 6). However, students who have had 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 enrolment in the college. Such deficiencies may delay graduation or necessitate extra summer work.

**New Students' Committee**—The faculty of the College of Education maintains a New Students' Committee, the duties of which are to assist students transferring from other colleges with advanced standing. Students in the special fields may secure help from the heads of their own departments in Elementary Education, Physical Education, Art Education, Music Education, and Child Welfare. All academic majors in such fields as social studies, English, languages, or science, should communicate with Miss Dora V. Smith, chairman of the committee, or with Miss Jean H. Alexander, chairman of the Students Work Committee, both at 206 Burton Hall. Instructions for New Students' Week and information concerning registration procedures and the location of major advisers will be mailed to advanced standing students on request. A transfer students' booth for the purpose of giving information during New Students' Week is maintained by upper classmen in the upstairs rotunda of Burton Hall.

**Admission on probation**—Students with advanced standing who wish to enter the College of Education may be admitted on probation if the average of the grades presented for admission is below that of the average mark required for graduation in the college from which they enter.

**Students with a B.A. degree**—Students already holding a B.A. or B.S. degree may in some cases register for the course Professional Training of Teachers. (See page 8.)

**Prerequisites for senior work**—Students who transfer with three years of college work approximating 135 credits, must have had courses equivalent to Ed. 51A-B-C, Introduction to Secondary School Teaching, and courses in their major prerequisite to practice teaching in order to complete the work for a degree in one school year. For prerequisites for practice teaching see page 10.

#### STUDENTS FROM SCHOOLS OF NURSING

Students who specialize in nursing education or public health nursing and who desire a teacher's certificate register in the College of Education for the last 45 credits of work. A student who enters the University as a freshman spends five quarters in the College of Science, Literature, and the Arts, earning 75 credits. During the next ten quarters the student is registered in the School of Nursing taking required subjects and nursing practice. During the last three quarters the student is registered in the College of Education. For detailed statement see pages 59-66.

#### STUDENTS FROM TEACHERS COLLEGES

Graduates from the standard two-year course of the Minnesota state teachers colleges and of other fully accredited teachers colleges are admitted to the College of Education with 90 blanket credits. These credits are accepted in lieu of the Junior College requirements listed above but a student in a specialized field will be held for all the work of his curriculum.

Graduates of the three-year course in the state teachers colleges of Minnesota will receive not more than 113 quarter credits; credits earned in such three-year normal course shall be applied, in case they are deemed of equivalent merit, in the College of Education, to courses for teachers and supervisors in elementary grades, principals in state graded schools, teachers in junior high schools, or in normal school departments in high school; students coming from such three-year courses will not receive certificates for teaching high school subjects from the University without completing the prescribed courses of the University for such certificates or their equivalents.

Students who transfer from the third or fourth year of the degree course offered in Minnesota teachers colleges will receive credit for any part of their work in so far as such work is equivalent in subject-matter to courses offered in the College of Education.

Graduates of five-year normal courses, if individually recommended by the normal school president, are allowed 63 quarter credits and are admitted as unclassified students pending the completion of 27 additional credits.

Teachers of experience who are unable to meet the regular requirements for admission are admitted to the College of Education as unclassified students.

Graduates of state teachers colleges will not be permitted to take for credit, Comp. 4-5-6 or Eng. A-B-C or Psy. 1-2, General Psychology. Graduates of state teachers colleges should not take Ed. 51A or Ed. 61A-B-C without special permission.

#### STUDENTS WITH A BACHELOR'S DEGREE

Provision is made for a selected group of students who already have earned a Bachelor's degree in some other college and desire to complete their preparation for teaching and qualify for a teacher's certificate to do so in the shortest possible time by registering in the course Ed.W, Professional Preparation for Teaching. To be admitted to Ed.W, students must have a 1.7 average and the consent of the adviser for the course. Such students plan their complete program in conference with the adviser and must earn a minimum of 45 credits. All requirements of the curriculum chosen must be completed and all units of the course, totaling 45 credits, must be completed. Students who complete the course receive the bachelor of science degree and are entitled to certification by the Minnesota State Department of Education.



## RESIDENCE REQUIREMENTS

The minimum residence requirement for graduation from the College of Education is represented by 45 credits of work, of which 30 credits must be earned in the senior year. No degree can be granted to any student who does not meet this requirement. Correspondence courses and General Extension courses do not count as residence credit except General Extension courses offered in Minneapolis, St. Paul, and Duluth.

Courses of study in the College of Education are outlined for two years and for four years.

Students may shorten the two years or four years of residence only by attending Summer Sessions, taking courses in General Extension in class or by correspondence or, by meeting such additional requirements in quality and quantity of professional work as will make the training of such students equal to that of students regularly registered for the full course.

The required courses in education are arranged in a sequence for the junior and senior years and cannot be completed in less time except in unusual cases or by extra summer work. Students who have not completed courses by the opening of the fall quarter will not, as a rule, be admitted to senior work. Students who do not enter the College of Education at the beginning of the junior year will not, as a rule, be able to complete the requirements of their curricula in two years.

Students who transfer from other colleges with three or more years of work receive a maximum of 135 credits exclusive of physical education. Students who transfer with 135 credits must, as a rule, enter in the fall and must have completed all requirements for practice teaching, in order to graduate in three quarters. To receive a certificate for teaching a student must be a graduate of the College of Education.

**Acceleration**—During the war, plans were put in operation whereby students may complete their work in less time than the regular two or four calendar years. This is usually done by earlier entrance, extra Summer Session work, and by carrying extra courses. Such programs are made for the individual student, and those interested in accelerating their work should consult the assistant dean, the chairman of the Students' Work Committee, or their major adviser. Acceleration is not possible in many departments.

## HEALTH EDUCATION

All students in the College of Education are required to take a sequence of courses in (a) personal health, (b) community health, and (c) school health, but students will be exempted from either or both of the *first two* requirements on the basis of knowledge shown through placement tests. A minimum of 6 credits is required unless students are exempted from (a) and (b).

Courses which may be taken to meet this requirement are as follows:

- a. P.H. 3, Personal Health, 2 credits; G. C. 10 C, Human Biology, 3 credits.
- 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 Infant and Preschool Child in certain curricula)

Students may secure advice about registering for the proper courses from their major advisers or from members of the Students' Work Committee.

## EXAMINATIONS AND REQUIREMENTS FOR REGISTRATION IN DIRECTED TEACHING

Registration for directed teaching in the senior year of the College of Education is subject to the approval of the director of student teaching. Such approval involves (1) a satisfactory report of the physical examination; (2) a satisfactory rating on the general English examination given during the junior year; (3) completion of all prerequisite courses in the major or satisfactory preparation in the major field; (4) satisfactory completion of all prerequisite courses in education; (5) satisfactory performance on all tests and examinations required by the committee on examinations, including the speech examination; (6) a C+ average (1.5 honor points per credit) in all courses in the major; (7) the recommendation of the major adviser; (8) the completion of any specific requirements set up by the examination committee or by the major department or by the director of student teaching. A student may be required to cancel his registration in directed teaching if he fails to meet the requirements or if his work is unsatisfactory. The student who is required to cancel his registration in directed teaching during the second or third quarter will be allowed to graduate without a teacher's certificate provided all other requirements have been met. Some of the requirements listed above may be waived for veterans upon the recommendation of the director of student teaching and the Students' Work Committee.

### GRADES, CREDITS, AND HONOR POINTS

**Grades**—The Senate regulations governing the "Uniform Grade and Honor Point System" is as follows:

(1) There are four permanent grades, A (highest), B, C, and D (lowest) acceptable for the completion of a single course.

(2) A permanent grade of F (failure) is given for work which in the opinion of the instructor should be repeated in class.

(3) The grade of I (incomplete) is a temporary grade indicating that a student has a satisfactory record in work completed and for justifiable reasons satisfactory to the instructor in charge was unable to complete the work of the courses.

Any student receiving this grade is required to complete the work of the course within the first thirty days of his next quarter in residence. A grade of Incomplete which is not removed within the first thirty days of the student's next quarter in residence will be marked cancelled without grade.

An extension of time may be permitted for removal of incomplete grades upon recommendation of the instructor concerned and approval by the Students' Work Committee of the college in which the student is registered.

If a petition is presented after the end of the thirty-day period, a restoration of the mark of incomplete may be permitted by the Students' Work Committee of the college concerned upon the recommendation of the instructor but would be considered in the nature of a special examination for which the special examination fee would be required.

(4) A symbol T (transferred) is used to indicate the transfer of credits from another institution or from one college to another within the University.

(5) For the purpose of determining scholarship averages, honor points are assigned to grades of A, B, C, and D as follows:

Each credit of A .....	3 honor points
Each credit of B .....	2 honor points
Each credit of C .....	1 honor point
Each credit of D .....	0 honor points

A student's scholarship average is the total number of honor points earned divided by the credits earned plus credits of removed and unremoved failures. See below.

The amount of work pursued by a student is estimated in credit hours; the quality or grade of his work, in honor points.

**A credit hour** is one hour per week of recitation or lecture work extending throughout one quarter, or three hours per week of laboratory work throughout one quarter. It is assumed that each credit hour will demand on the average three hours a week of the

student's time for recitation or lecture, one hour in class, and two hours of preparation; for laboratory courses, three hours in the laboratory.

**Honor points** are computed as follows: each credit hour with the grade of A entitles the recipient to 3 honor points; each credit hour with the grade of B to 2 honor points; each credit hour with the grade of C to 1 honor point; each credit hour with the grade of D to no honor points. Illustration: A student completing a one-quarter 3-credit course and receiving the grade of A would be entitled to 9 honor points; if receiving the grade of B, to 6 honor points; if receiving the grade of C, to 3 honor points; if receiving the grade of D, to no honor points.

**The scholarship or honor point average** is based on all courses a student has taken. It is obtained by dividing the number of honor points earned by the number of credits earned plus the credits of removed and unremoved failures. For example, assuming a student has registered for four 3-credit courses and receives grades of A, B, C, and D, he will have 12 credits and 18 honor points and his scholarship average is 1.5 or C+. If he registers for four courses and receives grades of B, C, D, and F, the total is 9 credits earned, 3 credits Fail and 9 honor points and the average is .75. If he repeats the course in which he received an F and earns a B, there are added to his record 3 credits earned and 6 honor points, and the total is 12 credits earned, 3 credits Fail and 15 honor points and his average is 1.0 or C.

#### AMOUNT AND QUALITY OF WORK FOR THE BACHELOR OF SCIENCE DEGREE

a. Upon entering the College of Education the student should, under advisement, (1) plan his program to secure one academic major and one or more academic minors and the required professional courses;\* or (2) he should plan his program in accordance with one of the specialized curricula.

b. During his entire course the student must earn a minimum of (1) 183 credits† if a man or 185 credits† if a woman, including the required courses in physical education, or a smaller number of credits determined as follows: For every 5 honor points in excess of one honor point per credit the number 183 or 185 is diminished by one, but no student will be recommended for graduation who has not completed all of the courses required in his particular curriculum and who has not satisfied all the requirements of his curriculum; (2) 1½ honor points per credit or an honor point ratio of 1.5 in his *major subject*; (3) 1 honor point per credit or an honor point ratio of 1.0 in his *minor subject* or *minors*; and (4) an average of 1 honor point per credit or an honor point ratio of 1.0 in *all courses* except those in the major pursued during the junior and senior years.

c. Fifteen credits are regarded as the usual load. Students who register for more than 17 hours should have a record of 1½ honor points per credit for the previous quarter. Students may be required to cancel one or more courses if their load is too heavy or their record is unsatisfactory.

d. All students registered in the College of Education shall maintain satisfactory standards of oral and written English. To determine when satisfactory standards have been attained the student is required to pass a general examination in English during the sophomore or junior year.

e. Students registered as freshmen and sophomores in the College of Education will be guided by the faculty regulations of the College of Science, Literature, and the Arts, but are responsible to the Students' Work Committee of this college.

f. Students who register in specialized curricula in the freshman and sophomore

\* For requirements in Education see pages 17-18.

† In some of the specialized curricula the number of credits required is more than 183 or 185.

years must have an average of one honor point per credit, or an honor point average of 1, for the first two years before they are admitted to junior work.

g. A student must have an honor point average of 1.5 or  $1\frac{1}{2}$  honor points per credit in his major subject to be admitted to practice teaching in his senior year.

**Honor points in the major**—Honor points are computed on the basis of one and one-half times the number of credits required in the major subject; e.g., in case a major recommendation requires 36 credits, the number of honor points will be 54. From among the courses carried in a department the student may select those which he will present as meeting this requirement except that he must include all courses which are specified in the departmental announcement as required for the recommendation for the certificate.

### UNSATISFACTORY WORK

Continued residence in the college is conditioned upon reasonable success in the student's work and progress toward graduation. Any student who does not make satisfactory progress in the curriculum in which he is registered may be placed on probation by the Students' Work Committee. No student is considered to have a satisfactory standing who fails to secure in the course of any year the normal advance of one honor point for each credit for which he is registered and  $1\frac{1}{2}$  honor points for each credit earned in his major subject.

Grades of D and F are considered unsatisfactory. A student who is found to have unsatisfactory marks in 50 per cent of his work at the end of any quarter will be placed on probation.

If he fails to make satisfactory marks in more than 50 per cent of his work the following quarter, he is liable to be dropped. Only in exceptional cases will such a student be allowed to continue in the College of Education.

Any student who has been on probation for more than one quarter and who fails to make an average of one honor point per credit may be dropped by the Students' Work Committee.

### GRADUATION—DEGREES—HONORS

**The degree of bachelor of science**—Students graduating from the four-year curricula of the College of Education will receive the degree of bachelor of science. A total of 183 credits and 183 honor points for men and 185 credits and 185 honor points for women is required for graduation. Candidates for this degree must (a) have met the requirements in a major and in a minor field and in professional subjects, or (b) they must have completed one of the specialized curricula. In addition they must have met the special scholarship requirements as stated on page 11. Candidates may major in any department listed on page 17.

**Graduation with high distinction**—All candidates of the four-year curricula of this college who have attained *special excellence* in scholarship as evidenced by an honor point ratio\* of 2.5 or more are candidates for the degree of bachelor of science *with high distinction*. This award is *not automatic* but is conditioned upon favorable recommendations of the faculty and is conferred by faculty action only. Other conditions that influence the award are the amount of advanced work taken by the student, the percentage of work taken at the University of Minnesota, evidence of ability to do independent work, and other conditions affecting scholastic standing.

**Graduation with distinction**—All graduates of the four-year curricula of this college who have attained *excellence* in scholarship to the extent of having earned an average honor point ratio\* of 2.0 or more are candidates for the degree of bachelor of

\* The honor point ratio is calculated by dividing the total number of honor points earned by the total number of credits earned plus credits of F (fail). See page 11.

science *with distinction*. This award is *not automatic* but is conditioned upon favorable recommendation of the faculty and is conferred by faculty action only. Other conditions that influence the award are the amount of advanced work taken by the student, the percentage of work taken at the University of Minnesota, evidence of ability to do independent work, and other conditions affecting scholastic standing.

**The degree of master of education**—Students graduating from one of the five-year curricula in the College of Education will receive the degree of master of education. A minimum of 225 credits (exclusive of the general required freshman and sophomore physical education courses) is required for this degree, together with the completion of all requirements of the curriculum. See below.

#### MASTER OF EDUCATION DEGREE

The College of Education grants the professional degree of master of education (M.Ed.) to students who satisfactorily complete the prescribed five-year programs. Five-year curricula are available in Agricultural Education, Art Education, Home Economics Education, Industrial Education, Music Education, Physical Education for Men, and Physical Education for Women. Five-year curricula in other fields which are being developed are: early childhood education, elementary education, English education, natural science, recreational leadership, rural education, and social studies. Students register in the curricula named above at the beginning of the freshman year. In some cases the student who already has a Bachelor's degree in the field may qualify for the degree of master of education by completing all the requirements of the fifth year.

Because standards for teacher-training are being raised and many states and cities now require a Master's degree for teaching in high school and for supervisory and special work, students are urged to take advantage of the five-year programs whenever possible.

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 (not subject) specialization, usually about 90 quarter credits; (4) advanced professional training including one quarter of internship under a master teacher. The total number of quarter credits is from 225 to 230, of which at least 45 must be in courses numbered above 100. In the courses comprising the fifth year of the curriculum, a B average (2 honor points per credit) is required. Final written and oral comprehensive examinations, and demonstration of competence in teaching classes, are required.

#### GRADUATE WORK IN EDUCATION†

Graduate work in education leading to the degree of master of arts or doctor of philosophy may be pursued in the Graduate School. All courses bearing numbers 100 and above (with the exception of those designated by a capital "E") are open for credit to graduate students. Before attempting to make out their programs, graduate students in education should consult the dean of the College of Education and the dean of the Graduate School.

Graduate courses may be pursued during the Summer Session. The work for the Master's degree may ordinarily be completed in three or four full Summer Sessions. For full statement of regulations, consult the Bulletin of the Graduate School.

**Prerequisites for graduate work in education**—For major work the prerequisite is at least 6 quarter credits in psychology and in addition to this a total of not less than 18 quarter credits of undergraduate work in education which shall include Ed.51A-B-C or Ed.61A-B-C or the equivalent. For minor work at least 6 quarter credits in psychology, and, in addition to this, a total of not less than 18 credits of undergraduate work in education is required.

† For complete description of graduate work in education see the Bulletin of the Graduate School.

**Candidates for a degree**—Students who have met the requirements for admission to the Graduate School and for the courses elected may register for graduate courses in education, but *are not candidates for a degree* until the formal acceptance of their candidacy. For requirements for acceptance for candidacy consult major adviser.

**Language requirement**—Candidates for the Master's degree majoring in any of the fields of education are exempted from the foreign language requirement without petition. Candidates for the Doctor's degree will meet the requirement of the Graduate School.

**Academic work**—Students who have taken their undergraduate work at teacher training institutions or have had an undergraduate major in professional or technical work should note especially the requirement in academic credits for admission to the Graduate School.

#### MAJORS AND MINORS

Major and minor work for advanced degrees may be arranged from the graduate courses listed below (pages 85 to 116) under the following groupings:

##### *Doctor's Degree*

**Major**—Major work will be chosen in the field of education in the following manner:

With the approval of his adviser the student will select a group of courses, excluding the field of his minor, centering about his special interest in education. Major fields are:

Education  
Educational Administration  
Educational Psychology

**Minor**—Minors may be chosen as follows:

1. From one of the fields listed above, not representing the major, and from additional fields in education as listed below:

Education	Educational Psychology
Agricultural Education	History and Philosophy of Education
Curriculum and Instruction	Home Economics Education
Educational Administration	Industrial Education

2. Any other field of study offered in the University of Minnesota in which satisfactory courses of graduate character are available and which is obviously related to the field of major interest.

3. Students majoring in fields other than education may choose education or any of its subdivisions enumerated above under 1, as a minor when it appears that such a minor is appropriately related to a major field.

##### *Master's Degree—Plan A*

**Major**—Majors may be chosen as follows:

The student with the approval of his adviser, may select a group of courses in one of the fields listed below, excluding the field of his minor, centering about his special interest in education.

Agricultural Education	Educational Psychology
Curriculum and Instruction	History and Philosophy of Education
Education	Home Economics Education
Educational Administration	Industrial Education

**Minor**—Minors may be chosen as follows:

1. From any of the groupings of courses enumerated above when such grouping is not included in the major.

2. From any other field of study offered at the University of Minnesota in which satisfactory courses of graduate character are available and which is obviously related to the major field.

3. Students majoring in fields other than education may choose education or any of its subdivisions enumerated above as a minor when it appears that such a minor is appropriately related to the major field.

#### *Master's Degree—Plan B*

**Field of concentration**—Under Plan B, which encourages a wider selection of courses, the student will be expected to select a field of concentration in which he will obtain from 21 to 27 credit hours. The field of concentration differs from a major in that it encourages the choice of a somewhat wider range of courses related to the student's interest. As in the case of the major, however, the student will be expected to indicate his field of concentration according to the general arrangement of courses that prevails for the requirement of a major. This arrangement is as follows:

Agricultural Education	Educational Psychology
Curriculum and Instruction	History and Philosophy of Education
Education (in special cases)	Home Economics Education
Educational Administration	Industrial Education

**Additional courses**—The student may elect the additional courses required to complete the total of 45 credits from areas of education not included in the field of concentration and from any other fields of study offered at the University of Minnesota in which satisfactory courses of graduate character are available and which are obviously related to the student's interest. Further work in subject-matter areas is encouraged.

Candidates for the Master's degree under Plan B are expected to earn 9 credits in advanced courses involving papers prepared in independent study. This requirement may be satisfied by work in starred courses.

#### CREDIT FOR MILITARY SERVICE

Credit for advanced courses in military and naval science and tactics is recognized in the College of Education in accordance with university regulations. Students interested in registering for such work should consult the officers in charge of the departments.

Credit is allowed for basic training received in the armed services and for advanced military and technical training upon presentation of the proper credentials to the Office of Admissions and Records.

Credit is also allowed for satisfactorily passing the various General Educational Development tests.

#### LABORATORY SCHOOLS

The University High School is a six-year secondary school maintained by the College of Education to provide opportunity for observation, demonstration, experimentation, and research. Many students do their directed teaching in the University High School; others do their teaching in Marshall High School or other Twin City schools.

The demonstration school affiliated with the College of Education for work in elementary education is Tuttle School, Minneapolis, W. W. Staudenmaier, principal.

#### BUREAUS OF RECOMMENDATIONS AND EDUCATIONAL RESEARCH

**Bureau of Recommendations**—Graduates of the College of Education and graduate students in education who have met the requirements for a state teacher's certificate will be recommended for positions for which they are qualified. Senior students on the Minneapolis campus should register with the Bureau of Recommendations, 208 Burton

Hall. The fee is \$4.50 and entitles the student to one year of placement service. This service may be renewed for any year by the payment of a small fee. The director of the bureau will confer with students and furnish information regarding placement, demands of the teaching profession, best subject-matter combinations, and probabilities of securing a position. Several group conferences are arranged for seniors each year.

Students are urged to register in the Bureau of Recommendations during their senior year in order that their credentials may be in the permanent files of the College of Education for future reference.

**Bureau of Educational Research**—The College of Education conducts a Bureau of Educational Research for the purpose of promoting investigations by faculty and students in problems of education. The bureau is under the direction of the dean of the college and the members of the faculty co-operate as their several interests dictate. Through the bureau opportunity is given for co-operation with public schools in studies bearing upon problems of school administration, classroom instruction, and related matters. The bureau is responsible for the publication of a series of studies under the general title of Educational Monographs.

#### SPECIAL FEES

All methods courses and all special methods and directed teaching courses carry a fee of \$1 per credit hour. All courses listed under Curriculum and Instruction and Methods and Directed Teaching carry a fee of \$1 per credit. Certain courses in the various departments require the payment of special fees. Such fees are indicated in connection with the course descriptions in this bulletin and with the schedule of courses as listed in the College of Education section of the Combined Class Schedule. For a statement of tuition and other fees see the Bulletin of General Information.

#### PROFESSIONAL LECTURES

From time to time during the year lectures of general interest to students of education will be given by members of the faculty and invited speakers. All students in the College of Education are expected to attend these lectures. Special announcements will appear in the Official Daily Bulletin.

#### CONFERENCES FOR STUDENT TEACHERS

Conferences for student teachers are arranged during the school year by the director of student teaching. Such conferences are a part of the required work in all courses that include directed teaching and practice work. Discussion centers around professional topics and problems of interest to student and beginning teachers. Announcement of the lectures and conferences is made at the appropriate time.

#### CERTIFICATION OF TEACHERS

Employment in a professional capacity in the schools of Minnesota is conditioned upon the proper licensing of the person to be employed. By a law enacted in 1929 all authority for such certification is conferred upon the State Department of Education. Certification by institutions and the university teacher's certificate have been discontinued. Within the scope of this law the University operates its program for those students who desire certification for teaching in the public schools of this state.

The law provides that certification is automatic for the graduates of the College of Education who have completed specifically named curricula in this college. No provision is made for the certification of any other university graduates. Certificates may be issued only to those persons who are "physically competent and morally fit to teach." The various curricula in the College of Education provide the training necessary for any type of state certificate which is based upon four or five years of training beyond the high school.



Four-year programs of study which provide the training necessary for holding positions in the public schools of Minnesota are offered in the following subjects:

Agriculture	Nursery School and Kindergarten Education
Art Education	Nursing Education
Botany	Physical Education for Men
Business Education	Physical Education for Women
Chemistry	Physics
Elementary Education	Political Science
Elementary School Supervision	Public Health
English	Public Health Nursing
French	Recreational Leadership
Geography	Scandinavian
German	School Health
History	Social Studies
Home Economics	Sociology
Industrial Education	Spanish
Junior High School Education	Speech
Latin	Speech Pathology
Library Methods	Teaching of Handicapped Children
Mathematics	Visiting Teachers
Music Education	Zoology
Natural Science	

Students who desire certification upon graduation from the University of Minnesota shall be registrants in the College of Education beginning with the junior year (except in the four- and five-year curricula where students register in the college as freshmen). Students in home economics and agriculture shall also be registrants in the College of Agriculture, Forestry, and Home Economics. They shall have satisfied the prescribed requirements for a major and a minor in secondary school subjects or the specific requirements of a specialized curriculum as outlined in this bulletin. Such students will also be required to complete the two years' work leading to the degree of bachelor of science. *No certificate is granted without a degree from the College of Education.*

By a proper selection of courses students qualifying for the degree of bachelor of science may qualify for teaching in more than two fields. This is desirable since most beginning teachers in public schools are required to teach several subjects.

The Minnesota High School Advanced certificate is granted upon the completion of a five-year program and the M.Ed. degree when the major is in a teaching field.

Because the regulations and requirements in general education, in subject-matter fields, and in education necessary for certification in different states are constantly changing, students who plan to teach in states other than Minnesota should consult their major advisers in order that they may fully complete the requirements for the specific state in which they wish to teach.

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## PROFESSIONAL REQUIREMENTS FOR TEACHERS OF SECONDARY SCHOOL SUBJECTS

In order to qualify for the Minnesota state high school standard certificate in secondary school subjects the student must be a graduate of the College of Education. To qualify for a degree and for the certificate students not completing a specialized curriculum as set forth in this bulletin will meet the following requirements:\*

\* 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.

A. One academic major. Some courses of study are outlined not for a one-subject major but for a broad field of specialization, such as natural science, and social studies including history.

B. One or more academic minors.

Majors and minors must be selected from the subjects commonly taught in high schools. Students should elect 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. The following pages list the fields in which majors and minors are offered and the requirements in each field. See also pages 19-25.

C. Professional courses totaling not less than 26 credits.

The student preparing for high school teaching in academic subjects must meet the following professional requirements:

1. **Required course—General—Ed.51A-B-C.** Introduction to Secondary School Teaching. (9 cred.; prereq., Psy. 1-2)

This course consists of work in educational psychology, the technique of high school instruction, and the high school; and is usually taken in the order 51C-A-B.

2. **Methods and practice teaching—**In addition, the student must complete a *Special Methods and Directed Teaching Course* (9 cred.; prereq., Ed.51A-B-C) in his major field and a course in Special Methods in his minor field (3 or 4 cred.; prereq., Ed.51A-B-C).†

3. **Education electives—**To complete the professional requirement of at least 26 quarter credits required 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; Ind. 105, Administration of Industrial Education; Ind. 110, Guidance in the Schools. Methods and other courses offered in the special subjects are sometimes approved by petition.

All of these courses are described in the section, Description of Courses, pages 85-106.

#### DIRECTED TEACHING†

Because of the shortage of teachers since the beginning of the war some of the requirements for directed teaching may be waived and the time may be shortened on the recommendation of the director of student teaching and the Students' Work Committee. This applies especially to veterans.

Special methods and student teaching are normally combined into a one-year course extending throughout the senior year. Failure to register for such course for the fall quarter of the senior year will probably result in delay in graduation. All courses prerequisite to special methods and practice teaching should have been completed by the beginning of the senior year. In addition to the special methods and practice teaching course in the subject which the student wishes to teach he must satisfy the requirements for a major or minor in that subject according to his curriculum. By the beginning of his senior year he should have made adequate preparation, particularly in his major teaching field, for successful directed teaching in high school classes.

Arrangements for directed teaching should be made at the close of the junior year and before the student registers for other courses. In the academic subjects arrangements should be made through the director of student teaching, and in the special subjects through the major advisers.

† See prerequisites for registration in Methods and Directed Teaching, pages 85-103.

## MAJORS AND MINORS IN ACADEMIC SUBJECTS

### BOTANY

**Major adviser**—Professor W. S. Cooper.

For curriculum in natural science, see pages 58-59.

Botany as a major subject:

Course No.	Title	Credits
Bot. 1-2-3 or	General Botany .....	10
Bot. 4-5	General Botany .....	10
Bot. 10	Minnesota Plant Life .....	3
Bot. 12	Plants Useful to Man .....	3
Bot. 50	General Plant Ecology .....	3
Bot. 51	General Plant Physiology .....	3
Bot. 52	Elementary Taxonomy .....	3
Bot. 53	Morphology of Thallophytes and Bryophytes .....	3
Bot. 54	Morphology of Pteridophytes and Spermatophytes .....	3
Total credits .....		31

Botany as a minor subject:

Bot. 1-2-3 or 4-5; 10, 12 and 3 additional credits.

### CHEMISTRY

**Major adviser**—Professor Palmer O. Johnson.

For curriculum in natural science, see pages 58-59.

Chemistry as a major subject:

Course No.	Title	Credits
Inorg. Chem. 9-10	General Inorganic Chemistry .....	10
Inorg. Chem. 12	Semimicro Qualitative Analysis .....	5
Anal. Chem. 7	Quantitative Analysis .....	4
Org. Chem. 54-55, 57-58	Elementary Organic Chemistry .....	10
Additional credits .....		10

Chemistry as a minor subject:

Inorg. Chem. 9-10, 12; Anal. Chem. 7; six additional credits in chemistry.

Students without entrance credits in chemistry register for Inorg. Chem. 6-7 instead of 9-10.

### ENGLISH

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

English as a major subject:

Course No.	Title	Credits
Eng. 22-23	Introduction to Literature .....	10
Eng. 55-56	Shakespeare .....	6
Eng. 73-74	American Literature .....	6
Eng. 165	Historical Study of Modern English .....	3
Comp. 27-28	Advanced Writing .....	6
Speech 1-2	Fundamentals of Speech .....	6
Additional credits in courses numbered 100 or above .....		3
Total credits .....		40

NOTE. Majors in English are requested to take Ed.C.I. 122, Literature for Adolescents, 2 credits, which is counted in the professional requirement.

## English as a minor subject:

Course No.	Title	Credits
Eng. 22-23	Introduction to Literature .....	10
Eng. 55-56	Shakespeare .....	6
Eng. 73-74	American Literature .....	6
Comp. 27-28	Advanced Writing .....	6
Total credits .....		28

## GEOGRAPHY

Major adviser—Professor D. H. Davis.

For curriculum in social studies, see pages 78-79.

## Geography as a major subject:

Twenty-eight credits from the following courses:

Course No.	Title	Credits
Geog. 11	Human Geography .....	5
Geog. 41	Geography of Commercial Production .....	5
Geog. 43	Political Geography .....	5
Geog. 47	Geography of Minnesota .....	3
Geog. 53	Historical Geography of North America .....	3
Geog. 71	Geography of North America .....	3
Geog. 101	Geography of Europe .....	3
Geog. 102	Trade Routes and Trade Centers .....	3
Geog. 103	Geography of Africa .....	3
Geog. 104	Geography of Australia .....	2
Geog. 110	Geography of South America .....	3
Geog. 111	Cartography and Graphic Representation .....	3
Geog. 120	Geography of Asia .....	3
Geog. 125	Geography of the Polar Areas .....	3
Geog. 133	Climatology .....	3
Geog. 241	Field Course .....	3
Geog. 251- 252-253	Seminar in Geography .....	3

Five or six additional credits from the following courses in geology:

Geol. 1-2	General Geology (Dynamic and Historical) .....	6
Geol. 8	Earth Features and Their Meaning .....	5
Total credits, minimum .....		33

## Geography as a minor subject:

Eighteen credits selected from the following courses:

Geog. 11 or 41 (preferably 11), 53, 71, 101, 102, 103, 104, 110, 120

## GERMAN

Major adviser—Professor O. C. Burkhard.

## German as a major subject:

Course No.	Title	Credits
Ger. 50-51-52	Composition .....	6
Ger. 53-54-55	Conversation .....	6
Ger. 56-57	Essay Writing .....	6
Ger. 58	German Pronunciation .....	2
Ger. 68	Introductory Survey of German Literature .....	3
Additional credits in courses numbered 50 or above .....		12
Total credits .....		35

## German as a minor subject:

Ger. 50-51-52	Composition .....	6
Ger. 58	German Pronunciation .....	2
Additional credits in courses numbered 50 or above .....		8
Total credits .....		16

## HISTORY

Major adviser—Professor A. C. Krey.

For curriculum in social studies, see pages 78-79.

History as a major subject:

Total number of credits ..... 45

At least 18 credits must be in Senior College courses. In the senior year students, if they have maintained to the end of the junior year an honor point average of 1.5 in all work and an average of 2.0 in courses in history taken after the freshman year, may take at least one course numbered above 150; all other majors will take an additional survey course in the senior year, but will not take a course numbered above 150.

History as a minor subject:

A minimum of 18 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.

## JOURNALISM

Minor adviser—Assistant Professor Fred L. Kildow.

Journalism as a minor subject:

Course No.	Title	Credits
Jour. 13	Introduction to Reporting .....	3
Jour. 41	Editing for Nonmajors .....	3

Twelve credits in Senior College courses, including Jour. 69 and 82, and two additional courses. Courses 55 and 103 or 109-110 are recommended. Ed.T. 74, Teachers Course in Journalism, is also required.

## LATIN

Major adviser—Associate Professor J. L. Heller.

Latin as a major subject:

Eighteen credits including:

Course No.	Title	Credits
Lat. 73-74-75	Prose Composition .....	3
Lat. 111-112-113	Advanced Prose Composition .....	3

Additional courses in Latin including two with numbers between 50 and 100 and two with numbers above 100.

Latin as a minor subject:

Nine credits including Lat. 73-74-75 and any two courses with numbers above 50.

**Sequence of courses in Latin**—Students who have had no Latin in high school will take Courses 1, 2, 3, 11, 12, and any course numbered between 50 and 100. Students entering the University with one year of high school Latin will take Courses 3, 11, 12, and any course numbered between 50 and 100. Students entering with two years of Latin will take 11, 12, and any course numbered between 50 and 100. Students entering with three years of Latin will take 12, and any course numbered between 50 and 100. Students with four years of high school Latin will take 73-74-75 and any two courses numbered between 50 and 100.

## MATHEMATICS

Major adviser—Professor W. L. Hart.

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 recom-

† 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.

mended as an elective. With the permission of the major adviser Math. 15-16, Elementary Mathematical Analysis (10 credits) may be accepted instead of Math. 6 and Math. 7.

Course No.	Title	Credits
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
Additional credits in courses numbered over 51 .....		8
Total credits .....		33

Mathematics as a minor subject:

Prerequisite courses: Solid Geometry (entrance credit or its equivalent); † Higher Algebra taken either in high school or college. With the permission of the adviser Math. 15-16 may be accepted for Math. 6 and Math. 7.

Course No.	Title	Credits
Math. 6	Trigonometry .....	5
Math. 7	College Algebra .....	5
Math. 30	Analytic Geometry .....	5
Math. 50	Calculus I—Differential Calculus .....	5
Additional credits in courses numbered over 50 .....		3
Total credits .....		23

PHYSICS

Major adviser—Professor J. W. Buchta.

For curriculum in natural science, see pages 58-59.

Physics as a major subject:

Prerequisite: Math. 16-17, Elementary Mathematical Analysis, or equivalent.

Course No.	Title	Credits
Phys. 7-8-9	General Physics .....	15
Phys. 107-109-111	Modern Physics .....	9
Additional credits selected from the following:		
Phys. 52	Laboratory Arts	} ..... 9
Phys. 110-112	Modern Experimental Physics (3 or 4 cred. per qtr.)	
Phys. 124	Pyrometry (3 cred.)	
Phys. 134	Physical Optics (3 or 4 cred.)	
Phys. 136	Spectrum Analysis (3 or 4 cred.)	
Phys. 144	Electricity Measurement (3 cred.)	..... 9
Total credits .....		33

Physics as a minor subject:

Phys. 7-8-9	General Physics .....	15
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Additional credits selected from the following:

Course No.	Title	Credits
Phys. 52	Laboratory Arts (3 cred.)	} ..... 6
Phys. 107-109-111	Modern Physics (3 cred. per qtr.)	
Phys. 134	Experimental Optics (3 or 4 cred.)	
Phys. 136	Spectrum Analysis (3 or 4 cred.)	
Phys. 144	Electricity Measurement (3 cred.)	
Total credits .....		21

POLITICAL SCIENCE

Major adviser—Associate Professor E. M. Kirkpatrick.

For curriculum in social studies, see pages 78-79.

† 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.

Political Science as a major subject:

Thirty-six credits including:

Course No.	Title	Credits
Pol.Sci. 1-2-3	American Government and Politics .....	9

Additional courses in Political Science to the extent of 27 credits, including 7 or 9-10 or 15 or 25 and 18 credits in Senior College courses.

Political Science as a minor subject:

Eighteen credits including:

Course No.	Title	Credits
Pol.Sci. 1-2-3	American Government and Politics .....	9

Additional courses in Political Science to the extent of 9 credits, including either 7 or 9-10 or 15 or 25. At least 6 credits must be in Senior College courses.

PUBLIC HEALTH

Public Health as a minor subject:

Course No.	Title	Credits
P.H. 50	Public and Personal Health .....	3
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. 102	Environmental Sanitation .....	3
Bact. 53	General Bacteriology .....	5
Physiol. 2	Elements of Physiology .....	4
or		
Physiol. 4	Human Physiology .....	4
or		
Physiol. 51	Human Physiology .....	6
Total credits .....		23 or 25

ROMANCE LANGUAGES

Major advisers—French: Assistant Professor H. E. Clefton.

Spanish: Associate Professor W. T. Pattison.

French as a major subject:

Thirty-five credits in courses numbered above 4 including:

Course No.	Title	Credits
French 70-71-72	Survey of French Literature (or 73-74) .....	9
	and	
	One other literary course .....	3 to 9
French 50	French Pronunciation .....	3
French 53	French Composition .....	6
and		
French 54	French Conversation .....	
or		
French 20	Oral and Written French .....	5
French 55	French Conversation .....	3
French 63	Advanced French Composition .....	3
French 103-104-105	French Syntax and Composition .....	3

French as a minor subject:

Seventeen credits in courses numbered above 4, including 70-71-72 or 73-74.

