

*The Bulletin of the*  
UNIVERSITY of MINNESOTA

The College of Science, Literature, and the Arts  
1944-1945

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## ADMINISTRATION

The administrative officers of the College of Science, Literature, and the Arts are:  
T. Raymond McConnell, Ph.D., Dean (219 Administration Bldg.)

Joseph M. Thomas, Ph.D., Assistant Dean for the Senior College (217 Folwell Hall)

William H. Bussey, Ph.D., Assistant Dean for the Junior College (106 Folwell Hall)

Royal R. Shumway, B.A., Assistant Dean for Students' Work and Chairman of the Students' Work Committee (219 Administration Bldg.)

Horace T. Morse, Ph.D., Administrative Assistant (106 Folwell Hall)

The Students' Work Committee consists of the three assistant deans.

There is a directory of departmental offices in the University's *Combined Class Schedule*.

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**SPECIAL NOTICE.** In addition to the regular courses of study which lead to university degrees, this college offers several accelerated programs to train women for wartime work. They relate to geology, journalism, physics, psychology, social work, and statistics and are outlined in a special pamphlet on "**Special Opportunities for Women during the War and the Postwar Period**" which may be obtained at the General Information window of the Office of Admissions and Records or in Room 106 or Room 217 Folwell Hall.

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## GENERAL INFORMATION

1. **Junior and Senior Colleges.**—The College of Science, Literature, and the Arts is divided into a *Junior College*, in which students get their first two years of college work, and a *Senior College* in which they get their third and fourth years of work if they are candidates for the degree of bachelor of arts or bachelor of science given by the college.

The *Junior College* offers a two-year course leading to the degree of associate in liberal arts and courses of study leading to the Senior College and to the professional schools which require preliminary academic college work.

The *Senior College* is concerned primarily with advanced instruction leading to the degrees of bachelor of arts and bachelor of science.

2. **Courses of Study.**—The courses of study offered to students of this college are summarized on pages 8-9 and are described on pages 12-46.

3. **Admission.**—This college admits those students who have met the admission requirements as published in the University's Bulletin of General Information and who give reasonable promise of carrying successfully the courses of study offered in this college. The case of each individual applicant will be decided on the evidence of his previous record either in secondary school or college, or his performance in such aptitude and placement tests as are found reliable for this purpose, and comments, advice, or recommendations received from teachers or officials of the institutions previously attended. In the case of students transferring from other collegiate institutions, corresponding information will be taken into account in determining their status in this college.

4. **Admission to the freshman year.**—Students are admitted to this college either by certificate from an accredited secondary school or by examination. For details concerning the requirements in either case consult the Bulletin of General Information for 1944-45, pages 13-18.

**NOTE.**—The method of admission by examination is especially recommended to high school graduates who have shown superior ability in their high school work but who cannot present the proper units for admission by certificate. Entrance tests given by

the University are of the objective type, intended to measure aptitudes for college work rather than specific information in high school fields. No special preparation for the tests is practicable.

**5. Adult special students.**—Persons of mature age (twenty-four years or older) and experience and persons who have received a Bachelor's degree who desire a special and limited course of study may be admitted as adult special students.

Veterans under 24 years of age may be accepted as adult special students providing it is demonstrated that they have sound vocational objectives and the requisite ability.

Such applicants must submit the information called for on the regular application blank, and must obtain the recommendation of the Students' Work Committee and the approval of the director of admissions and records. The registration of such students will be under the control of the committee.

An adult special student may not become a candidate for a degree without approval of the college and the Board of Admissions.

**6. Admission to advanced standing.**—The following rules govern students entering this college with advanced standing from other institutions.

a. A student entering with advanced standing must earn an average of one honor point per credit for all work in this college counted for admission to the Senior College or for the degree of bachelor of arts or bachelor of science.

b. A student admitted to the Senior College and failing to meet this requirement may be excluded from the Senior College at any time after the first quarter.

**7. Examinations for advanced standing.**—Any student upon first registration at the University may, with the approval of the Students' Work Committee, be allowed without charge to take examinations for advanced standing in subjects in which the student declares himself to be prepared. Such examinations must be taken within the first six weeks of residence.

**8. Examinations for credit.**—Credit for work done outside of class may be obtained by taking a special examination. Applications should be made to the assistant dean for students' work. If approved, such an examination will be given by a committee appointed by the assistant dean for students' work. Unless the Students' Work Committee directs otherwise, the fee for such an examination will be five dollars.

**9. Examinations to demonstrate proficiency in prerequisite courses.**—Any student who wishes to carry a course for which he does not have the prerequisite may apply to the assistant dean for students' work for permission to take an examination to demonstrate his proficiency in the prerequisite. A satisfactory showing in the examination will admit the student to the course but will not entitle him to credit in the prerequisite course. There is no fee for this examination.

**10. Credits, grades, and honor points** are used for convenience in indicating amount and quality of work.

11. Four grades, A (highest), B, C, and D (lowest), are given for work of varying degrees of merit. They are all acceptable for the completion of a single course. Work completed with the grade D is counted toward graduation when combined with work of A or B grade in other courses. The grade C indicates work of the quality required for graduation in most curricula; the grades B and A are given for work of higher degrees of excellence.

The grade I (incomplete) shall be 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 course.

Any student receiving this grade shall be required to complete the work of the course within the first thirty days of his next quarter (except summer) in residence. A grade of I (incomplete) which is not removed within the first thirty days of the student's next quarter in residence shall 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.

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 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. (See Special Fees, page 6.)

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

The grade E (condition) which was used in 1942-43 and previous years has been abolished.

12. Amount of work is expressed in *credits*. Each credit demands on the average three hours a week of a student's time; that is, one recitation with two hours of preparation, or three hours of laboratory work.

13. Quality of work is indicated by *honor points*. Honor points are assigned to the various grades on the assumption that work of a quality required for graduation in most curricula is graded at least C. (See paragraph 11.) Each credit with the grade of C carries one honor point; each credit with the grade of B, two honor points; each credit with the grade of A, three honor points. The grade of D carries no honor points.

A student's scholarship average is defined as the ratio of honor points earned divided by the credits earned plus credits of removed and unremoved failures. Scholarship averages of 1, 2, and 3 are called C, B, and A averages, respectively. This definition has been in effect since the beginning of the Summer Session of 1943; but failures in courses taken before June 16, 1943 will not be counted in computing scholarship averages for students in residence in this college in the year 1942-43 or thereafter.

For satisfactory progress in most of the courses of study offered in this college, a student must maintain a scholarship average of at least C. By maintaining a better average, he may be able to reduce the amount of work which he is required to complete. (See paragraphs 18-20, Quality Credits.)

14. No course for which a student has received credit may be repeated by him to raise his grade except by special permission of the Students' Work Committee.

15. **Junior and Senior College courses.**—The college distinguishes between Junior College courses, intended primarily for freshmen and sophomores, and Senior College courses, intended primarily for juniors and seniors.\*

16. Senior College courses appear in the announcements, in the University's *Combined Class Schedule*, as open to "juniors and seniors" or "juniors, seniors, and graduates."

17. Some Senior College courses are regularly open to Junior College students who have an average grade of at least C in the prerequisite courses. They are listed under the heading *Senior College Courses* in departmental statements in the Science, Literature, and the Arts section of the University's *Combined Class Schedule*. Other Senior College courses are open to Junior College students only by special permission of the Students' Work Committee. Requests for the special permission should be presented to Assistant Dean Bussey in 106 Folwell Hall. Courses which carry graduate credit may not be taken earlier than the third quarter of the student's sophomore year.

18. **Quality credits.**—In some curricula and parts of curricula, the number of credits required of a student may be reduced as follows: For each five honor points in excess of the number necessary for a C average, the required number of credits will be diminished by one; or, in other words, for each five excess honor points, a student will be given one "quality credit."

\* Junior College students are listed as freshmen when they have less than 39 credits, as sophomores when they have 39 credits or more. Senior College students are listed as juniors when they have less than 135 credits, as seniors when they have 135 credits or more.

19. This regulation applies only to the total number of credits required. It does not apply to other specific requirements of the student's curriculum. It is in force as regards
- Admission to the Senior College, the College of Education, the School of Business Administration, the School of Dentistry, the Course Preliminary to Nursing Education and Public Health Nursing, and the Courses in Medical and X Ray Technology.
  - The Senior College part (exclusive of courses given by the Division of Library Instruction) of any course of study, given entirely within this college, leading to the degree of bachelor of arts or bachelor of science with this restriction: To a student registered in the Senior College, quality credits will be given for excess honor points earned in Senior College courses but not for those earned in Junior College courses.
  - The Senior College part of the work done in this college in the combined courses in Arts and Law, Arts and Dentistry, and Arts and Medicine, with the restriction stated in the preceding paragraph (b).