**Spanish as a major subject:**

Thirty-five credits in courses numbered above 4 including:

Course No.	Title	Credits
Span. 65-66-67	Survey of Spanish Literature .....	9
or		
Span. 68-69	Survey of Spanish Literature .....	10
or		
Span. 74-75-76	Survey of Spanish-American Literature .....	9
Span. 53	Spanish Composition	} 6
and		
Span. 54	Spanish Conversation	} 6
or		
Span. 20	Oral and Written Spanish .....	5
Span. 55	Spanish Conversation .....	3
Span. 60	Advanced Spanish Composition .....	3
Span. 70-71	Latin-American Culture .....	6
At least eight credits chosen from the following:		
Span. 56	Spanish Phonetics and Diction .....	5
Span. 71-72-73	Latin American Culture .....	3 to 9
Span. 103-104-105	Spanish Syntax and Composition .....	3
Span. 171-172-173	History of the Spanish Language .....	3

**Spanish as a minor subject:**

Seventeen credits in courses numbered above 4, including Span. 65-66-67 or 68-69 or 74-75-76.

**SOCIOLOGY****Major adviser—Professor Clifford Kirkpatrick.**

For curriculum in social studies, see pages 78-79.

**Sociology as a major subject:**

Thirty-six credits including 1, 2, and 14.

Course No.	Title	Credits
Soc. 1	Introduction to Sociology .....	5
Soc. 2	Individual and Minority Group Adjustment .....	5
Soc. 14	Rural Sociology .....	3
Additional credits .....		23

Students majoring in sociology must complete two teaching minors in addition to the required professional courses. 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:**

Nineteen or twenty credits including Soc. 1, 2, and 14.

**SPEECH****Major advisers—Professors F. M. Rarig, Bryng Bryngelson, C. Lowell Lees, Assistant Professor Howard Gilkinson.**

For curriculum in speech pathology, see pages 79-80.

**Speech as a major subject:\***

Course No.	Title	Credits
Speech 1-2	Fundamentals of Speech .....	6
or		
Speech 5	Fundamentals of Speech .....	5
Speech 31	Introduction to the Theater .....	3
Speech 32	Beginning Acting .....	3
Speech 61	Personality Development Through Speech .....	3
Speech 67	Phonetics .....	3
Speech 71-72-73	Problems of Dramatic Production in Secondary Schools .....	9
Speech 81-82	Interpretative Reading .....	6
Speech 101-102	Argumentation and Persuasion .....	6
Speech 121	Advanced Speech Problems .....	3
Total .....		41 or 42

\* Students are advised to take Psy. 4-5 or 7. Students expecting to major in Speech should consult a major adviser as early as possible in their Junior College course.



**Speech as a minor subject:**

A minimum of 27 credits including Speech 1-2-3 or 5-6; and fifteen additional credits chosen in conference with the adviser. Differential sequences are recommended according to whether the student is primarily interested in general speech, the theater, or speech pathology.

All students majoring or minoring in Speech must present satisfactory evidence of interest and effective participation in one or more activities, such as debating, dramatics, oratory, public reading, or public speaking. Speech majors are required to have two minors.

Because of the close relation between English and speech in the high schools in Minnesota, students majoring in Speech must have one of their minors in English.

Students intending to take further work in speech correction, specializing in that field of speech alone, should include in their undergraduate course Physiology 4.

Students majoring in speech must register for Ed.T. 66Am, The Teaching of Composition in Secondary Schools, 2 credits (fall), or for Ed.T. 66Bm, The Teaching of Literature in Secondary Schools, 2 credits (fall), as well as for Ed.T. 88A-B-C, Methods and Directed Teaching in Speech, 9 credits.

**ZOOLOGY**

**Major adviser**—Professor J. E. Wodsedalek.

For curriculum in natural science, see pages 58-59.

**Zoology as a major subject:**

Course No.	Title	Credits
Zool. 1-2-3	General Zoology .....	10
Zool. 52	Introductory Entomology .....	5
Zool. 53	Faunistic Zoology .....	5
Zool. 75	Nature Study .....	3
Zool. 83	Introduction to Genetics and Eugenics .....	3
Physiol. 4	Human Physiology .....	4

With the approval of the major adviser, other courses in the department may be substituted for Zool. 52 and 53.

**Zoology as a minor subject:**

Minimum of 18 credits including Zool. 1-2-3, 53, and 75.

## SPECIALIZED CURRICULA

### ADMINISTRATION AND SUPERVISION

See statements under Curriculum and Instruction and Educational Administration. See also Bulletin of the Graduate School.

### AGRICULTURAL EDUCATION

**Major adviser**—Professor A. M. Field.

Students who have completed the required work of the freshman and sophomore years of the Agricultural Education Curriculum of the College of Agriculture, Forestry, and Home Economics, or equivalent from the Technical Agriculture Curriculum, may prepare to teach agriculture in the public schools by completing the junior and senior years in a combined curriculum of the College of Education and the College of Agriculture, Forestry, and Home Economics leading to the degree of bachelor of science. By completing a fifth year in the combined five-year curriculum with the College of Education, they may receive the degree of master of education.

#### GENERAL REQUIREMENTS

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

2. This curriculum requires 204 credits for graduation, including a distribution of minimum credits as follows: Agr.Biochem., 5; Agr.Econ., 17; Agr.Ed., 26; Agr.Eng., 18; Agron., 15; An. and Poult.Husb., 20; Bact., 5; Bot., 6; Chem., 8; Dy.Husb., 8; Ed., 3; Ent., 5; Hort., 6; Math., 5; Orientation, 1; Pl.Path., 8; Public Health, 5; Rhet., 15; Rural Soc., 3; Soils, 6; Vet.Med., 3; Zool., 6.

3. 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. 6, 14, 15, 33, 38, 41; Agron. 21, 23, 31; An.Husb. 56, 57 or Dy.Husb. 103, 112 or 113; Poult.Husb. 1 and an elected course; Dy.Husb. 1 and two elected courses; Ent. 5; Hort. 6 and an elected course; Pl.Path. 1, 3; Soils 4, 5; Vet.Med. 52; Zool. 14-15.

4. Certification requirements for teaching vocational agriculture in Minnesota include a provision 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

Course No.	Title	Credits
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. 6	Farm Buildings .....	4
Agr.Eng. 38	Farm Water and Sewage Disposal .....	2
Agron. 1*	General Farm Crops .....	3
An.Husb. 1	Livestock Production .....	4
Bot. 1, 2, 3, or Bot. 4, 5†	General Botany .....	6
Dy.Husb. 1	Elements of Dairying .....	3
Hort. 6	Fruit Growing .....	3
Inorg.Chem. 1-2	General Inorganic Chemistry or	8
Inorg.Chem. 4-5	General Inorganic Chemistry }	

\* May be omitted by students who took vocational agriculture in high school, provided substitutions will be taken.

† Pl.Path. 3, Weeds may be substituted for Bot. 3.

Course No.	Title	Credits
Math. 1§ or Agr.Eng. 11	Higher Algebra } .....	5
Orient. 1	Applied Mathematics } .....	
Rhet. 1,2,3	Freshman Orientation Lectures .....	1
	Rhetoric I, II, III .....	9

SOPHOMORE YEAR

Agr.Biochem. 4	Introduction to Organic Chemistry and Biochemistry .....	5
Agr.Econ. 1,2	Principles of Economics I, II .....	8
Agr.Eng. 41	Metal Work .....	3
Agron. 31	Principles of Genetics .....	4
Bact. 53	General Bacteriology .....	5
Ent. 52 or Ent. 5	Introductory Entomology } .....	5
Pl.Path. 3	Economic Entomology } .....	
Poult.Husb. 1	Weeds .....	3
P.H. 3¶	Poultry Production .....	4
P.H. 4 or 50¶	Personal Health .....	2
Soils 4	Community Hygiene .....	2 or 3
Soils 5	Soils .....	3
Zool. 14-15	Soil Management .....	3
	General Zoology .....	6

JUNIOR AND SENIOR YEARS

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

Special attention of every student is called to the faculty regulations for classification in the junior class, see Bulletin of the College of Agriculture, Forestry, and Home Economics.

It is recommended that the student keep in mind the possible completion of majors or minors in some agricultural groups.

Junior Year

1. Freshman-sophomore courses not completed. See Bulletin of College of Agriculture, Forestry, and Home Economics for requirements for classification in the junior class.
2. Rhet. 51                      Exposition .....
3. Social science requirement.                      Credits 3
4. Education courses:                      Title
- Ed. 51A                      Introduction to Secondary School Teaching .....
- Agr.Ed. 54                      Rural Education and Community Leadership .....
- Agr.Ed. 81                      Teaching Agriculture .....
5. Agricultural courses:                      Credits
- Agr.Econ. 102                      Farm Organization .....
- Agr.Econ. 103                      Farm Operation .....
- Agr.Eng. 14                      Farm Power and Machinery .....
- Agron. 21                      Grain Crops .....
- An.Husb. 56                      Livestock Feeding .....
- An.Husb. 57                      Livestock Feeding } .....
- or                      } .....
- Dy.Husb. 103                      Dairy Stock Feeding } .....
- Pl.Path. 1                      Plant Pathology .....
- Rhet. 22                      Public Speaking .....
- Vet.Med. 52                      Anatomy, Physiology, and Hygiene of Domestic Animals .....
6. Public Health requirements:                      Credits
- P.H. 59                      Health of the School Child .....

§ Students will be exempt from Math. 1 who pass an exemption test given by the Department of Mathematics. For exemption the student will be required to substitute an equivalent number of credits (mathematics or electives) as approved by his adviser.

¶ See p. 9.

## Senior Year

Course No.	Title	Credits
<b>1. Education courses:</b>		
Agr.Ed. 82	Methods in Teaching Agriculture .....	3
Agr.Ed. 91	Supervised Teaching Experience .....	5
Agr.Ed. 101	Part-time School Instruction .....	2
Agr.Ed. 102	Evening School Instruction .....	3
Agr.Ed. 103	Facilities and Materials .....	3
Agr.Ed. 104	Planning Programs .....	2
<b>2. Agricultural courses:</b>		
Agr.Eng. 14	Electricity in Agriculture .....	2
Agr.Eng. 33	Introduction to Soil and Water Control .....	3
Agron. 23	Forage Crops .....	4
An.Husb. 112 or An.Husb. 113	Animal Breeding } Livestock Management }	3
Soc. 14	Rural Sociology .....	3

## RECOMMENDED ELECTIVES

## ELECTIVES RECOMMENDED TO MEET AREA REQUIREMENTS FOR GRADUATION

Agricultural Economics—3 credits. Suggested courses: 8, 40, 50, 80, 144.

Animal and Poultry Husbandry—3 credits. Suggested courses:  
Poult.Husb. 53.

An.Husb. 3, 4, 51, 112 or 113.

Dairy Husbandry—5 credits. Suggested courses: 3, 101, 103, 104.

Horticulture—3 credits. Suggested courses: 1, 21, 22, 32, 135.

## FREE ELECTIVES RECOMMENDED

Agr.Biochem. 5 or 6	Ed.Psy. 120, 133	Pub. and Rural Jour. 53
Agr.Ed. 56	H.Ed. 74	Rhet. 12, 24
Agron. 22, 132, 13	For. 10	Vet.Med. 50, 51

## FIFTH YEAR LEADING TO THE MASTER OF EDUCATION DEGREE

(A joint curriculum between the College of Education and the College of Agriculture, Forestry, and Home Economics.)

The College of Education and the College of Agriculture, Forestry, and Home Economics will award the master of education degree (M.Ed.) to students who satisfactorily complete a fifth year of work in agricultural education at the graduate level and who meet all of the regulations for the professional degree. The specific requirements for the M.Ed. degree 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. In the courses comprising the fifth year of the curriculum, a B average (2 honor points per credit) is required.
4. Satisfactory completion of final written and oral examinations.
5. A satisfactory report on a health examination within one year prior to obtaining the M.Ed. degree will be required.
6. The distribution of credits for the fifth year will include:
  - a. Agricultural Education: 12-15 credits of which not more than 6 credits may be in problems courses.
  - b. Education other than Agricultural Education: 11-15 credits.
  - c. Technical Agriculture and areas other than those listed above: 15-22 credits.

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

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 36-42).

SUGGESTED COURSES

A minimum of 18 credits selected from the following:

Course No.	Title	Credits
Agr.Ed. 54 and/or	Rural Education and Community Leadership	} ..... 2 or 3 or 5
Agr.Ed. 56	Rural Youth Leadership	
Agron. 1	General Farm Crops .....	3
An.Husb. 1	Livestock Production .....	4
Hort. 1 or	General Horticulture	} ..... 3
56 or	Plant Propagation .....	
32	Vegetable Growing .....	
Dy.Husb. 1	Elements of Dairying .....	3
For. 10	Farm Forestry .....	3

ART EDUCATION

**Major advisers**—Professor Ruth Raymond; Assistant Professors Clifton Gayne, Jr. and Marie Lien.

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 (minimum, 75 credits for Art Education majors, 27 credits for minors).
3. An opportunity to specialize in painting, design, sculpture, crafts, commercial art, illustration, appreciation and understanding, or some other phase of art. A wide 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, plus the "high school standard special" certificate awarded by the State Department of Education for teaching 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, and the advanced teaching certificate, in addition to broader understanding and increased skill in those areas chosen for specialization.

**Emphasis of the Department**—The function of general education is to contribute in every possible way to the growth of rich and many-sided personalities capable of individually and socially satisfactory participation in the many aspects of modern democratic living. The function of art education should be based on the needs of general education and accordingly not only significantly enrich the curriculum and liberalize formal education but vitalize the immediate and potential personal life of all students and awaken them to social responsibility. Therefore, the art teacher must be acquainted not only with the current approaches in art education but also must know these in relation to the timely developments in general education.

Furthermore, in contrast to widespread practices in art education, the future lies in reaching large masses of the people, developing attitudes and providing techniques for achievement of these new understandings. At present there are active new channels being organized to reach the people at large through such quasi-public institutions as educational departments of museums, art departments of libraries, adult education programs of labor unions, radio, and periodical art departments. All teacher candidates must be informed

regarding these new departures and be qualified to co-ordinate their values with the public school program. For the specially trained and qualified, further opportunities are being developed in art education for professional training leading to affiliation with these programs.

The resources of the many departments and special services at the University are freely available to Art Education majors who wish to develop special interests and relationships. The fifth year program is based on the growing necessity of training art educators who are well-informed general educators widely acquainted with social problems.

#### MINIMUM REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN ART

1. Art courses to maintain a balance of experience:

Group A—Design, 15 credits.

Group B—Handcrafts, 12 credits.

Group C—Drawing and Painting, 15 credits.

Group D—Understanding and Appreciation, at least 9 credits giving theory and practice in evaluating, and background for evaluating and enjoying art.

Group E—Professional Courses, 15 credits.

2. A teaching minor chosen from one of the academic departments and fulfilling the credit requirements as designated by that department. (See pages 19-25.)

3. Professional education courses:

Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
	Special methods in the academic minor .....	4
	Education electives (see page 18) .....	5

4. Required supporting courses:

Eng. A-B-C or	Freshman English	}	18
Comp. 4-5-6 or	Freshman Composition (or exemption)		
Com. 4-5-6	Communication		
	Additional courses in English or Humanities		
Hist. 1-2-3*	Civilization of the Modern World .....		9
Soc. 1	Introduction to Sociology .....		5
Psy. 1-2	General Psychology .....		6
Fine Arts 1-2-3	Introduction to Art .....		9
	Physical Education .....		3 or 5
P.H. 59	Health of the School Child (and prereq. courses) .....		6 to 9

Additional academic electives selected from: science, languages, speech, English, 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 upon concerts, exhibitions, and plays is urged as part of art education. Available electives may be spent profitably in the various art courses beyond the minimal requirement or in a minor or in an academic field.

5. Quality standard: C average outside of major; C+ or honor point average of 1.5 in the major.

#### REQUIREMENTS FOR A MINOR IN ART

Twenty-seven credits in a balanced distribution selected from the following five groups and approved by the department. The courses listed below are suggested.

Group	Course No.	Title	Credits
A	ArtEd. 1,2,3	General Design .....	3 to 9
	ArtEd. 50A, 50B, 50C	Commercial Design .....	3 to 9
	ArtEd. 52A,52B	Interior Design .....	3 to 9
B	ArtEd. 31,32,33,34	General Handcrafts .....	3 to 12
	ArtEd. 70A,70B,70C	Wood Sculpture and Carving .....	3 to 9
	ArtEd.73A,73B,73C	Ceramics .....	3 to 9
	ArtEd. 76,77,78,79	Textiles .....	3 to 12
C	ArtEd. 4,6,8	Basic Drawing .....	2 to 6
		Advanced Drawing and Painting courses (See Class Schedule) .....	Ar

\* If European history was not taken in high school.

Group	Course No.	Title	Credits
D	ArtEd. 14,15,16 or 17,18,19	Survey of Art in Life and Education .....	3 to 9
	ArtEd. 54,55,56	Fundamental Experiences in Art .....	3 to 9
E	ArtEd. 84	Methods of Teaching Art in the Elementary Grades .....	3
	ArtEd. 156	Intercultural Education through Art .....	3
	ArtEd. 183	Philosophy of Art Education .....	3
	ArtEd. 184	Advanced Course in Methods and Supervision of Art in the Elementary School .....	3
	ArtEd. 185	Methods of Teaching Art in the Secondary School .....	3

## A RECOMMENDED PROGRAM

FOR THE FIRST FOUR YEARS OF THE FIVE-YEAR CURRICULUM  
OR FOR THE B.S. DEGREE*Freshman and Sophomore Years*

Academic Courses	Course No.	Title	Credits
Eng. A-B-C or 4-5-6 or Com. 4-5-6		Freshman English	15 or 9
		Freshman Composition Communication	
Hist. 1-2-3*		Civilization of the Modern World .....	9
Soc. 1		Introduction to Sociology .....	5
Psy. 1-2		General Psychology .....	6
P.H. 3		Personal Health (or G.C. 10C or exemption by examination or P.H. 50 taken in Senior College) .....	2
P.H. 4		Health Problems of the Community (or exemption by examination or P.H. 50 taken in Senior College) .....	2
Phys.Ed.		Physical Education .....	3 or 5
		English or Humanities .....	3 or 9
<b>Art Courses—30 credits from Groups A, B, C, and D.</b>			
A	ArtEd. 1-2-3	General Design (strongly recommended) .....	3 to 9
B	ArtEd. 31,32,33,34	General Handcrafts .....	3 to 6
C	ArtEd. 4,6,8	Basic Drawing (strongly recommended) .....	2 to 6
	ArtEd. 23	Pictorial Composition .....	2
D	ArtEd. 24,26,28	Painting, Advanced Drawing .....	2 to 6
	ArtEd. 14-15-16	Survey of Art in Life and Education (required for majors) .....	9
	Art History F.A. 1-2-3	Introduction to Art (required for majors) .....	9
Other Courses—Prerequisite courses for minor and electives to total .....			90 to 95

*Junior and Senior Years*

Academic Courses—30 credits, a part of which will be selected to complete the academic teaching minor, the remainder as electives.			
<b>Professional Education Courses</b>			
Ed. 51A-B-C		Introduction to Secondary School Teaching .....	9
		Special Methods in Teaching Minor .....	4
		Electives in Education (See p. 18) .....	5
<b>Art Courses—Approximately 42 credits selected from Groups A, B, C, D, and E. (For prerequisites see Combined Class Schedule)</b>			
<b>Group A—Design</b>			
	ArtEd. 50A,50B,50C	Commercial Design .....	3 to 9
	ArtEd. 51	Industrial Design .....	3
	ArtEd. 52A,52B	Interior Design .....	3 to 9
	ArtEd. 54,55,56	Fundamental Experiences in Art .....	3 to 9
	ArtEd. 150,151	Advanced General Design .....	3 to 6
<b>Group B—Handcrafts</b>			
	ArtEd. 70A,70B,70C	Wood Sculpture and Carving .....	3 to 9
	ArtEd. 73A,73B,73C	Ceramics .....	3 to 9
	ArtEd. 74	Bookbinding .....	3
	ArtEd. 75	Metal .....	3
	ArtEd. 76, 77	Textiles: Weaving .....	3 to 6
	ArtEd. 78, 79	Textile Design .....	3 to 6
	ArtEd. 81A,81B	Puppetry .....	3 to 6
	ArtEd. 170E	Advanced Wood Sculpture .....	3 to 9
	ArtEd. 173E	Advanced Ceramics .....	3 to 9

\* If European history was not taken in high school.

Course No.	Title	Credits
<b>Group C—Drawing and Painting</b>		
ArtEd. 61	Figure Drawing and Painting .....	2
ArtEd. 62	Portrait Drawing and Painting .....	2
ArtEd. 63	Landscape Drawing and Painting .....	2
ArtEd. 66A,66B	Fashion Illustration .....	2 to 4
ArtEd. 67A,67B,67C	Illustration for Advertising, etc. ....	2 to 6
ArtEd. 68A,68B,68C	Print Processes .....	2 to 6
ArtEd. 124E	Specialized Drawing and Painting .....	Ar
<b>Group D—Appreciation and Understanding</b>		
ArtEd. 54, 55, 56	Fundamental Experiences in Art .....	3 to 9
ArtEd. 153	Home Design in Society and Education .....	3
ArtEd. 154	Development of Personality and Its Expression in Costume .....	3
ArtEd. 155	Painting and Sculpture in Society and Education .....	3
ArtEd. 157	Art Movements of 20th Century Scandinavia .....	3
<b>Group E—Professional Art Education</b>		
ArtEd. 86-87-88	Special Methods and Directed Teaching in Art (required for majors) .....	9
ArtEd. 156	Intercultural Education through Art .....	3
ArtEd. 183	Philosophy of Art Education (required for majors) .....	3
ArtEd. 184	Advanced Course in Methods and Supervision of Art in the Elementary School .....	3
ArtEd. 185	Methods of Teaching Art in the Secondary School .....	3
ArtEd. 189	Applications of Esthetic Theory in Public Education .....	3
Total Senior College credits .....		90 to 95

### FIFTH YEAR LEADING TO THE MASTER OF EDUCATION DEGREE

#### GENERAL REQUIREMENTS FOR FIVE-YEAR PROGRAM

1. Ninety quarter credits in academic fields.
2. A teaching minor in an academic field and a methods course in the minor.
3. A broad major field (not subject) specialization.
4. Thirty-five quarter credits in education including one quarter of internship under a master teacher.
5. Total number of credits to equal 45 beyond the number required for the Bachelor's degree. These forty-five credits must be in courses numbered above 100.
6. B average (2.0 honor points per credit) for the courses comprising the fifth year of the curriculum.
7. Successful completion of final written and oral examinations.
8. Satisfactory demonstration of teaching competence.

#### MINIMUM REQUIREMENTS FOR FIFTH YEAR

	Credits
1. Academic courses in minor or related fields .....	12
2. Art education major .....	24
3. Education courses .....	9
4. Quality standard: B average in fifth year work.	
5. Final examinations: (1) written comprehensive in the major; (2) written comprehensives in education; (3) certification of demonstrated competence in teaching by director of student teaching, including an examination in methodology; (4) oral examination by Graduate Committee of College of Education and representatives from Art Education Department.	

*For Graduates of Other Institutions*—The fifth year program leading to the M.Ed. degree is open to students from other institutions with an undergraduate major in art or in art education representing training equivalent to that offered at the University 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 outlined above. Requirements are as follows:

1. 18 credits selected from *art education* graduate courses.
2. 6 credits from two of the following *related* departments: architecture, fine arts, home economics.
3. 9 credits in related courses in academic fields. Of these Soc. 104, City Planning (same as Arch. 104, Econ. 111, and Pol.Sci. 123), 3 credits is required.
4. 12 credits in education courses, to represent at least three fields. (See suggested courses below.)
5. Quality standards and examinations as listed under Minimum Requirements.



## SUGGESTED COURSES FOR THE FIFTH YEAR

Course No.	Title	Credits
Academic electives in minor or related field		
	Courses numbered over 100*, including Soc. 104 .....	12
Art Education major—24 credits chosen from the following:		
ArtEd. 124	Advanced Painting .....	2 to 6
ArtEd. 150E,151E	Advanced Design .....	3 to 9
ArtEd. 153,154,155	Art in Society and Education .....	3 to 9
ArtEd. 156	Intercultural Education through Art .....	3
ArtEd. 170E	Advanced Wood Sculpture .....	3 to 9
ArtEd. 173E	Advanced Ceramics .....	3 to 9
ArtEd. 183	Philosophy of Art Education .....	3
ArtEd. 184	Advanced Course in Methods and Supervision of Art in the Elementary School .....	3
ArtEd. 185	Methods of Teaching Art in the Secondary School .....	3
ArtEd. 189	Applications of Esthetic Theory to Public Education .....	3
ArtEd. 284E	Reading and Research in Art Education .....	3
ArtEd. 295	Special Problems in Art Education .....	2 to 6
Fine Arts 151, 152, 153	Foundations of Christian Art; Monastic Art of the Middle Ages; The Art of the Great Cathedrals (3 cred. each) .....	3 to 9
Fine Arts 201, 202, 203	Seminar—Special Problems in American Art .....	3 to 9
Arch. DP-IV	Drawing and Painting, Grade IV .....	2 to 6
Arch. DP-V	Drawing and Painting, Grade V .....	2 to 6
Arch. M-III	Modeling (Graduate level) .....	2 to 6
H.E. 120	Art History and Appreciation .....	3
H.E. 125	Advanced Costume Design .....	3
H.E. 180	Home Planning and Furnishing .....	5
Education—9 credits. Comprehensive examinations in education cover several different fields. Students should consult an adviser about selection of courses.		
Ed.C.I. 105	Visual Aids .....	2
Ed.C.I. 119 or	Elementary School Curriculum .....	3
Ed.C.I. 113	Secondary School Curriculum .....	3
Ed.C.I. 170	Curriculum and Course of Study Construction .....	3
Ed.C.I. 171	Curriculum Laboratory Practice .....	2 to 6
Ed.C.I. 150	Supervision and Improvement of Instruction .....	3
or 266	Supervision of High School Instruction .....	
Ed.Psy. 293	Psychology of Learning .....	3
Ed.Psy. 291	Individual Differences .....	3
Ed.Psy. 120	Basic Principles of Measurement .....	3
	Internship .....	6 to 8

## BUSINESS EDUCATION

Major adviser—Assistant Professor Warren G. Meyer.

The curriculum in education is designed to prepare teachers of commercial subjects in secondary schools. It is purposely made much broader in its scope than the present program of the typical high school commercial department, with the idea of paving the way for meeting more effectively than at present the needs of high school students who enter business. Completion of this curriculum leads to the bachelor of science degree and provides the training necessary for the Minnesota "high school standard special" certificate for teaching commercial subjects. By a careful selection of electives it is possible to secure also one or two minors in academic subjects.

The first two years' work, taken in the Junior College, College of Science, Literature, and the Arts, consists of the regular academic requirements of that college, with the foreign language requirement omitted and foundation courses in psychology, economics, statistics, accounting, and secretarial training added.

Students who enter the College of Education from other institutions must substitute for some of their electives such of the Junior College requirements as they have not fulfilled. Graduates from the two-year course in state teachers colleges and transfer

\* It may be necessary for the student to take prerequisite courses at the undergraduate level.

students who have not had typing and shorthand may find it necessary to attend an extra Summer Session or an extra year in order to meet all requirements.

Students who have had a high school course or experience in bookkeeping may be exempt from Econ. 20 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 and are exempt from Econ. 37-38. Such students may be admitted to Econ. 40 by passing a placement test.

For the professional requirement in this curriculum, see pages 17-18.

#### FOUR-YEAR CURRICULUM IN BUSINESS EDUCATION

##### JUNIOR COLLEGE, COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition (or Communication 4-5-6 or Eng. A-B-C or exemption)	9
	Natural science (Exemption on the basis of two years of science in high school. G.C. 10A-B-C, Human Biology, or Natural Science Orientation is recommended)	9 or 10
Geog. 41	Geography of Commercial Production	5
	Additional social science, other than economics	9 or 10 or 12
Econ. 3	Elements of Money and Banking	5
Econ. 5	Elements of Statistics	5
Econ. 6-7	Principles of Economics	10
Econ. 20	Elements of Accounting	3
Econ. 25-26	Principles of Accounting	6
Econ. 32	Beginning Typewriting	1
Econ. 33-34	Typewriting, Intermediate and Advanced	2
Econ. 37-38-39	Shorthand, Beginning and Intermediate	9
Psy. 1-2	General Psychology	6
	Physical Education	3 or 5
	Public Health (See p. 9)	6-9
	Electives, for which the following are especially recommended: continuation of a language begun in high school, speech, philosophy, additional social science. The number of electives depends on entrance credit in shorthand, typing, accounting, and science.	
	Total	95

##### COLLEGE OF EDUCATION

###### Junior Year

B.A. 51-53	Business Law	6
B.A. 77	Survey in Marketing	3
B.A. 86	Office Management	3
B.A. 91	Tabulating Equipment Laboratory	1
B.A. 96	Business Equipment Laboratory	1
Econ. 40-41	Secretarial Procedure	6
Econ. 43	Advanced Shorthand Theory	3
Ed. 51A-B-C	Introduction to Secondary School Teaching	9
	Education Electives	3-8
	General Electives	6-11

###### Senior Year

Ed. T. 73A-B-C	Methods and Directed Teaching in Business Subjects	9
Econ. 161	Labor Problems and Trade Unionism	3
Econ. 175	Government Regulation of Business	3
Econ. 178	Economics of Consumption	3
B.A. 93	Accounting Laboratory	1
B.A. 180-181	Senior Topics Courses: Office Management	6
P.H. 59	Health of the School Child	3
	Education Electives	3-8
	General Electives	12-17

For purposes of computing the C+ average (1.5 honor points per credit) the following are considered the major courses: Econ. 6-7, 20, 25, 26, 34, 40-41, 43, 178; B.A. 86, 180.

### CURRICULUM AND INSTRUCTION

**Major advisers**—Dean W. Peik; Professors Guy L. Bond, Nelson L. Bossing, L. J. Brueckner, Walter W. Cook, Palmer O. Johnson, Dora V. Smith, Edgar B. Wesley.

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.

### FIFTH YEAR 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 with a major in education or curriculum and instruction and a supporting minor in English under Plan A or Plan B in the Graduate School. Courses applicable to the teaching of English from which the student may profitably choose are as follows: Ed.C.I. 113, 122, 133, 169, 293, 294, 296; Ed. Psy. 158, 208. The seminar, Ed.C.I. 222, is required without credit for all students with a major or minor in theory and practice of teaching under Plan A. Programs should be arranged in consultation with the major adviser.

### FIFTH YEAR FOR TEACHERS OF SOCIAL STUDIES

**Major adviser**—Professor Edgar B. Wesley.

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 in history, economics, political science, geography, or sociology. Courses which are recommended as fitting into this plan are Ed.C.I. 168, 201, 204, 254, 293; H.Ed. 241; Ed.Psy. 208. The Seminar, Ed.C.I. 222, is required without credit for all students with a major or minor in theory and practice of teaching under Plan A. Programs should be arranged in consultation with the major adviser in social studies.

### EDUCATIONAL ADMINISTRATION

**Major advisers**—Educational Administration: Professor M. G. Neale.

Secondary School Administration and Supervision: Professors Charles W. Boardman and Nelson L. Bossing.

Elementary School Administration and Supervision: Dean W. E. Peik, Professor L. J. Brueckner

The student who wishes to specialize in administration or administration and supervision for any one of the following fields, superintendent of schools, elementary principal and supervisor, secondary school principal and supervisor, or other administrative position, must satisfactorily complete the requirements for the master of arts degree. (See Bulletin of the Graduate School.)

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 administration and a minor in curriculum and instruction or educational psychology, but other combi-

nations with subject-matter departments or a general major in education can be arranged, subject to approval of major adviser.

### EDUCATIONAL PSYCHOLOGY

**Major advisers**—Professors Guy L. Bond, Walter W. Cook, Marcia Edwards, Palmer O. Johnson, W. S. Miller, C. Gilbert Wrenn; Associate Professors G. Lester Anderson, Willis E. Dugan, Marvin J. Van Wagenen.

Students who plan to assume certain specialized duties in connection with high school work and students who wish to specialize in the field of educational psychology, 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, clinical psychologist, or specialist in tests and measurements 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, KINDERGARTEN, AND NURSERY SCHOOL EDUCATION CURRICULA IN ELEMENTARY, KINDERGARTEN, AND NURSERY SCHOOL EDUCATION

**Major Advisers**—Elementary Education—Supervision or Teaching: Professors Guy L. Bond and L. J. Brueckner; Assistant Professor Jean H. Alexander.

Nursery School and Kindergarten-Primary Education: Professor J. E. Anderson.

Curricula IA, IB, IC, IIA and IIB are for five different groups of students.

Curricula IA and IIA are for students who expect to work in the elementary schools and entitle the graduate to the Minnesota *elementary school advanced* certificate. These curricula prepare for:

1. General elementary school teaching (all grades: primary, intermediate, or upper grades).
2. Elementary school principalships and elementary school supervisorships in Minnesota, if or when two years of elementary school teaching experience has been completed, *provided* the student has included the necessary courses in administration and supervision in his program.
3. Junior high school teaching when so endorsed after certain modifications, as specified later, have been made.

Curricula IB and IIB prepare for nursery school, kindergarten-primary teaching and entitle the graduate to the Minnesota special *kindergarten-primary* certificate.

Curricula IC is for students who already hold a Bachelor's degree from a liberal arts college and who wish to qualify for the Minnesota *kindergarten-primary* certificate.

The two four-year curricula constitute also the first four years of five-year programs for more intensive specialization in elementary teaching, general grade supervisorships, elementary school principalships, critic teaching or supervision of student teaching in teacher training institutions, nursery school, kindergarten and primary teaching, and for instructors of elementary education in teachers colleges and other institutions.

## CURRICULA IA AND IB (FRESHMAN AND SOPHOMORE YEARS)

*For students who will spend the first two years largely or entirely in academic or pre-education junior college work and who wish to qualify for the advanced elementary school certificate by majoring in elementary education in Curriculum IA in the junior and senior years; or who wish to qualify for the Minnesota special nursery school-kindergarten-primary certificate by continuing in Curriculum IB for the junior and senior years.*

*General Minimum Requirements for Curricula IA and IB*

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition (or Com. 4-5-6 or Eng. A-B-C or exemption)	
Geog. 11	Human Geography	5
Science	Biological sciences (General Botany, General Zoology, or both, or orientation course) total minimum required	10
Sp. 1-2	Fundamentals of Speech	6
Soc. 1	Introduction to Sociology	5
Soc. 49	Social Problems	3
Social Studies	General Social Studies (history, political science, geography, sociology, economics, or orientation course)	9
ArtEd. 17-18-19	Art for Elementary School Teachers (6 credits required in Curriculum IB, 9 recommended)	9
Ind. 11	Special-Class Woodwork	2
Mu. 1	Ear Training	2
Mu. 31 or 32 or 33	Music Appreciation	2
Mu.Ed. 50A	Primary Methods	2
Psy. 1-2	General Psychology	6
H.E. 30	Introduction to Nutrition	2
Phys.Ed. 1-4	General Course in Physical Education	6
Phys.Ed. 25	First Aid	1
Phys.Ed. 60	Principles of Play	2
P.H. 3f	Personal Health	2
P.H. 4f	Health Problems of the Community	2
	Electives	19-22
	Total	95

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

Students transferring from teachers colleges with 90 blanket credits should follow Curriculum IIA or IIB.

Certain deficiencies due to transfer from other schools can be made up after entering the College of Education. Certain substitutions can be made. 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 (JUNIOR AND SENIOR YEARS)

*For those who wish to secure the Minnesota elementary school advanced certificate qualifying the holder to teach in any of the grades 1 to 8, inclusive; and when so endorsed, after certain modifications as noted below, also in junior high schools. After two years of successful experience the curriculum qualifies for the Minnesota elementary school principal's and supervisor's certificate, provided the student has chosen electives in the fields of administration and supervision.*

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

**A. Academic fields**—Completion of *one regular* academic minor (pages 19-25) and 18 credits of concentration in each of *two additional* fields as listed below. These fields of concentration may include, with approval of major adviser, the Junior College subject-matter courses already completed at the University of Minnesota or elsewhere.

English	A natural science or preferably general science
A foreign language	Mathematics
Geography	Art
History	Music
A social science other than history or geography, or preferably, general social sciences other than history or geography	Library Methods
	Physical Education
	Others by special permission of adviser

Much of the work of the junior year should be in the above academic subjects. A total of 18 credits in academic subjects must be in courses numbered 50 or above.

**B. General and elementary education**—A major of 44 or 45 credits.

1. Required of all—46 credits.

Course No.	Title	Credits
Ed. 71A-B-C	Introduction to Elementary School Teaching: 71A, Individual Differences; 71B, Learning and Adjustment; 71C, Curriculum, Methods, and Organization .....	15
ArtEd. 84	Teaching of Art in the Elementary Grades .....	3
Mu.Ed. 50B	Intermediate Methods .....	2
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
or		
Ed.C.I. 62B	The Teaching of Arithmetic in the Intermediate 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 .....	2
Ed.T. 54A-B	Directed Teaching in the Elementary School .....	8
	Total .....	46

2. Five or six credits chosen from the courses listed under *General Courses* or *Elementary Education* in the departments of Curriculum and Instruction, Educational Administration, Educational Psychology, and History and Philosophy of Education, in consultation with an adviser. Descriptions of the various courses are found on pages 85-99 of this bulletin.

The C+ average is based on the 46 credits in elementary education.

**Special examinations**—Students should consult the advisers early in their course about the specific comprehensive examinations which may be required for directed teaching and for graduation. These vary somewhat for those desiring junior high school endorsement.

**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. See list of academic minors, on pages 19-25, and minors in the special departments.
2. The course Ed.Ad. 167, Junior High School.
3. A special methods course covering the junior high school level in the minor, which may be substituted for some of the other methods courses on the recommendation of the adviser.
4. Directed teaching or experience in grades 7, 8 or 9.

## CURRICULUM IB (JUNIOR AND SENIOR YEARS)

*For those who wish to secure the Minnesota special kindergarten-primary certificate qualifying for nursery school, kindergarten-primary teaching.*

Course No.	Title	Credits
Ed. 71A-B-C	Introduction to Elementary School Teaching: 71A, Individual Differences; 71B, Learning and Adjustment; 71C, Curriculum, Methods, and Organization	15
C.W. 80	Child Psychology	3
Ed.T. 55	Principles of Early Childhood Education	3
Ed.T. 56	Methods and Observation in the Nursery School and Kindergarten	5
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. 70	The Teacher and the Parent	3
P.H. 57 or 59	Health of Infant and Preschool Child } Health of the School Child }	2 or 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 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	2
Ed.C.I. 105	Visual Aid in Teaching	2
Ed.T. 77A*	Directed Teaching in the Nursery School	4
Ed.T. 77B*	Directed Teaching in the Primary Grades	4
Ed.T. 77C*	Directed Teaching in the Kindergarten	4
	Electives	19-20
	Total	90

The C+ average is based on the following courses: C.W. 80; Ed.T. 55, 56, 57, 58, 70, 77A-B-C; Ed.C.I. 60, 61, 62, 63, 64, 65.