20. This regulation is based on the well-known fact that students of high scholarship have accomplished more than those who have poorer records. Students of higher attainment are thus given the opportunity of completing the work for the B.A. degree in less than four years and entering earlier on their graduate work. Juniors and seniors with high scholastic standing are allowed the privilege of visiting classes<sup>§</sup> and of reading under direction; and students who are handicapped by outside work or poor health can thus carry less than full work and still make a normal advance toward graduation.

21. **Residence requirement for a degree.**—The student must earn at least 45 credits in residence in the University. If the term of residence is only one year, that year must be the final year; and in any case he must spend two quarters of the final year in residence. If he is a candidate for the degree of bachelor of arts or bachelor of science, he must earn a minimum of 45 credits in residence in the Senior College.

22. **Election of subjects in other colleges or schools.**—In the senior year, any student registered in the College of Science, Literature, and the Arts may elect not to exceed 6 credits per quarter in any other college or school of this University, provided that (1) the courses are indicated by the dean of the college or school in question and approved by the Advisory Committee of this college as suitable for such election; and (2) no duplication of subject occurs. Courses so taken are counted toward the bachelor of arts degree on the same terms as those taken in the College of Science, Literature, and the Arts.

Seniors desiring further information regarding courses open should consult the assistant dean for the Senior College, 217 Folwell Hall.

23. **Registration.**—Students are required to register on the days announced in the university calendar. Only in very exceptional circumstances will a student be allowed to register thereafter, and no student will be enrolled after the first week of the quarter. (See paragraph 34, Privilege Fees.)

24. No student will receive credit for work for which he is not properly registered.

25. **Amount of work.**—Students must elect at least 13 credits of work a quarter. To take less than that number, a student must secure permission from the Students' Work Committee.

26. The maximum number of credits for which a student may register is ordinarily 17. After two quarters of residence a student may register for 18 credits provided he has a scholarship average of  $1\frac{1}{2}$  for the two quarters *previous to the time of registration*, and no failure for the quarter immediately preceding registration.

27. If a student is in any doubt regarding his registration, or desires to make any change in it, he should consult his major adviser, the assistant dean of his college, or the chairman of the Students' Work Committee.

<sup>§</sup> See paragraphs 28-31 below.

28. **Auditors.**—Any mature person not a regular student may be admitted to classes as an auditor and may hear lectures and class discussions without doing the work of the course, subject to the following conditions:

- a. He shall get an auditor's card at the office of the dean of the college (219 Administration Building) and on it secure the written approval of the instructor in charge of the course, and of the dean.
- b. He shall present such approvals to the recorder and pay the usual fee charged for regular membership in such a course. See paragraph 33.

29. Registration as an auditor does not entitle one to participate in the activities of the class or to take the final examination.

30. Any Senior College student may register as an auditor under the same regulations, with this understanding—that unless he has at least a B average, the courses for which he registers both as regular student and as auditor must not exceed the permissible maximum. (See paragraph 26, page 5.) If he has at least a B average he may register as an auditor for an additional three-credit course.

31. **Courses without credit.**—With the permission of the Students' Work Committee a student may register for a course without credit. This will entitle him to participate in class activities to an extent agreed upon in advance with the instructor.

32. **Petitions.**—A student who wishes exception made to any rule of the college should present his request in writing to the Students' Work Committee. Petition blanks may be obtained at 219 Administration Building or 106 or 217 Folwell Hall.

Every student who desires to be heard in regard to his petition will be given such an opportunity by the committee.

33. **Fees.**—All university fees are subject to modification without notice.

Tuition fee (per quarter)

Residents of Minnesota.....	\$25.00
Nonresidents .....	56.00

Credit hour tuition fee (adult special students, auditors, and others carrying less than full work)

Residents of Minnesota.....	2.25
Nonresidents .....	4.75

Incidental fee (per quarter)..... 9.65

Matriculation deposit† (first quarter only)..... 10.00

Special fees

Fees for individual courses are specified in the course announcements  
(See *Combined Class Schedule*).

Examination for credit (after first 6 weeks in residence)..... 5.00

Special examination .....

Laboratory deposit (required of students registered for courses in chemistry) 5.00

Graduation fee .....

Music fees (in addition to tuition) for those electing music

Courses 11 to 27

1 individual lesson per week, 2 credits..... 25.00

2 individual lessons per week, 4 credits..... 50.00

Class lessons in Courses 11C, 12C, 2 credits..... 15.00

Courses A, B, C and Courses D, E, F

1 individual lesson per week, no credit..... 25.00

Practice fees (per quarter)\*..... 5.00

\* Pianos and organs are available for practice purposes upon payment of practice fees charged by the Music Department.

† Such charges as may be incurred for lockers, library penalties, laboratory breakage, etc., will be deducted from the amount of this deposit and the balance will be refunded by mail upon graduation or after the beginning of the first quarter the student fails to return to the University.

34. **Privilege fees.**—The fee for the privilege of late registration or late payment of fees is \$2 through the third day of classes, on the fourth day the fee is \$2.50, and then increases 50 cents per day to a maximum of \$5.

35. **Students who are called, or volunteer, for active duty with the armed forces of the United States as evidenced by presentation of order to report for induction before the end of the current quarter are entitled to refund of tuition on the following basis:**

- a. Full refund for cancellation through the fifth week.
- b. One-half refund for cancellation during the sixth week and to the beginning of the last week of classes.
- c. No refund for cancellation during or after the last week of classes.

The refund of the incidental fee representing service charges will be on the normal basis.

36. **Credit for students who enter the armed forces of the United States during a quarter.**—During the year 1944-45, students who are called or who volunteer for active duty with the armed forces of the United States, as evidenced by the presentation to the office of admissions and records of orders to report for induction before the end of a quarter, will be given partial or full credit according to the following schedule if their work up to the time they leave is satisfactory to their instructors. Except when full credit is given, the allowance will be in terms of blanket credits rather than in credits for separate courses. Courses in which the work is not satisfactory will be cancelled with no grade.

#### *Fall Quarter*

<i>Time of Leaving</i>	<i>Amount of Credit Given</i>
Before November 6	No credit
November 6—November 15 incl.	One-half credit
November 16—November 24 incl.	Two-thirds credit
November 25—December 5 incl.	Three-fourths credit
December 6—December 15 incl.	Full credit

#### *Winter Quarter*

Before February 5	No credit
February 5—February 14 incl.	One-half credit
February 15—February 24 incl.	Two-thirds credit
February 26—March 6 incl.	Three-fourths credit
March 7—March 15 incl.	Full credit

#### *Spring Quarter*

Before May 7	No credit
May 7—May 12 incl.	One-half credit
May 14—May 21 incl.	Two-thirds credit
May 22—May 29 incl.	Three-fourths credit
May 31—June 7 incl.	Full credit

## SUMMARY OF COURSES\*

The individual subjects of study offered to students in the College of Science, Literature, and the Arts, with information about credits and prerequisites and with a schedule of hours, days, and classrooms, are given in the University's *Combined Class Schedule*. They are listed under the following departmental headings: Anatomy, Anthropology, Architecture, Art Education, Astronomy, Bacteriology, Biostatistics, Botany, Botany and Plant Pathology, Chemistry and Agricultural Biochemistry, Child Welfare, Drawing and Descriptive Geometry, Economics, Educational Psychology, English, Fine Arts, French, Geography, Geology and Mineralogy, German, Greek, History, Home Economics, How To Study, Humanities, Italian, Journalism, Latin, Library Methods, Linguistics and Comparative Philology, Mathematics, Military Science and Tactics, Music, Music Education, Natural Science, Naval Science and Tactics, Norwegian, Philosophy, Physical Education for Men, Physical Education for Women, Physics, Physiology, Political Science, Portuguese, Psychology, Public Health, Russian, Social Science, Sociology and Social Work, Spanish, Speech, Swedish, Vocational Orientation, and Zoology.

The college welcomes students who have definite intellectual interests but who do not expect to graduate or to enter one of the professional schools. Such students may continue in college as long as they maintain a satisfactory standing in the studies they elect. During their Junior College years a wide variety of courses is open to them. After that period they may continue work in their fields of interest as nonclassified students under the direction of the Students' Work Committee.

A student who is a candidate for a degree may, while registered in the College of Science, Literature, and the Arts, pursue one of the following courses, described on pages 12 to 46 of this bulletin. These curricula are subject to revision by action of the faculties of the colleges concerned.