NOTE—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 IC

*For students who already have a B.A. or B.S. degree and who wish to receive a B.S. degree with a nursery school, kindergarten-primary certificate.†*

Forty-five credits selected from the following courses in conference with the adviser.

Course No.	Title	Credits
Ed. 71A-B-C	Introduction to Elementary School Teaching: 71A, Individual Differences; 71B, Learning and Adjustment; 71C, Curriculum, Methods, and Organization	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 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	2
C.W. 80	Child Psychology	3
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 Art, Literature, and Social Studies	5

\* Taking the psychological examinations and a C+ average (1.5 honor points per credit) in the major are prerequisite to this course.

† Electives may be substituted for any of these courses or their equivalent, which the student has already taken.

Course No.	Title	Credits
Ed.T. 58	Nursery School-Kindergarten Laboratory in Play Materials, Music and Science .....	5
Ed.T. 70	The Teacher and the Parent.....	3
Ed.T. 77A*	Directed Teaching in the Nursery School .....	4
Ed.T. 77B*	Directed Teaching in the Primary Grades.....	4
Ed.T. 77C*	Directed Teaching in the Kindergarten.....	4
H.E. 30	Introduction to Nutrition.....	2
Mu.Ed. 50A	Primary Methods .....	2

**CURRICULUM IIA (JUNIOR AND SENIOR YEARS)**  
COLLEGE OF EDUCATION

*For graduates of the usual two-year advanced normal professional curriculum for elementary teachers in teachers colleges and normal schools, or its equivalent, for which 90 blanket credits (two years' work) are allowed in the College of Education toward graduation. Students who transfer from other teacher training programs for which 60 to 63 blanket credits are allowed may also enroll in this curriculum.*

The curriculum leads to the elementary school advanced certificate and if or when two years of experience in elementary education have been completed, to the Minnesota state principal's or supervisor's certificate as well, *provided* the student has included the necessary courses in administration and supervision in his program. By substituting certain elective courses in the junior high school field the certificate is made legal also for junior high school teaching.

**A. Major in elementary education—30 credits in the College of Education as follows:**

1. Required of all—11 or 12 credits.

Course No.	Title	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	Elementary School Organization (For junior high school endorsement substitute Ed.Ad. 167 for this course) .....	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 103	Problems in the Teaching of Elementary School Science		
Ed.C.I. 63	Children's Literature	} .....	2 or 3
or 190	Principles of Selection of Materials for Reading in the Elementary School		
Ed.C.I. 102	The Teaching of the Social Studies in the Elementary School.....	3	
Ed.C.I. 143	The Teaching of Reading in the Elementary School.....	3	
Ed.C.I. 149	The Teaching and Supervision of Arithmetic .....	2	
Ed.C.I. 151	Diagnostic and Remedial Instruction .....	3	
Ed.C.I. 153	Supervision and Teaching of English in the Elementary Schools .....	2 or 3	
	Other courses in methods by petition.		

For junior high school endorsement the methods course in the minor must be substituted for 3 or 4 of these nine credits.

3. Education electives—to be chosen from the above or any related courses listed under General Courses or Elementary Education—9 to 10 credits.

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

**NOTE**—Students may be required to take Practice Teaching Ed.T. 54A-B unless evidence of satisfactory experience is presented. This is left to the discretion of the major advisers. Students are urged to plan their programs early so as not to exceed the 30 credits allowed in education.

\*Taking the psychological examinations and a C+ average (1.5 honor points per credit) in the major are prerequisite to this course.



**B. Subject-matter and academic courses**—60 credits. At least 18 of the 60 credits must be in courses numbered 50 or above.

1. A *regular* minor as listed on pages 19-25 or in one of the special fields listed under the specialized curricula. Requirements for minors vary usually from 18 to 36 credits.

2. 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 minor and major sequences of the College of Education (see pages 19-25 and Combined Class Schedule). Transfer 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	Mathematics
A foreign language	Art
Geography	Fine Arts
History	Music
A science or general science	Library Methods
A social science or general social sciences (other than history or geography)	Physical Education
	Others by special permission

3. Academic electives—12-24 credits. At least 18 credits in *academic courses* must be in courses numbered 50 or above.

Excess quality credits earned in all courses will reduce the general elective credits in academic subjects but cannot be used to meet any specific requirement of the curriculum.

**Special examinations**—Students should consult an adviser early in their course about special examinations which may be required for graduation.

**Courses in General Extension**—Elementary teachers, taking extension courses, who will ultimately transfer to the College of Education for a degree, should follow the pattern of the curriculum to be certain that the work taken will apply toward graduation. They should consult an adviser in the College of Education early in their course and with regard to 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 B-1 above.

2. A methods course in the minor covering the junior high school level. This course, usually four credits, is to be included in the nine credits in methods required under A-2. Taking the psychological examinations and C+ average (1.5 honor points per credit) in the major are prerequisite to this course.

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

4. Satisfactory directed teaching or experience in grades 7, 8, or 9.

## CURRICULUM IIB (JUNIOR AND SENIOR YEARS)

*For graduates of the usual two-year advanced normal professional curriculum for elementary teachers in teachers colleges and normal schools, or its equivalent, for which 90 blanket credits (two years' work) are allowed in the College of Education toward graduation; and who wish to secure a degree in Nursery School, Kindergarten, and Primary Education, or who wish to prepare for teaching in the field.*

**A. Major in Nursery School, Kindergarten, Primary Education**—40 credits in the College of Education and Child Welfare, as follows:

1. Required of all—22 credits.

Course No.	Title	Credits
Ed.T. 56	Methods and Observation in the Nursery School and Kindergarten.....	5
Ed.T. 70	The Teacher and the Parent .....	3
Ed.T. 77A	Directed Teaching in the Nursery School.....	4
C.W. 140	Behavior Problems in Younger Children.....	2
C.W. 150-151-152	Childhood Education .....	6
C.W. 190	Principles of Mental Measurement of Young Children.....	2

2. Eight or nine credits chosen from the following :

C.W. 130	Motor, Linguistic, and Intellectual Development of the Child .....	3
C.W. 131	Personality, Emotional, and Social Development of the Child .....	3
C.W. 141	Behavior Problems in Older Children .....	2
C.W. 142	Psychology of Atypical Children .....	3
C.W. 160	Physical Growth and Development.....	3
C.W. 185	Children in a Changing World.....	3

3. Nine or ten credits from the following courses :

Ed.C.I. 102	Teaching of Social Studies in the Elementary School.....	3
Ed.C.I. 105	Visual Aids in Teaching.....	2
Ed.C.I. 119	Elementary School Curriculum.....	3
Ed.C.I. 130	Problems of Childhood Education.....	2
Ed.C.I. 143	The Teaching of Reading in the Elementary School.....	3
Ed.C.I. 145	Remedial Reading .....	3
Ed.C.I. 146	Current Developments in Language Expression in the Elementary School.....	3
Ed.C.I. 150	Supervision and Improvement of Instruction.....	3
Ed.C.I. 151	Diagnostic and Remedial Instruction .....	3
Ed.Ad. 115	Elementary School Organization .....	3
H.Ed. 73	Educational Sociology .....	3
H.Ed. 103 or H.Ed. 155 H.Ed. 176	History of Modern Elementary Education History of Education in the United States Conflicting Issues in Modern Education .....	3 3 3

**B. Subject-matter and academic courses—50 credits.** (At least 18 credits must be in courses numbered 50 or above.)

1. A regular minor as listed on pages 19-25 or in one of the special fields. Requirements for minors vary from 18 to 36 credits.

2. Twelve credits in at least one of the following fields or such other fields as may be approved by the adviser.

English	Fine Arts
A foreign language	Mathematics
Geography	Music
A science or general science	Physical Education
A social science	Public Health
Art education	Others by special permission

3. Academic electives—2 to 20 credits.

**NOTE**—The C+ average (1.5 honor points per credit) is based on the 40 credits in Nursery School, Kindergarten, and Primary Education.

**FIVE-YEAR PROGRAM IN EARLY CHILDHOOD EDUCATION LEADING TO THE  
MASTER OF EDUCATION DEGREE**

The College of Education, in co-operation with the Institute of Child Welfare, has outlined a 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 co-ordinated to the best advantage. The specific requirements for the M.Ed.

degree 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 curriculum; (2) in addition to the period of observation and practice teaching required for graduates in the four-year curriculum, a period of internship for which a maximum of 8 credits will be given; (3) a B average in the courses comprising the fifth year of the curriculum; (4) satisfactory completion of final written and oral examinations; (5) 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 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, IA, and conforms to the general requirements set up for the M.Ed. degree. (See page 13). For information in regard to the program consult the major adviser or the dean of the college.

#### FIFTH YEAR IN THE GRADUATE SCHOOL

*Elementary School Administration and Supervision, Teacher Training, Nursery, Kindergarten-Primary Education, or General Elementary Education*

Graduates in elementary and early childhood education may take courses in the Graduate School and pursue work leading to the degrees of master of arts and doctor of philosophy.

It is recommended that as a rule students without any teaching experience teach a year or two before taking graduate work. Students will select their advisers according to their specialization, interests, and needs. For the list of advisers see the introductory statement (page 36). For a statement of the general plan of graduate work in the College of Education, see the Bulletin of the Graduate School.

### ENGLISH EDUCATION

#### FIVE-YEAR PROGRAM LEADING TO THE MASTER OF EDUCATION DEGREE

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

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 and 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, conforms to the general requirements for the M.Ed. degree (see page 13), 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 pages 13-15 regarding work in the Graduate School.

### HIGHER EDUCATION

**Major advisers**—Dean W. E. Peik; Professor T. R. McConnell; Associate Professor Ruth E. Eckert.

Students enrolled in the Graduate School may select courses relating to the field of higher education. Such students will usually have a graduate major in curriculum and instruction, educational administration, or educational psychology. Some of the courses offered are: Ed.C.I. 250, Higher Education in the United States—Curriculum and Instruction; Ed.Ad. 253, Administration in Higher Education; Ed.Psy. 252, Student Personnel Work in College and University; Ed.Psy. 254, Measurement and Evaluation in Higher Education; Ed.C.I. 228, Problems of College Education and Teacher Training; Ed.C.I. 285, Professional Education for Teachers.

Unusual facilities are offered for laboratory work in higher education through the co-operation of administrative, research, and service departments, and through the University's experimental educational divisions. Such laboratories include the University Counseling Bureau and its associated counseling services, the General College, and the University Committee on Educational Research, through which are co-ordinated the researches on the University's own educational problems.

### HISTORY AND PHILOSOPHY OF EDUCATION

**Major advisers**—Professors Edgar B. Wesley and Theodore Brameld.

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

### HOME ECONOMICS EDUCATION

**Major advisers**—Professors Wylle M. McNeal, Clara M. Brown, Ella J. Rose.

The College of Agriculture, Forestry, and Home Economics and the College of Education co-operate in the preparation of teachers of home economics. Satisfactory completion of the general teaching curriculum will lead to the B.S. degree and will provide the necessary training for qualification for the Minnesota "high school standard special certificate" for teaching home economics in the secondary school. Completion of this curriculum also qualifies for teaching in federally aided home economics departments.

During the first two years the student is registered in the College of Agriculture, Forestry, and Home Economics. When the student has earned a minimum of 90 credits and at least one honor point per credit (junior classification) and indicated her specialization as the teachers' or the extension teachers' curriculum, she becomes a registrant also in the College of Education. At the end of the sophomore year or the beginning of the junior year, the student is required to take the psychological and other 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 clothing, foods, and other phases of home economics.
3. Certain specified 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 (1)  $1\frac{1}{2}$  honor points per credit in 40 credits of home economics work in the curriculum for General Home Economics Teaching, (2) an average of 1 honor point per credit in all other courses pursued during the junior and senior years.

By a 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 most

\* 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 170), 40, 41.

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

GENERAL HOME ECONOMICS TEACHING\*

The following courses are required for those preparing for teaching general home economics:

*Freshman Courses*

Course No.	Title	Credits
Orient. 1	College Orientation Lectures .....	1
H.E. 1	Choice and Care of Clothing.....	4
H.E. 3	Clothing Construction A.....	3
H.E. 10	Vocational Opportunities in Home Economics.....	2
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
Rhet. 1,2,3	Rhetoric I, II, III (or exemption).....	9
Rhet. 34	Books and Reading .....	1
Zool. 14-15 and Physiol. 4 or G.C. 10A-B Dy.Husb. 20	General Zoology } Human Physiology } Human Biology } Household Microbiology (or Bact. 53).....	6-10 4
Chem. 1-2 or 4-5 or 6-7 or 9-10 or G.C. 37B G.C. 37A or Agr.Eng. 35	General Inorganic Chemistry } Physical Science II: The Nature of Chemistry } Physical Science I: Energy and Matter } Household Physics }	5-10 5
Soc. 1	Introduction to Sociology .....	3-5
Psy. 1-2	General Psychology .....	6
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 170, 171).....	4-6
H.E. 41	Food Management and Marketing .....	5
C.W. 40 or H.E.Ed. 90	Child Training .....	3
Rhet. 22	Public Speaking .....	3
Rhet. 31 or 32 or 33	Survey of English Literature I or II (or Rhet. 60) .....	3 or 5
Bact. 53	American Life in American Literature.....	3
Agr.Biochem. 4	General Bacteriology (or Dy. Husb. 20).....	4 or 5
Agr.Econ. 3 or Econ. 6-7	Introduction to Organic and Biochemistry..... Principles of Economics } Principles of Economics }	5 5 or 10

\* 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 170), 40, 41.

† Home experience in the construction of garments is required as a prerequisite for H.E. 4 or 53. The character and amount of experience will be determined by a member of the faculty of the textiles and clothing section.

‡ Three credits may be completed any time during the four years of residence.

*Junior and Senior Courses*

Course No.	Title	Credits
H.E. 50	Textiles .....	3
H.E. 53†	Advanced Clothing .....	3
H.E. 85	Home Management: Operation and Maintenance, Lectures.....	4
H.E. 86	Home Management: Operation and Maintenance, Laboratory.....	4
H.E. 170,171	Nutrition of the Family, Child Nutrition (or H.E. 34).....	6
H.E. 180	Home Planning and Furnishing.....	5
P.H. 52A,B	Health Care of the Family (Lect. 2 cred.; lab. 1 cred.).....	1-2
Rhet. 51	Exposition (unless exempted from the course) .....	3
Rhet. 60	Contemporary Literature (or Rhet. 31 or 32 or 33) .....	3
Ed. 51A-C	Introduction to Secondary School Teaching .....	6
Agr.Econ. 126	Economics of Consumption .....	3
H.E.Ed. 90	Child Training .....	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 .....	6
H.E.Ed. 192	Evaluation in Home Economics .....	2

Additional social science credits beyond those required above, should be taken to meet the 18-credit requirement. These may be selected from anthropology, economics, geography, history, political science, philosophy, or sociology. See All-College Requirements in the Bulletin of the College of Agriculture, Forestry, and Home Economics.

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:

Course No.	Title	Credits
H.E. 54	Problems in Clothing Construction .....	3
H.E. 102	Advanced Textiles .....	3
H.E. 115	Clothing Economics .....	3
H.E. 120	Art History and Appreciation .....	3
Bot. 1	General Botany .....	4

*Teaching Foods*

To the requirements in general teaching add:

Course No.	Title	Credits
H.E. 45	Quantity Cookery .....	6
H.E. 142	Experimental Cookery .....	3
H.E. 146	Special Food Problems .....	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, 53, 180, G.C. 10A-B, 37A-B, and Agr.Econ. 126.

To the requirements in general teaching add:

Course No.	Title	Credits
H.E. 24	Problems in Home Planning and Furnishing .....	5
H.E. 142	Experimental Cookery .....	3
H.E. 173	Nutrition in Disease .....	3
H.E. 179	Readings in Nutrition .....	2

\* Plans for the home experience prerequisite for H.E.Ed. 91 and 93 will be made in conference for first quarter juniors on Tuesdays, IV hour, in Room 114 Economics.

† Home experience in the construction of garments is required as a prerequisite for H.E. 4 or 53. The character and amount of experience will be determined by a member of the faculty of the textiles and clothing section.

*Teaching Related Art*

Those interested in teaching Related Arts should:

- a. Select the minimum credit requirement in science when there is an option.
- b. Omit Agr.Econ. 126.
- c. Add the following:

Course No.	Title	Credits
H.E. 23	Advanced Design .....	3
H.E. 25	Design Applied to Crafts .....	3
H.E. 120	Art History and Appreciation .....	3
H.E. 122	Advanced Interior Design .....	3
or 125	Advanced Costume Design .....	3
H.E.Ed. 197	Organization and Methods for Related Art Teaching .....	1-3

Six credits from the following Art Education or Architectural Drawing:

Art.Ed. 4-6-8	Basic Drawing .....	2 a qtr.
or		
Arch. DP-I	Drawing and Painting, Grade I .....	2 a qtr.

*Home Economics Extension*

A combined curriculum with the College of Education. See all-college requirements for students in the College of Agriculture, Forestry, and Home Economics, page 7.

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

The student following this curriculum should be one who has a real interest in rural life and rural people and has 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 and willingness for continuous learning on a job. Residence in rural areas and some contact with extension work before coming to college are 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 for administration and organization of adult and youth programs, an understanding of educational principles and techniques suitable for rural groups.

An organized program of home experience is required to 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 Demonstration staff of the 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. 4, Rhet. 34, 51, Ed. 51C, H.E.Ed. 92, 94, 192, Agr.Econ. 126.

Add to the requirements in general home economics teaching:\*

Course No.	Title	Credits
Soc. 2	Individual and Group Adjustment .....	5
or Soc. 14	Rural Sociology .....	3
or Soc. 91	Case Methods Applied to the Study of Human Problems .....	3
or Soc. 95	Introduction to Public Welfare .....	3
or Soc. 101	Social Organization .....	3
Pub. 53	Publicity .....	3
H.E.Ed. 95	Field Experience for Home Demonstration Agents .....	6
H.E.Ed. 194A or 194B	Adult Education in Home Economics .....	3
Agr.Econ. 8 or	Rural Economics .....	3
Agr.Econ. 126	Economics of Consumption .....	3

**FIVE-YEAR CURRICULUM IN HOME ECONOMICS EDUCATION  
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 upon 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, extra-curricular, and community problems met during the internship.

*Requirements for a Fifth Year Leading to the M. Ed. Degree*

	Credits
(1) Additional academic courses .....	8-24
(2) Home Economics .....	17-25
(3) General Education .....	4-9
(4) Home Economics Education .....	5-9
<b>Total</b> .....	<b>45</b>

An honor point ratio of 2 (a B average) must be attained in all fifth year work.

Satisfactory completion of the fifth year work will be determined by:

- (1) A written comprehensive examination covering home economics materials.
- (2) A written examination in education courses.
- (3) Certification of competence in teaching in the major field.
- (4) An oral examination by the Graduate Committee of the College of Education and a representative of the Home Economics Department.

*Fifth Year*

**I. Academic fields**—From 8-24 credits to be selected from the following courses or from other graduate courses by petition.

Course No.	Title	Credits
Soc. 100	Social Psychology .....	3
Soc. 101	Social Organization .....	3
Soc. 104	City Planning .....	3

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



Soc. 110	Rural Community Organization .....	3
Soc. 112	Problems in Rural Social Research .....	2
Soc. 114	Rural Social Institutions .....	3
Soc. 119	The Family .....	3
Soc. 120	Social Life and Culture Change .....	3
Soc. 161	Social Aspects of Housing and Standards of Living .....	3
B.A. 101-102	Advanced General Economics .....	6
Econ. 178	Economics of Consumption .....	3
Econ. 140	The Co-operative Movement .....	3

**II. Home Economics—From 22-25 credits selected from the following:**

H.E. 102	Advanced Textiles .....	3
H.E. 115	Economic and Social Aspects of Clothing .....	3
H.E. 120	Art History and Appreciation .....	3
H.E. 122	Advanced Interior Design .....	3
H.E. 125	Advanced Costume Design .....	3
H.E. 142	Experimental Cookery .....	3
H.E. 146	Special Food Problems .....	3
H.E. 179	Readings in Nutrition .....	2
H.E. 186	Problems in Income Management .....	3
H.E. 270-271	Nutrition Problems .....	3-6

*Seminars*

H.E. 209	Textiles and Clothing .....	1
H.E. 249	Foods .....	1
H.E. 279	Nutrition .....	1
H.E. 295-296	Home Economics Problems .....	1-5
H.E. 299	Home Economics Problems .....	1

**III. Education and Home Economics Education—A minimum of 15 credits from the following:**

H.E.Ed. 199	Teaching Internship .....	Credits arranged
H.E.Ed. 193	Home Economics Curriculum .....	3
H.E.Ed. 197	Organization and Methods for Teaching Related Art .....	3
H.E.Ed. 243	Trends in Home Economics .....	3
H.E.Ed. 295	Seminar in Home Economics Education .....	Credits arranged
H.E.Ed. 194A	Adult Education in Home Economics .....	3
H.E.Ed. 194B	Adult Education in Home Economics .....	3
H.E.Ed. 292	Problems in Evaluation .....	3
H.E.Ed. 294	Research Methods .....	3-6
Ed.Psy. 158	Psychology of Adolescence .....	3
Ed.Psy. 159	Personality Adjustments in Education .....	2 or 3
Ed.Psy. 225-226	Diagnosis and Counseling .....	3 or 6
Ed.Psy. 293	Psychology of Learning .....	3
Ed.C.I. 207	Problems in Radio Education .....	1-6
Ed.C.I. 271	Problems in Curriculum Construction .....	2-3
Ed.C.I. 113	High School Curriculum .....	3
Ed.C.I. 169	Extra-Curricular Activities .....	2
Ed.C.I. 266	Supervision of High School Instruction .....	3
Ed.C.I. 150	Supervision and Improvement of Instruction .....	3
Ed.C.I. 170	Curriculum and Course of Study Construction .....	3
Ed.C.I. 122	Literature for Adolescents .....	2
Ed.C.I. 285	Professional Education of Teachers .....	2
Ed.C.I. 250	Higher Education in the United States .....	3
Ed.Ad. 133	Guidance in Secondary Schools .....	2
H.Ed. 101	Historical Foundations of Modern Education .....	3
H.Ed. 140	Philosophies of Modern Education .....	3
H.Ed. 176	Conflicting Issues in Modern Education .....	2
H.Ed. 178	Education and Problems of American Democracy .....	3
Ind. 110	Guidance in the Schools .....	3
C.W. 170	Parent Education .....	2

Students with a Bachelor's degree with a major in home economics education 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**—Professor Homer J. Smith; Associate Professor William J. Micheels.

The following curriculum has been designed for young men who desire to prepare for teaching, administrative, and supervisory positions in the fields of industrial arts and trade education. 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.

*Minnesota Standards for Graded Elementary and High Schools, page 35, contains the following provision:*

From and after July 1, 1929, a certificate to teach general industrial education may be issued only upon a Bachelor's degree in industrial education from an institution accredited for the training of teachers of industrial arts, but the status of industrial teachers holding certificates prior to that date shall not be affected.

Certain courses of the curriculum are acceptable for Smith-Hughes and George-Deen certification, for service in trade schools and classes—day, evening, and part-time as to type. These courses should be selected only upon recommendation of the departmental adviser or the state supervisor of trade and industrial education. The latter assures himself of the vocational competence of those who desire educational courses to complete requirements. Special certificates are issued by the State Department of Education. General industrial certificates and vocational industrial certificates are based upon wholly different preparations and should not be confused.

The Department of Industrial Education, in addition to the campus schedules, conducts off-campus courses in centers scattered throughout the state. These offerings are made through co-operation of officials in the State Department of Education, and requests of interested groups of instructors will be given prompt consideration. 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 who have instructional responsibilities and to public school authorities who have curriculum and equipment problems upon which assistance may be desired.

The Graduate School provides the master of arts degree with major work in this field, with and without thesis, Plans A and B. The College of Education provides the more professional master of education degree under Plans X and Y. *Mimeographed pages may be secured from the major advisers, 200 Eddy Hall, which explain the entrance requirements and program patterns for both degrees.* Persons desiring to do work beyond the Master's degree are invited to confer or to correspond about status and program.

In the four-year program curriculum shown following (leading to the B.S. degree), courses numbered 101 and 110 carry graduate credit for students who have not presented them earlier as undergraduate earnings. The department offers many other professional courses of advanced type. See pages of course descriptions near the close of this bulletin.

## FOUR-YEAR CURRICULUM IN INDUSTRIAL EDUCATION

*Freshman Year*

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition (or A-B-C or exemption)	9
Pol.Sci. 1-2	American Government and Politics	6
Geog. 11	Human Geography	5
M.E. 2	Machine Woodworking	2
M.E. 3	Wood Finishing	2
Ind. 1	Basic Woodwork	3
Ind. 5	Basic Drawing	3
Ind. 10	Basic Electricity	3
Ind. 30	Graphic Presentation	3
Ind. 80	General Industrial Training (not a shop course)	2
Electives	Academic	5
Phys.Ed. 1-2-3	Sports Education	3
Total		46

*Sophomore Year*

Course No.	Title	Credits
Math. 1	Higher Algebra	5
Soc. 1	Introduction to Sociology	5
Phys. 1-2-3	Introduction to Physical Science	9
Psy. 1-2	General Psychology	6
Draw. 41-42	Technical Drawing	4
M.E. 8	Foundry Practice	3
M.E. 12	General Metal Work	2
M.E. 19	Machine Shop Practice	2
Ind. 40	Analysis	2
Ind. 42	Course Organization	2
Ind. 44	Equipment and Management	2
Ind. 60	Philosophy of Vocational Education	2
Ind. 61	Practices in Vocational Education	2
Total		46

*Junior Year*

Course No.	Title	Credits
Econ. 6-7	Principles of Economics	10
Chem. 1-2	General Inorganic Chemistry	8
Ed. 51A-B-C	Introduction to Secondary School Teaching	9
Agr.Eng. 40	Mechanical Training	3
Agr.Eng. 41	Metal Work	3
Agr.Eng. 42	Art Metal Work	3
Ind. 66	Related Subjects	2
Ind. 70	Methods in Shop Subjects	3
Ind. 75	Methods in Drawing	2
Ind. 101	Tests in Industrial Subjects	3
Total		46

*Senior Year*

Course No.	Title	Credits
Hist. 80-81-82	Introduction to Economic History	9
Ind. 50A-B-C†	Directed Teaching	6
Ind. 110	Guidance in the Schools	3
Dunwoody	Building Construction Drafting	3
Elective	Shopwork or Drawing	11
Elective	Academic	11
Elective	Art Education	2
Total		45

† Senior status, taking the psychological examinations, and a C+ average (1.5 honor points per credit) in the major are prerequisite to this course; also Ind. 80 and either 70 or 75.

A degree candidate is privileged to complete his work under the curriculum form which was current when he entered.

The C+ average is based on all courses in Industrial Education. Shop and drawing courses may be included.

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.

The required 26 credits in shopwork and 10 credits in drawing (36 total) are increased by election to a maximum of 45 credits. All such courses should be selected under advice and may be either extensive or intensive in resultant preparation for teaching. Credits in excess of 45 will be recorded but will not be counted toward the graduation requirements.

Requirements above are classified as follows: 90 credits in academic subjects, 20 in education, 28 in industrial education, 45 in shopwork and drawing. Total credit requirement, 183.

#### GRADUATE COURSES AVAILABLE

Ind. 100	Industrial Instruction
Ind. 101	Tests in Industrial Subjects
Ind. 102	The General Shop (not a shop course)
Ind. 103	Instructional Aids
Ind. 104	Defense Training
Ind. 105	Administration of Industrial Education
Ind. 107	Co-ordination
Ind. 108	Apprenticeship
Ind. 109	Conference Leading for Industry
Ind. 110	Guidance in the Schools
Ind. 115	Supervision of Industrial Education
Ind. 125	Philosophy and Practice of Industrial Education
Ind. 170	Day Industrial Schools
Ind. 171	Evening Industrial Schools
Ind. 172	Part-Time Education
Ind. 200	Research Problems (Independent Papers)
Ind. 250-251	Industrial Education Literature

#### FIFTH YEAR LEADING TO THE MASTER OF EDUCATION DEGREE

The College of Education awards the master of education degree (M.Ed.) to those students who satisfactorily complete a fifth year of work in industrial education at the graduate level and who meet all the requirements of the college for the professional degree. Information may be secured from the major adviser. See statement above.

#### LIBRARY SCIENCE\*

**Major advisers**—Professor Errett W. McDiarmid; Assistant Professor C. Irene Hayner.

The following curricula have been arranged in co-operation 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 five-year program leading to the degree of B.S. in L.S. (bachelor of science in library science).
2. A four-year program leading to the degree of B.S. with a major in library science.
3. A minor in library science for students desiring to fill positions as teacher-librarians, i.e., part-time teaching in combination with part-time library work.†

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

† Altho the present Minnesota requirement for a library endorsement for part-time work is 9 quarter credits, it is believed that a minor of 18 quarter credits is the minimum necessary for successful librarianship.

In each of the first two programs, students qualify for a teaching certificate by completing requirements for a major or two minors in subjects commonly taught in Minnesota high schools. It will usually be advisable for students with a major or minor in Library Science to combine with it minors or a major in English, history or social studies. Such students are required to take special methods in the teaching major or one of the minors.

Students with a major or minor in Library Science should have an adviser in the Division of Library Instruction.

Graduates of the College of Education who already have an elementary or secondary school certificate, or students who have completed the four-year course in a teachers college and already hold a Bachelor's degree and a teaching certificate may upon completion of 45 credits in Library Science be eligible for either the degree of B.S. in L.S. or the degree of B.S. with a major in Library Science. Such students *must consult the dean* of the College of Education *at the time of entrance* in order to become candidates for a degree.

An average 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 \$42 per quarter for residents of Minnesota and \$56 per quarter for nonresidents. Un-classed students, auditors, and others carrying less than full work in library instruction (15 credits per quarter) pay a tuition fee of \$3.50 per credit for residents and \$4.75 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.

FIVE-YEAR CURRICULUM FOR THE DEGREE OF B.S. IN L.S.  
WITH A TEACHER'S CERTIFICATE

*Freshman and Sophomore Years*

Students should enroll in the College of Science, Literature, and the Arts and fulfill the general requirements for entrance to the College of Education as given on page 6 of this bulletin.

*Junior Year*

Course No.	Title	Credits
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
Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
	Continuation of required and elective academic courses (including courses in minors) .....	25
	Total .....	45

*Senior Year*

Lib.Sci. 70	Reading Guidance .....	3
Lib.Sci. 81	Theory of Bibliography .....	2
Lib.Sci. 82	Cataloging and Classification .....	4
	Special Methods and Directed Teaching and School Library Practice Work§	12-14
	Elective and required courses in Education .....	7
	Continuation of required and elective academic courses .....	15-18
	Total .....	45

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

## COLLEGE OF EDUCATION

*Fifth Year*

Lib.Sci. 53	School Library Administration .....	3
Lib.Sci. 56	Current Issues .....	1
Lib.Sci. 71	Reading Guidance for Children .....	3
Lib.Sci. 72	Reading Guidance for Adolescents .....	3
	Elective courses in Library Science .....	15
	Elective courses in Education .....	5
	Continuation of required and elective academic courses .....	15
	<b>Total</b> .....	<b>45</b>

FOUR-YEAR PROGRAM LEADING TO THE DEGREE OF B.S.  
WITH A MAJOR IN LIBRARY SCIENCE

*Freshman and Sophomore Years*

Students should enroll in the College of Science, Literature, and the Arts and fulfill the general requirements for entrance to the College of Education as given on page 6 of this bulletin.

*Junior Year*

Course No.	Title	Credits
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. 81	Theory of Bibliography .....	2
Lib.Sci. 82	Cataloging and Classification .....	4
Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
	Electives in Education .....	2-5
	Continuation of required and elective academic courses (including courses in minors) .....	14-19
	<b>Total</b> .....	<b>45</b>

*Senior Year*

Lib.Sci. 53	School Library Administration .....	3
Lib.Sci. 56	Current Issues .....	1
Lib.Sci. 71	Reading Guidance for Children .....	3
Lib.Sci. 72	Reading Guidance for Adolescents .....	3
	Elective Courses in Library Science .....	18
	Special Methods and Directed Teaching and School Library Practice Work§ .....	12-14
	Electives in Education .....	2-5
	General Electives .....	3
	<b>Total</b> .....	<b>45</b>

*Minor in Library Science*

For a minor in Library Science students should elect Lib.Sci. 53, 71, and nine credits from the following: 60, 62, 70, 73, 82.

## MUSIC EDUCATION

**Major advisers**—Professor Paul M. Oberg; Assistant Professor Robert W. Winslow.

The course in Music Education is a four-year course leading to the degree of bachelor of science, in which the theoretical, practical, and methods courses in music are combined

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

with the study of English composition, psychology, and such subjects as the College of Education demands as a definite requirement. The object is to provide a well-rounded course for candidates for the bachelor of science degree in music education.

For graduation, women students must earn 185 credits and 185 honor points and men students must earn 183 credits and 183 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, exemption dependent upon entrance examination. Students not majoring in voice shall be required to take one year of Voice (12 or 12C) exemption dependent upon entrance examination. 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. English, history, languages, and social studies are suggested. For advice concerning minors, see departmental advisers.

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 directed teaching are required in the Minneapolis and St. Paul grade schools, and in the Minneapolis, St. Paul, and University high schools.

Courses upon which the C+ average is based are Mu.Ed. 4-5-6, 50A-B, 53, 54, 55, 65, 68; Mu. 60 or 61 or 62 or 63.

Following are the specific regulations and requirements applying to this course:

**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 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 and Music Education in the Combined Class Schedule Bulletin.

**FOUR-YEAR CURRICULUM IN MUSIC EDUCATION**  
*Freshman and Sophomore Years*

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition .....	9
Mu. 1T,2T,3T,4T	Music Theory .....	13
Mu.Ed. 59	Choral Literature and Conducting .....	1
	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 1-2-3	Civilization of the Modern World .....	9
Soc. 1	Introduction to Sociology .....	5
	Physical Education .....	3 or 5
	Academic electives (minor) .....	8-14
	<b>Total</b> .....	<b>93 or 95</b>

*Junior and Senior Years*

Mu.Ed. 50A	Primary Methods .....	2
Mu.Ed. 50B	Intermediate Methods .....	2
Mu.Ed. 52	Technique of Teaching Appreciation .....	1
Mu.Ed. 53	High School Methods .....	3
Mu.Ed. 54	Public Performance and Operetta Production .....	3
Mu.Ed. 65	Instrumentation .....	3
Mu.Ed. 59	Choral Literature and Conducting .....	3
Mu. 60 or 61 or 62	Instrumental Ensemble } .....	2
or 63	Vocal Ensemble } .....	2
Mu. 59	Technique of Voice .....	2
Mu. 76	Form and Analysis .....	3
Mu. 40-41-42	Orchestra } .....	3
or 43-44-45	University Chorus } .....	3
or 46-47-48	Concert Band* } .....	3
Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
Mu.Ed. 68	Conducting of Instrumental Music and Survey of Materials .....	4
Mu.Ed. 55	Survey and Evaluation of Vocal Materials and Methods .....	4
Mu.Ed. 60-61-62	Music Supervision and Student Teaching .....	9
	Special Methods (academic minor) .....	4
	Practical Music .....	6-12
	Electives in education .....	5
	Academic electives (minor) .....	16-22
	<b>Total</b> .....	<b>90</b>

**FIVE-YEAR CURRICULUM IN MUSIC EDUCATION**  
**LEADING TO THE M.ED. DEGREE**

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

The work of the fifth year is definitely integrated with that of the first four years described above. The fifth year will provide opportunity for those interested to concentrate in either vocal or instrumental music if they desire to do so. Encouragement will be given to those students possessing outstanding talents in music and demonstrated scholastic ability.

\* Music Education majors will be allowed a maximum of 6 credits in Concert Band.



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

In addition to the honor point requirements for the four-year curriculum (see pages 11-12) an honor point ratio of 2 (a B average) must be attained in all fifth year work.

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 in the Graduate School.

*Fifth Year Leading to M.Ed. Degree*

I. Electives in academic major or minor (or closely related field)—15 to 17 credits. Courses must be numbered 100 or above.

II. Music major—12 credits elected from the following:

Course No.	Title	Credits
Mu. 209-210-211	Advanced Topics of Musical Analysis .....	3, 6, or 9
Mu. 225	Advanced Applied Music .....	6-8
Mu. 200-201-202	Basis of Musical Expression .....	3, 6, or 9
Mu. 205-206-207	Composition in Larger Forms .....	3, 6, or 9

III. Music Education—10 credits elected from the following:

Mu.Ed. 101E	Tests and Measurements in Music Education .....	2
Mu.Ed. 103E	Psychological Foundations of Music Education .....	3
Mu.Ed. 220E	Survey and Evaluation of Recent Research in Music Education .....	3
Mu.Ed. 224E	Seminar and Individual Research Problems in Music Education .....	2-6
	Optional Internship and Seminar .....	8

IV. Education—6 credits elected from the following:

Ed.Psy. 293	Psychology of Learning .....	3
Ed.C.I. 113	High School Curriculum .....	3 or 4
Ed.C.I. 119	Elementary School Curriculum .....	3
Ed.C.I. 150	Supervision and Improvement of Instruction .....	3
Ed.C.I. 266	High School Supervision .....	3
	Other education courses from the various departments may be substituted with the permission of the adviser.	

Total for fifth year ..... 45

REQUIREMENTS FOR A MINOR IN MUSIC EDUCATION

A minimum of 25 credits in music and music education to include the following subjects:

Course No.	Title	Credits
Mu. 1T,2T	Music Theory .....	6
Mu. 36	History of Music .....	2
Mu.Ed. 50A	Primary Methods .....	2
or 50B	Intermediate Methods .....	2
or 53	High School Methods .....	3
Mu.Ed. 54	Public Performance and Operetta Production .....	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 43-44-45	University Chorus .....	1-3
Mu. 60,61,62	Instrumental Ensemble .....	2
or 63,64, 65	Vocal Ensemble .....	2
Mu.Ed. 68	Conducting of Instrumental Music and Survey of Materials .....	4
or 59	Choral Literature and Conducting .....	2
or 55	Survey and Evaluation of Vocal Materials and Methods .....	4

## NATURAL SCIENCE

**General adviser**—Professor Palmer O. Johnson.

**Special advisers**—Botany: Professor William S. Cooper.  
 Chemistry: Professor Palmer O. Johnson.  
 Physics: Professor J. William Buchta.  
 Zoology: Professor J. E. Wodsedalek.

Students preparing to teach science in Minnesota high schools should 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, for which the teacher should be trained in both biological and physical sciences. While it is possible to meet the major and minor sequences in one or more of the sciences as in other academic subjects, the following special curriculum in natural science is recommended for those persons desiring to secure the best preparation for the teaching of high school science. It requires:

- A. The completion of a sequence of a minimum of twenty-nine hours in one of the four natural sciences: chemistry, physics, botany, or zoology. This is referred to as the core subject.
- B. The completion of at least fifteen hours in another science (excepting the one chosen under A) selected from the following: physics, geology, botany, zoology, chemistry.
- C. The completion of at least nine credits in each of the remaining sciences listed under B but not selected to meet requirements A and B. In lieu of 9 credits in geology, 5 credits in geology and 5 credits in astronomy will be accepted. For graduation 10 credits in a social science are also required.
- D. Completion of Ed. 51A-B-C, Ed.T. 68A-B-C, and 8 credits in education electives.

The C+ average is based on the courses in the core subject.

The requirements under A and B for the several sciences are:

## BOTANY†

- A. Courses 1-2-3 or 4-5, 10, 12, 50, 51, 52, 53, 54.
- B. Courses 1-2-3, or 4-5, and 6 additional credits chosen from Courses 10, 12, 50, 51, 52.

## CHEMISTRY†

- A. Inorganic Chemistry 9, 10, 12 (or 6, 7, and 12 if without entrance credit in chemistry); Analytical Chemistry 7; Organic Chemistry 54-57, 55-58.
- B. Inorganic Chemistry 9, 10, 12 (or 6, 7, and 12).

## PHYSICS†

- A. Courses 7-8-9, 107-109-111, and five credits of approved electives.
- B. Courses 7-8-9.

## ZOOLOGY†

- A. Courses 1-2-3, 52, 53, 75, 83, and Physiology 4.
- B. Courses 1-2-3, 53, and 75.

## REQUIREMENTS FOR A MINOR IN NATURAL SCIENCE

The requirements for a minor in natural science are:

1. The completion of at least 15 specified quarter hours in one of the four natural sciences: botany, chemistry, physics, or zoology.

† For titles of courses see pages 19-25.

2. The completion of at least 9 quarter hours in each of the remaining sciences listed above under A not selected to meet the requirement in 1. In addition 9 credits in geology, or 5 credits in geology and 5 credits in astronomy, are required.

#### FIVE-YEAR PROGRAM IN NATURAL SCIENCE LEADING TO THE DEGREE OF MASTER OF EDUCATION

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. The work of the fifth year is based on the four-year curriculum and follows the pattern of work for the M.Ed. degree. (See page 13.) For specific information confer or correspond with the major adviser.

#### NURSERY SCHOOL AND KINDERGARTEN EDUCATION

See Elementary Education Curricula IB and IIB, pages 37 and 39.

#### NURSING EDUCATION AND PUBLIC HEALTH NURSING

**Major adviser**—Nursing Education: Professor Katharine J. Densford.

Public Health Nursing: Associate Professor Margaret S. Taylor.

The following courses are arranged so as to indicate the minimum requirements for students wishing to secure a bachelor of science degree with a major in nursing. They are planned to prepare the student for such public health nursing positions as visiting nursing, school nursing, health teaching, infant welfare, rural and industrial nursing; for administrative, supervising, and teaching positions in schools of nursing and hospitals; and for combined positions in secondary schools as health educators. By registering for additional selected courses students may complete the requirements for certification for teaching in the public schools of this state.

#### CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE AND GRADUATE IN NURSING

Students in this curriculum are required to complete 185 credits for graduation. The curriculum is divided into three parts as follows:

Part I. Five quarters in the College of Science, Literature, and the Arts either in the University of Minnesota or some other accredited university or college.

Part II. Ten quarters in the School of Nursing (first quarter on the campus, and nine quarters in clinical divisions).

Part III. Three quarters in the College of Education or in the School of Public Health.

#### PART I: COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

(Five quarters)

During the first five quarters the student must complete 75 credits and enough of the required courses listed below so that *all* required courses will be completed by the end of the sixth quarter (first quarter in the School of Nursing). Preferably not more than 12 credits of *required courses* including Nursing 12, 3 credits; and Nursing 1, 1 credit, should be left for the sixth quarter. She must earn an average of one honor point per credit (C average) for total credits earned in the prenursing period.

A. Required courses to be completed by the end of the 6th quarter.

	Credits
English A-B-C or 4-5-6 or exemption .....	9 or 15
Sociology 1 .....	5
Sociology 49 .....	3
Psychology 1 and 2 .....	6
Child Welfare 40 or Home Economics Education 90 .....	3
Public Health 3 .....	2
Anatomy 3 .....	3
Physiology 50* or 1 .....	4
Physiology 60* or 2 .....	4 or 6
Bacteriology 53* or 101 and 102 or 1 .....	5 or 9 or 4
Home Economics 31* or 30 .....	3 or 2 or 1
Physical Education .....	5
Nursing 1, first quarter in the School of Nursing .....	1
Nursing 12, first quarter in the School of Nursing .....	3

B. Elective courses. (Thought should be given to possible fields of specialization in choosing electives.)

Students planning to take the Public Health major are required to have 9 credits in Social Sciences other than Sociology.

Students planning to take the Teaching of Science variant are required to have two quarters of inorganic chemistry, three quarters of Zoology and the preferred science courses in the above list.

Chemistry 1 and 2, or 4 and 5, or 6 and 7  
 Zoology 1-2-3  
 Zoology 22, 83  
 History 1-2-3  
 Social Sciences

Philosophy 3  
 Anthropology 41  
 Political Science 1-2-3  
 Humanities or other electives as desired

Advisers from the School of Nursing faculty are assigned to prenursing students in the College of Science, Literature, and the Arts. Before registering each quarter, students should have their programs reviewed by their adviser in the School of Nursing.

Students from other universities or colleges should, as a rule, transfer to the University of Minnesota at the end of their first academic year, if they wish to complete the Bachelor of Science Curriculum in the minimum time. Students may, however, transfer at any point in the prenursing program. Those who wish to complete all prenursing requirements before transferring to the University of Minnesota may do so provided they complete sufficient required courses as listed above. These students should confer with the office of admissions and records early to ascertain their exact standing. They are urged to consult with the School of Nursing at the end of their freshman year.

A suggested two-year program, including the preferred electives of chemistry and zoology follows: The choice of electives and sequence of courses may be varied in accordance with the individual needs and interest of the students.

#### *First Year*

<i>Fall</i>	<i>Winter</i>	<i>Spring</i>
English 4f or Af	English 5w or Bw	English 6s or Cs
Chemistry 1f or 4f or 6f	Chemistry 2w or 5w or 7w	Sociology 1s
Zoology 1f	Zoology 2w	Zoology 3s
Public Health 3f	Physical Education	Anatomy 3s
Physical Education	Electives†	Physical Education
Electives†		

\* Preferred courses.

† Electives should be chosen to make on the average a program of 15 credits per quarter in addition to physical education. Social science should be chosen in the freshman year if possible. Electives in social science, natural science, and child welfare are urged, with special attention to the possible fields of specialization.

## Second Year

<i>Fall</i>	<i>Winter</i>	<i>Spring (Part II)</i> (School of Nursing—1st quarter)
Psychology 1f	Psychology 2w	History of Nursing 1s
Physiology 50f	Child Welfare 40w or	Nursing 12s
Physical Education	Home Economics Ed. 90w	Physiology 60s or Physiology 2s
Bacteriology 53f	Home Economics 31w	Electives†
Electives†	Sociology 49w	
	Physical Education	

## PART II: SCHOOL OF NURSING

(10 Quarters)

Students in the Bachelor of Science Curriculum transfer from the College of Science, Literature, and the Arts to the School of Nursing at the end of the fifth quarter. During the sixth quarter (first quarter in the School of Nursing) they complete, from the list of required courses already given on page 60, all courses they have not completed while in the College of Science, Literature, and the Arts, and in addition enough electives to make a total of 90 credits completed by the end of the six quarters. Nursing 12 and 1 are taken in this quarter. After completion of the sixth quarter the student is assigned to the hospitals for clinical experience for nine quarters.

## PART III: COLLEGE OF EDUCATION

(Students must spend three full quarters in this portion of the curriculum)

After completion of the clinical experience the student returns to the campus and selects one of two majors as follows:

- A. Nursing Education for which she registers in the College of Education.
- B. Public Health Nursing for which she registers in the College of Education or in the School of Public Health.

NOTE—Students wishing a combined Public Health and Nursing Education major should register in the College of Education for the primary pattern and must complete in addition the courses listed in Part III B, School of Nursing bulletin. This combined program takes at least four quarters. Unless some of the subjects of Part III A or B have been completed in advance most students will need an additional quarter to complete the program.

## A. NURSING EDUCATION

Students in Nursing Education must meet the requirements for graduation of the College of Education. See page 9-12. They are, however, exempt from Public Health 4 and Public Health 59 of the Health Education requirement.

Nursing Education has, in addition to the primary pattern, four variants; namely, Ward Administration, Teaching of Sciences, Child Care, and Nutrition. Students who wish to plan a program with special emphasis upon one of the special fields should register for the appropriate variant. For any one of these the student registers in the College of Education.

Major Adviser: Katharine J. Densford, 125 Medical Sciences Building.

**Primary pattern**—Prepares students for nursing in institutions, for administration, or for teaching in hospitals and schools of nursing.

† Electives should be chosen to make on the average a program of 15 credits per quarter in addition to physical education. Social science should be chosen in the freshman year if possible. Electives in social science, natural science, and child welfare are urged, with special attention to the possible fields of specialization.

Course No.	Title	Credits
Ed. 51A,B	Introduction to Secondary School Teaching .....	6
Ed.T. 51A	Special Methods of Teaching in Schools of Nursing .....	3
Ed.T. 51B†	Special Methods of Teaching and Directed Teaching in Schools of Nursing .....	5
Nurs.Ed. 60	Ward Administration .....	4
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing, including War Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
	Electives‡ .....	18-19
	Education electives approved by adviser .....	2-3
Total .....		45

**Variant for those interested in Ward Administration**—Designed to provide the student with theoretical background and ward experience in the activities and responsibilities of the hospital head nurse and supervisor.\*

Course No.	Title	Credits
<b>Nursing Courses</b>		
Nurs.Ed. 60	Ward Administration .....	4
Nurs.Ed. 65	Analysis of Nursing Care .....	4
Nurs.Ed. 67	Field Practice in Ward Administration .....	6
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing, including War Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
Nurs.Ed. 73	Principles of Economics in Nursing Service Administration .....	1
<b>Education Courses</b>		
Ed. 51A,B	Introduction to Secondary School Teaching .....	6
Ed.T. 51A	Special Methods of Teaching in Schools of Nursing .....	3
Ed.T. 51B†	Special Methods of Teaching and Directed Teaching in Schools of Nursing .....	5
	Education Electives approved by adviser .....	2-3
<b>General Courses</b>		
	Electives .....	7-8
Total .....		45

*Suggested Sequence of Courses*

**Primary Pattern or Ward Administration Variant**

Fall Quarter	Winter Quarter	Spring Quarter
Ed. 51A‡	Nurs.Ed. 60	Ed.T. 51B†
Ed. 51B	Education Elective	Nurs.Ed. 71
Nurs.Ed. 69	Ed.T. 51A	Nurs.Ed. 67
General Electives 7 cred.	Nurs.Ed. 65	or
	Nurs.Ed. 73	General Electives
	or	
	General Electives	

} 5 cred.                                      } 6 cred.

**Variant for those interested in the Teaching of Sciences in Schools of Nursing**—Prepares the student to teach basic sciences and clinical courses in schools of nursing. The purpose is to build a broad knowledge and deep understanding of such medical sciences as are included in the nursing curricula and to study the problems involved in teaching these sciences in schools of nursing. Any student who shows special aptitude and interest in the science courses and who is interested in choosing this variant is urged to consult the director of the School of Nursing during her first year for assistance in the planning of her preclinical course since many of the required science courses must be completed previous to assignment to clinical experience.

\* Enrolment is limited. Permission of major adviser required.

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

1. A passing grade in Ed. 51A, B.
2. Taking the psychological examinations.
3. Attainment of a scholastic average of 1.5 in the field in which the practice teaching is to be done.
4. Passing of the required speech test.

‡ By careful selection of these electives and with an additional quarter the public health nursing certificate may be earned. See the Bulletin of the School of Public Health.

¶ It is suggested that students planning to major in Nursing Education elect Ed. 51A during the 9th or 10th quarter in the School of Nursing if possible. This is especially advisable for students planning to elect one of the variants of the Primary Pattern.

Course No.	Title	Credits
<b>Nursing Courses</b>		
Nurs.Ed. 60	Ward Administration .....	4
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
Nurs.Ed. 74	Sciences in a School of Nursing Curriculum .....	5
<b>Education Courses</b>		
Ed. 51A,B	Introduction to Secondary School Teaching .....	6
Ed.T. 51A	Special Methods of Teaching in Schools of Nursing .....	3
Ed.T. 51B†	Special Methods of Teaching and Directed Teaching in Schools of Nursing .....	5
	Education Electives approved by adviser .....	2-3
<b>Science Courses</b>		
	(Physiol. 50 and Physiol. 60 and Bact. 53 or Bact. 101 are required in addition to the following courses and should be taken in the second year of the prenursing program. If they have not been taken previously, it is apt to take more than three quarters to complete this variant.)	
Bact. 102	Medical Bacteriology .....	4
Zool. 149, 150 or Zool. 21 or Anat. 61	Histology and Organology .....	
Zool. 22 or Anat. 59	Histology .....	5 or 6
	Comparative Anatomy .....	
	Systematic Anatomy .....	5 or 6
	<b>Total</b> .....	<b>46 or 48</b>

**Variant for those interested in Child Care**—Prepares the student for work in pediatric wards or clinics, work with both well and sick children, or serves as an excellent background for nurses who may later seek additional preparation for public health work with children.

Course No.	Title	Credits
<b>Nursing Courses</b>		
Nurs.Ed. 60	Ward Administration .....	4
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing, including War Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
<b>Education Courses</b>		
Ed.T. 51A	Special Methods of Teaching in Schools of Nursing .....	3
Ed. 71A,B or Ed. 51A,B	Introduction to Elementary School Teaching } Introduction to Secondary School Teaching }	6-10
<b>Child Welfare and Nursery School Courses</b>		
C.W. 80	Child Psychology .....	3
C.W. 170	Parent Education .....	3
Ed.T. 55 or Ed.C.I. 130	Principles of Early Childhood Education } Problems of Childhood Education }	3 or 2
Ed.T. 56A,C	Methods and Observation in the Nursery School and Kindergarten .....	4
Ed.T. 57 or Ed.T. 58 } Ed.T. 75 }	Nursery School-Kindergarten Laboratory .....	5
	Directed Teaching in the Nursery School .....	4
Mu.Ed. 50A	Primary Methods .....	2
	Electives approved by major adviser .....	2-3
	<b>Total</b> .....	<b>45</b>

**Variant for those interested in Nutrition**—Prepares the student for any position in which more than ordinary mastery of this field is desirable, as, for example, in Medical Nursing.

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

1. A passing grade in Ed. 51A, 51B.
2. Taking the psychological examinations.
3. Attainment of a scholastic average of 1.5 in the field in which the practice teaching is to be done.
4. Passing of the required speech test.

Students taking this variant must have completed Home Economics 30 (2 cred.) or Home Economics 31 (3 cred.) before entering the School of Nursing.

## Nursing Courses

Course No.	Title	Credits
Nurs.Ed. 60	Ward Administration .....	4
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
<b>Education Courses</b>		
Ed. 51A,B	Introduction to Secondary School Teaching .....	6
Ed.T. 51A	Special Methods of Teaching in Schools of Nursing .....	3
Ed.T. 51B†	Special Methods of Teaching and Directed Teaching in Schools of Nursing .....	5
	Electives in Education approved by adviser .....	6
<b>Home Economics Courses</b>		
Agr.Biochem. 4‡	Introduction to Organic and Biochemistry .....	5
H.E. 34 or	Nutrition Problems	} 3 or 4
H.E. 170	Nutrition of the Family	
H.E. 173	Nutrition in Disease .....	3
	Electives .....	4 or 3
<b>Total</b> .....		<b>45</b>

## B. PUBLIC HEALTH NURSING

Students who wish a combined course in Nursing Education and Public Health register for the last 4 quarters in the College of Education and must complete the required courses of the primary pattern of Nursing Education and in addition complete the following courses. Those who wish to register for Public Health Nursing only register in the School of Public Health.

The following courses are required in addition to the requirements listed under Part I.

*Social Science Courses*

Course No.	Title	Credits
Soc. 91 or	Case Method Applied to	} 4 or 3
	Study of Human Problems	
Soc. 129	Principles of Social Case Work	
Note: Social Science other than Sociology—9 credits. Should be taken during the preansuring period.		

*Public Health Courses*

P.H. 53	Elements of Preventive Medicine .....	5
P.H. 62-63	Principles of Public Health Nursing .....	6
P.H. 65, 66, 67	Field Practice in Public Health Nursing .....	16
Ed. 81	Introduction to Education for Public Health Nurses .....	3
P.H. 133 or 61	Mental Hygiene Aspects of Public Health Nursing .....	3
	Electives in Public Health minimum .....	5

General electives, any department, to bring total program to minimum of 45

## CURRICULUM FOR GRADUATE NURSES LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

Open to those who meet entrance requirements for specialized curricula of the College of Education. Applicants are required to submit their high school and nursing school records for evaluation to the office of admissions and records. Advanced credit for the

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

1. A passing grade in Ed. 51A, 51B.
2. Taking the psychological examinations.
3. Attainment of a scholastic average of 1.5 in the field in which the practice teaching is to be done.
4. Passing of the required speech test.

‡ If student has not had organic chemistry.



professional nursing courses will be determined by the Committee on Evaluation of Nursing Credentials which will indicate the number of credits allowed and any additional clinical services to be completed before credit is granted. Forty-five credits represent approximately the average advanced standing granted for satisfactory course of study in a hospital school of nursing; fifty-five in a hospital school having its pre-nursing sciences taught in the University of Minnesota; fifty-three in other university schools; and sixty in the University of Minnesota School of Nursing.

Students register in the College of Education and must 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 9-12.) They are, however, exempt from Public Health 4 and 59 of the Health Education requirement.

To secure a degree in the College of Education students must earn 185 credits and 185 honor points, and achieve 1½ honor points for each credit in a major field.

The amount and type of courses recommended for each candidate are decided upon after consideration of a candidate's general education and experience. As a rule the following curriculum meets the needs of most students. Substitutions may be made by petition upon the recommendation of the major adviser.

Graduate nurses preparing for personnel and guidance positions should plan to take graduate work in that field, but should select certain electives in the Bachelor of Science program which serve as preparation for graduate study. Attention is called to offerings in other colleges of the University in the field of personnel work.

#### A. NURSING EDUCATION

**Major Adviser:** Professor Katharine J. Densford

A suggested sequence of courses for the graduate nurse who has approximately 45 blanket credits (one academic year) follows. (Chemistry and Zoology are highly recommended as electives and prerequisites to Physiology 60.) All other courses listed below are required.

##### *First Year*

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition (or Eng. A-B-C or exemption) .....	9
Chem. 1-2 or 4-5 or 6-7	General Inorganic Chemistry .....	8-10
Zool. 1-2-3	General Zoology .....	10
Soc. 1	Introduction to Sociology .....	5
	Physical Education .....	5
	Electives to total approximately 50 credits	

##### *Second Year*

Psy. 1-2	General Psychology .....	6
	Physiological Chemistry or Physiology or Human Anatomy or Bacteriology .....	4-6
C.W. 80	Child Psychology (or C.W. 40) .....	3
Soc. 49	Social Problems .....	3
Ed. 51A	Introduction to Secondary School Teaching .....	3
Nurs.Ed. 60	Ward Administration .....	4
	Electives to total 45 credits	

## Third Year

Course No.	Title	Credits
Ed. 51B	Introduction to Secondary School Teaching .....	3
Ed.T. 51A-B†	Special Methods of Teaching and Directed Teaching in Schools of Nursing	8
Nurs.Ed. 69	Survey of Conditions and Trends in Nursing .....	3
Nurs.Ed. 71	The Curriculum of the School of Nursing .....	3
	Electives in Education .....	2-3
	General electives to total 45 credits	

## B. PUBLIC HEALTH NURSING

Students who wish to secure a certificate in Public Health Nursing in addition to a B.S. degree in Nursing Education should consult bulletin of the School of Public Health.

## GRADUATE STUDY

Graduate study in fields related to nursing may be carried and a Master's degree earned by students who meet the requirements of the Graduate School. Programs should be made out in consultation with a major adviser in the School of Nursing and in the chosen department. Among the fields recommended for graduate study are bacteriology, education, pathology, educational personnel work, physiology, psychology, and social science. Graduate programs are being developed in the field of Nursing Education and it is hoped that these will be available in the near future.

## PHYSICAL EDUCATION FOR MEN

**Major advisers**—Professors Louis F. Keller, Carl L. Nordly; Associate Professors Edwin C. Haislet, Ralph A. Piper; Assistant Professor David C. Bartelma; Instructor John Roning.

Physical Education 1, A, B, C, Sports Education courses, are required of all freshmen in the College of Education except physical education majors and minors. See Combined Class Schedule for activities and period schedule.

The following curricula have been designed for men who desire to prepare for teaching and administrative positions in the field of physical education. Completion of either curriculum entitles a student to *Minnesota high school standard special certificate*.

Two plans are included:

1. Four-year curriculum leading to the bachelor of science degree with a major in physical education.
2. Five-year curriculum leading to the master of education degree with a major in physical education.

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

1. Courses listed under Required Courses in Physical Education for the B.S. degree.
2. A total of twenty-six credits in education including methods and directed teaching in physical education, methods in the minor, and Ed. 51A-B-C.
3. At least one teaching minor which may be fulfilled partially in the required curriculum.
4. A methods course in the teaching minor unless two teaching majors are completed.
5. A total of 183 credits at least ninety of which must be in academic (other than education) courses. These courses must be carried with a C average.
6. An average of C+ (1.5 honor points per credit) in designated physical education courses, and a C average in the minor and a C average in all other courses taken during the junior and senior years.

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

1. A passing grade in Ed. 51A, 51B.
2. Taking the psychological examinations.
3. Attainment of a scholastic average of 1.5 in the field in which the practice teaching is to be done.
4. Passing of the required speech test.

B. 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 :

1. Eighteen additional credits in courses numbered above 100 in physical education.
2. A minor in a teaching field with the special methods course in that field or an additional major unless fulfilled in the requirements for the B.S. degree.
3. Additional courses to complete two hundred twenty-eight credits, ninety of which must be in academic (other than education) courses. A maximum of thirty-five credits is allowed in education excluding *all* courses in physical education.
4. During the last two years a minimum of forty-five credits with an average of B in courses numbered 100 and above.
5. Examinations
  - a. Each candidate is required to pass a written comprehensive examination covering the major in physical education.
  - b. Each candidate is required to pass a written comprehensive examination in education.
  - c. Each candidate is required to pass the following examinations as a basis for the estimation of his qualifications as a teacher:
    - (1) A formal written examination in methodology.
    - (2) Each candidate is required to demonstrate proficiency by teaching two demonstration classes. One of these will be at the request of the director of student teaching, the other will be the choice of the candidate.
  - d. Each candidate is required to pass an oral examination conducted by the members of the Committee on Standards, a faculty member of the field in which the candidate is specializing, and a faculty member selected in the field of the candidate's minor.
  - e. Health examination within one year prior to graduation.

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

1. Physical Education 101E and 103E.
2. Eighteen additional credits in physical education courses numbered above 100.
3. Ed. 51A-B-C, Introduction to Secondary Teaching, or equivalent.
4. A maximum of thirty-five transfer and University of Minnesota education credits is allowed excluding all courses in physical education.
5. At least one teaching minor or an additional teaching major<sup>†</sup> equivalent to University of Minnesota requirements which include a methods course. The minor or additional major may be fulfilled partially in the required curriculum. For major and minor requirements see pages 19-25.
6. Forty-five credits in courses numbered 100 and above with average grade of B.
7. At least ninety transfer and University of Minnesota credits in academic (other than education) courses.
8. The examinations previously indicated under item B5.

D. 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 C and the following undergraduate work :

	Credits
Science courses—human anatomy, physiology, applied anatomy (Mechanics of Movement, Kinesiology) .....	9
Physical Education Activities .....	12
Professional physical education theory courses .....	15
Methods and directed teaching in physical education .....	9
	45

REQUIRED COURSES IN PHYSICAL EDUCATION MAJOR FOR THE B.S. DEGREE

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition .....	9
Sp. 1-2	Fundamentals of Speech .....	6
Chem. 6-7	General Inorganic Chemistry .....	10
or 9-10	General Inorganic Chemistry .....	10

<sup>†</sup> Unless fulfilled in the student's undergraduate curriculum.

Course No.	Title	Credits
Zool. 1-2-3	General Zoology .....	10
or		
G.C. 10A-B-C‡	Human Biology .....	9
Psy. 1-2	General Psychology .....	6
P.H. 3‡	Personal Health .....	2
P.H. 51	Community Hygiene .....	3
P.H. 59	Health of the School Child .....	3
Physiol. 50	Physiological Chemistry .....	4
Physiol. 51	Human Physiology .....	6
Phys.Ed. 4A-B-C*	Fundamentals of Athletic Sports .....	3
Phys.Ed. 5A-B-C*	Physical Education Activities .....	3
Phys.Ed. 6A-B-C*	Intramural Sports .....	3
Phys.Ed. 7A-B-C*	Physical Education Activities .....	3
Phys.Ed. 8*	Dual Spring Sports .....	1
Phys.Ed. 9*	Rhythms .....	1
Phys.Ed. 25†	First Aid .....	1
Phys.Ed. 50	Human Anatomy .....	4
Phys.Ed. 51	Mechanics of Movement .....	3
Phys.Ed. 53,54,55	Methods and Materials in Physical Education .....	4
Phys.Ed. 56	Nature and Function of Play .....	2
Phys.Ed. 57	Operation and Conduct of Play Centers .....	3
Phys.Ed. 60	Prevention and Care of Injuries .....	2
Phys.Ed. 63	Organization and Administration of Physical Education .....	3
Phys.Ed. 67,69	Coaching of Athletic Sports (Football, Track) .....	4
Phys.Ed. 68,72	Coaching of Athletic Sports (Baseball, Basketball) .....	4
Phys.Ed.73,74,75	Directed Teaching .....	6
Phys.Ed. 83†	School Health Education, Method and Content .....	3
Phys.Ed. 101E	Principles of Physical Education .....	3
Phys.Ed. 103E	Physical Examination and Adaptation of Activities .....	3

Eighteen credits are required from the following group in physical education to obtain the master of education degree :

Phys.Ed. 111E†	Advanced Course in Methods of Teaching in Physical Education .....	3
Phys.Ed. 112E†	Supervision of Physical Education .....	3
Phys.Ed. 113E†	Physical Education in the Elementary Schools .....	3
Phys.Ed. 114E†	Administration of the School Health Education Program .....	3
Phys.Ed. 116E†	Problems in Physical Fitness .....	1 to 3
Phys.Ed. 133E	Special Administrative Problems in Physical Education .....	3
Phys.Ed. 134E	The Secondary School and College Curriculum in Physical Education .....	3
Phys.Ed. 135E	Tests and Measurements in Physical Education .....	3
Phys.Ed. 136E	Leadership in Community Recreation .....	3
Phys.Ed. 137E	Recent Literature and Research in Health Education, Physical Education, and Recreation .....	3
Phys.Ed. 138E	Administration of Physical Education in Colleges and Universities .....	3
Phys.Ed. 141E	Administration and Supervision of Public Recreation .....	3
Phys.Ed. 142E	Group Leadership and Community Organization for Recreation .....	3
Phys.Ed. 237E	Problems in Health Education, Physical Education, and Recreation .....	Ar

#### ELECTIVES IN PHYSICAL EDUCATION

Phys.Ed. 58	Teachers' Course in First Aid .....	3
Phys.Ed. 61	History of Physical Education .....	2
Phys.Ed. 66A-B	Methods and Techniques of Officiating .....	4
Phys.Ed. 68,72‡	Coaching of Athletic Sports (Basketball, Baseball) .....	4
Phys.Ed. 78	Elements of Scout Leadership .....	2
Phys.Ed. 79	Campcraft and Camp Administration .....	2

#### REQUIREMENTS IN EDUCATION

Candidates for the Bachelor's degree are required to have Ed. 51A-B-C plus 8 credits in education electives (see page 18).

A maximum of thirty-five education credits is required for the M.Ed. degree.

\* Students must complete the course or demonstrate proficiency to qualify for exemption and credit.

† Offered in the Department of Physical Education for Women.

‡ No student may receive credit for both G.C. 10C and P.H. 3.

§ Students without varsity squad experience will be required to take the course or courses.

## REQUIREMENTS FOR A MINOR IN PHYSICAL EDUCATION FOR MEN

A total of 29 credits is required as follows :

**Group A—All required.**

Course No.	Title	Credits
Phys.Ed. 5C	Physical Education Activities .....	1
Phys.Ed. 7A-B-C	Recreational Games and Sports .....	3
Phys.Ed. 53,54,55	Methods and Materials in Physical Education .....	4
Phys.Ed. 57	Operation and Conduct of Play Centers .....	3
Phys.Ed. 60	Prevention and Care of Injuries .....	2
Phys.Ed. 63	Organization and Administration of Physical Education .....	3
Phys.Ed. 83†	School Health Education, Method and Content .....	3
Phys.Ed. 101E	Principles of Physical Education .....	3

**Group B—Four credits required.**

Phys.Ed. 67	Coaching of Athletic Sports (Football) .....	2
Phys.Ed. 68	Coaching of Athletic Sports (Basketball) .....	2
Phys.Ed. 69	Coaching of Athletic Sports (Track) .....	2
Phys.Ed. 72	Coaching of Athletic Sports (Baseball) .....	2

**Group C—Three 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. 9	Rhythms .....	1

## PHYSICAL EDUCATION FOR WOMEN

**Major advisers**—Professor Gertrude M. Baker and Associate Professor Helen M. Starr.

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. Five-year curriculum leading to the master of education degree with a major in physical education.
3. Curriculum for a teaching minor in physical education.
4. Curriculum for state of Minnesota 9-credit endorsement for teaching physical education.

## GENERAL REQUIREMENTS FOR TEACHING PHYSICAL EDUCATION\*

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 particular adviser.

During the first two years in the department the progress of each student in basic sports skills, posture, dance, and aquatics will be studied in terms of an individualized profile chart. Recommendations for improvement in these professional skills will be made by the adviser on the basis of skill and knowledge tests.

\* See handbook "Guide for Professional Students in Physical Education" for more specific information.

† Offered in the Department of Physical Education for Women.

**FOUR-YEAR CURRICULUM LEADING TO A BACHELOR OF SCIENCE DEGREE  
WITH A MAJOR IN PHYSICAL EDUCATION**

A scholarship average of C+ (honor point ratio of 1.5) in all the physical education courses and a C average (honor point ratio of 1) in the remaining courses taken during the junior and senior years must be attained. In addition the student must have a C average for all courses taken during the four years of work.

*Freshman Year*

Course No.	Title	Credits
Hist. 1-2-3	Civilization of the Modern World .....	12
Eng. A-B-C or	Freshman English (or exemption) .....	15
Comp. 4-5-6 or	Freshman Composition .....	9
G.C. 31A-B-C†	Writing Laboratory .....	9
Zool. 1-2-3	General Zoology .....	10
Soc. 1	Introduction to Sociology .....	5
Phys.Ed. 21	Elementary Physical Education .....	6
Phys.Ed. 25	First Aid .....	1
P.H. 3	Personal Health .....	2
	Electives (Consult adviser)	

*Sophomore Year*

P.H. 4	Health Problems of the Community .....	2
Chem. 1-2	General Inorganic Chemistry .....	8
Sp. 1-2	Fundamentals of Speech .....	6
Psy. 1-2	General Psychology .....	6
Phys.Ed. 41	Intermediate Physical Education .....	9
Phys.Ed. 50	General Anatomy .....	4
Phys.Ed. 65A,73	Teaching Techniques in Physical Education .....	2

*Junior Year*

Phys.Ed. 51	Mechanics of Movement .....	3
Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
Ed.T. 83	Methods and Materials of School Health Education .....	3
Physiol. 50	Physiological Chemistry .....	4
Physiol. 51	Human Physiology .....	6
Phys.Ed. 60	Principles of Play .....	3
Phys.Ed. 57,61,63 64,65B,74	Teaching Techniques in Physical Education .....	10
Phys.Ed.66	Advanced Physical Education .....	3
P.H. 59	Health of School Child .....	3
Phys.Ed. 61§	History of Physical Education .....	2
	Electives (Consult adviser)	

*Senior Year*

Ed.Psy. 158	Psychology of Adolescence .....	3
Phys.Ed. 82	Principles of Physical Education .....	3
Phys.Ed. 84	Problems in Physical Education .....	2
Phys.Ed. 85	Remedial Activities in Physical Education .....	3
Phys.Ed. 86	Aspects of School Health Appraisal .....	3
Phys.Ed. 95	Administration of Physical Education .....	3
Phys.Ed. 90A-B-C*	Student Teaching .....	8
Phys.Ed. 116E	Problems in Physical Fitness .....	3
	Education electives .....	7
	General electives (Consult adviser)	

The following minors are suggested for majors in Physical Education:

Zoology	Recreation Leadership
Sociology	Political Science
School Health Education	

\* Senior life saving certificate or its equivalent is required for student teaching in swimming. Life saving skills are included in Phys.Ed. 41.

† Writing Laboratory must be carried with a percentile rank of 50 or better in order to receive credit.

§ Offered in Department of Physical Education for Men.

Professional students in Physical Education may find desirable electives in the course offerings of the departments listed below:

Sociology and Social Work	Music
Child Welfare	Public Health
Education: Curriculum and Instruction	Home Economics
Educational Administration	

FIVE-YEAR CURRICULUM LEADING TO A MASTER OF EDUCATION DEGREE  
WITH A MAJOR IN PHYSICAL EDUCATION§

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 their next three years may be properly integrated and directed.

Students with a bachelor of science degree with a major in physical education or its equivalent from other accredited institutions upon fulfilling the requirements for the fifth year may receive the master of education degree with a major in physical education. (See prerequisites.)

At least one teaching minor should be completed at the undergraduate level in order to have partially fulfilled the credit requirements for work in the minor at the graduate level. The department recommends that all fifth year students have two graduate minors if possible. Consult adviser about choice of minors.

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

*Fifth Year*

		Credits
General academic field .....		6-12
Education .....		6-12
Suggested courses: Ed.Psy. 158; Ed.C.I. 119		
Physical Education .....		24
Course No.	Title	Credits
Ed.C.I. 114E	The School Health Education Program .....	3
Phys.Ed. 101*	Principles of Physical Education .....	3
Phys.Ed. 103*	Physical Examination and Adaptation of Activities .....	3
Phys.Ed. 111	Advanced Course in Methods of Teaching Physical Education .....	3
Phys.Ed. 112E	Supervision of Physical Education .....	3
Phys.Ed. 113E	Physical Education in the Elementary Schools .....	3
Phys.Ed. 116E	Problems in Physical Fitness .....	1-3
Phys.Ed. 133E*	Special Administrative Problems in Physical Education .....	3
Phys.Ed. 134E*	Curriculum in Physical Education .....	3
Phys.Ed. 135E*	Tests and Measurements in Physical Education .....	3
Phys.Ed. 136E*	Leadership in Community Recreation .....	3
Phys.Ed. 137E*	Recent Literature and Research in Health Education, Physical Education, and Recreation .....	3
Phys.Ed. 138E*	Administration of Physical Education in Colleges and Universities .....	2
Phys.Ed. 141E*	Administration and Supervision of Public Recreation .....	3
Phys.Ed. 142E*	Group Leadership in Community Recreation .....	3
Phys.Ed. 237E*	Problems in Health Education, Physical Education, and Recreation .....	2-6

PREREQUISITE FOR MASTER OF EDUCATION DEGREE FOR STUDENTS WITH A  
MAJOR IN PHYSICAL EDUCATION FROM OTHER INSTITUTIONS

- I. Students who have the equivalent of a major in physical education from an accredited institution may be accepted as candidates for the master of education degree.

\* Offered in the Department of Physical Education for Men.

§ See page 13 of this bulletin for further information regarding M.Ed. degree.

The requirements of such a candidacy are the following or their equivalent:

1. The theory and technique courses for the professional degree in physical education or their equivalent.
2. Average skill in basic professionalized skill courses as shown by performance reached in Individualized Profile Chart.
3. Ed. 51A-B-C, Introduction to Secondary School Teaching, 9 credits, plus 10 additional credits in education exclusive of practice teaching.

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

1. Average skill in at least two areas of physical activities or better than average skill in at least one area (opinion of experts in the field).
2. Total of 45 credits in courses numbered above 100 distributed as follows:
  - a. 24 credits in physical education courses numbered above 100; of these the following are required:
 

Ed.C.I. 114E	The School Health Education Program
Phys.Ed. 111E	Advanced Course in Methods of Teaching in Physical Education
	or
	One quarter of student teaching
Phys.Ed. 112E	Supervision of Physical Education
Phys.Ed. 113E	Physical Education in Elementary Schools
Phys.Ed. 134E	The Curriculum in Physical Education
Phys.Ed. 137E	Recent Literature and Research in Physical Education
  - b. 6 to 12 credits in education courses numbered above 100.
  - c. A minimum of 9 credits in courses numbered above 100 in the minor field.
  - d. 6 credits elective in an academic field. The minor field is acceptable if in an academic field.
3. The general requirements and standards of the College of Education for the completion of the work for the master of education degree. See page 13 of this bulletin.

REQUIREMENTS FOR MINOR IN PHYSICAL EDUCATION FOR WOMEN

	Credits
I. Elementary and Intermediate Physical Education Skill Courses .....	7
NOTE—Recognition will be given for the Physical Education required for graduation. Amount of credit given will be determined by experiences in the following areas: Team Games, Individual Sports, Body Building, Posture and Conditioning, Self-Testing, Group Gymnastics, Rhythm, and Aquatics.	
II. Technique Courses (minimum of 3 credits) .....	3
III. Health Course .....	3
Ed.T. 83†      Methods and Materials of School Health Education (required) .....	3 cred.
IV. Physical Education Theory Courses .....	8
Phys.Ed. 95†    Administration of Physical Education .....	3 cred.
Phys.Ed. 84     Problems in Physical Education .....	2 cred.
Phys.Ed. 82†    Principles of Physical Education .....	3 cred.
V. Student Teaching .....	2
VI. Electives selected from the list below .....	3
Phys.Ed. 25     First Aid .....	1 cred.
Phys.Ed. 41s    Life Saving and Water Front Safety .....	1 cred.
Phys.Ed. 54     Camp Leadership .....	2 cred.
Phys.Ed. 60     Principles of Play .....	3 cred.
Phys.Ed. 80     Principles of Rhythm .....	2 cred.
Phys.Ed. 61*    History of Physical Education .....	2 cred.
Total .....	26

\* Offered in the Department of Physical Education for Men.

† May be taken by Correspondence Study.



**REQUIRED COURSES FOR 9-CREDIT STATE ENDORSEMENT FOR TEACHING  
PART-TIME PHYSICAL EDUCATION**

The Nine-Credit Endorsement is based upon work in two fields—activity and theory.