### **Courses given within this college:**

- I. A two-year course leading to the degree of associate in liberal arts (page 12).
- II. A course leading to the degree of bachelor of arts, which includes
  1. A curriculum which provides for concentration and involves the pursuit of major and minor studies in the Senior College (pages 12-16).
  2. A curriculum in liberal arts which provides for greater breadth of training (pages 12-16).
  3. A course in preparation for Theological Training (page 16).
  4. A course in the humanities (page 17).
  5. Courses in Art (page 17).
  6. A course with specialization in journalism (page 19).
  7. A course with specialization in Latin-American studies (page 20).
  8. A course with specialization in music (page 21).
- III. A course in library training leading to the degree of bachelor of science (page 24).
- IV. A course preliminary to social work leading to the degree of bachelor of arts (page 25).
- V. Courses preparing for admission to the School of Business Administration (page 27), School of Dentistry (page 29), College of Education (page 30), the Course in Nursing Education and Public Health Nursing (page 33), the Law School (page 35),

\*This summary does not include certain accelerated programs for women which are outlined in a separate pamphlet entitled "Special Opportunities for Women During the War and the Postwar Period." There is a special notice about these programs on page 2 of this bulletin.

the Course in Medical Technology (page 36), the Course in X-Ray Technology (page 37), and the Course in Physical Therapy (page 37).

VI. Courses leading to the degree of bachelor of arts or bachelor of science with special training in military or naval science and tactics (page 38).

**Combined arts and professional courses:**

VII. A four-year course leading to the degrees of graduate dental hygienist and bachelor of arts (page 39).

VIII. A six-year course leading to the degrees of bachelor of arts and bachelor of architecture (page 39).

IX. A six-year course leading to the degrees of bachelor of science in law and bachelor of laws (page 40).

X. A seven-year course leading to the degrees of bachelor of arts and bachelor of laws (page 41).

XI. A seven-year course leading to the degrees of bachelor of business administration and bachelor of laws (page 41).

XII. A seven-year course leading to the degrees of bachelor of arts and doctor of dental surgery (page 42).

XIII. An eight-year course leading to the degrees of bachelor of science, bachelor of medicine, and doctor of medicine (page 43).

XIV. An eight-year course leading to the degrees of bachelor of arts, bachelor of medicine, and doctor of medicine (page 45).

NOTE.—A unit of the University known as University College arranges special courses of study for individual students whose intellectual interests or professional aims are not provided for by curricula offered in other colleges of the University. For further information, inquire in the office of Professor Buchta, Room 143, Physics Building.

## REQUIRED HEALTH EDUCATION AND PHYSICAL EDUCATION

### HEALTH EDUCATION

All students of this college whose first entrance to the University of Minnesota was in the fall of 1943-44 or thereafter, are required to take a comprehensive examination covering health information; and those who fail to show a reasonable standard of knowledge will be required to take a course in personal health offered by the Department of Public Health. In 1944-45 this will be offered as Public Health 3, "Personal Health," a 2-credit course which may be taken in the fall or the winter or the spring. Public Health 50, "Public and Personal Health," may be taken as a substitute for Public Health 3 by juniors and seniors. For the schedule of hours and days, see page 91 of the University's *Combined Class Schedule*.

The required examination will be given each quarter (fall, winter, spring) at a time and place to be announced in the University's *Official Daily Bulletin*. Students who do not pass the examination will be notified that they should add Public Health 3, "Personal Health," to their program of studies in their next quarter of residence in college, or as soon thereafter as possible, unless they have already taken that course or its equivalent.

### PHYSICAL EDUCATION FOR MEN

Beginning with the fall quarter of 1943-44 and thereafter for the duration of the war, all men while registered in the Junior College are required to take the equivalent of one credit per quarter of physical education for the remaining quarters of their residence in that division of the College of Science, Literature, and the Arts unless they will have earned, in the meantime, a total of six credits in physical education courses

taken here or elsewhere or unless they are excused from the requirement by the assistant dean for Students' Work (219 Administration Building).

The course which will be offered to men in 1944-45 to enable them to meet this requirement is called "Sports Education" and is announced on page 13 of the University's *Combined Class Schedule*.

Six is the maximum number of credits in physical education for men which this college regularly accepts for graduation; but for students in the Army and Navy Reserve Officers Training Corps and in the enlisted reserve programs, the maximum is twelve credits.