**I. Activity Courses ..... 4-6 quarter hours**

These courses must be selected from the elementary and intermediate skills courses and the technique courses in the major physical education curriculum. Six quarter hours are recommended. Activity courses should include work in the following:

- A. Team Sports
- B. Individual and Dual Sports
- C. Self-Testing Activities
- D. Body Building Activities
- E. Rhythms

NOTE—Consult the physical education adviser for selection of courses.

**II. Theory Courses ..... 3-5 quarter hours**

Phys.Ed. 84	Problems in Physical Education .....	2 cred.
Phys.Ed. 95*	Administration of Physical Education .....	2-3 cred.

**PUBLIC HEALTH**

**Major Adviser: Dr. Gaylord Anderson.**

Public Health as a minor subject:

Course No.	Title	Credits
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. 102	Environmental Sanitation .....	3
P.H. 106	Public Health Administration .....	3
Bact. 53	General Bacteriology .....	5
Physiol. 2	Elements of Physiology .....	4
or		
Physiol. 4	Human Physiology .....	4
or		
Physiol. 51	Human Physiology .....	6
Total credits .....		23 or 25

**RECREATION LEADERSHIP**

**Major Adviser: Associate Professor Edwin L. Haislet.**

This curriculum is offered to meet the increasing need and demand of the public and private agencies alike for trained recreation workers.

A broad training is offered which qualifies graduates for positions in all phases of recreation work on all levels, federal, state, and municipal; community, county, and rural; industrial, institutional and youth-serving agencies.

Some of the specific jobs that graduates of this curriculum qualify for are: Superintendent or director of a department of recreation; assistant superintendent or director; supervisor of programs for girls and women; director of athletics and boys' and men's activities; director of a community center; supervisor of playgrounds; playground director; play leader; supervisor of community music, drama, arts, and crafts, social recreation, dancing and nature; manager of a golf course, swimming pool, bathing beach; camp director; director of adult education; director of recreation in industry; director of recreation in housing projects; recreational aide or physical director, rehabilitation program, veterans' administration; program director for hotels and resorts; recreational planner and consultant.

\* May be taken by Correspondence Study.

The program of courses gives the student an extensive cultural background, appreciation, and technique in the major recreation skill areas, principles and practice in group work, actual field work experience, and the fundamental principles of community organization for recreation.

The four-year curriculum leads to the degree of bachelor of science, with a major in recreation and the fifth year to a master of education degree, major in recreation.

The emphasis in the fifth year is in the organization, administration and supervision of recreation with help given toward the preparation for specialization in a specific recreation field.

#### 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 Arts, General College, and from the four-year curricula in physical education, music education, art education, industrial education, home economics education, and agricultural education.

The pattern of the lower division is designed to provide an "Education for Leisure." Such a program becomes the nucleus of educational experience that will enable one to live more satisfactorily in a world that increasingly demands social understanding and rich inner resources of creative expression.

Courses designated recreation leadership are designed especially for those students who are considering the field of recreation as a profession or those who wish further knowledge and experience in leisure time activities. Such students are asked to report to the Students' Counseling Bureau for an aptitude rating. This rating will be sent to the major adviser after which time a personal interview will be arranged.

#### Course Requirements

##### Group A: Natural Science—*Fifteen credits required*

Course No.	Title	Credits
<b>Required Courses</b>		
Nat.Sci. 1-2-3	Orientation in Natural Sciences .....	15
		15

##### Group B: Psychology and Health—*Eight credits required*

<b>Required Courses</b>		
Psy. 1-2	General Psychology .....	6
P.H. 3	Personal Health .....	2
		8

##### Group C: Social Sciences—*Twenty-four to twenty-six credits required*

<b>Required Courses</b>		
Soc. 1 or	Introduction to Sociology .....	5
G.C. 50A-B-C	Social Trends and Problems .....	6
Pol.Sci. 1-2- or	American Government and Politics .....	6
G.C. 46A and	The American Citizen and His Government .....	3
G.C. 46B	The Function and Problems of Government .....	3
Econ. 8-9 or	General Economics .....	6
Ag.Econ. 1 and	Principles of Economics .....	3
G.C. 48A or B	Our Economic Life .....	3
Hist. 20-21-22 or	American History .....	9
G.C. 45A and	The United States in World Civilization .....	5
G.C. 45B	Minnesota and the Northwest .....	3

**Group D: English Composition, Literature, and Speech—Fifteen credits required**

Required Courses		Credits
Course No.	Title	
Comp. 4-5-6 or A-B-C or	Freshman Composition or Freshman English .....	9-15
G.C. 31A-B-C or	Writing Laboratory .....	
Com. 4-5-6	Communication .....	9
Sp. 1-2 or 5-6	Fundamentals of Speech .....	6-10
		15

**Group E: Skills and Their Appreciation—Twenty-two credits required**

Required Courses		Credits
<i>Music—4 credits</i>		
Mu. 1 and	Ear Training .....	2
G.C. 24A-B; 24B-C or	Music Today .....	2
Mu. 31 or 32 or 33	Music Appreciation .....	2
<i>Arts—6 credits</i>		
G.C. 21 and	General Arts Orientation .....	3
G.C. 23A-B-C or	Art Laboratory .....	3
ArtEd. 1-2 or	General Design (Sec. 3) .....	6
ArtEd. 20-21 or	Fundamental Experience in Design .....	6
H.E. 20 and	Introduction to Related Art .....	4
H.E. 21	Color and Design .....	3
<i>Dramatics—6 credits</i>		
Speech 31	Introduction to the Theater .....	3
Speech 32	Beginning Acting .....	3
<i>Games, Rhythms, and Sports—Men—6 credits</i>		
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. 9	Rhythms .....	1
<i>Games, Rhythms, and Sports—Women—6 credits</i>		
Phys.Ed. 21A-B-C	Elementary Physical Education Select from Fundamentals and Team and Individual Sports, Folk and Country Dancing, Aquatic and Officiating—Sections 3-5-7-9-11 Intermediate Physical Education as above—Sections 1-2-10-13-16	
Phys.Ed. 41A-B-C		

**Group F: Recreation—Nine credits required**

Required Courses		Credits
Rec.L. 1A-B-C	Survey of Recreation Activities .....	3
Rec.L. 10A-B-C	Introduction to Recreation Leadership .....	3
Rec.L. 49	Social Significance of Leisure .....	3

**MAJOR IN LEADERSHIP IN RECREATION**

Students transferring from other institutions who desire to major in recreation will be permitted some deviation from the lower division pattern listed above, but must meet specific course requirements in Groups B, E, and F above as well as special entrance requirements.

Requirements for all students desiring to enter or to continue in the recreation leadership major which begins in the junior year are as follows:

1. Ninety college credits, exclusive of required physical education, the courses meeting the general lower division pattern.
2. Minimum of C average over all college work taken.
3. Passing mark in special entrance examination in recreation.
4. Satisfactory health examination.
5. Evidence of leadership qualities as shown by extra-classroom experience during high school and college and *personal interview*.
6. Minimum experience of one summer as a play leader or one summer as a 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. During the fall quarter they will be asked to submit evidence

of leadership qualities and will be required to take the entrance examination in recreation. Only those students whose own examination of their lower division work gives them some assurance that they have met the requirements under (1) and (2) of entrance requirements are encouraged to register.

Those university students who wish to enter the major curriculum in their junior year should make application to the major adviser in recreation before the completion of the work of the sophomore year to afford time for their examinations, interviews, and a study of the quality of their university work. Application should be made only when the student has some assurance of meeting the entrance requirements (1) and (2) above.

A student can graduate with or without a teaching certificate. No teaching certificate is issued for the recreation major, but can be obtained only by including preparation for a teaching minor in an academic subject or in one of the 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, a teaching major is recommended or two teaching minors. No minor is required in this curriculum altho students who plan to teach must meet the above listed requirements.

The curriculum is designed to meet graduation requirements of the College of Education and includes the public health requirement. (See page 9.)

### Junior and Senior Years

#### COURSE REQUIREMENTS

#### Education and Psychology—*Sixteen credits required*

Course No.	Title	Credits
<b>Required Courses</b>		
Ed. 51A-B-C or 61A-B-C	Introduction to Secondary School Teaching .....	9
Psy. 140	Introduction to Elementary School Teaching .....	9
Ed.C.I. 104	Social Psychology .....	3
Ed.C.I. 106	Adult Education .....	2
	Co-ordinating of Visual Aid Programs .....	2

#### Recreation—*Twenty-seven credits required*

For courses in Recreational Leadership consult major adviser.

#### Skill Techniques—*Eighteen credits required*

<b>Required Courses</b>		
<i>Music—4 credits</i>		
Mu.Ed. 50	Primary Methods (Non-majors) .....	2
Mu.Ed. 59	Choral Literature and Conducting .....	2
<i>Art—3 credits</i>		
ArtEd. 31,32, 33,34 or ArtEd. 70-71-72 or ArtEd. 73-74-75 or Ind. 11 or Ag.Eng. 42	General Handcrafts .....	3
	Wood Sculpture and Carving .....	3
	Ceramics .....	3
	Special Class Woodwork .....	2
	Art Metal Work .....	3
<i>Dramatics—3 credits</i>		
Sp. 111-112 or Sp. 71-72-73	Stage Direction .....	3
	Problems of Dramatic Production for Secondary Schools .....	3
<i>Games, Rhythms, and Sports—Men—4 credits to be selected from among the following:</i>		
Phys.Ed. 5A-B-C Phys.Ed. 7A-B-C	Physical Education Activities .....	2
	Recreational Games and Sports .....	2
<i>Games, Rhythms, and Sports—Women—4 credits to be selected from among the following:</i>		
Phys.Ed. 57A-B	Technique of Teaching Aquatics .....	2
Phys.Ed. 61A-B-C	Technique of Teaching Team Sports .....	3
Phys.Ed. 63	Technique of Teaching Folk Dancing .....	1
Phys.Ed. 65A-B	Technique of Teaching Individual and Dual Sports .....	2
Phys.Ed. 73A-B	Technique of Teaching Rhythms .....	1½

Practice and Field Work—*Twelve credits required*

## Required Courses

Course No.	Title	Credits
Ed.T. 85A-B-C	Practice and Field Work in Recreation .....	6
	Special Methods and Directed Teaching in Minor (only if teaching minor is selected) .....	9

Public Health—*Six credits required*

## Required Courses

P.H. 51	Community Hygiene .....	3
P.H. 59	Health of the School Child .....	3

General Electives—*Eight credits required*

## Suggested Courses

Soc. 91	Case Methods Applied to Study of Human Problems .....	3
Soc. 95	Introduction to Public Welfare .....	3
Anthrop. 54	Social Organization .....	3
Psy. 56	Psychology of Advertising .....	3
Ag.Ed. 54	Rural Education and Community Leadership .....	2
Ag.Ed. 56	Rural Youth Leadership .....	3
Ed.C.I. 63 or Ed.C.I. 122	Children's Literature .....	2
	Literature for Adolescents .....	2
B.A. 58	Elements of Public Finance .....	3
B.A. 86	Office Management .....	3
B.A. 88	Advertising .....	3
Jour. 78	Public Opinion .....	3
Phys.Ed. 78	Elements of Scout Leadership .....	2
C.W. 80	Child Psychology .....	3

## MINOR IN RECREATIONAL LEADERSHIP

## Required Courses

Phys.Ed. 25	First Aid .....	3
	Recreational Leadership (Courses to be chosen in consultation with major adviser) .....	12
	Skill Techniques (To be chosen in consultation with major adviser) .....	12
Ed.T. 85A-85B-85C	Practice and Field Work in Recreation .....	3
Controlled Electives.	One course to be selected from the following:	
Psy. 140	Social Psychology .....	3
Ed.C.I. 104	Adult Education .....	2
Ed.C.I. 106	Co-ordinating of Visual Education Programs .....	2
Ed.Psy. 158	Psychology of Adolescence .....	3
Ed.C.I. 169	Extra-curricular Activities .....	2

## FIVE-YEAR CURRICULUM WITH A MAJOR IN RECREATION LEADING TO THE MASTER OF EDUCATION DEGREE

The College of Education will award the master of education degree to students who satisfactorily complete a fifth year of work in Recreational Leadership at the graduate level and who meet all the requirements for the professional degree. (See page 13.) The distribution of credits for the fifth year is approximately as follows: education, 6 to 9 credits; recreation, 24 to 28 credits; electives, 8 to 15 credits. For further information in regard to specific requirements and courses confer or correspond with the major adviser.

## SCHOOL HEALTH EDUCATION

Major adviser—Associate Professor Helen M. Starr.

This minor in School Health Education is open to elementary education majors and as an additional minor for secondary education majors (not to be substituted for any minor requirement now held in the secondary fields).

## REQUIREMENTS FOR MINOR IN SCHOOL HEALTH

## Group A—Scientific Background

Course No.	Title	Credits
G.C. 10A-B	Human Biology .....	6
G.C. 10C† or	Human Biology .....	
P.H. 3 and	Personal Health .....	
P.H. 4 or	Health Problems of the Community } .....	7 or 8
P.H. 50 or	Public and Personal Health .....	
P.H. 51	Community Hygiene .....	
H.E. 30 or 31	Introduction to Nutrition .....	2
P.H. 59	Health of the School Child .....	3
Soc. 170	Introductory Psychiatry .....	2
Phys.Ed. 25	First Aid .....	1

21 or 22

## Group B—School Health Education Theory

Ed.T. 83	Methods and Materials of School Health Education .....	3
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## Group C—Administration

P.H. 106	Public Health Administration .....	3
Ed.C.I. 114	The School Health Education Program .....	3

## Group D—Directed Teaching

Phys.Ed. 90	Student Teaching—Direct Health Instruction in the Classroom .....	1
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## SOCIAL STUDIES

## Major adviser—Professor Edgar B. Wesley.

The secondary teacher of the social studies is seldom given an opportunity to devote his entire schedule to one special subject. Prospective teachers are therefore urged to take some work in each of the social studies. The following programs are designed to furnish a diversified preparation. The social studies program outlined below covers both the major and the minor. According to the regulations of the State Department of Education a major or a minor (18 credits) is required for teaching history in high school. Those who take a social studies major are strongly urged to gain experience in some extra-curricular activity. A minor in science, a foreign language, or mathematics constitutes a valuable addition to one's preparation in the social studies.

**Major**—The course requirements for a major in the social studies are prescribed under A and B below§:

- A. 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.
1. Economics, 30 credits including Courses 6-7 and 20 additional credits of which 12 must be in courses numbered above 100.
  2. Geography, 28 credits.
  3. History, 36 credits, 18 of which must be from the Senior College.
  4. Political Science, 30 credits.
  5. Sociology, 30 credits.
- B. In addition to the requirements set forth under A the student must complete courses in other subjects as follows:
1. With economics, geography, political science, or sociology as the core subject. In addition to the requirements for the core subject the student must secure 18 credits in history and 18 credits in other subjects listed under A. Note the following limitations: Not fewer than 5 credits may be chosen from any one field, and the field selected under A as core subject may not be used to meet the B requirement.

† See Public Health requirement, page 9.

§ For titles of courses see pages 19-25 of this bulletin or the Combined Class Schedule.

2. With history as the core subject. In addition to the requirements in history set forth above, the student must secure 30 credits in at least three other subjects listed under A. No fewer than 5 credits may be chosen from any one field and courses in history may not be used to meet the requirement.

The C+ average is based on the 28-36 credits in the core subject.

**Minor**—Those who major in some subject or field other than the ones listed under A, may secure a minor in the social studies. The course requirements for a minor in the social studies are 36 credits, 18 in history and 18 divided between at least two other subjects selected from the five listed under A above. No fewer than 5 credits in any one subject will be counted toward the requirement of 18 credits in other subjects.

**FIVE-YEAR PROGRAM IN THE SOCIAL STUDIES 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 13. For specific requirements for this curriculum confer or correspond with the major adviser. See also the statement concerning work in the Graduate School, page 13.

**SPEECH PATHOLOGY**

**Major adviser**—Professor Bryng Bryngelson.

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

The program is arranged for four or more years of study. At the end of four years a certificate in special education is granted and a B.S. degree. Further study for the M.S. and Ph.D. degrees is possible for those having an A or a B average in undergraduate work. 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. Junior and senior electives should be selected from the following: Psy. 84; Soc. 49, 53, 100; C.W. 40, 90, 140, 170. See also requirement in public health, page 9.

**COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS**

*Freshman and Sophomore Years*

Course No.	Title	Credits
Comp. 4-5-6	Freshman Composition (or English A-B-C or exemption) .....	9
Phys.Ed. 1-7	General Course in Physical Education .....	5
Zool. 1-2-3 or	General Zoology .....	10
Biol. 7-8	General Biology .....	10
Psy. 1-2	General Psychology .....	6
Sp. 1-2-3	Fundamentals of Speech .....	9
Psy. 4-5	Introductory Laboratory Psychology .....	4
Zool. 83	Introduction to Genetics and Eugenics (optional) .....	3
Zool. 21	Histology (optional—recommended for those minoring in zoology) .....	5
Physiol. 2	Elements of Physiology .....	5
Human Anat. 3	Elementary Anatomy .....	3
P.H. 3	Personal Health .....	2
P.H. 4	Health Problems of the Community .....	2
	Physical Education .....	3 or 5
	Electives .....	27-29
<b>Total</b> .....		<b>93 or 95</b>

## COLLEGE OF EDUCATION

*Junior and Senior Years*

Course No.	Title	Credits
Sp. 61	Personality Development through Speech .....	3
Sp. 67	Phonetics .....	3
Sp. 162-163	Speech Pathology .....	6
Psy. 144-145 or 113	Abnormal Psychology .....	6 or 3
Psy. 151-152	Animal Psychology .....	6
or 52	Genetic Psychology .....	3
Ed.Psy. 60	Introduction to Measurement and Statistics .....	2-3
Ed.Psy. 142	Construction and Use of Individual Aptitude Tests .....	3
Ed. 61A-B-C	Introduction to Elementary School Teaching .....	9
or 51A-B-C	Introduction to Secondary School Teaching .....	9
Ed.C.I. 145	Remedial Reading (optional) .....	2
Sp. 141-142-143	Voice Science .....	9
Soc. 90	Case Method as Applied to the Study of Human Problems .....	3
Ed.C.I. 174-175-176*	Clinical Methods in Lip Reading and Practice in Speech Pathology .....	9
C.W. 80	Child Psychology .....	3
C.W. 132	Later Childhood and Adolescence .....	3
P.H. 59	Health of the School Child .....	3

The C+ average is based on the following courses: Sp. 61, 67, 162-163; Ed.Psy. 60, 142; Ed.C.I. 174-175-176; C.W. 80.

*Graduate School (Fifth Year)*

The fifth year of this curriculum is devoted to graduate work. See Graduate School Bulletin for detailed requirements. Only those having at least a B average in undergraduate work will be considered for graduate study. The major, consisting of at least 18 credits for the M.S. degree, should be selected on approval of the major adviser from the following:

Sp. 121-122, 141-142, 181-182-183, 261-262-263; Psy. 114, 118, 125-126; Zool. 170-171; Ed.Psy. 150, 159, 233; C.W. 130, 131.

A minor selected from courses in education, psychology, zoology, child welfare, or physiology is recommended.

## STUDENT PERSONNEL WORK

**Major advisers**—Professors Marcia Edwards and C. Gilbert Wrenn and Associate Professor Willis E. Dugan.

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. A major in education is also possible with a minor in psychology. The Plan A type M.A. program is the almost universal recommendation for students desiring only the first graduate degree.

In this field heavy stress is laid upon training leading 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, Practice in Personnel Work. Basic courses are Ed.Ad. 133; Ed.C.I. 135; Ed.Psy. 120, 141, 158, 159, 225, 233; and Ed. 252. In addition, students are advised to become familiar with curriculum and administrative problems at either the public school or higher educational 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.

\* Taking the psychological examinations and a C + average in the major are prerequisite to this course.



## TEACHERS OF HANDICAPPED CHILDREN

Major adviser—Professor Guy L. Bond.

The four-year program, Curriculum I, outlined below is for students without teaching experience who wish to qualify for the elementary and special teaching certificate. Curriculum II is for graduates of teachers colleges or similar institutions, who already hold an elementary school teaching certificate and have had teaching experience.

Students who hold an elementary school certificate, and who have had two years of teaching experience in elementary schools, and who complete a minimum of 20 credits in approved courses of the junior and senior years, will qualify for a special teaching certificate required of teachers of subnormal children, in special classes for which state aid is received. All students who have not had the equivalent previously must take the courses in directed teaching and handwork to qualify them for this special certificate.

Unclassed students with proper prerequisites may pursue courses for which they are qualified in the junior and senior years, on the basis of previous training and experience.

The C+ average is based on Ed. 71A-B-C; Ed.Psy. 142, 184; Ed.T. 53A-B; Ed.C.I. 60, 61, 62, 63, 64, 65, 145; C.W. 80.

CURRICULUM I. FOUR-YEAR CURRICULUM FOR TEACHERS OF  
HANDICAPPED CHILDREN*Freshman and Sophomore Years*

The program for the freshman and sophomore years follows the general pattern outlined for elementary education. See pages 36-37. Electives should be chosen upon the recommendation of the adviser.

*Junior Year*

Course No.	Title	Credits
Ed.71A-B-C	Introduction to Elementary School Teaching .....	15
Ed.C.I. 61	The Teaching of the Social Studies in the Elementary School .....	3
Ed.Psy. 158	Psychology of Adolescence .....	3
or		
C.W. 132	Later Childhood and Adolescence .....	3
Ed.Psy. 182	Education of Handicapped Children .....	2
Ed.Psy. 184	Education of the Slow Learning Child .....	2
Phys.Ed. 60	Principles of Play .....	3
Soc. 49	Social Problems .....	3
Soc. 50	Areas of Social Work .....	4
Soc. 91	Case Method Applied to the Study of Human Problems .....	3
C.W. 80	Child Psychology .....	3
Sp. 61	Personality Development through Speech .....	3
	Electives .....	0-3
Total .....		44-47

*Senior Year*

Course No.	Title	Credits
Ed.C.I. 60	The Teaching of Reading in the Elementary School .....	3
Ed.C.I. 62	The Teaching of Arithmetic in the Elementary School .....	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 .....	2
Ed.C.I. 145	Remedial Reading .....	3
Ed.T. 53A-B	Directed Teaching of Subnormal Children .....	8
Ed.Psy. 120	Basic Principles of Measurement .....	3
Ed.Psy. 142	Construction and Use of Individual Aptitude Tests .....	3
C.W. 141	Behavior Problems in Older Children .....	2
	Electives .....	12-15
Total .....		45

## CURRICULUM II. JUNIOR AND SENIOR YEARS

For graduates of the usual two-year advanced normal professional curriculum for elementary teachers in teachers colleges and normal schools, or its equivalent, for which 90 blanket credits (two years' work) are allowed in the College of Education toward graduation.

The curriculum leads to the elementary advanced and special certificates and if or when two years of experience in the elementary schools have been completed to the Minnesota state principals or supervisors certificate, *provided* the student has included the necessary courses in administration and supervision in his program.

**A. Major in Teaching Handicapped Children—30 credits**

## 1. Required courses—15 credits

Ed.C.I. 119	Elementary School Curriculum .....	3
Ed.C.I. 145	Remedial Reading .....	3
Ed.C.I. 150	Supervision and Improvement of Instruction .....	3
Ed.C.I. 151	Diagnostic and Remedial Instruction .....	3
Ed.Ad. 115	Elementary School Organization .....	3

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

Ed.C.I. 65 or	Teaching of Science in the Elementary School .....	2
Ed.C.I. 103	Teaching of Science in the Elementary School .....	3
Ed.C.I. 63 or	Children's Literature .....	2
Ed.C.I. 190	Principles of Selection of Materials for Reading in the Elementary School .....	3
Ed.C.I. 102	Teaching of Social Studies in the Elementary School .....	3
Ed.C.I. 143	Teaching of Reading in the Elementary School .....	3
Ed.C.I. 149	Teaching and Supervision of Arithmetic in the Elementary School .....	2
Ed.C.I. 153	Supervision and Teaching of English in the Elementary School .....	2

3. Education electives—6 credits—to be chosen from the above or any related courses listed under General Courses or Elementary Education.

Note—Students are required to take Directed Teaching, Ed.T. 53A-B, unless evidence of satisfactory experience is presented. This is left to the discretion of the major adviser.

**B. Subject Matter and Academic Courses—60 credits**

## 1. Sociology and Child Welfare—required 21 credits.

Soc. 49	Social Problems .....	3
Soc. 50	Areas of Social Work .....	4
Soc. 91	Case Method Applied to the Study of Human Problems .....	3
C.W. 80	Child Psychology .....	3
C.W. 132	Later Childhood and Adolescence .....	3
C.W. 141	Behavior Problems in Older Children .....	2
C.W. 142	Psychology of Atypical Children .....	3

## 2. Special Courses—required 21 or 22 credits.

Ed.Psy. 60	Introduction to Measurement and Statistics .....	2 or 3
Ed.Psy. 120	Basic Principles of Measurement .....	3
Ed.Psy. 142	Individual Aptitude Testing .....	3
Ed.Psy. 182	Education of Handicapped Children .....	2
Ed.Psy. 184	Education of the Slow Learning Child .....	2
Sp. 61	Personality Development through Speech .....	3
	Physiotherapy .....	6

## 3. Academic Electives—18 credits.

Note—The C+ average is based on the 30 credits in the major. Excess quality credits earned in all courses will reduce the general elective credits in academic subjects but cannot be used to meet any specific requirement of the curriculum.

## VISITING TEACHERS

Major adviser—Professor Edgar B. Wesley.

The work of the visiting teacher is social work in the schools for the 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 sciences in secondary schools as well as to perform visiting teacher duties if such are in demand, 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 science field. Elementary school teachers and those desiring to work in that field should consult an adviser in Elementary Education. See page 36.

## FOUR-YEAR CURRICULUM FOR VISITING TEACHERS

## JUNIOR COLLEGE, COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

*Freshman Year*

Course No.	Title	Credits
Eng. A-B-C	Freshman English .....	15
or		
Comp. 4-5-6	Freshman Composition (or exemption) .....	9
Hist. 1-2-3	Civilization of the Modern World .....	9
G.C. 10A-B-C	Human Biology .....	9
Soc. 1	Introduction to Sociology .....	5
Phys.Ed. 1-2-3	General Course in Physical Education .....	5
	Electives† .....	7-13
	<b>Total</b> .....	<b>50</b>

*Sophomore Year*

Econ. 6-7	Principles of Economics .....	10
Hist. 20-21-22	American History .....	9
Pol.Sci. 1-2-3	American Government and Politics .....	9
Soc. 2	Individual and Minority Group Adjustment .....	5
Soc. 49	Social Problems .....	3
Psy. 1-2	General Psychology .....	6
	Electives† .....	3
	<b>Total</b> .....	<b>45</b>

## COLLEGE OF EDUCATION

*Junior Year*

Ed. 51A-B-C	Introduction to Secondary School Teaching .....	9
Ed.Psy. 60	Introduction to Measurement and Statistics .....	2
Ed.Psy. 158	Psychology of Adolescence .....	3
or		
C.W. 132	Later Childhood and Adolescence } .....	
Ed.Psy. 182	Education of Handicapped Children .....	2
Ed.Psy. 184	Education of the Slow Learning Child .....	2
P.H. 50	Public and Personal Health .....	3
P.H. 59	Health of the School Child .....	3
	Electives† .....	21
	<b>Total</b> .....	<b>45</b>

† Electives should be chosen in consultation with the adviser and should include at least 6 more credits in sociology.

*Senior Year*

Course No.	Title	Credits
Ed.T. 69A-B-C*	Special Methods and Directed Teaching in History and Social Studies .....	9
Ed.Psy. 159	Personality Adjustments in Education .....	3
Ed.Psy. 120	Basic Principles of Measurement .....	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 .....	5
Soc. 53	Elements of Criminology .....	3
Soc. 91	Case Method Applied to the Study of Human Problems .....	3
Soc. 132	Juvenile Courts and Probation .....	3
Econ. 161	Labor Problems and Trade Unionism .....	3
	Electives† .....	9
	Total .....	45

\* Taking the psychological examinations and a C + average in the major are prerequisite to this course.

† Electives should be chosen in consultation with the adviser and should include at least 6 more credits in sociology.

## DESCRIPTION OF COURSES

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 from 100 to 199 are primarily for seniors and graduates; 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 graduate course numbers indicates courses that 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.

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### GENERAL COURSES

- Ed.51A-B-C.†† Introduction to Secondary School Teaching. A basic course concerned with the nature of the pupil body, organization of the school, objectives, curriculum, mental and social development, individual differences, psychology of learning, principles of instruction, and measurement of achievement. An attempt is made to integrate these materials but 51C emphasizes organization, objectives, and curriculum; 51A, principles of psychology; 51B methods of instruction. The course is taken in the order 51C-A-B.
- Ed.71A-B-C.†† Introduction to Elementary School Teaching. A basic course required of all students in the four-year curricula in elementary and nursery school, kindergarten and primary education. Ed. 71A, individual differences; 71B, learning and adjustment; 71C, curriculum, methods and organization. Students should enter the course in the fall.
- Ed.W. Professional Preparation for Teaching. This classification is designed for students already holding a Bachelor's degree who desire to complete their preparation for teaching and qualify for a state teacher's certificate. Such students should consult the adviser as to their eligibility and outline a program covering at least three quarters of study and totaling not less than 45 credits. Courses must be selected so as to meet all requirements for major, minor, and professional training. The entire program must be approved by the adviser and the entire 45 credits must be completed successfully before credit is allowed for any of the courses taken.
- Ed.81. Introduction to Education for Public Health Nurses. Principles, methods, and materials in education as applied to public health nursing situations. Group work will be emphasized. Not open to candidates for a degree in the College of Education.

### AGRICULTURAL EDUCATION

- Agr.Ed.1. Introduction to Agricultural Education. An orientation course for students who are interested in exploring the opportunities for employment and service as teachers of agriculture. Qualifications of teachers and a survey of preparatory offerings.
- Agr.Ed.54. Rural Education and Community Leadership. The rural school as a community center, and ways and means of organizing education and recreational activities, such as clubs, festivals, fairs, and other desirable features of rural community life.

‡ A fee of \$1 per credit is charged for this course.

- Agr.Ed.56. Rural Youth Leadership. A lecture, demonstration, and laboratory course in co-operation with leaders and specialists in the various fields and problems of rural youth leadership with emphasis on 4-H clubs, Future Farmers of America, and extension activities.
- Agr.Ed.81. Teaching Agriculture. Organization and administration of the program for teaching agriculture in the secondary school. Relationships to other rural programs; planning farm practice activities, guidance for rural youth, and the use of the home, farm, and community in teaching agriculture.
- Agr.Ed.82.‡ Methods in Teaching Agriculture. Fundamentals of methods in teaching as related to teaching agriculture in high school. Organizing subject-matter of daily work; selection and manipulation of devices. Classroom and laboratory method. Specific plans for teaching secondary school agriculture.
- Agr.Ed.91.‡ Supervised Practice Teaching. Preparation of lesson plans and actual teaching of classes under careful supervision in recitation and laboratory; criticism and discussion of plans, methods, and results of student teaching.
- Agr.Ed.101. Part-time School Instruction. Instructional programs for rural young men not regularly enrolled in school. Analysis of rural youth situations and placement problems.
- Agr.Ed.102. Evening School Instruction. Instructional programs for adult farmer groups. Organization of courses, teaching procedures, follow-up work, community programs of adult education.
- Agr.Ed.103. Facilities and Materials. A study of the physical arrangement for departments of vocational agriculture. Building facilities, room fixtures, references, equipment, visual aids, illustrative materials.
- Agr.Ed.104. Planning Programs. Long-time and annual plans for departments of vocational agriculture. Schedule of activities, analysis of results.
- Agr.Ed.121. Enterprise Analysis.
- Agr.Ed.154. Rural Education and Community Leadership.
- Agr.Ed.191. Seminar in Agricultural Education.
- Agr.Ed.199E.‡§ Internship.
- Agr.Ed.221. Field Problems. Making investigations, gathering data, and formulating plans regarding agricultural education.
- Agr.Ed.232.\* 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.
- Agr.Ed.286. Current Problems in Agricultural Education. Analysis and discussion of special problems of individual teachers. Opportunity for intensive study of specific problems related to local school programs.

## ART EDUCATION

### GROUP A—DESIGN

- ArtEd.1-2-3. General Design. A discriminating awareness of organic design in the contemporary environment is developed through analysis of the structural basis of pictorial, decorative, and industrial design simultaneously with individual creative and practical problems.
- ArtEd.14-15-16. See Group D.
- ArtEd.17-18-19. Survey of Art in Life and Education. (See Group D.)

‡ A fee of \$1 per credit is charged for this course.

§ 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.

- ArtEd.20-21-22. Fundamental Experiences in Design. Special emphasis upon color and its use in handicrafts. Discussion of color in which experience in a variety of materials is possible. (May be taken with ArtEd. 31, 32. See Group B.)
- ArtEd.50A-B-C. Introduction to Commercial Design. A senior college course. General design and basic drawing or permission of instructor are prerequisites for registering in the course.
- ArtEd.51. Introduction to Industrial Design.
- ArtEd.150-151. Advanced General Design. An advanced course in organic design based on the execution of practical problems leading to a wider understanding of art in commerce and industry. ArtEd. 150 Commercial Design and the Consumer; 151 Industrial Design and the Consumer.

### GROUP B—HANDCRAFTS

NOTE—Design either before or concurrent with craft courses is strongly recommended. ArtEd. 31, 32, 33, and 34, serve the needs of recreational leaders, social workers, camp directors, occupational therapists, hobbyists, elementary teachers, and other non-art specialists.

- ArtEd.31,32,33,34. General Handcrafts. ArtEd. 31, texture exercises, work in metal, wood, and clay; 32, collage, montage, mobiles, three dimensional compositions, combining materials; 33, paper, cardboard, papier mache, decorative papers, hand puppets, cords, belts, knitting, crochet, hooking, cardboard weaving; 34, leather tooling, bookbinding, basketry, needlework, netting, cardweaving, etc.
- ArtEd.70A-B-C.‡ Wood Sculpture and Carving.
- ArtEd.73A-B-C.‡ Ceramics.
- ArtEd.74.‡ Bookbinding.
- ArtEd.75.‡ Metal.
- ArtEd.76,77.‡ Textiles. 76, fundamental weaving; 77, advanced weaving.
- ArtEd.78,79.‡ Textile Design. ArtEd. 78, weaving; 79, printing processes—tie-dye, batik, stenciling, silk screen, block printing, etc.
- ArtEd.81A-B. Puppetry.
- ArtEd.170E. Advanced Wood Sculpture and Carving.
- ArtEd.173E. Advanced Ceramics.

### GROUP C—DRAWING AND PAINTING

- ArtEd.4,6,8. Basic Drawing. ArtEd. 4, introduction to materials and techniques; 6, introduction to still life and figure; 8, introduction to landscape and figure.
- ArtEd.23. Pictorial Composition.
- ArtEd.24A-B-C. Water Color Painting.
- ArtEd.26A-B-C. Oil Painting.
- ArtEd.28A-B-C. Advanced Drawing Techniques.
- ArtEd.61. Figure Drawing and Painting.
- ArtEd.62. Portrait Drawing and Painting.
- ArtEd.63. Landscape Drawing and Painting.
- ArtEd.66A-B. Fashion Illustration.
- ArtEd.67A-B-C. Illustration for Advertising and Other Purposes.
- ArtEd.68A-B-C. Print Processes. Lithography, block print, silk screen, etc.
- ArtEd.124E. Advanced Specialized Drawing and Painting.

‡ A fee of \$1.50 per quarter is charged for this course.

## GROUP D—UNDERSTANDING AND APPRECIATION

- ArtEd.14,15,16. Survey of Art in Life and Education. For art majors and others obtaining experience in studio courses. Lectures, readings, discussions and problems exploring current practices and vocational opportunities for art-educators and artists, and examining professional standards required for various goals. ArtEd. 14, present-day varieties of drawing and painting; ArtEd. 15, foundations of contemporary design; ArtEd. 16, the designer's role in modern life.
- ArtEd.17,18,19. Survey of Art in Life and Education. For elementary, nursery-school, kindergarten, primary and other education majors; others by permission. A combination lecture and laboratory course in art for the layman for personal growth and preparation for co-operative understanding of the role of art in modern educational programs. ArtEd. 17, how the artist expresses life; 18, design, the structural basis of art; 19, influence of art on modern life.
- ArtEd.153,154,155E. Art in Society and Education. An advanced course in the interpretation and enjoyment of art, designed to develop student awareness of the relations between the artist and his product and the society which conditions both. ArtEd. 153, home design in society and education; 154, development of personality and its expression in costume; 155, painting and sculpture in society and education.
- ArtEd.157. Art Movements of Twentieth Century Scandinavia.

## GROUP E—PROFESSIONAL COURSES

- ArtEd.84.‡ The Teaching of Art in the Elementary Grades. The place of art in the curriculum of the elementary school with methods for securing maximum educational returns from art activities. Demonstration lessons at the Tuttle School provide a realistic basis for discussion of important problems in the teaching of art.
- ArtEd.86‡-87‡-88.‡ Special Methods and Directed Teaching in Art. Actual experience under public school conditions. Techniques required in fulfilling these conditions. Informal discussions and conferences to generalize specific experience.
- ArtEd.156. Intercultural Education through Art. A course designed to foster national unity and international understanding through recognition of the cultural contributions of diverse peoples to world-wide development and experience with special emphasis on twentieth-century exchange. Timely approaches towards understanding the fundamental problems arising out of current ethnic and racial conflicts will be considered in the light of specific needs of teacher, community worker, layman.
- ArtEd.183. Philosophy of Art Education. The developing by each individual of an art philosophy integrated in a wider philosophy of life. A course in which teaching experience and professional education courses are synthesized in the light of the dynamic characteristics of life and art today.
- ArtEd.184.‡ Advanced Course in Methods and Supervision of Art in the Elementary Schools.
- ArtEd.185.‡ Methods of Teaching Art in the Secondary Schools. This course is designed for teachers of art and for advanced students who are planning to teach in secondary schools. It emphasizes the philosophy, research, and procedures of the new secondary art education in connection with the current practices of the general education movement.
- ArtEd.189. Application of Esthetic Theory in Public Education. A scrutiny of the varying claims made for art in its wider functional aspect; the validity of the claims tested in everyday living; findings applied to education.

‡ A fee of \$1 per credit is charged for this course.



ArtEd.284E. Recent Literature and Research in Art Education and Related Fields. Provides for guided reading in areas of the student's need and choice with training in valid research techniques.

ArtEd.295. Special Problems in Art Education. The content of this course is determined by the individual specialization and creative projects selected. These projects may include advanced studio practice or technical solution of problems involving research in a chosen field. Registration by special permission of major adviser.

**Internship**—Practical experience in using art in public education will give fifth year registrants an opportunity for accumulating material for research under scientific direction. Arranged to fit individual needs.

### CHILD WELFARE

C.W.10. Introduction to Child Study. Survey of child development, nursery school, parent education, and mental hygiene approaches to child study.

C.W.40. Child Training. A study of the physical and mental development of the child followed by a discussion of the problems of training of young children. Observations in the nursery school, lectures, and reports. (Not open to majors in the Nursery School-Kindergarten Curriculum.)

C.W.80. Child Psychology. A survey of child psychology and its applications to education of young children.

C.W.90. Home, School, and Family Relations. Adjustment within and outside the family; relation of adults and children; family problems such as finance, discipline, recreation, marital adjustments, etc.

C.W.130. Motor, Linguistic, and Intellectual Development of the Child. Analysis and interpretation of the scientific literature. Lectures, readings, and reports.

C.W.131. Personality, Emotional, and Social Development of the Child. Analysis and interpretation of the scientific literature. Lectures, readings, and reports.

C.W.132. Later Childhood and Adolescence. Growth, social adjustment, emotional, mental, and personality development. Training and guidance in leisure-time activities, educational and vocational interests.

C.W.133-134-135. Research Methods. Methods used in the study of children. Laboratory exercises and problems.

C.W.140. Behavior Problems in Younger Children. Nature and origin of behavior difficulties in young children, with special reference to the relation between early behavior and later maladjustment.

C.W.141. Behavior Problems in Older Children. Nature and origin of behavior difficulties in older children, with particular reference to readjustment at time of adolescence.

C.W.142. The Psychology of Atypical Children. A survey of the scientific literature on children with physical and mental handicaps. Emphasis upon personal, social and vocational adjustment.

C.W.150-151-152. Childhood Education. Philosophy and methods of early childhood education; materials, equipment, community and home relations.

C.W.160. Physical Growth and Development. The growth of the human body and its systems from early fetal life to maturity.

C.W.166. Maturity and Aging: Developmental Changes and Adjustment. Survey of scientific literature of changes in ability and learning that accompany maturity and senescence.

C.W.170. Parent Education. History and survey of programs, materials, and methods. Administration and organization. Lectures, discussions, and reports.

- C.W.185. Children in a Changing World. The effects of social change and social stress upon children. Some emphasis upon war, depressions, and catastrophes. Problems of reconstruction and rehabilitation.
- C.W.186.‡ Laboratory in Childhood Education and Child Development—Workshop. (Identical with Ed.C.I. 131.) Independent study, conferences, observations, group work under supervision with observation in public and private schools and agencies for children. Credit will be allowed toward kindergarten or elementary education major. (Offered in Summer Session.)
- C.W.190. Principles of Mental Measurement of Young Children. Survey of mental testing from the point of view of the teacher, social worker, and others concerned with the use and interpretation of test results.
- C.W.220-221-222. Seminar in Current Research. Reports on completed research or research in progress. Discussion of methodology and results.
- C.W.225.\* Seminar in Developmental Theory. Consideration of various developmental theories and their efficacy in interpreting developmental material.
- C.W.230-231-232. Seminar in Recent Literature. Reviews of current literature, discussion of fundamental problems, and reports on research. Meetings in alternate weeks.
- C.W.250. Internship. Experience under qualified supervision open under special conditions to graduate students with consent of department.
- C.W.270-271-272.\* Readings and Research in Child Development. Independent readings, research, and reports in any field such as physical growth, health problems, mental development, social behavior, nursery school theory, parent education, etc., which meets the approval of the listed instructors.
- C.W.274-275. Field Work and Technique in Parent Education. Organization and administration of study groups, lesson plans, observations, and field work.
- C.W.290-291. Mental Examination of Preschool Children. A study of the methods used in testing young children, together with supervised practice in the administration of a variety of tests and specific training in the interpretation of test results.

### CURRICULUM AND INSTRUCTION

NOTE—All courses listed under Curriculum and Instruction carry a fee of \$1 per credit.

#### GENERAL COURSES

- Ed.C.I.70.‡ Methods and Materials in Safety Education.
- Ed.C.I.104.‡ Adult Education. This is a survey course of the field of adult education. It deals with agencies, programs, philosophies, history, and trends. Each student will be given opportunity to devote a part of his time to the field of his special interest.
- Ed.C.I.105.‡ Visual Aids in Teaching. A study of the characteristics, advantages, limitations, and practical schoolroom use of visual aids of both non-projection and projection types. Gives specific laboratory practice in operation of usual projection machines. Provides information on sources of materials available for all grade levels and illustrates practical methods of using visual aids in various school subjects. Is intended as a definite means of working out solutions to individual visual aid problems.
- Ed.C.I.107.‡ Radio in Education. The major purpose of the course is to assist teachers and prospective teachers in making the most effective use of radio in the classroom. This necessitates consideration of such aspects as production, techniques of classroom use, selection of equipment, teaching appreciation, and the administration of radio in the schools. Field trips, demonstrations, activities, and concrete examples are used wherever possible. Each individual's needs and interests are met by permitting him to select for intensive study one of the several units into which the course is divided.

‡ A fee of \$1 per credit is charged for this course.

- 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.)
- Ed.C.I.114.‡ The School Health Education Program. Study of various health organizations in city and state in relation to the school health program; organization of the health education programs with the school; construction of the curriculum in school health; evaluation of the school health education program; preparation and requirements for teaching school health education; health supervision and guidance.
- Ed.C.I.117.‡ Rural Education for Administrators and Teachers.
- Ed.C.I.129.‡ Principles and Problems of Teaching Social Hygiene. Emphasis will be placed on methods of teaching social hygiene in the public schools and materials for instructional use in the elementary and secondary schools.
- Ed.C.I.145.‡ Remedial Reading. A study of the remedial practices in reading that are useful to both the classroom teacher and the reading specialist in the light of contributions of research, projects, and observations of remedial techniques.
- Ed.C.I.151.‡ Diagnostic and Remedial Instruction. Objective evaluation of the results of teaching; diagnosis of pupil difficulty; remedial work; tests as aids to teaching; following up a testing program.
- Ed.C.I.171.‡ Curriculum Laboratory Practice. A practice course in the analysis and construction of units, courses of study, and curricula; class projects and individual projects according to needs, interests, level, and specialization.
- Ed.C.I.174-175-176.†‡§ Clinical Methods in Lip-reading and Practice in Speech Pathology. Case history and analysis; testing and diagnosis of speech defects; techniques and work programs for treatment; practical clinical work with children in public schools and with adults in the University Speech Clinic.
- Ed.C.I.207.\*‡ Problems in Radio Education. Individual problems for graduate students whose work in Ed.C.I. 107 has indicated a special aptitude and interest in the field. Each student selects a problem, studies it intensively, outlines the proposed procedure, and carries it through to completion under the guidance of the instructor. Meetings are called from time to time to provide opportunity for group discussion and criticism of the individual problems.
- Ed.C.I.215.\*‡ Problems in the School Health Education Program. For advanced students who wish to pursue independent study and experimentation in school health education.
- Ed.C.I.216.‡ Field Work in the School Health Education Program. Practical field experience in school health education under the supervision of qualified health educators. Details will be worked out in accordance with individual needs of the students.
- Ed.C.I.217.‡ Seminar in the School Health Education Program. Discussion and reports on current problems in school health education.
- Ed.C.I.227.\*‡ Problems in Rural Education.
- Ed.C.I.271.\*‡ Problems in Curriculum Construction. Special problems in the field of the student's individual choice.
- Ed.C.I.273.\*‡ Problems in Reading. A survey of recent problems, issues, studies, and findings. Intended for those who have had previous training in reading, who have a special problem, or who wish to survey the most recent literature.

## ELEMENTARY EDUCATION

- Ed.C.I.60.‡ The Teaching of Reading in the Elementary School.
- Ed.C.I.61.‡ The Teaching of the Social Studies in the Elementary School.

‡ A fee of \$1 per credit is charged for this course.

§ Taking the psychological examinations and a C+ average in the major are prerequisite to this course.

- Ed.C.I.62.‡ The Teaching of Arithmetic in the Elementary School. A. The Teaching of Arithmetic in Primary Grades; B. The Teaching of Arithmetic in Intermediate Grades.
- Ed.C.I.63.‡ Children's Literature. A study of the varied purposes of reading in the elementary school. Bases of selecting materials for extensive reading. Analysis of studies of children's interests. Extensive critical survey of old and new materials for children's reading.
- Ed.C.I.64.‡ The Teaching of English in the Elementary School.
- Ed.C.I.65.‡ The Teaching of Science in the Elementary School. An overview of the 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.
- Ed.C.I.102.‡ Teaching the Social Studies in the Elementary School.
- Ed.C.I.103.‡ Teaching of Science in the Elementary School.
- Ed.C.I.119.‡ Elementary School Curriculum. A study of the 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.
- Ed.C.I.130.‡ Problems of Childhood Education. Lectures and readings on the philosophy and current methods of early childhood education; the needs of children and the means of integrating the school with the home and community.
- Ed.C.I.131.‡ Laboratory in Childhood Education and Child Development—Workshop. (Identical with C.W. 186.) Independent study, conferences, observations, group work under supervision with observation in public and private schools and agencies for children. Credit will be allowed toward kindergarten or elementary education major. (Offered in Summer Session.)
- Ed.C.I.143.‡ Teaching of Reading in the Elementary School. A study of the objectives, the materials, and the teaching procedures in lower and intermediate grades in the light of the contributions of research; survey of current practices and curricula; class and individual projects; observation of reading techniques and materials in the demonstration school.
- Ed.C.I.144.‡ Teaching of Reading in Junior and Senior High Schools. A study of the teaching procedures, objectives, and materials, with special consideration for the teaching of reading in the various subject-matter fields.
- Ed.C.I.146.‡ Current Developments in Language Expression in the Elementary School. A general course in the function and development of language power in connection with all the experiences of the school day; materials, methods, and current philosophies of language in the elementary school.
- Ed.C.I.147.‡ Workshop in the Language Arts. The first hour will be given over to a series of lectures on methods and curriculum in reading, writing, speaking, and listening, from the kindergarten to college, with different lectures each week. Relationships to child development, to social studies, and the like will be stressed. At the second hour group and individual conferences will be held on problems pursued by individual teachers in relationship to their own teaching. Lectures may be registered for without credit. Three credits may be obtained by those pursuing problems and turning in reports.
- Ed.C.I.149.‡ 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.

‡ A fee of \$1 per credit is charged for this course.

- Ed.C.I.150.‡ Supervision and Improvement of Instruction. An analysis of the 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; class studies.
- Ed.C.I.153.‡ Supervision and Teaching of English in the Elementary Schools. Improvement of instruction in language, grammar, spelling, and handwriting; the results of scientific investigation; use of standardized and informal tests; remedial work.
- Ed.C.I.157.‡ Practice in Supervision. Individual research on special supervisory problems; especially intended for supervisors in service.
- 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.
- Ed.C.I.173A.‡ Organizing Units of Instruction in the Elementary School. A consideration of the principles and procedures involved in the organization of units (center of interest units, activity units, experience units, etc.) utilizing natural science and social studies content in the development of reading skills, oral and written composition skills, arithmetic skills, study skills, and desirable social behavior.
- Ed.C.I.181.‡ Foundations of Elementary School Methods. A survey of the current philosophy and research which form the bases for improvement of elementary school instruction. Observation in the demonstration school.
- Ed.C.I.190.‡ Principles of Selection of Materials for Reading in the Elementary School. An advanced course in reading and selection of materials suitable for the elementary school with emphasis upon curriculum needs, principles of child development, and scientific determination of reading difficulty.
- Ed.C.I.226.‡ Seminar in Elementary School Problems.
- Ed.C.I.261.\*‡ Special Problems in School Supervision. Intended 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.
- Ed.C.I.263.\*‡ Research in Arithmetic Instruction. A study of recent research in curriculum, gradation of subject matter, methods, materials, and supervision of arithmetic.
- Ed.C.I.264.\*‡ Research in Educational Diagnosis. A study of recent research in the methods of diagnosis in education, and the techniques of preventive and remedial teaching.
- Ed.C.I.265.\*‡ Research in Supervision. A study of recent research in supervision, teacher rating, surveys of instruction and school and community.

#### SECONDARY EDUCATION

- Ed.C.I.113.‡ High School Curriculum. A study of viewpoints and curriculum issues; reorganization trends; typical research findings by subjects and the analysis of selected state and local curricula.
- Ed.C.I.122.‡ Literature for Adolescents. Background for pupil guidance in extensive reading in junior and senior high schools; analysis of studies of adolescent choices in literature; principles of selection; critical reading in broad fields of literary, biographical, historical, scientific, and vocational interests of boys and girls.
- Ed.C.I.135.‡ Teaching of Occupations and Group Guidance. Problems of group work in guidance in the secondary schools. Content and materials for home room groups, occupations classes, and other guidance courses in junior and senior high school.
- Ed.C.I.144.‡ Teaching of Reading in the Upper Grades and Junior and Senior High Schools. A study of the teaching procedures, objectives, and materials, with special consideration for the teaching of reading in the various subject-matter fields.

‡ A fee of \$1 per credit is charged for this course.

- Ed.C.I.168.‡ Current Developments in the Social Studies. A survey of contemporary literature, curricular trends, and developments in method.
- Ed.C.I.169.‡ Extra-curricular Activities. Types of activities in junior and senior high schools; aims and values; practices in organizing, administering, and supervising; methods of evaluation.
- Ed.C.I.170B.‡ Curriculum and Course of Study Construction. A study of the principles and methods for selection and organization of units, courses of study, and curricula at the secondary school level.
- Ed.C.I.173B.‡ Organizing Units of Instruction in the Secondary School. Philosophical and psychological basis of the unit. Development of principles and procedures for construction and teaching of units of instruction at the secondary level.
- Ed.C.I.191.‡ Advanced Course in the Teaching and Supervision of Secondary School Mathematics. Evaluation of the present practices in methods, content, and administration of junior and senior high school mathematics.
- Ed.C.I.198.‡ Recent Literature in Methods and Curriculum in Secondary School English.
- Ed.C.I.199E.‡ Internship. Directed teaching and practice work at the graduate level for candidates for the master of education degree.
- Ed.C.I.201.\*‡ Problems in Teaching the Social Studies. A seminar on general problems. Each student studies one problem intensively and gives oral reports and a final written report.
- Ed.C.I.204.‡ Social Studies Curriculum. A review of the techniques and practices of curriculum-making in the social studies at all grade levels.
- Ed.C.I.222. Seminar—Current Problems in Techniques of High School Instruction.
- Ed.C.I.225.\*‡ Special Problems in Supervision of Instruction in Secondary Schools. Study of special problems in supervision primarily for graduate students and supervisors in schools who are qualified to make intensive studies. Consult instructor before registering.
- Ed.C.I.254.‡ Supervision of the Social Studies. Reviews of techniques of supervision as applied to the social studies. Particular attention to curriculum making and measurement.
- Ed.C.I.266.‡ Supervision of Instruction in the Secondary Schools. Modern concepts of the nature, scope, and functions of supervision; functions and responsibilities of supervisors; organizing for the improvement of instruction; procedures for developing a program for improving instruction; methods and procedures in improving instruction.
- Ed.C.I.287.‡ 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.
- Ed.C.I.293.\*‡ Foundations of Secondary School Methods. A study of the investigations which form the bases of the technique of high school instruction and the application of their results to subject matter and to classroom procedure. Each member will work primarily in the field of his teaching choice, with a final synthesis by the class as a whole.
- Ed.C.I.294.\*‡ Advanced Course in Methods of Teaching English. Evaluation of present practices in methods and content of junior and senior high school English courses in the light of the known results of scientific investigations in that field.
- Ed.C.I.296.\*‡ Special Problems in Teaching English. Special research problems in the field of the student's individual choice.

#### HIGHER EDUCATION

- Ed.C.I.184.‡ Supervision of Student Teaching. Primarily for teachers engaged in the direction of practice teachers in secondary education.

‡ A fee of \$1 per credit is charged for this course.

- Ed.C.I.228.\*‡ Problems of Higher Education and Teacher Training. Problems of student personnel, of college curricula and instruction, of organization and administration. Offered as a class course once a year and as an individual problems course each quarter.
- Ed.C.I.250.‡ Higher Education in the United States. A survey of the historical development of institutions of higher education and a consideration of the following topics: the functions of higher education in a democracy; types of higher institutions; the articulation of secondary and higher education; readjustments in organization and administration, curriculum and instruction; the control of higher education; the evaluation of higher institutions by accrediting agencies. This course is designed as an introduction to the sequence of courses in higher education and is also designed for graduate students in academic fields who wish a survey of the problems of colleges and universities.
- Ed.C.I.285.‡ The Professional Education of Teachers. A basic course for present and future instructors and administrators in departments and colleges of education, teachers colleges, and supervising teachers in laboratory schools. The historical development and present status of teacher education and of the teaching profession; the problems that relate to the program of studies, curricula, and courses. Recent trends; research.

## EDUCATIONAL ADMINISTRATION

### GENERAL COURSES

- Ed.Ad.124. Public School Administration. The organization, administration, and general support of public schools in states and local school districts.
- Ed.Ad.210.\* 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.
- Ed.Ad.225. 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.
- Ed.Ad.226. School Plant Planning and Management. Plant program planning and financing, including operation and maintenance of public school buildings.
- Ed.Ad.227. Teacher and Employee Administration. Employment practices, salary schedules, personnel records and reports, welfare procedures, improvement in service and legal aspects of instructional and non-instructional school employee administration.
- Ed.Ad.228.\* Special Problems in Educational Administration. This course is designed primarily for superintendents and principals qualified to make extensive studies of specific problems related to the administration of a school system.
- Ed.Ad.230.\* Public Relations for Schools. Theory and practice of educational interpretation. Principles involved; machinery and personnel; the teacher's contacts with the community; the role of the pupil; professional and lay organization.
- Ed.Ad.235. Seminar in Educational Administration. Enrollment limited to candidates for Master's degrees under Plan A and candidates for Ph.D. degrees in educational administration.

### ELEMENTARY EDUCATION

- Ed.Ad.115. 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.

‡ A fee of \$1 per credit is charged for this course.

## SECONDARY EDUCATION

- Ed.Ad.133. Guidance in Secondary Schools. Basic principles and current practices in educational and vocational guidance in junior and senior high schools. Application of principles through case discussions.
- Ed.Ad.167. Junior High School. Sources of the movement; purposes, functions, and limitations; types of reorganization; fundamental problems of reorganization; reorganization of subject matter.
- Ed.Ad.218. Recent Literature in Secondary Education.
- Ed.Ad.263. Organization of Secondary Education. The organization of secondary school units, types of schools, and internal organization for administration and supervision.
- Ed.Ad.264. Administration of Instructional Activities in the Secondary School. The administration of guidance, provisions for scholarship, curriculum, extra-curricular activities, and school control.
- Ed.Ad.265. Administration of Non-Instructional Activities in the Secondary School. Housing, finance, marks, forms, records, reports, and community relationships.
- Ed.Ad.270.\* Special Problems in Secondary Education. A course designed for those qualified to undertake research.

## HIGHER EDUCATION

- Ed.Ad.174. The Junior College. The present status of the junior college, its development, purposes and functions, organization, curriculum, and probable trends.
- 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.

## EDUCATIONAL PSYCHOLOGY

## GENERAL COURSES

- Ed.Psy.60. Introduction to Measurement and Statistics. This course includes a study of measures of central tendency, variability, and correlation as well as principles of test construction.
- Ed.Psy.120. Basic Principles of Measurement. Principles of measurement applied to the construction and evaluation of tests and to the interpretation of scores. Illustrations from achievement, intelligence, interest, attitude, and personality tests. Each student will have opportunity to construct an examination in the field of his major interest.
- Ed.Psy.133. Guidance in Secondary Schools. Basic principles and current practices in educational and vocational guidance in junior and senior high schools. Application of principles through case discussions.
- Ed.Psy.140. 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. Laboratory practice two hours per week.
- Ed.Psy.141. Group Aptitude Testing. A study of group aptitude tests for all school levels with special emphasis on their reliability and validity as instruments for educational and vocational guidance.
- Ed.Psy.142. Individual Aptitude Testing. A study of methods and practice in the administration of individual mental tests.
- Ed.Psy.143. Individual Mental Testing Laboratory. A practice course in the administration of individual mental tests.
- Ed.Psy.150. Psycho-educational Clinic. Conducted in co-operation with existing clinics and agencies in the Twin Cities. Students will receive practice in giving psychological examinations, in case study, and in interpretation of case records.



- Ed.Psy.159. Personality Adjustments in Education. A survey course for educational workers, particularly teachers and counselors. Emphasis on an understanding of the factors involved in personality development and on the preventive rather than the remedial phases of mental hygiene. Attention given to the various types of maladjustments as well as to the conditions under which a teacher or counselor can safely attempt remedy or treatment.
- Ed.Psy.208.\* Methods in Educational Research. A study of the methods employed in the investigation and reporting of educational problems. Designed to aid students in the preparation of theses and of reports for projects under Plan B. Suggested for all candidates for graduate degrees.
- Ed.Psy.216-217-218. Statistical Methods in Education. A course at the graduate level designed to lay the foundations of statistical theory and to develop the craftsmanship necessary to put theory to application, with special reference to educational and psychological problems.
- Ed.Psy.220-221. Advanced Theory of Measurement. An examination of 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 in evaluation of students' work.
- Ed.Psy.225,226.\* Diagnosis and Counseling in a Student Personnel Program. An advanced course, requiring recent background in both psychological measurement and the principles of guidance. Stress on skill in interpreting diagnostic material rather than on theory. Attention to techniques for collecting information regarding a student, the making of a diagnosis, and the techniques of counseling and interviewing. Ed.Psy. 225, Diagnosis ; 226, Interviewing and Counseling.
- Ed.Psy.233.\* Problems in Guidance and Personnel Work. Investigations of particular problems in the student personnel field, weekly seminar discussions of specialized phases of college student personnel and noneducational personnel work.
- Ed.Psy.240.\* Problems in Measurement. Intensive study and individual research in problems of educational and vocational measurement.
- Ed.Psy.243. Problems in Statistics for Students in Education and Psychology. A seminar devoted to recent developments in statistical science with special reference to the applications to educational and psychological problems. To carry credit individual projects are required.
- Ed.Psy.253.\* Research Problems.
- Ed.Psy.281. Practice in Personnel Work. Designed to give properly qualified students experience in the use of psychological and related methods in dealing with individuals.
- Ed.Psy.290-291. Individual Differences. A study of group and individual differences and their relations to educational practice.
- Ed.Psy.292.\* Recent Literature in Educational Psychology. Readings and reports on problems in educational psychology.
- Ed.Psy.293-294.\* Psychology of Learning. 293, a survey of research and a statement of principles in human learning, and their implications for curriculum and instruction; 294, recent literature and research in human learning.

## ELEMENTARY EDUCATION

- Ed.Psy.113-114-115. Psychology of Elementary School Subjects. A discussion of the research studies in the field of psychology of elementary school subjects.
- Ed.Psy.182. Education of Handicapped Children.
- Ed.Psy.183. Psychology of Gifted Children. A study of the abilities and characteristics of intellectually gifted children and adults.

Ed.Psy.184. *Education of the Slow Learning Child.* A study of the physical and mental traits of intellectually subnormal children and methods of adjusting the school program to their needs.

#### SECONDARY EDUCATION

Ed.Psy.158. *Psychology of Adolescence.* A study of changes characterizing the transition from childhood to adult life. Implications for guidance during the period of secondary education.

See also Ed.Psy. 182 and 183 above under Elementary Education.

#### HIGHER EDUCATION

Ed.Psy.252. *Student Personnel Work in College and University.* An advanced course for students who have had at least one earlier course in higher education, and who wish to become familiar, as college personnel workers or college teachers, with student personnel functions. The philosophy underlying student personnel work, specific personnel services with particular regard to the work of the counselor and the faculty adviser, and student personnel administration.

Ed.Psy.254. *Measurement and Evaluation in Higher Education.* A consideration of the examination program in American institutions of higher learning; principles of examination at the college level; the design of investigations and the critical evaluations of investigations in higher education.

### HISTORY OF PHILOSOPHY OF EDUCATION

#### GENERAL COURSES

H.Ed.71. *Brief Course in History of Education.* Current school problems and educational theories in the light of their history. Emphasis upon 18th and 19th centuries, the work of great educators, and education in the United States.

H.Ed.73. *Educational Sociology.* A study of the effects of recent social trends upon American educational institutions and of the chief problems in educating individuals for their associations and in directing educative forces of society.

H.Ed.74. *Social Viewpoints in Education.* A critical examination of the motivations and attitudes of educators in the light of social, economic, and political forces, with a view toward formulating an effective viewpoint for teachers today.

H.Ed.76. *Introduction to the Philosophy of Education.* An introduction to the basic controversies in current educational theory from the standpoint of their philosophic principles. Major attention will be given to the progressive, traditional, and radical viewpoints together with their effects upon educational practice in American life.

H.Ed.101. *Historical Foundations of Modern Education.* Historical analysis and interpretation of the more important elements in modern education derived from the Greeks, Romans, Ancient Hebrews, Middle Ages, and Renaissance.

H.Ed.102. *History of Modern Secondary and Higher Education.* A historical study of the origin, aims, growth of existing types of American and European secondary schools.

H.Ed.103. *History of Modern Elementary Education.* The development of educational theory and the evolution of the common school. Not open to students who have had H.Ed. 71.

H.Ed.110. *Intercultural Education.* Problems of race, religion, nationality and other group relations in their bearings on and challenge to education.

H.Ed.140. *Philosophies of Modern Education.* A survey of the field especially designed for students who have no background in philosophy but wish to obtain a comprehensive view of major positions in educational theory.

- H.Ed.155. History of Education in the United States. A survey of the development of elementary and secondary schools in the United States with special emphasis on the nineteenth century.
- H.Ed.176. Conflicting Issues in Modern Education. A critical survey of major controversial problems confronting education today.
- H.Ed.178. Education and Problems of American Democracy. A study of the conflicts and tensions in current American life as these affect the program of the public schools and colleges.
- H.Ed.179. Critical Thinking for Teachers. Through the practical examination of typical educational materials, this course aims to increase the ability of prospective teachers to think more logically, to read and listen more critically, and to convey something of this ability to their own students.
- H.Ed.180. The School and the Social Order. This course deals with some of the controversial social issues confronting schools today, such as the relation of education to the state, the influence of pressure groups, etc.
- H.Ed.181. Tutorial Work in Educational Sociology and Philosophy. Work on an individual basis for students who have developed special interest in problems raised by previous courses in educational philosophy and sociology.
- H.Ed.241. Problems in the History and Philosophy of Education. For graduate students interested in research and original work in these areas.

## ELEMENTARY EDUCATION

- H.Ed.103. History of Modern Elementary Education. The development of educational theory and the evolution of the common school. Not open to students who have had H.Ed. 71.

## SECONDARY EDUCATION

- H.Ed.102. History of Modern Secondary and Higher Education. A historical study of the origin, aims, growth and existing types of American and European secondary schools.

## HOME ECONOMICS EDUCATION

- H.E.Ed.90. Child Training. A brief study of the physical and mental development of the child is followed by a discussion of the problems of training small children. Emphasis is placed on the preschool child. Lectures, observations in the Nursery School, and reports.
- H.E.Ed.91.† Observation, Materials, Teaching in Home Economics. The psychological bases for teaching; investigation and collection of facts on teaching situations through observation and participation in school activities; study of teaching materials and method.
- H.E.Ed.92. Teaching Problems in Home Economics. Reports, discussion, conferences on the planning of units, teaching procedures, illustrative materials, and equipment.
- H.E.Ed.93‡-94.‡ Supervised Teaching in Home Economics. Observation, participation, and actual teaching experience under supervision in different home economics situations and on different age levels. The student must have received a grade of C or higher in H.E. 3, 4, 21, 22, 27, 34 (or 170), 40, 41, and must have completed Home Experience in Foods, Clothing, and other phases of home economics.
- H.E.Ed.95. Field Experience for Home Demonstration Agents, Observation, participation, and actual experience under supervision in the agricultural extension program. This experience includes a study of the program at University Farm and participation in a selected county program with a home demonstration agent. A written report summar-

† A fee of \$1 per credit is charged for this course.

izing the experience will be required. (6 cred.; permission of the head of Home Economics Education and the director of Agricultural Extension is required for registration.)

- H.E.Ed.192. Evaluation in Home Economics Education. Evaluation as a means of measuring progress toward important goals in different areas of home economics; study of available tests and other evaluation materials; construction and refinement of various evaluation instruments. Study of elementary statistical techniques useful to home economics teachers.
- H.E.Ed.193A. Home Economics Curriculum (secondary level). A study of the contribution of home economics at elementary and secondary levels; evaluation of curriculum practices and techniques employed in curriculum planning and reconstruction.
- H.E.Ed.193B. Home Economics Curriculum (college level). The place of home economics in higher education; problems facing home economics in small colleges; curriculum offerings; teaching schedules and load; appropriate reference materials.
- H.E.Ed.194A. Adult Education in Home Economics. An analysis and study of the problems affecting community and family living; methods and techniques used in helping men and women and out-of-school youth meet present situations. Course is planned for teachers and supervisors of adult classes, extension and farm security workers.
- H.E.Ed.194B. Adult Education in Home Economics. Objectives of adult education to meet present needs; planning a community program; teaching procedures; discussion of special problems. Course is planned for teachers and supervisors of adult classes.
- H.E.Ed.197.‡ Organization and Methods of Related Art Teaching. Organization of a related art course and methods of teaching art as applied to familiar objects and processes. The course is planned on an individual problem basis. Permission of the instructor is required.
- H.E.Ed.199E.‡ Internship. Directed teaching and practice work at the graduate level for candidates for the master of education degree.
- H.E.Ed.243. 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.
- H.E.Ed.292.\* Problems in Evaluation. A continuation of Course 192, with emphasis upon individual problems in the field of evaluation.
- H.E.Ed.293.\* Problems in Home Economics Education. Offers opportunity for graduate students to study current educational problems independently on the level of major interest—elementary, secondary, or higher education. Students should have had at least one quarter of graduate work and if possible H.E.Ed. 294, Research Problems. Consult instructor before registering. 1-9 cred. Individual conferences arranged.
- H.E.Ed.294.\* Research Methods. Study of methods used in collecting data dealing with various types of educational problems, tabulation, organization, appropriate statistical treatment, and interpretation of data. Independent study of a special problem and writing a report of the investigation are required.
- H.E.Ed.295.\* Seminar in Home Economics Education. Offers opportunity for group discussion and reports on current problems at the various educational levels.

### INDUSTRIAL EDUCATION

**Shop and drawing courses**—Courses of a manipulative or laboratory nature are offered at the University in great number and variety. (In addition to courses listed below, see bulletins and schedules in Architecture and Fine Arts, Drawing and Descriptive Geometry, Mechanical Engineering, and Agricultural Engineering.) Students may arrange to take shop, drawing, and related courses, day or evening, at the William Hood Dunwoody

‡ A fee of \$1 per credit is charged for this course.

Industrial Institute without fees other than those paid to the University, except \$1 which is subject to refund. Courses not specifically named in the curriculum should be selected under advice and may be either extensive or intensive in resultant preparation for teaching. A maximum of forty-five credits is strictly enforced, which fact should be noted, particularly by those who transfer to this University or to this special curriculum with advanced standing. Credits in excess of forty-five will be recorded but they will not be counted toward the graduation requirement.

Ind.1.‡ Basic Woodwork. An introduction to woodwork with emphasis on the use of common hand tools. Fundamental skills, processes, projects, and related information as applied to industrial arts.

Ind.5.‡ Basic Drawing. An introduction to drawing as an area of industrial arts. Fundamental skills in sketching, lettering, use of instruments, orthographic projection, and pictorial representation.

Ind.10.‡ Basic Electricity. An introduction to electricity as an area of industrial arts. Theories, fundamental skills, processes, projects, and jobs.

Ind.11.‡ Special Class Woodwork. For teachers of art, subnormal and primary work; lectures, demonstrations, and shop practice; not open to those with college credit in woodworking. Not a part of the special four-year curriculum.

Ind.30. Graphic Presentation. Typical methods of the graphic portrayal of data; use of educational and social facts for drill in construction and interpretation; corrected charts become student property.

Ind.40. Analysis. Necessity for, and types of, instructional analysis; individual work upon selected fields, for course construction purposes.

Ind.42. Course Organization. Makes definite use of analyses; content of courses selected and arranged for common and special teaching situations; both general and vocational classes and groups considered.

Ind.44. 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.

Ind.50A-B-C.‡ Directed Teaching. Three quarters or six credits required. (Consult with adviser or critic teacher.)

Ind.60. 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.

Ind.61. Practices in Vocational Education. Plans of organization and control; types of schools and classes; public versus private and corporation training; state and federal aid; teacher preparation; efficiency factors.

Ind.66. Related Subjects. Theories, practices, and problems of related instruction; special reference to mathematics, drawing, science, safety, and other auxiliary and technical information; group study, unit courses, usable techniques of management.

Ind.70.‡ Methods in Shop Subjects. Conduct of shop classes, with and without reference to production work; plans, demonstrations, drill, grading, reports, and records. General concepts and techniques of method particularized for school shop situations.

Ind.75.‡ Methods in Drawing. The selection and arrangement of course materials; methods of presentation, instructional devices, and problems of the drawing room. Not a course in drawing.

Ind.80. General Industrial Training. Administration of the industrial department for elementary and secondary schools in typical Minnesota towns and elsewhere; aims, offerings, schedules, etc.; consideration of the unifying opportunities within a department, school, or system.

‡ A fee of \$1 per credit is charged for this course.

- Ind.100. 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.
- Ind.101. Tests in Industrial Subjects. Study and application of principles of achievement test construction to shop and drawing subjects; evaluation of results.
- Ind.102. The General Shop. (Not a shop course.) Purpose of the new general shop organization; current practice as to types of shops, equipment, instructional materials and procedures, pupil personnel plans, etc. Special attention to planning for individual school situations of those enrolled.
- Ind.103. Instructional Aids. Consideration of various instructional aids; preparation and plans for their use.
- Ind.104. Defense Training. A special wartime course. Not offered.
- Ind.105. Administration of Industrial Education. Chiefly administration and, therefore, open to superintendents, principals, and teachers not specializing in the field named; general and vocational phases considered; objectives, programs and practices; laws, rulings, and standards for aid; significant literature.
- Ind.107. Co-ordination. Province and duties of co-ordinators in trade schools, part-time programs, and cosmopolitan high schools offering training opportunities. Informational for school administrators and in the nature of guidance and training for those having interest in entering this new type of school work.
- Ind.108. Apprenticeship. History and recent development of apprenticeship in the United States; trends, practices, organization, laws, and rulings; state plans for vocational education in their varying relationship to apprenticeship.
- Ind.109. Conference Leading for Industry. Purposes, advantages, limitations, and types of conference method. Characteristics of conference situations and of good leadership. Initial planning, sequential steps, techniques and devices, problems and tensions, summaries. Evaluation of group and individual attainment. Writing of reports. Practice sessions and criticisms.
- Ind.110. Guidance in the School. 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; emphasis upon vocational phases. A part of the undergraduate curriculum.
- Ind.115. Supervision of Industrial Education. Principles of creative supervision applied in industrial teaching; analysis of duties, organization for supervision; functional analysis of modern concepts of industrial education.
- Ind.125. Philosophy and Practice of Industrial Education. History, objectives, development, and current practices of the field. Three phases considered—industrial arts as general education, school preparation and upgrading for trade pursuits, induction and adjustment of workers by employers.
- Ind.170. Day Industrial Schools. National, state, and local organization and types; buildings and equipment; promotion and advertising; co-operative relationships; teaching staff; pupil guidance, training, placement, and follow-up.
- Ind.171. Evening Industrial Schools. Development of the after training of adults; agencies and scope of the movement; national and state legislation; qualifications of instructors; problems and difficulties; records and certification; fees and charges; buildings, equipment, and instruction facilities.
- Ind.172. Part-time Education. Covers "unemployed youth" plans for 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; federal and state reimbursement.
- Ind.200.\* Research Problems. Independent work for the degrees master of arts, Plan B, and master of education, Plan Y. Prerequisite: approval of candidacy for either degree.

3, 6, or 9 credits per enrolment; 9 credits required. Lectures and conferences on projects.

Ind.250-251. Industrial Education Literature. Six credits assumed. Survey of printed reports; critical analysis; selection of thesis problems; formulation of work plans; reports of progress; organization and presentation; acquaintance with all types of literature in the field. Limited to graduate students.

### LIBRARY SCIENCE

**Statement of fees**—The fees for Library Science are \$3.50 per credit or \$42 per quarter for residents of Minnesota and \$4.75 per credit or \$56 per quarter for nonresidents.

- Lib.Sci.50. Libraries and Society. History of libraries; types of libraries, library agencies and services; libraries in the modern world; librarianship as a profession.
- Lib.Sci.51. Origins of the Book. Survey of writing and the materials and methods of writing from earliest times through the spread of printing in the fifteenth century.
- Lib.Sci.52. History of Publishing. Publishers and publishing from the sixteenth century to the present.
- Lib.Sci.53. School Library Administration. The organization and management of libraries in schools.
- Lib.Sci.54. Public Library Administration. Management problems in public libraries; finance, personnel, equipment, extension work, etc.
- Lib.Sci.55. College Library Administration. A survey of administrative problems in libraries of institutions of higher education.
- Lib.Sci.56. Current Issues. Reading in professional library literature on the unsolved problems and current issues of librarianship.
- Lib.Sci.60. Sources of Information about Library Materials. Reviewing media "best" lists, trade bibliographies, etc. Principles of book selection and order work.
- Lib.Sci.61. Library Practice. Practice under supervision, in Minneapolis and St. Paul libraries. The time and character of the practice will be arranged individually to suit student aptitudes and needs, usually in the second and third quarters.
- Lib.Sci.62. Reference I. General reference tools and other sources of information in reference work; theory and practice of reference work.
- Lib.Sci.63. Reference II. Reference work in subject fields; the reference department; practical bibliography.
- Lib.Sci.64. Reference III. Specialized reference tools; government publications; administration of the reference department; special problems in large libraries.
- Lib.Sci.65. National and Regional Bibliography. The most important national and regional bibliographies in English and other languages; their use as aids in book selection and acquisition; the history of bibliography.
- Lib.Sci.70. Reading Guidance. The library user, his personality and background; the matching of book and user and the improvement of reading habits.
- Lib.Sci.71. Reading Guidance for Children. The reading interests of children; book selection and reading guidance; the children's room, its organization and administration.
- Lib.Sci.72. Reading Guidance for Adolescents. Book selection and reading guidance for the adolescent; the adolescent in the public library and in the high school library.
- Lib.Sci.73. Reading Guidance for Adults. Factors affecting adult use of the library; reading interests of adults; book selection for adults; biography of the book world.
- Lib.Sci.76. Library Service in Hospitals.
- Lib.Sci.77. Book Selection for Hospital Patients.
- Lib.Sci.78. Reading and the Mental Patient.
- Lib.Sci.79. Medical Reference Work.
- Lib.Sci.80. Hospital Library Practice.

- Lib.Sci.81. Theory of Bibliography. Introduction to the description and arrangement of books in catalogs, bibliographies, and on library shelves.
- Lib.Sci.82. Cataloging and Classification. Methods of dictionary card cataloging and shelf classification, especially for small libraries.
- Lib.Sci.83. Descriptive Cataloging. History of cataloging; outstanding catalogs and codes; difficult problems of descriptive cataloging; the catalog department.
- Lib.Sci.84. Subject Cataloging and Classification. History of book classification and the classification of knowledge; comparison of modern subject schemes.
- Lib.Sci.85. Special Problems. Individual study on library problems for advanced students in Library Science.
- Lib.Sci.126. Subject Bibliography. The bibliography of subject fields; standard works, current lists, and bibliographical manuals.

### METHODS AND DIRECTED TEACHING

**Honor point average**—C+ average (1.5 honor points per credit) in the major or the subject in which student teaching is done, is required for registration in all special methods and directed teaching courses. See page 12.

**Statement of fees**—For all courses in methods, directed teaching, and special methods and directed teaching combined, a fee of \$1 per credit is charged. Taking the psychological examinations and a C+ average in the major are prerequisite to all special methods and student teaching courses. For Clinical Methods in Lip-Reading and Practice in Speech Pathology see Ed.C.I. 174-175-176. For methods and directed teaching in special subjects see department concerned.

### NURSING EDUCATION

- Ed.T.51A.‡ Special Methods of Teaching in Schools of Nursing. A study of the problems of nursing education, surveying present conditions. Objectives of nursing education and the making of curricula. Principles underlying clinical and classroom teaching in schools of nursing. Planning and evaluating instruction.
- Ed.T.51B.‡ Special Methods of Teaching and Directed Teaching in Schools of Nursing. Observation and study of principles of teaching applied in the nursing school situation. Supervised practice in teaching of nursing subjects.

### RECREATION LEADERSHIP

- Ed.T.85A-B-C.‡ Practice and Field Work in Recreation Leadership. Opportunity for observation of the practice in leadership of recreation activities. Students will be assisted in planning individual programs based on previous experience and professional needs.

### SCHOOL HEALTH EDUCATION

- Ed.T.83.‡ Methods and Materials of School Health Education. Study of principles, materials, and problems of health education in preparation for health teaching. Observation in techniques of school health instruction Allocation and gradation of health subject matter, study of health needs of school children. Evaluation of school health instruction.

### ELEMENTARY EDUCATION

- Ed.T.53A-B.‡ Directed Teaching of Handicapped Children. Students will have opportunity to observe work with the special classes, and to teach under direction. Conducted in co-operation with the public schools of Minneapolis and St. Paul.

‡ A fee of \$1 per credit is charged for this course.



- Ed.T.54A-B.‡ Directed Teaching in the Elementary School.
- Ed.T.55.‡ Principles of Early Childhood Education. The development, aims, and organization of kindergarten and nursery school education. A consideration of the curriculum and methods.
- Ed.T.56.‡ Methods and Observation in Nursery School and Kindergarten. Directed observation in the Nursery School and Kindergarten. Emphasis upon observations of the young child in the school setting, program planning, techniques of management, record keeping, care and use of materials.
- Ed.T.57.‡ Nursery School-Kindergarten Laboratory in Art, Literature, and Social Studies. Lectures and laboratory periods emphasizing methods and materials for children 2 to 6. Books, story telling, social studies, and art are considered in their relation to the nursery school and kindergarten program and the home life of the child.
- Ed.T.58.‡ Nursery School-Kindergarten Laboratory in Play Materials, Music, and Science. Lectures, laboratory periods, and excursions emphasizing methods and materials for children 2 to 6. Permanent and plastic play materials, music, and science in their relation to the nursery school and kindergarten program and the home life of the child.
- Ed.T.70.‡ The Teacher and the Parent. Relations between parent and teacher. Interviews, informal and formal parent education methods. Parent-teacher work. Lectures, observations, practice in interviewing and preparing programs, reports.
- Ed.T.77A.‡ Directed Teaching in Nursery School. Five half-days each week spent in classroom participation under supervision.
- Ed.T.77B.‡ Directed Teaching in the Primary Grade. Five half-days each week spent in classroom participation under supervision in public or private schools.
- Ed.T.77C.‡ Directed Teaching in the Kindergarten. Five half-days each week spent in classroom participation under supervision in public or private schools.

## SECONDARY EDUCATION

- Ed.T.52.‡ Directed Teaching. Teaching under supervision in the University High School and in the Twin City schools. The course calls for one period daily at the school where the work is assigned. Registration in this course is limited to students who have completed special methods courses or have had teaching experience. In combination with the Special Methods Course, this course meets the student teaching requirement for a secondary school academic major. Practice teaching in academic subjects is normally combined with special methods courses in a one-year teachers' course. See below.
- Ed.T.61.‡ Teachers' Course in Norwegian.
- Ed.T.62.‡ Teachers' Course in Swedish.
- Ed.T.66A-B-C.‡ Special Methods and Directed Teaching in English. A one-year course. This course is required of all students with a major in English or Speech.
- Ed.T.66Am.‡ Teaching of Composition in the Senior High School. Objectives of composition; selection of subject matter and its relation to the problem—project method of assignment; problems of grading composition; problems of teaching grammar, punctuation, and spelling; oral composition. Practice teaching and observation are combined with this course except in special cases.
- Ed.T.66Bm.‡ Teaching of Literature in the Senior High School. Objectives of literature teaching; differentiated method for appreciation and information; methods of handling different types such as fiction, drama, poetry, and essay; survey courses; home reading; illustrative material. Practice teaching and observation are combined with this course except in special cases.

‡ A fee of \$1 per credit is charged for this course.

- Ed.T.67A-B-C.‡ Special Methods and Directed Teaching in Mathematics. A one-year course required of all students with a major in mathematics.
- Ed.T.67Am-Bm.‡ Teaching of Secondary School Mathematics. Discussion of procedures in selecting and organizing materials and in teaching secondary school mathematics.
- Ed.T.68A-B-C.‡ Special Methods and Directed Teaching in Secondary School Science. A one-year course required of all students with a major in natural science.
- Ed.T.68Am-Bm.‡ Methods of Teaching Secondary School Science.
- Ed.T.69A-B-C.‡ Special Methods and Directed Teaching in the Social Studies. A one-year course required of all students with a major in history or the social studies.
- Ed.T.69Am-Bm.‡ Methods of Teaching the Social Studies.
- Ed.T.70A-B-C.‡ Special Methods and Directed Teaching in Modern Languages. A one-year course required of all students with a major in a modern language.
- Ed.T.71A-B-C.‡ Special Methods and Directed Teaching in Latin. A one-year course required of all students with a major in Latin.
- Ed.T.73A-B-C.‡ Special Methods and Directed Teaching in Commercial Subjects. A one-year course required of all students in the specialized curriculum in business education.
- Ed.T.74.‡ Teachers' Course in Journalism. A study of methods and techniques of presenting journalism instruction to students of less than college level. It is required of College of Education students with a journalism minor.
- Ed.T.88A-B-C.‡ Special Methods and Directed Teaching in Speech. A one-year course involving special methods and directed teaching in speech and English. Students must also register for the fall course in Ed.T. 66Am-Bm.

### MUSIC EDUCATION

NOTE—For description of courses in Music and statement of fees see Bulletin of Science, Literature, and Arts or the Combined Class Schedule.

- Mu.Ed.1. Music Orientation. To provide opportunity for the student to become acquainted with the various divisions of music study; a survey of the offerings in general music and music education.
- Mu.Ed.4-5-6.‡ Applied Instrumental Technique. This laboratory course is divided into three quarters, strings, brass (and percussion), and woodwinds, respectively. It incorporates the theory and technical development of the instruments, and elementary instruction in the playing of the chosen vehicle of expression, with special attention to the routine of class instruction.
- Mu.Ed.50A.‡ Primary Methods. Practical methods for teaching music in the nursery school, kindergarten, and grades one, two, and three. Particular attention is given to the child voice; its care and development; rote singing, the transition from rote singing to note reading; new practices and materials. Observation in Minneapolis and St. Paul schools.
- Mu.Ed.50B.‡ Intermediate Methods. Music methods to be used in grades four, five, and six; rhythmic and melodic problems; voice testing, two- and three-part singing; integration. Observation in Minneapolis and St. Paul schools.
- Mu.Ed.52.‡ Technique of Teaching Appreciation. A practical course in the teaching of appreciation of music to children in the elementary grades. Materials and methods of presentation will be discussed and demonstrated, using the class as a laboratory.
- Mu.Ed.53.‡ High School Methods. Organization and methods of teaching chorus, glee clubs, and voice classes; appreciation and theoretical music as encountered in the modern junior and senior high school. Particular attention to the changing voice, various voice combinations, helps and materials for public appearances.

‡ A fee of \$1 per credit is charged for this course.

- Mu.Ed.54.‡ Public Performance. How to select materials, organize, rehearse, and present school activities in audience situations. This includes operettas, cantatas, concerts, pageants, etc. Costuming, make-up, lighting, rehearsals, business management, and scenery are included. All materials and discussions are from the educational point of view.
- Mu.Ed.55.‡ Survey and Evaluation of Vocal Materials and Methods. An analysis and comparison of various techniques of school music teaching. A survey of octavo vocal materials and textbooks in series.
- Mu.Ed.59.‡§ Choral Literature and Conducting. A laboratory class for intimate contact with vocal materials and actual practice in conducting. The following approaches are used: the class reads much material for contact with evaluation, the music education seniors will rehearse and direct small ensembles from the class, conducting problems will be presented and discussed from the student's as well as the teacher's point of view.
- Mu.Ed.60-61-62.‡ Supervision and Teaching. Practical phases of school music teaching. Actual experience in carrying forward, under supervision, the activities of the elementary music teacher as well as all types of vocal and instrumental activities in the junior and senior high school. Work done in Minneapolis and St. Paul schools and University High School. Special attention given to organization of materials, methods of procedure, lesson planning, and recent approaches.
- Mu.Ed.63.‡ Band Conducting. A course designed to give practical experience in conducting recommended band literature of all grades.
- Mu.Ed.64.‡ Band Organization. A course dealing with the organization, promotion, curriculum, administration, equipment, and other problems of the school band.
- Mu.Ed.65.‡ Instrumentation. This course involves a theoretical study of orchestral and band instruments, in combination. The physics of tone color is explained. Revision of materials suitable for school use, and discussion of capacity and capability of school performance on the various instruments are undertaken.
- Mu.Ed.68. Conducting of Instrumental Music and Survey of Materials. Training of directors of orchestra and band ensembles, and a critical survey of available music materials adaptable to school music purposes. Laboratory practice in the technique of the baton in interpreting worthy instrumental compositions, developing appreciation of better literature. Psychological basis of conducting and consideration of the acoustical properties of auditoriums. Efficient management of rehearsals.
- Mu.Ed.101. Tests and Measurements in Music Education. Techniques for elementary statistics. To acquaint students with existing tests in the field of music education; their reliability, validity, administration, and proper interpretation of the findings. Not offered.
- Mu.Ed.103E. Psychological Foundations of Music Education.
- Mu.Ed.150.‡ Advanced Course in the Teaching of Elementary School Music.
- Mu.Ed.220E. Survey and Application of Research in Music Education. To include recent books, monographs, and studies. Relative significance of their contributions in respective fields.
- Mu.Ed.224E. Seminar and Individual Research Problems in Music Education. A knowledge of elementary statistics is required. Individual projects; guidance; remedial procedures; interrelationships.
- Mu.Ed.225E.‡ Advanced Applied Music.

‡ A fee of \$1 per credit is charged for this course.

§ Four credits are required in Mu.Ed. 59. The course should be repeated until all four credits are earned.

## NURSING EDUCATION

- Nurs.Ed.60. Ward Administration. Organization of the hospital; principles of administration and their application to ward management; analysis and maintenance of nursing service; selection, orientation, assignment, and motivation of personnel; planning clinical teaching programs.
- Nurs.Ed.62. Personnel Work in Schools of Nursing. A survey of principles and techniques of personnel work applied to school of nursing problems. The relationship of such topics as individual differences, human behavior, personality, emotions, and intelligence to the problem of personnel guidance. Study of such techniques as psychological tests, personnel records, orientation periods, remedial programs and counseling interviews in schools of nursing.
- Nurs.Ed.63. Motion Study. A course designed to apply the science of motion study to the technique of nursing. The student is taught to analyze critically the present methods used in nursing, and to devise better ways of doing the job. Motion picture method of analysis, lectures, and laboratory work.
- Nurs.Ed.65. Comparative Nursing Procedures. A comparative study of nursing procedures including individual projects.
- Nurs.Ed.67. Field Practice in Ward Administration. Practice in the administration of a ward, in the supervision of the nursing service, and in the planning of the student's clinical experience in that division. Participation in the ward teaching program.
- Nurs.Ed.68. Construction and Use of Examination in Basic Nursing Courses. Techniques for making and scoring objective and essay type questions; study of criteria for judging and improving methods of measurement; discussion of examinations as aids to student progress; relation of examination scores to grading systems.
- Nurs.Ed.69. Survey of Conditions and Trends in Nursing. A study of conditions existing in nursing as revealed in literature and reports.
- Nurs.Ed.71. Curriculum Making in Schools of Nursing. General principles of curriculum making; study of the functions of the graduate nurse in the community as determinants of the clinical and classroom curricula of the professional school. Integration of materials into curricula preparing nurses as community health agents.
- Nurs.Ed.72. Teaching and Supervision in Schools of Nursing. Principles of teaching applicable in schools of nursing. Planning of class work. Use of case studies, ward clinics and demonstrations, and assignment of practice, as methods of clinical teaching. Methods of evaluating students' work. Principles of supervision and their application for the improvement of nursing practice. For postgraduates.
- Nurs.Ed.73. Principles of Economics in Nursing Service Administration. A study of the principles of business administration in their application to hospital organization and management.
- Nurs.Ed.74. Sciences in a School of Nursing Curriculum. Discussion of 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. Observation of classroom and laboratory instruction. Supervised practice as assistants. This course should preferably be carried during the last quarter of the fifth year, but may not be carried in the same quarter as Ed.T. 51B.
- Nurs.Ed.75. Fundamentals of Administration in Schools of Nursing. Concept of school of nursing and of nursing service; functions of administration in school of nursing.

For other courses see bulletins of the School of Nursing and the School of Public Health.

## PHYSICAL EDUCATION FOR MEN

For statement of fees see Combined Class Schedule.

- Phys.Ed.1A-B-C. Sports Education. General course in physical education with special emphasis on recreational sports.
- Phys.Ed.2A-B-C. Sports Education. An advanced course open to students who have completed 1A-B-C or equivalent. Emphasis on sports techniques.
- Phys.Ed.4A. Basketball Fundamentals. Demonstrations and practice in such fundamentals as footwork, passing, dribbling, goal throwing, individual and team defensive tactics.
- Phys.Ed.4B. Football Fundamentals. Demonstrations and practice in football fundamentals for all positions of a football team.
- Phys.Ed.4C. Track Fundamentals. Demonstrations and practice in all track and field events.
- Phys.Ed.5A-B-C. Physical Education Activities. A (fall)—conditioning, mimetic and exhibition drills; corrective exercises; story plays; touchball and six-man football; apparatus—stall bars, buck, and mats. B (winter)—marching tactics; fundamental dance steps—folk, square, and gymnastic dances; apparatus—low and high horizontal bars. C (spring)—individual and combination stunts with and without equipment; contests and class races; softball.
- Phys.Ed.6A. Intramural Sports. Soccer and speedball fundamentals and team play.
- Phys.Ed.6B. Intramural Sports. Ice hockey, handball, and squash.
- Phys.Ed.6C. Intramural Sports. Advanced swimming, diving, and lifesaving.
- Phys.Ed.7A-B-C. Recreational Games and Sports. A (fall)—team and non-team games with and without equipment, social games and mixers; progressive game parties, noon-hour activities, volleyball. B (winter)—relays with and without equipment, pyramid building, boxing, wrestling, apparatus—long horse, ropes, side horse, flying rings. C (spring)—badminton, aerial darts, deck tennis, horseshoes, archery, paddle tennis, tether ball, table tennis, bowling.
- Phys.Ed.8. Dual Spring Sports. Tennis, golf.
- Phys.Ed.9. Rhythms. Tap and social dancing.
- Phys.Ed.25. First Aid. See Department of Physical Education for Women.
- Phys.Ed.32. Introduction to Physical Education. An orientation course. History, vocational significance and fundamental principles of physical education.
- Phys.Ed.50. Human Anatomy.
- Phys.Ed.51. Mechanics of Movement. Study of the structure of the body and the principles and mechanics of bodily movements.
- Phys.Ed.53,54,55.‡ Methods and Materials in Physical Education. Application of principles of methodology to physical education, analysis and study of the techniques of measurement devices for grading and classifying pupils. Practice in leadership in physical education activities.
- Phys.Ed.56. Nature and Function of Play. A study of the philosophy of play and a survey of types of play, their values, and classification of activities according to age and sex differences.
- Phys.Ed.57. Operation and Conduct of Play Centers. Study of the facilities, programs, leadership, and administration of playgrounds and community centers.
- Phys.Ed.58. Instructors' First Aid. Designed to prepare students to teach standard course in first aid. The first aid instructor's certificate will be issued to those who satisfactorily complete the course and its prerequisites.
- Phys.Ed.60. Prevention and Care of Injuries. Policies for conditioning of athletes in inter-scholastic and intercollegiate sports, safety controls, and care and prevention of injuries in physical education activities.

‡ A fee of \$1 is charged for this course.

- Phys.Ed.61. History of Physical Education. A study of the influence of social, economic, political, and religious factors in the development of physical education from ancient times to the present. Special treatment will be given to the origin and development of games and sports.
- Phys.Ed.63. Organization and Administration of Physical Education. Problems of organization, administration, and supervision in required and elective courses, intramural and interschool athletics.
- Phys.Ed.66A-B. Officiating of Athletic Sports. A (fall)—qualifications of officials; officiating ethics; discussion of rules and officiating in touchball, football, basketball. B (winter)—wrestling, boxing, volleyball, gymnastics, swimming, track, softball, and baseball. One hour per week lecture and class discussion, three hours of practice in officiating under supervision.
- Phys.Ed.67. Coaching of Athletic Sports (Football). Study of the theory, strategy, generalship, styles of offense and defense, methods of organizing practice and handling men.
- Phys.Ed.68. Coaching of Athletic Sports (Basketball). Study of theory, styles of offense and defense; the conditioning and handling of players.
- Phys.Ed.69. Coaching of Athletic Sports (Track). Instruction and actual practice in track and field events. Lectures on the conduct of meets, track strategy, and practice schedules.
- Phys.Ed.72. Coaching of Athletic Sports (Baseball). Theoretical consideration of, and actual practice in, batting, base running, and methods of playing each position. Special attention is given to "inside baseball" and the development of team play.
- Phys.Ed.73,74,75.‡ Directed Teaching. Six hours of directed teaching per week for three quarters.
- Phys.Ed.78. Scout Leadership.
- Phys.Ed.79. Camp Leadership.
- Phys.Ed.83. School Health Education, Method and Content. See Ed.T. 83.
- Phys.Ed.101E.§ Principles of Physical Education. A study of the aims, scope, and biological aspects of physical education with special treatment of its place in education.
- Phys.Ed.103E.§ Physical Examination and Adaptation of Activities. The physical educator's responsibility in diagnosis, amelioration, and correction of physical abnormalities.
- Phys.Ed.111E.§ An Advanced Course in Methods of Teaching. See Department of Physical Education for Women.
- Phys.Ed.112E.§ Supervision of Physical Education. See Department of Physical Education for Women.
- Phys.Ed.113E.§ Physical Education in the Elementary Schools. See Department of Physical Education for Women.
- Phys.Ed.114E.§ The Administration of the Health Education Program. See Ed.C.I. 114.
- Phys.Ed.133E.§ Special Administrative Problems in Physical Education in Secondary Schools. Survey of staff organizations in public schools of towns and cities, and state departments; problems of construction and maintenance of facilities and policies for their use; legal aspects of physical education; special emphasis on intramural and interscholastic athletic problems. Lectures, discussions, and written reports.
- Phys.Ed.134E.§ The Secondary School and College Curriculum in Physical Education. Theory and principles of program construction applied to physical education. Critical analysis of existing programs and evaluation of activities in the light of modern trends.

‡ A fee of \$1 per credit is charged for this course.

§ 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. For courses in Physical Education giving credit in the Graduate School, consult adviser.

¶ Taking the psychological examinations and a C+ average in the major are prerequisite to this course.

- Practical application of principles in the construction of a program for a specific situation.
- Phys.Ed.135E. § Tests and Measurements in Physical Education. Critical analysis of existing testing methods in physical education. Study of current tests from both practical and theoretical standpoints. Use of tests in the administration of physical activity programs. Application of the principles of test construction to specific problems in physical education.
- Phys.Ed.136E. § Leadership in Community Recreation. A study of problems of leadership in community recreation; finance, co-ordination of existing agencies promoting recreation activities, facilities, and public relations.
- Phys.Ed.137E. § Recent Literature and Research in Health Education, Physical Education, and Recreation. Methods of educational research applied to health education, physical education, and recreation. Critical analysis of existing studies. Analysis of methods of gathering and interpreting data.
- Phys.Ed.138E. § Administration of Physical Education in Colleges and Universities. A study of the problems connected with the administration of the facilities and programs in physical education and athletics in institutions of higher education.
- Phys.Ed.141E. § Administration and Supervision of Public Recreation. Organization of public recreation; policies and procedures relating to recreation, finance, the activity program, facilities, office management, promotion, and public relations.
- Phys.Ed.142E. § Group Leadership and Community Organization for Recreation. Inquiry into the nature, scope, principles, and procedures in community organization, with attention to those principles and practices of group leadership that have particular reference to community organization work.
- Phys.Ed.237E. Problems in Health Education, Physical Education, and Recreation.

### PHYSICAL EDUCATION FOR WOMEN

**Statement of fees**—All activity courses for which registration is required, \$1.75 per quarter. Maximum physical education fee (for activity courses) per student \$3.50. For courses for which no fee is charged see Combined Class Schedule.

A fee of \$1 per credit is charged for all methods and student teaching courses as indicated in the footnotes. A laboratory fee of \$2 is charged for Phys.Ed. 50 or Phys.Ed. 51.

### COURSES FOR UNDERGRADUATE STUDENTS

Phys.Ed.1,2,3,4,5,6,8. General Course in Physical Education. 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 course permits choice, based on guidance of the faculty advisers in the following activities:

#### *Aquatics*

Canoeing  
Swimming, Beginning, Advanced Beginning,  
Intermediate, Advanced, and Synchronized  
Diving  
Functional Swimming, American Red Cross  
Lifesaving, American Red Cross Senior Course  
Water Safety, American Red Cross, Preliminary  
Water Safety Instructors' Review and Water  
Safety Instructors' Course

#### *Body Building*

Individual Body Building  
Posture and Conditioning Exercises

#### *Individual Sports*

Archery, Elementary and Intermediate  
Badminton, Elementary and Intermediate  
Bowling  
Fencing  
Golf, Elementary, Intermediate, Advanced

§ 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. For courses in Physical Education giving credit in the Graduate School, consult adviser.

Horseback Riding, Intermediate, Advanced	<i>Team Sports</i>
Rifle Marksmanship	Basketball
Skating, Plain and Figure	Recreational Games
Tennis, Elementary, Intermediate, Advanced	Softball
Social Games and Mixers	Speedball
Skiing	Volleyball
<i>Rhythms</i>	<i>Team Sports Officiating</i>
Country Dance	Volleyball
Folk Dance	Basketball
Modern Dance, Elementary, Intermediate, Advanced, and Composition	Softball
Social Dance	

*Recreational Activities for Which No Registration Is Required*

Inquire at 101 Norris Gymnasium for Women for hours.

Archery	Rifle Marksmanship
Badminton	Riding
Basketball	Swimming
Exercises for Body Building	Tennis
Fencing	Volleyball
Modern Dance	

**Phys.Ed.21A-B-C. § Elementary Physical Education.**

Fall—Badminton, speedball, soccer, fieldball, fundamentals of rhythm, orientation.

Winter—Skating, modern dance, folk dancing for elementary and secondary schools, posture and daily life skills.

Spring—Tennis, soccer, speedball, fieldball, aquatics, modern dance.

**Phys.Ed.25. First Aid. Lectures, demonstrations, and practice in emergencies and first aid treatment. Special emphasis on care of injuries in physical education. An American Red Cross Standard Certificate in First Aid is received upon successful completion of this course.**

**Phys.Ed.26. Advanced Course in First Aid. Lectures and laboratory practice in advanced first aid techniques. Special emphasis on the ability to assume leadership in typical emergency situations. The American Red Cross Advanced Certificate is received upon completion of this course.**

**Phys.Ed.41AB-C. § Intermediate Physical Education.**

Fall—Advanced tennis, volleyball, hockey, aquatics, modern dance, tumbling and stunts, Danish gymnastics.

Winter—Baseball, basketball, apparatus, Swedish gymnastics.

Spring—Track and field, softball, aquatics, ballroom and country dance.

**Phys.Ed.50. †† General Anatomy. Lecture and demonstration; dissections of the muscles, bones, and joints; circulatory and nervous systems; the abdominal, pelvic, and thoracic viscera.**

**Phys.Ed.51. †† Mechanics of Movement. Lectures on the principles of mechanics of movement with laboratory studies involving the kinesiological analysis of sport techniques.**

**Phys.Ed.54. Camp Leadership. Practical work in campcraft, organization, and administration of the camp program; responsibilities and duties of a counselor; experience in leadership in camp activities.**

**Phys.Ed.57A-B. † Technique of Teaching Aquatics. Description of strokes, diving, stunts, and water safety techniques, methods of teaching swimming, student teaching in class, organization and management of competitive and recreational aquatic activities, essentials of pool control and sanitation, the testing program in aquatic skills.**

† A fee of \$1 per credit is charged for this course.

†† A fee of \$2 is charged for Phys.Ed. 50 and 51 whether taken as a whole or as a part.

§ Students must supply their own tennis and their own golf equipment if possible and pay 50 cents for a tennis permit.



- Phys.Ed.60. Principles of Play. A study of the 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.
- Phys.Ed.61A-B-C.‡ Technique of Teaching Team Sports. Special techniques for each sport and methods of teaching. Organization of extra-curricular activities. Practice in skills and student teaching within the group.
- Phys.Ed.63.‡ Technique of Teaching Folk Dancing. The racial characteristics and folk arts of people are studied as a background for folk dances. Practice in teaching within the group.
- Phys.Ed.64.‡ Technique of Teaching Group Gymnastics. A study is made of the principles of progression and methods of teaching gymnastics. Student teaching is done within the group.
- Phys.Ed.65A-B.‡ Integration of Special Methods. Technique of teaching individual and dual sports. Special techniques for each sport and method of teaching. Student teaching within the group. Organization of recreational activities.
- Phys.Ed.66. Advanced Physical Education. Fundamentals of movement.
- Phys.Ed.71. Applied Physiology. Lectures and laboratory problems demonstrating the physiological bases for objectives and content of the physical education program.
- Phys.Ed.73.‡ Technique of Teaching Rhythm. A study of methods of teaching all types of rhythmic activities and of teaching any other activity through rhythm. Some consideration is given programs of rhythmic work. Student teaching within the group and also at nearby schools.
- Phys.Ed.74.‡ Technique of Teaching Modern Dance. Teaching methods in modern dance with emphasis on approaches to creative rhythm work for high school girls. Organization and production of dance programs and demonstrations. Teaching within the group.
- Phys.Ed.79. Massage and Therapeutic Exercises. A consideration of the principles of massage and the study of conditions especially applicable to physical education. The practical application of these principles to athletic injuries, foot disorders, paralysis, and certain functional and nervous disorders, etc. Visits to Twin City physiotherapy departments.
- Phys.Ed.80. Principles of Rhythm. A study of the history of rhythm; also the study of rhythm and dance in relation to allied arts and the place of rhythm in physical education.
- Phys.Ed.82. Principles of Physical Education. Philosophy of physical education and principles underlying curriculum building, methods of teaching, measurement, and outcomes.
- Phys.Ed.83. School Health Education. Method and Content. See Ed.T. 83.
- Phys.Ed.84. Problems in Physical Education. A study of curricular problems in the field of physical education carried on by individuals or groups. The emphasis is on the elementary and high school level.
- Phys.Ed.85. Remedial Activities in Physical Education. Adaptation of the physical education program to the needs of the atypical child. Principles and techniques in the correction of postural defects. Use of corrective exercises in the follow-up of the recommendations of the health examination.
- Phys.Ed.86. Aspects of School Health Appraisal. Content and organization of the school health services. Emphasis on techniques used in detecting atypical body mechanics.
- Phys.Ed.90A-B-C.‡ Student Teaching. Student teaching in team and individual sports, orthopedic and remedial work, health, fundamentals of movement and rhythm in Minneapolis elementary and high schools and in university classes.

‡ A fee of \$1 per credit is charged for this course.

Phys.Ed.95. Administration of Physical Education. The study of the professional responsibilities of physical education teachers; the organization of the class and extra-curricular program in the school and community setting; appraisal of activities; protection and classification of students; standards for the operation of the physical education plant.

COURSES FOR UNDERGRADUATE AND GRADUATE MEN  
AND WOMEN STUDENTS

Phys.Ed.111E.§ An Advanced Course in Methods of Teaching Physical Education. The purpose of this course is to give an overview of the activity program in reference to instructional procedures. Outstanding results of the course should be increased perspective of the common method problems in the various activities as well as those peculiar to each activity and possible solutions for conspicuous instructional problems today.

Phys.Ed.112E.§ Supervision of Physical Education. This course presents a consideration of the function, organization, and administration of supervision in physical education; adaptations of accepted procedures for inspection, guidance and training of teachers in the field, and problems peculiar to supervision of physical education.

Phys.Ed.113E.§ Physical Education in the Elementary Schools. The course deals primarily with the elementary school curriculum, with adaptations of instructional procedures necessary in the elementary grades, with problems of classification and evaluation, and with the influence of modern educational thinking upon problems commonly met at this level.

Phys.Ed.114E.§ Administration of School Health Education. See Ed.C.I. 114.

Phys.Ed.116.§ Problems in Physical Fitness. Analysis of current physical fitness problems in the elementary, secondary, and college levels in relation to health, physical education, recreation, and education. Undergraduates with sufficient background in physical education may register for the course. The number of credits allowed will depend upon the type of individual problem studied.

SCHOOL OF PUBLIC HEALTH

COURSES FOR UNDERGRADUATE STUDENTS

P.H.3.§†† Personal Health. Elementary principles of normal body function; predisposing and actual causes of disease; ways in which disease may be avoided.

P.H.4.§†† 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.

P.H.50.§†† Public and Personal Health. Causes of diseases and of physical defects, fundamental principles and working methods of health conservation and disease prevention. Lectures, discussions, and directed readings.

P.H.51.§†† Community Hygiene. Elementary concepts of development, spread, and prevention of preventable diseases; community programs for their control.

P.H.52.§†† Health Care of the Family. (See Bulletin of the College of Agriculture, Forestry, and Home Economics.)

P.H.53. 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. (For nurses and students in medical social work.)

§ 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 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.

†† No credit granted for this course in major sequence in public health nursing.

- P.H.55. Nursing and Social Problems in the Control of Gonorrhoea and Syphilis. History, prevalence, and epidemiology of gonorrhoea and syphilis, public health control measures; individual and family problems resulting from these diseases. Provision will be made for conferences and case discussions.
- P.H.56. First Aid and Safety for Nurses. Principles of first aid in home, industry, and community; prevention of accidents; organization of community programs in first aid and safety; professional and legal responsibilities of nurses in administering first aid. (Public health nurses only.)
- P.H.57.†† Health of Infant and Preschool Child. Maternal and child health in public health program, problems of infant and maternal mortality, growth and development of infant and young child, care and feeding of normal infant; prevention and correction of physical defects.
- P.H.58. Maternal and Child Hygiene. (For nurses.) The maternal welfare program; importance of breast feeding; conduct of infant welfare clinics in cities and rural communities; consideration of child of preschool and school age as to malnutrition, physical defects, cardiac and nervous disorders.
- P.H.59. Health of the School Child. Mental and physical growth; prevention and control of diseases common to the school-age child; health appraisal; correction of physical defects; emotional problems; care of the handicapped; the school environment and its effect on child health; accident prevention and emergency care; practical problems of health supervision and administration.
- P.H.60. Tuberculosis and Its Control. History of tuberculosis movement and campaign in the United States; early diagnosis and sanatorium treatments; tuberculosis in children; psychology of tuberculosis; supervision of returned sanatoria patients, state program for eradication of tuberculosis; legislation.
- P.H.62. Principles of Public Health Nursing I. Trends, principles and techniques in public health nursing service including family health guidance.
- P.H.63. Principles of Public Health Nursing II. Organization of public health nursing services; program planning; evaluation; professional problems in public health nursing.
- P.H.65.‡ Field Practice in School Nursing. (For public health nurses only.) Working with the school nurse, the student observes and participates in the activities included in the school nursing program; special attention to organization, relationships, techniques, methods of informal health teaching, provision for handicapped children, and home visiting.
- P.H.66.‡ Field Practice in County Nursing. (For public health nurses only.) The student accompanies the rural nurse on her round and observes and participates in the activities in a rural nursing program. Special attention to organization for rural health work, methods of health teaching, development of community leadership, planning and conducting classes of various types for differing age groups, home visiting, etc.
- P.H.67.‡ Field Practice with Family Health Agency. (For public health nurses only.) Lectures, demonstrations, and supervised experience in prenatal and infant clinics and in home visiting. This includes bedside care of all types of cases, with emphasis on promotion of physical and mental health and recognition of social problems.
- P.H.70.‡ Practice Teaching in Home Nursing for Public Health Nurses. Includes practice in planning instruction and in teaching adults. Enrolment limited.
- P.H.76. Nutrition in Public Health Nursing. (Same as H.E. 76.) Principles of nutrition applied to family teaching, consideration of diet for normal living, at special periods in life, and for certain diseases. Discussion of diet problems of low income groups.

‡ A fee of \$1 per credit is charged for this course.

†† No credit granted for this course in major sequence in public nursing.

- P.H.102. Environmental Sanitation I. Methods for promoting man's health and comfort by controlling his environment; water supply sanitation, food sanitation, pollution abatement; sewage, excreta, and waste disposal; bathing place sanitation, air hygiene, illumination, housing, control of insect and animal vectors of disease, industrial hygiene and sanitation.
- P.H.106. Public Health Administration. Structure, basic functions, and activities of public health agencies; public health laws and regulations; administrative procedures in public health practice; relationship to other governmental and social activities.
- P.H.125. The Community Health Education Program. A course intended primarily for those preparing for leadership in community health education to include organization, administration, and evaluation of community health education programs, and the selection, preparation, and use of media commonly employed in health education.

For other courses for graduate students see the Bulletin of the Graduate School.

#### COURSES IN BIOSTATISTICS

- P.H.110. Biometric Principles. Introduction to statistical analysis with emphasis on basic principles of statistical reasoning. The description of univariate distributions, normal correlations, simple tests of significance, and goodness of fit.
- P.H.111.‡ Biostatistics Laboratory. Practical training in machine calculation and statistical techniques. To be taken concurrently with Course 110.
- P.H.120. Correlation Analysis. Total, partial, and multiple correlation and regression; correlation ratio; contingency; biserial methods; tetrachoric correlation; rank-order correlation; the symmetrical table and intraclass correlation. Course 121 to be taken concurrently.
- P.H.121.‡ Correlation Laboratory. Practical training in the above techniques of correlation analysis. To be taken concurrently with Course 120.
- P.H.130. Random Sampling Distributions. A discussion of the sampling distributions of the more familiar statistics, the principles of statistical inference, and analysis of the problems of interpretation of differences, with special reference to small samples. Course 131 should be taken concurrently.
- P.H.131.‡ Sampling Laboratory. Study of the distributions of statistics derived from small samples by practical test. To be taken concurrently with Course 130.

‡ A fee of \$1 per credit is charged for this course.

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*The Bulletin of the*  
UNIVERSITY *of* MINNESOTA

The College of Education Announcement  
of Afternoon and Saturday Morning Classes  
1946-1947

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Volume XLIX, Number 31

August 19, 1946

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## UNIVERSITY CALENDAR, 1946-47

1946		<i>Fall Quarter</i>	
September	23	Monday	Entrance tests <sup>1</sup>
September	26-27		Registration, <sup>2</sup> all colleges except Institute of Technology. Fall quarter fees due for all students in Science, Literature, and the Arts, General College, Education, Medical School, Medical Technology, Public Health, Physical Therapy, University College, and for new students in other undergraduate colleges
September	30	Monday	Fall quarter classes begin 8:00 a.m. <sup>3</sup>
October	3	Thursday	Opening convocation, 11:00 a.m.
October	11	Friday	Last day for registration and payment of fees for the Graduate School, and for teachers in service
October	12	Saturday	Columbus Day; holiday (except extension)
November	9	Saturday	Homecoming Day
November	11	Monday	Armistice Day; holiday (except extension)
November	16	Saturday	Dads Day
November	28	Thursday	Thanksgiving Day; holiday
December	13-14 and 16-19		Final examination period
December	19	Thursday	Fall quarter ends 6:00 p.m. <sup>4</sup> ; Commencement, 8:00 p.m.

### *Winter Quarter*

December	26	Thursday	Winter quarter fees due for students in residence fall quarter in undergraduate colleges
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1947

January	3-4		Registration <sup>2</sup> for new students in all colleges except Institute of Technology. Registration and payment of fees for new students in all undergraduate colleges closes at noon, Saturday, January 4
January	6	Monday	Winter quarter classes begin 8:00 a.m. <sup>3</sup>
January	18	Saturday	Last day for registration and payment of fees for the Graduate School, and for teachers in service
February	12	Wednesday	Lincoln's Birthday; holiday (except extension)
February	20	Thursday	Charter Day Convocation, 11:00 a.m.
February	22	Saturday	Washington's Birthday; holiday (except extension)
March	14-15 and 17-20		Final examination period
March	20	Thursday	Spring quarter fees due for students in residence winter quarter in undergraduate colleges. Winter quarter ends 6:00 p.m.; Commencement, 8:00 p.m.

### *Spring Quarter*

March	28-29		Registration <sup>2</sup> for new students in all colleges except Institute of Technology. Registration and payment of fees for new students in all undergraduate colleges closes at noon, Saturday, March 29
March	31	Monday	Spring quarter classes begin 8:00 a.m. <sup>3</sup>
April	4	Friday	Good Friday; holiday (except extension)



April	12	Saturday	Last day for registration and payment of fees for the Graduate School, and for teachers in service
May	10	Saturday	Mothers Day
May	15	Thursday	Cap and Gown Day Convocation
May	30	Friday	Memorial Day; holiday (except extension)
June 6-7 and 9-13			Final examination period
June	8	Sunday	Baccalaureate service
June	13	Friday	Spring quarter ends 6:00 p.m.; Seventy-fifth annual commencement, 8:00 p.m.

*Summer Session*

June	16-17		Registration, <sup>2</sup> first term. First term fees due for students in all colleges
June	18	Wednesday	First term Summer Session classes begin 8:00 a.m. <sup>3</sup>
July	4	Friday	Independence Day; holiday
July	24	Thursday	Commencement, 8:00 p.m.
July	25	Friday	First term closes
July	28	Monday	Registration, <sup>2</sup> second term. Second term fees due for students in all colleges
July	29	Tuesday	Second term classes begin 8:00 a.m. <sup>3</sup>
August	29	Friday	Second term closes

<sup>1</sup> Applicants are urged to take entrance tests a month in advance of the quarter for which admission is desired. Tests may be taken at the Student Counseling Bureau.

<sup>2</sup> 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. No student may register in the undergraduate colleges after one week from the beginning of the quarter except in unusual cases wherein circumstances shall justify the appropriate committee of the college concerned permitting registration at a later date.

<sup>3</sup> First hour classes begin at 7:45 a.m. at University Farm.

<sup>4</sup> Extension classes continue through Friday, December 20 and will resume Monday, January 6, 1947.

## DIRECTORY OF ADMINISTRATIVE OFFICERS

(University of Minnesota Telephone—Main 8177)

	Room
W. E. Peik, Dean of the College of Education .....	204Bu
Marcia Edwards, Assistant Dean of the College of Education .....	202Bu
Willis Dugan, Director of Student Personnel .....	214Bu
Jean H. Alexander, Chairman, Students' Work Committee .....	206Bu
Paul R. Grim, Director of Student Teaching .....	304EdH
Clifford P. Archer, Director of Bureau of Recommendations .....	208Bu

See list of major advisers on page 14.

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### 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 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.

The small letter *f* after a course number indicates that the course is taught in the fall quarter; *w* indicates winter quarter; *s* indicates spring quarter.

Bulletin changes and room schedules will be posted each quarter on the official bulletin board outside the door of Room 210 Burton Hall.

The fee for part-time registration in the College of Education is \$2.25 per credit for residents of the state and \$4.75 per credit for nonresidents. Other fees include special course fees and a \$5 deposit. If four and one-half or more credits are taken, an incidental fee of \$10.65 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 MA 8177, Ext. 498.

### SPECIAL REQUIREMENTS

#### PSYCHOLOGICAL EXAMINATIONS

The psychological examinations, which are general examinations designed to show a student's capacity to pursue professional curricula in education, are required of both classified and unclassified undergraduate students of education, and are considered a prerequisite to graduation. These examinations include the general English examination.

Dates when they are given will be announced at the beginning of fall, winter, and spring quarters. Special arrangements can be made for teachers in service and others who are unable to attend during the week. Graduate students in education should take the examinations scheduled for this group during the first quarter in residence.

### 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.

### REQUESTS FOR SPECIAL OFFERINGS IN EXTENSION

The College of Education is desirous of meeting the needs of teachers, supervisors, and administrators in service. Whenever there are groups of about fifteen or more who desire a special extension course to cover an educational problem not now included in our offering, please make a formal request to Mr. J. M. Nolte, dean, University Extension, who will take up the matter with the College of Education. Such requests should be made early in any quarter or semester for inclusion during the subsequent term or during the fall quarter for inclusion the following Summer Session. All late evening and off-campus courses are extension courses. All campus late afternoon and Saturday morning courses are regular College of Education courses. A limited number of Graduate School courses can now be taken for credit in the Graduate School in extension in the Twin City area. See Graduate School bulletins on this point.

### 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 from one of the university book stores the bulletin entitled Combined Class Schedule for 1946-47, price 35 cents.

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

Students who have completed thirty quarter hours of work or alumni are eligible for registration for placement. The fee is \$4.50 per year of registration. The bureau receives requests for experienced persons for many important vacancies.

### 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.

# PROGRAM OF COURSES

## AGRICULTURAL EDUCATION

**Major adviser**—Professor Field.

Persons interested in courses to be arranged by the Department of Agricultural Education should write directly to Mr. A. M. Field, head of the Department of Agricultural Education, 205 Horticulture, Agricultural Campus, St. Paul 1, Minn.

### ART EDUCATION

**Major advisers**—Professor Ruth Raymond; Assistant Professors Marie Lien and Clifton Gayne, Jr.

#### GROUP A—DESIGN

##### *Senior College Courses*

No.	Title	Hour	Day	Bldg.	Instructor
ArtEd.150w	Advanced General Design: Commercial design and the consumer (3 cred.; jr., sr., grad.; prereq. permission of instructor)	IX-X-XI	M	104J	Miss Lien
		and ar			
ArtEd.151f	Advanced General Design: Industrial design and the consumer (3 cred.; jr., sr., grad.; prereq. permission of instructor)	IX-X-XI	M	104J	Miss Lien
		and ar			

#### GROUP C—DRAWING AND PAINTING

##### *Junior College Courses*

ArtEd.26Af,26Bw, 26Cs§	Oil Painting (6 cred.; prereq. 6, 8, or equiv., or permission of instructor) Sec. 2	I-IV	S	207bJ	Mrs. Rollins
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##### *Senior College Courses*

ArtEd.61f	Figure Drawing and Painting (2 cred.; prereq. 12 cred. drawing or painting, or permission of instructor)	I-IV	S	207aJ	Mrs. Rollins
ArtEd.62w	Portrait Drawing and Painting (2 cred.; prereq. 12 cred. drawing or painting, or permission of instructor)	I-IV	S	207aJ	Mrs. Rollins
ArtEd.63s	Landscape Drawing and Painting (2 cred.; 12 cred. drawing or painting, or permission of instructor)	I-IV	S	207aJ	Mrs. Rollins

#### GROUP D—UNDERSTANDING AND APPRECIATION

##### *Senior College Courses*

ArtEd.157s	Art Movements of Twentieth Century Scandinavian (3 cred.; prereq. permission of instructor)	III-IV	S	203J	Miss Lien
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#### GROUP E—PROFESSIONAL COURSES

ArtEd.156w	Intercultural Education through Art (3 cred.; jr., sr., grad.)	II-III	S	203J	Miss Lien
ArtEd.189w	Application of Esthetic Theory in Public Education (3 cred.; jr., sr., grad.)	Ar	Ar	Ar	Miss Raymond

§ Students may enter any quarter.

No.	Title	Hour	Day	Bldg.	Instructor
ArtEd.284f,w,s	Reading and Research in Art Education (Cred. ar.; grad.)	Ar	Ar	Ar	Ar
ArtEd.295f,w,s	Special Problems in Art Education (Including advanced studio practice) (Cred. ar.; grad.)	Ar	Ar	Ar	Ar

## CURRICULUM AND INSTRUCTION

**Major advisers**—Professors Boardman, Bond, Bossing, Brueckner, Cook, Johnson, Dora V. Smith, and Wesley; Associate Professor Archer.

All courses under *Curriculum and Instruction* except seminar courses, carry a fee of \$1 per credit.

### GENERAL COURSES

Ed.C.I.104s‡	Adult Education (2 cred.; jr., sr., grad.)	IX-X	T	301Lib	Ar
Ed.C.I.105s‡	Visual Aids in Teaching (2 cred.; jr., sr., grad.)	III-IV	S	206WeH	Mr. Wendt
Ed.C.I.107w‡	Radio in Education (3 cred.; jr., sr., grad.; prereq. 9 cred. in ed.)	IX-X	W	302MurH	Mr. Tyler
Ed.C.I.117f‡	Rural Education for Administrators and Teachers (3 cred.; sr., grad.; prereq. consult instructor)	III-IV	S	109UHS	Mr. Archer
Ed.C.I.145s‡	Remedial Reading (3 cred.; prereq. Ed.C.I. 143 or 144 or 159)	III-IV	S	106Pt	Mr. Bond
Ed.C.I.171f,w,s‡	Curriculum Laboratory Practice. A course in the analysis and construction of units, courses of study, and curricula; class projects and individual projects according to needs, interests, level, and specialization. A special section will be organized for the winter quarter devoted to community resources available within the Twin Cities for curriculum development. Class discussions, survey, field trips. (2 to 6 cred.; sr., grad.; prereq. 170 or consent of instructor)	Ar	Ar	Ar	Mr. Bossing, Mr. Cook, Mr. Archer
Ed.C.I.207f,w,s*‡	Problems in Radio Education (1 to 3 cred. per qtr.)	Ar	Ar	Ar	Mr. Tyler
Ed.C.I.215f,w,s*‡	Problems in the School Health Education Program (Cred. ar.; prereq. permission of instructor)	Ar	Ar	Ar	Miss Grout
Ed.C.I.216f,w,s‡	Field Work in the School Health Education Program (Cred. ar.; prereq. permission of instructor)	Ar	Ar	Ar	Miss Grout
Ed.C.I.217f,w,s	Seminar in the School Health Education Program (Cred. ar.; consult instructor)	Ar	Ar	Ar	Miss Grout
Ed.C.I.227f,w,s*‡	Problems in Rural Education (Cred. ar.)	Ar	Ar	Ar	Mr. Archer
Ed.C.I.271f,w,s*‡	Problems in Curriculum Construction (2 or 3 cred. a qtr. with a maximum of 6; prereq. completion or current enrolment in one of the following: Ed.C.I. 113 or 119 and 170 or consent of instructor)	Ar	Ar	Ar	Mr. Bossing, Mr. Cook Mr. Archer
Ed.C.I.273f,w,s*‡	Problems in Reading (2 to 6 cred.; prereq. previous training in reading such as Ed.C.I. 143 or 144 or equiv.)	Ar	Ar	Ar	Mr. Bond

### ELEMENTARY EDUCATION

Ed.C.I.63Tf‡	Children's Literature (2 cred.; for teachers in service)	IX-X	M	206UHS	Miss Smith
Ed.C.I.119w‡	Elementary School Curriculum (3 cred.; sr., grad.; prereq. Ed. 61C or equiv.)	III-IV and 1 hr. ar	S	115UHS	Mr. Cook

‡ A fee of \$1 per credit is charged for this course.

No.	Title	Hour	Day	Bldg.	Instructor
Ed.C.I.143f†	Teaching and Supervision of Reading in the Elementary School (3 cred.; jr., sr., grad.; prereq. 9 hrs. in ed. including Ed. 51A or 61A)	4:30-6:30	W	106Pt	Mr. Bond
Ed.C.I.147f†	Workshop in the Language Arts (3 cred.; primarily for teachers in service) The first hour will be given over to a series of lectures on methods and curriculum in reading, writing, speaking, and listening, with different lecturers each week. At the second hour group and individual conferences will be held on problems pursued by individual teachers in relationship to their own teaching. Lectures may be registered for without credit.	II-III	S	210UHS	Miss Smith, Mr. Bond
Ed.C.I.149s†	The Teaching and Supervision of Arithmetic in the Elementary School (2 cred.; sr., grad.; prereq. Ed. 61A-B-C or equiv.)	I-II	S	115UHS	Mr. Brueckner
Ed.C.I.153s†	Supervision and Teaching of English in the Elementary Schools (2 cred.; sr., grad.; prereq. Ed. 61A-B-C or equiv.)	I-II	S	210Bu	Mr. Archer
Ed.C.I.157f,w,s†	Practice in Supervision (3 cred. a qtr.; sr., grad.; prereq. consent of instructor)	Ar	Ar	Ar	Mr. Brueckner
Ed.C.I.173As†	Organizing Units of Instruction in the Elementary School. A consideration of the principles and procedures involved in the organization of units (center of interest units, activity units, experience units, etc.) utilizing natural science and social studies content in the development of reading skills, oral and written composition skills, arithmetic skills, study skills, and desirable social behavior (3 cred.; sr., grad.; prereq. 119 or teaching experience)	III-IV	S	109UHS	Mr. Cook
Ed.C.I.226f,w,s	Seminar in Elementary School Problems	IX-X	Th	210Bu	Mr. Brueckner, Mr. Cook, Mr. Archer
Ed.C.I.261f,w,s*†	Special Problems in School Supervision (3 cred.; prereq. 10 hrs. in ed. including Ed. 51A or equiv.)	Ar	Ar	220Bu	Mr. Brueckner
Ed.C.I.263f*†	Research in Arithmetic Instruction (3 cred.; prereq. Ed.C.I. 148 or 149 or equiv.)	III-IV	S	209UHS	Mr. Brueckner
Ed.C.I.264w*†	Research in Educational Diagnosis (3 cred.; prereq. Ed.C.I. 151 or equiv.)	IX-X	M	115UHS	Mr. Brueckner
SECONDARY EDUCATION					
Ed.C.I.113w†	High School Curriculum (3 cred.; sr., grad.; prereq. 10 hrs. in ed. including Ed. 51A-B-C)	I-II and 1 hr. ar	S	209UHS	Mr. Bossing
Ed.C.I.122s†	Literature for Adolescents (2 cred.; jr., sr., grad.; prereq. Ed. 51C or junior-senior teaching experience)	I-II	S	206UHS	Miss Smith
Ed.C.I.135s†	Teaching of Occupations and Group Guidance (2 cred.; sr., grad.; prereq. Ed.Psy. 133 or permission of instructor)	III-IV	S	105UHS	Mr. Dugan, Miss Wright
Ed.C.I.144s†	Teaching of Reading in Junior and Senior High Schools (3 cred.; sr., grad.; prereq. 9 hrs. in ed. including Ed. 51A)	IX-X and 1 hr. ar	M	100Pt	Mr. Bond
Ed.C.I.168w†	Current Developments in the Social Studies (2 cred.; grad. only)	III-IV	S	207UHS	Mr. Wesley
Ed.C.I.170Bs†	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 secondary school level. (3 cred.; sr., grad.; prereq. 113 or 119 and 170 or consent of instructor)	I-II and 1 hr. ar	S	209UHS	Mr. Bossing

\* This course may be taken for independent study under Plan B for the Master's degree.  
† A fee of \$1 per credit is charged for this course.

No.	Title	Hour	Day	Bldg.	Instructor
Ed.C.I.173Bs†	Organizing Units of Instruction in the Secondary School (2 cred.; sr., grad.; prereq. 113 or consent of instructor)	III-IV and 1 hr. ar.	S	209UHS	Mr. Bossing
Ed.C.I.191s†	Advanced Course in the Teaching and Supervision of Secondary School Mathematics (2 cred.; prereq. Ed. 51C or permission of instructor)	I-II	S	105UHS	Mr. Donovan Johnson
Ed.C.I.199Ef,w,s‡	Internship (Cred. ar.; grad.)	Ar	Ar	Ar	Ar
Ed.C.I.201f,w,s*‡	Problems in Teaching the Social Studies (3 cred. a qtr.; grad.; prereq. consent of instructor)	4:00	T	226Bu	Mr. Wesley
Ed.C.I.204s‡	Social Studies Curriculum (2 cred.)	III-IV	S	207UHS	Mr. Wesley
Ed.C.I.222f,w,s	Seminar—Current Problems in Technique of High School Instruction (With or without credit; prereq. Ed. 51B and Ed.C.I. 113)	IX-X	W	210UHS	Mr. Bossing, Mr. Johnson, Miss Smith, Mr. Wesley
Ed.C.I.225f,w,s*‡	Special Problems in Supervision of Instruction in Secondary Schools (Cred. ar.)	Ar	Ar	218Bu	Mr. Boardman
Ed.C.I.287f‡	Advanced Course in the Teaching of Science (2 cred.; sr., grad.; prereq. Ed. 51C)	III-IV	S	106UHS	Mr. Johnson
Ed.C.I.293s*‡	Foundations of Secondary School Methods (3 cred.)	IX-X and 1 hr. ar	F	106UHS	Mr. Johnson
Ed.C.I.294w*‡	Advanced Course in Methods of Teaching English (2 cred.; prereq. Ed.T. 66A-B-C or equiv.)	III-IV	S	209UHS	Miss Smith
Ed.C.I.296f,w,s*‡	Special Problems in Teaching English (Cred. ar.; grad.) Spring—Units of Literature	Ar(f,w) IX-X(s)	S M	206Bu 206UHS	Miss Smith Miss Smith

#### HIGHER EDUCATION

Ed.C.I.184f‡	Supervision of Student Teaching (2 cred.; sr., grad.)	I-II	S	106UHS	Ar
Ed.C.I.228f,w,s*‡	Problems of Higher Education and Teacher Training (Cred. ar.)	Ar	Ar	Ar	Mr. Peik (Teacher Education), Mr. Cooper and Miss Eckert (Higher Education)
Ed.C.I.250f‡	Higher Education in the United States. Curriculum and instruction (3 cred.; prereq. 18 hrs. in ed.)	I-II and 1 hr. ar.	S	206UHS	Miss Eckert
Ed.C.I.285f‡	Professional Education of Teachers (2 cred.; prereq. 15 hrs. in ed.)	III-IV	S	105UHS	Mr. Peik

#### EDUCATIONAL ADMINISTRATION

Major advisers—Professors Neale, Boardman, and Bossing.

Ed.Ad.235f,w,s	Seminar in Educational Administration	Ar	Ar	224Bu	Mr. Neale
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\* This course may be taken for independent study under Plan B for the Master's degree.

‡ A fee of \$1 per credit is charged for this course.

## ELEMENTARY EDUCATION

No.	Title	Hour	Day	Bldg.	Instructor
Ed.Ad.115w	Organization of the Elementary School (3 cred.; jr., sr., grad.; prereq. 10 hrs. in ed.)	I-II 1 hr. ar		S 110UHS	Ar

## SECONDARY EDUCATION

Ed.Ad.133f	Guidance in Secondary Schools (3 cred.; sr., grad.; prereq. 9 hrs. in ed.)	III-IV and 1 hr. ar		S 106Pt	Mr. Dugan Miss Wright
Ed.Ad.167f	Junior High School (3 cred.; sr., grad.; prereq. 10 hrs. in ed. including Ed. 51)	I-II and 1 hr. ar		S 105UHS	Mr. Bossing
Ed.Ad.218f,w,s	Recent Literature in Secondary Education (Cred. ar.)	IX-X		W 209UHS	Mr. Boardman, Mr. Bossing
Ed.Ad.270f,w,s*	Special Problems in Secondary Education (Cred. ar.; maximum 9 cred.)	Ar		Ar Ar	Mr. Boardman, Mr. Bossing

## EDUCATIONAL PSYCHOLOGY

**Major advisers**—Professors Bond, Cook, Miller, Johnson, McConnell, and Wrenn;  
Associate Professors Anderson and Van Wagenen.

### GENERAL COURSES

Ed.Psy.60f	Introduction to Measurement and Statistics (2 cred.; jr., sr.; prereq. 6 cred. in psy.)	I-II		S 106Pt	Mr. Van Wagenen
Ed.Psy.133f	Guidance in Secondary Schools (3 cred.; sr., grad.; prereq. 9 hrs. in ed.)	III-IV		S 106Pt	Mr. Dugan, Miss Wright
Ed.Psy.143f	Individual Mental Testing Laboratory (2 cred.; prereq. Ed.Psy. 142)	IX-X		W Ar	Mr. Bond
Ed.Psy.208w*	Methods in Educational Research (2 or 3 cred.)	III-IV and 1 hr. ar		S 105UHS	Mr. Johnson
Ed.Psy.220w-221s	Advanced Theory of Measurement (2 cred. a qtr.; prereq. Ed.Psy. 60 or 120 and 216 or equiv.)	IX-X		T 115Psy	Mr. Van Wagenen
Ed.Psy.233f,w,s	Problems in Guidance and Personnel Work (Cred. ar.; prereq. consent of instructor (Two-hour weekly seminar) Fall—College Student Activities. Winter—College Placement. Spring—Personnel Procedures in Non-Academic Agencies.)	Ar		Ar 202Bu	Miss Edwards 113APsy Mr. Wrenn
Ed.Psy.240f,w,s*	Problems in Measurement (2 cred. a qtr.)	Ar		Ar Ar	Mr. Johnson
Ed.Psy.243f,w,s	Problems in Statistics for Students in Education and Psychology (With or without credit. Cred. ar.)	Ar		Ar Ar	Mr. Johnson
Ed.Psy.253f,w,s*	Research Problems (Ar.; prereq. consult instructor) (See also Ed.Psy. 233 and Ed.Psy. 240)	Ar		Ar Ar	Mr. Miller, Mr. Cook, Mr. Anderson, Mr. Van Wagenen

\* This course may be taken for independent study under Plan B for the Master's degree.



No.	Title	Hour	Day	Bldg.	Instructor
Ed.Psy.281f,w,s	Practice in Personnel Work (2-3 cred. Maximum 9 cred.; prereq. Ed.Psy. 225, or to be taken concurrently, and consent of instructor)	Ar	Ar	Ar	Miss Edwards, Mr. Wrenn, Mr. Bordin

### ELEMENTARY EDUCATION

Ed.Psy.113f-114w-115s	Psychology of Elementary School Subjects (2 cred. per qtr.; jr., sr., grad.; prereq. 10 cred. in psy. and ed.)	IX-X	W	109Psy	Mr. Van Wagenen
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### HIGHER EDUCATION

Ed.Psy.254s	Measurement and Evaluation in Higher Education (3 cred.; 15 hrs. in ed.)	III-IV	S	106UHS	Mr. Johnson
		1 hr. ar			

### HISTORY AND PHILOSOPHY OF EDUCATION

**Major advisers**—Professors Wesley and Brameld; Assistant Professor Jean H. Alexander.

#### GENERAL COURSES

H.Ed.110s	Intercultural Education (3 cred.; jr., sr., grad.; prereq. 9 cred. in ed. or consent of instructor)	IX-X	T	210Bu	Mr. Brameld, Miss Lien
H.Ed.140w	Philosophies of Modern Education (3 cred.; sr., grad.; no prereq.) (Not open to those who have had H.Ed. 76)	I-II	S	301Psy	Mr. Brameld
		and 1 hr. ar			
H.Ed.176f	Conflicting Issues in Modern Education (2 cred.; jr., sr., grad.; prereq. 6 hrs. in psy.)	I-II	S	301Psy	Mr. Brameld
H.Ed.178f	Education and Problems of American Democracy (3 cred.; jr., sr., grad.; prereq. 6 cred. in soc. sci.)	IX-X	T	301Psy	Mr. Brameld
		and 1 hr. ar			
H.Ed.241f,w,s	Problems in the History and Philosophy of Education (Cred. ar.; prereq. permission of instructor)	Ar	Ar	226Bu 216ABu 206Bu	Mr. Wesley Mr. Brameld Miss Alexander

### HOME ECONOMICS EDUCATION

**Major advisers**—Professors Wylle B. McNeal, Clara M. Brown, and Ella J. Rose.

**Note**—Courses in Home Economics are open to all students in the College of Education who have satisfied the prerequisites or by permission of the chief of the division.

H.E.Ed.193Af,s	Home Economics Curriculum (2 or 3 cred.; sr., grad.; prereq. permission of instructor) Secondary school level	IX-X	W	114HE	Miss Clara Brown, Miss Rose
H.E.Ed.197f,w,s‡	Organization and Methods for Related Art Teaching (1 to 3 cred.; sr.; prereq. H.E.Ed. 91; H.E. 180 or parallel)	II	S	405HE	Miss H. Goldstein

‡ A fee of \$1 per credit is charged for this course.

No.	Title	Hour	Day	Bldg.	Instructor
H.E.Ed.199Ef,w,s†	Internship (Cred. ar.; grad.)	Ar	Ar	Ar	Miss Rose
H.E.Ed.243f,w,s	Trends in Home Economics (3 cred.; prereq. permission of instructor)	III-IV	S	114HE	Miss Rose
H.E.Ed.293f,w,s*	Problems in Home Economics Education (1 to 9 cred.; prereq. H.E.Ed. 294 recommended, permission of instructor)	Ar	Ar	Ar	Miss Clara Brown, Miss Rose
H.E.Ed.295f,w,s*	Seminar in Home Economics Education (1-3 cred.)	IX	Th	114HE	Miss Clara Brown, Miss Rose

## INDUSTRIAL EDUCATION

**Major advisers**—Professor Homer J. Smith, Associate Professor Micheels.

Ind.11f,w,s†¶	Special-Class Woodwork (2 cred.; no prereq.; not open to those who have credit in bench woodwork or cabinet making; for teachers of art, subnormal and elementary grade work; not used in substitution) (Limited to 24)	I-IV	S	6Pt	Mr. La Berge
Ind.30	<i>Graphic Presentation</i> (3 cred.; no prereq.) (Not offered)				
Ind.40f	Analysis (2 cred.; no prereq.)	I-II	S	Ar	Mr. Micheels
Ind.42w	Course Organization (2 cred.; prereq. Ind. 40)	IX-X	F	Ar	Mr. Micheels
Ind.44s	Equipment and Management (2 cred.; prereq. 40, 42)	IX-X	M	Ar	Mr. Widdowson
Ind.50Af-50Bw-50Cs†§	Directed Teaching (6 cred.; prereq. Ed. 51A-B-C, Ind. 70 or 75, and 80)	Ar	Ar	6Pt	Mr. Nelson
Ind.60f	Philosophy of Vocational Education (2 cred.; no prereq.)	IX-X	M	Ar	Mr. Widdowson
Ind.61w	Practices in Vocational Education (2 cred.; prereq. Ind. 60)	IX-X	M	Ar	Mr. Widdowson
Ind.66w	Related Subjects (2 cred.; prereq. Ind. 40, 42)	I-II	S	Ar	Mr. Widdowson
Ind.75s†	Methods in Drawing (2 cred.; prereq. Ind. 40, 42)	IX-X	W	Ar	Mr. Micheels
Ind.80f	General Industrial Training (2 cred.; no prereq.) (Not a shop course)	IX-X	F	Ar	Mr. Micheels
Ind.102w¶	The General Shop (2 cred.; jr., sr.; prereq. Ind. 80) (Not a shop course)	IX-X	W	Ar	Mr. Micheels
Ind.107f¶	Coordination (2 cred.; jr., sr., grad.; prereq. Ind. 60, 61 or 105, or consent of instructor)	IX-X	T	Ar	Mr. Widdowson
Ind.108w¶	Apprenticeship (2 cred.; jr., sr., grad.; prereq. consent of instructor)	IX-X	T	Ar	Mr. Widdowson
Ind.109s¶	Conference Leading for Industry (2 cred.; prereq. consent of instructor)	IX-X	T	Ar	Mr. Widdowson
Ind.115s¶	Supervision of Industrial Education (3 cred.; jr., sr., grad.; prereq. Ind. 60, 61 or 105)	I-II	S and 1 hr. ar	Ar	Mr. Micheels
Ind.200f,w,s*¶	Research Problems (3, 6, or 9 cred. a qtr.; total of 9 cred. required; grad. only) Conference periods as follows and by arrangement:	III	S	200EdH	Mr. Smith
		IX	Th	200EdH	Mr. Micheels

\* This course may be taken for independent study under Plan B for the Master's degree.

† A fee of \$1 per credit is charged for this course.

§ A C+ average (1.5 honor points per credit) in the major is prerequisite to registration in this course. Industrial education and shop courses constitute the major.

¶ Not a part of the four-year curriculum.

Off-Campus Courses and Services—Mr. Widdowson.

Dunwoody Shop and Drawing Courses—arranged. (Special blank must be used.)

Shop and drawing courses are available in wide variety in the Institute of Technology, University campus, and the Division of Agricultural Engineering, Farm campus. Students may elect to pursue courses, day or evening, at the William Hood Dunwoody Industrial Institute without fees other than those paid to the University, except a deposit of \$1. Degree candidates, especially those transferring from other institutions, should bear in mind the maximum of 45 credits in shop work and drawing combined, which is enforced in this department. Credits in excess of 45 will be recorded but will not be counted toward degree requirements. Graduate students may have such credits recorded but they will not be counted toward their degrees.

*Curriculum revision*—See College of Education Bulletin for 1946-48 for revised form, or request mimeographed materials at 200 Eddy Hall.

*Graduate programs*—The departmental office will provide mimeographed materials descriptive of admission requirements and program patterns for both the M.A. and M.Ed. degrees, plans A, B, X, and Y. Conferences and correspondence concerning Ph.D. programs are invited.

## MUSIC EDUCATION

Major advisers—Professor Oberg; Assistant Professor Winslow.

Note—Students following the Music Education Curriculum may elect seven credits in music in addition to the requirements of their curriculum. Five credits in education electives are required. All other electives must be in academic subjects.

No.	Title	Hour	Day	Bldg.	Instructor
Mu.Ed.220Ef,w,s	Survey and Evaluation of Research in Music Education (3 cred.; prereq. Mu.Ed. 101E)				
		Ar	Ar	Ar	Mr. Winslow
Mu.Ed.224Ef,w,s	Seminar and Individual Research Problems in Music Education (2 to 6 cred.)	Ar	Ar	Ar	Mr. Winslow and others
Mu.Ed.225Ef,w,s††	Advanced Applied Music (2 to 4 cred.; prereq. entrance exam.)	Ar	Ar	Ar	Ar

## PHYSICAL EDUCATION FOR MEN

Major advisers—Professors Keller and Nordly; Associate Professor Piper; Assistant Professor Bartelma; Instructors Ostrander and Ronning.

Phys.Ed.138Ef‡	Administration of Physical Education in Colleges and Universities (2 cred.; sr. grad.; prereq. 63 or 133E or equiv.)	IX-X	M	206CH	Mr. Keller
Phys.Ed.237Ef,w,s‡‡	Problems in Health Education, Physical Education, and Recreation (2 to 6 cred.; grad.; prereq. 137E and Ed. 206; ar.)	Ar	Ar	Ar	Mr. Nordly

## PHYSICAL EDUCATION FOR WOMEN

Major advisers—Professor Gertrude M. Baker; Associate Professor Helen M. Starr.

### COURSES IN MAJOR, MINOR, AND GRADUATE CURRICULA IN PHYSICAL EDUCATION FOR WOMEN

Open only to students in the College of Education except by permission of instructor.

**Statement of fees**—A physical education fee of \$1.75 per quarter is charged for all starred courses; a fee of \$3.50 per quarter is charged for Phys.Ed. 21A-B-C and for Phys.Ed. 41A-B-C; maximum fee per student \$3.50 per quarter. For methods and directed teaching courses a fee of \$1 per credit is charged as indicated in the footnotes. The maximum fee per quarter does not apply to the methods and directed teaching courses.

Phys.Ed.21Af-

Bw-Cs†§

Elementary Physical Education (6 cred.; no prereq.)

Sec. 9 (spring) Individual Sports: Tennis

III-IV

S 151NGW Ar

† A fee of \$3.50 per quarter is charged for this course.

†† One individual lesson per week, 2 credits, \$25; two individual lessons per week, 4 credits, \$50.

§ Students must pay fifty cents for tennis permit and supply own golf equipment.

¶ 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.	Title	Hour	Day	Bldg.	Instructor
Phys.Ed.41Af- Bw-Cs‡	Intermediate Physical Education (9 cred; prereq. 21A-B-C) Sec. 1 (fall) Officiating of Teamports: Fieldball, Soccer, and Speedball I-II		S	151NGW	Ar
	8 (winter) Individual Sports: Archery—Bowling				
	I		S	60NGW	Ar
	II		S	Ar	Ar
Phys.Ed.111Ef*	An Advanced Course in Methods of Teaching Physical Education (3 cred.; sr., grad.; prereq. undergrad. methods courses, 60 and 82 or equiv.)				
	IX, X		W	3NGW	Miss Baker
	1 hr. ar.				
Phys.Ed.112Es*	Supervision of Physical Education (3 cred.; sr., grad.; prereq. teaching experience)				
	IX, X		W	3NGW	Miss Baker
	1 hr. ar.				
Phys.Ed.113Ew*	Physical Education in the Elementary Schools (3 cred.; sr., grad.; prereq. 60 and 82 or equiv., and experience teaching elementary grade children)				
	IX, X		T	3NGW	Miss Baker
	1 hr. ar.				
Phys.Ed.114Es*	The School Health Education Program (See Ed.C.I. 114)				
Phys.Ed.116Ew*	Problems in Physical Fitness (3 cred.; sr., grad.; prereq. 82, 83 or equiv.)				
	IX, X		W	3NGW	Ar
	1 hr. ar.				

\* This course may be taken for independent study under Plan B for the Master's degree.  
‡ A fee of \$3.50 per quarter is charged for this course.

### MAJOR ADVISERS

1946-47

Subject	Name of Instructor	Room
General Advisers	Jean H. Alexander, Chairman Students' Work Committee	206Bu
	Willis E. Dugan, Director Student Personnel	214Bu
New Extension Courses	J. M. Nolte	402Adm

### EDUCATIONAL FIELDS

Adult Education		
Agricultural Education	A. M. Field	205Hort(UF)
	Milo J. Peterson	205Hort(UF)
Art Education	Clifton Gayne	202J
	Marie Lien	202J
	Ruth Raymond	202J
Commercial Education	Ernestine Donaldson	215VH
Curriculum and Instruction	C. W. Boardman (Secondary)	218Bu
	N. L. Bossing (Secondary)	222Bu
	L. J. Brueckner (Elementary)	220Bu
	W. W. Cook (Elementary)	305EdH
	Ruth E. Eckert (Higher)	301EdH
	W. E. Peik (Teacher Training)	204Bu
Educational Administration	C. W. Boardman (Secondary)	218Bu
	N. L. Bossing (Secondary)	222Bu
	M. G. Neale (General)	224Bu
Educational Psychology	G. Lester Anderson	303EdH
	W. W. Cook	305EdH
	Willis E. Dugan	214Bu
	P. O. Johnson	216Bu
	Marcia Edwards	202Bu
	W. S. Miller	302Psy
	M. J. Van Wagenen	351Psy
	C. Gilbert Wrenn	113APsy
Health Education	Ruth Grout	121MH
	Helen Starr	108NGW

Subject	Name of Instructor	Room
Elementary Education	Jean H. Alexander	206Bu
	C. P. Archer	208Bu
	Guy L. Bond	212Bu
	L. J. Brueckner	220Bu
	W. W. Cook	305EdH
History and Philosophy of Education	Jean H. Alexander (History)	206Bu
	Theodore Brameld (Philosophy)	216ABu
	Edgar B. Wesley (Educational Sociology)	226Bu
Home Economics Education	Clara M. Brown	101HE(UF)
	Wylle B. McNeal	215HE(UF)
	Ella J. Rose	111HE(UF)
Industrial Education	William J. Micheels	200EdH
	Homer J. Smith	200EdH
Library Training	Irene Hayner	6Lib
	Errett W. McDiarmid	107Lib
Methods and Directed Teaching	Paul R. Grim	104UHS
Music Education	Paul M. Oberg	106Mu
	Robert W. Winslow	214Mu
Nursery School and Kindergarten Education	John E. Anderson	101Pt
	Mary Mechem Fuller	1CWI
Nursing Education	Katharine J. Densford	125MeS
Philosophy of Education	Theodore H. Brameld	216ABu
Physical Education for Men	Louis F. Keller	110CH
	Carl L. Nordly	217CH
Physical Education for Women	Gertrude Baker	101NGW
Professional Education of Teachers	W. E. Peik	204Bu
Public Health Nursing		121MH
Radio Education	T. F. Tyler	111NMA
Recreational Leadership	Edwin L. Haislet	219CH
Visual Education	Paul Wendt	3WeH

### SUBJECT-MATTER FIELDS

Botany	William S. Cooper	212Bo
Chemistry	P. O. Johnson	216Bu
Economics	E. A. Heilman	313VH
English	Harold B. Allen	319F
	Dora V. Smith	206Bu
Geography	R. H. Brown	101bBu
German	O. C. Burkhard	210aF
History	A. C. Krey	102Bu
	Edgar B. Wesley	226Bu
Journalism	Fred L. Kildow	106MurH
Latin	J. L. Heller	112F
Mathematics	W. L. Hart	100F
Natural Science	P. O. Johnson	216Bu
Physics	J. W. Buchta	147Ph
Political Science	Lloyd M. Short	207Bu
Public Health	Ruth Boynton	121MH
Romance Languages	F. B. Barton	200bF
	H. E. Clefton	200aF
	Walter T. Pattison	204½F
Scandinavian	Alrik Gustafson	13F
Social Studies	Edgar B. Wesley	226Bu
Sociology	C. Kirkpatrick	111J
Speech	F. M. Rarig	309aF
	Howard Gilkinson	309bF
	F. M. Whiting	10Mu
Speech Pathology	B. Bryngelson	411F
Zoology	J. E. Wodsedalek	308Z

## COMPLETE 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
<b>FALL</b>						
ArtEd.26A ArtEd.61 Ed.C.I.147* Ed.C.I.184 Ed.C.I.250 Ed.Ad.167 Ed.Psy.60 H.Ed.176 H.E.Ed.197* Ind.11 Ind.40 Phys.Ed.41A	ArtEd.26A ArtEd.61 Ed.C.I.117 Ed.C.I.147§ Ed.C.I.263 Ed.C.I.287 Ed.C.I.285 Ed.Psy.&Ed.Ad.133 H.E.Ed.243 Ind.11 Phys.Ed.21A	ArtEd.151 Ed.C.I.63T Ind.60 Phys.Ed.138E	Ed.C.I.201† H.Ed.178 Ind.107	Ed.C.I.143 Ed.C.I.222 Ed.Ad.218 Ed.Psy.143 Ed.Psy.113 H.E.Ed.193A Phys.Ed.111E	Ed.C.I.226 H.E.Ed.295 Ind.200	Ind.80
<b>WINTER</b>						
ArtEd.26B ArtEd.62 Ed.C.I.113 Ed.Ad.115 H.Ed.140 H.E.Ed.197* Ind.11 Ind.66 Phys.Ed.41B	ArtEd.26B ArtEd.62 Ed.C.I.119 Ed.C.I.168 Ed.C.I.294 Ed.Psy.208 H.E.Ed.243 Ind.11 Phys.Ed.21B	ArtEd.150 Ed.C.I.264 Ind.61	Ed.C.I.201† Ed.Psy.220 Ind.108 Phys.Ed.113E	Ed.C.I.107 Ed.C.I.222 Ed.Ad.218 Ed.Psy.114 Ind.102 Phys.Ed.116E	Ed.C.I.226 H.E.Ed.295 Ind.200	Ind.42
<b>SPRING</b>						
ArtEd.26C ArtEd.63 ArtEd.156* Ed.C.I.149 Ed.C.I.153 Ed.C.I.122 Ed.C.I.170B Ed.C.I.191 H.E.Ed.197* Ind.11 Ind.115	ArtEd.26C ArtEd.63 ArtEd.157 ArtEd.156§ Ed.C.I.105 Ed.C.I.145 Ed.C.I.173A Ed.C.I.135 Ed.C.I.173B Ed.C.I.204 Ed.Psy.254 H.E.Ed.243 Ind.11 Phys.Ed.21C	Ed.C.I.144 Ed.C.I.296 Ind.44	Ed.C.I.104 Ed.C.I.201† Ed.Psy.221 H.Ed.110 Ind.109	Ed.C.I.222 Ed.Ad.218 Ed.Psy.115 H.E.Ed.193A Ind.75 Phys.Ed.112E	Ed.C.I.226 H.E.Ed.295 Ind.200	Ed.C.I.293

\* II hour only.  
† 4:00 o'clock.  
§ III hour only.