#### PHYSICAL EDUCATION FOR WOMEN

The College of Science, Literature, and the Arts does not require its women students to take courses in physical education; but such courses are available, as elective courses without credit. See the announcement of the Department of Physical Education for Women on page 14-17 of the University's *Combined Class Schedule* for 1944-45.

In Courses Preliminary to the College of Education and to Nursing Education and Public Health Nursing which are outlined on pages 30-35 of this bulletin, physical education is required (see page 30 and page 34) and should be taken in the freshman and sophomore years.

#### REGULATIONS APPLYING TO FRESHMAN ENGLISH

No student may register for any course in Freshman English without having taken a placement test.

On the basis of placement tests in English, students are:

Exempt from any requirement in English,

Permitted to choose between English A-B-C and Composition 4-5-6,

Assigned to Composition 4-5-6,

Advised to postpone their English until they have had a year of experience in college,

Required to make up minimum essentials<sup>‡</sup> as a preliminary to Composition 4-5-6.

Students who are exempt from Freshman English may register, if they wish, for English A-B-C or Composition 4-5-6, or for any Junior College courses in English, composition, or speech for which English A-B-C is the prerequisite.

English A-B-C is a 15-credit course consisting of 9 credits of literature and 6 credits of composition. Composition 4-5-6 is a 9-credit course in composition. Either course satisfies the requirement in English for graduation or for admission to the Senior College. Students who have already completed one or more quarters of Freshman English in another college should consult Professor Hillhouse, 221 Folwell Hall, before registering.

Any student who receives an A in composition in Course A or B or 4 or 5 may, upon recommendation of his instructor, be exempted from any further requirement in English.

Any student who receives an A or B in Course 4 or 5 may, upon recommendation of his instructor, elect the following quarter of A-B-C.

**Habitual bad English.**—Any student who, either in speaking or in writing, habitually uses bad English shall be reported by his instructor to the dean with all available evidence. If the dean considers this evidence sufficient, he will require the student to take without credit such further work in composition as the chairman of the Department of English may specify.

<sup>‡</sup> For students who have to make up these minimum essentials, the General Extension Division of the University offers a course in "Preparatory English." It is a one-quarter course for which there is a special fee of \$7.50.

## ADVISERS

Every new freshman student will be assigned to a faculty counselor who will help him during the registration period, and who will be available throughout the year to aid in personal matters, in choosing a vocation, or in planning the quarter's study program. Each quarter's registration must be approved by this adviser.

A freshman student who has not decided on the general plan of his college course before entrance should begin at once to consider whether he will elect the curriculum for concentration in a major subject or the curriculum in liberal arts (pages 12-13) or one of the professional courses—library training, social work, medicine, etc. (pages 24-46). He should seek the help of his faculty counselor in deciding which program to select.

Every student is expected to make the planning of his study program a serious part of his work. The student should plan his program and submit it to his adviser for suggestions and approval. Advisers are available for discussion of student programs at any time during the year.

Freshmen with advanced standing and sophomores who have not been assigned to advisers may discuss their study programs with the assistant dean for the Junior College, Room 106, Folwell Hall, or with Senior College advisers in lines of work in which they are interested. These students may get counselors by applying to the office of the Committee of Faculty Counselors, Room 114, Psychology Building.

## COURSES OF STUDY

### I. A TWO-YEAR COURSE LEADING TO THE DEGREE OF ASSOCIATE IN LIBERAL ARTS\*

The degree of associate in liberal arts is given for the two years of college work (90 credits) outlined below. Students may choose freely from the many subjects of study offered by the college to freshmen and sophomores. The only restrictions are these: (1) normally the 90 credits must be earned in not more than seven quarters of residence; (2) the student must meet requirements in English and in at least two of three groups of subjects (foreign languages, social sciences, natural sciences).

More specifically the requirements are these:

#### 1. Group Requirements

- A. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. All students are required to take a placement test before registering for any course in English or composition. (See page 10.)

Any two of the following group requirements (B, C, D):

- B. Foreign language, 0 to 20 credits, according to the following schedule:†

<i>Amount Presented for Entrance</i>	<i>Amount Required in Junior College</i>
Four years of one language	None
Three years of one language	5 credits in same language
Two years of one language	10 credits in same language
One year of one language	15 credits in same language
Less than a year of one language	20 credits in same language

- C. 10 credits‡ in one of the social sciences: anthropology, economics, geography, history, political science, sociology  
or  
12 credits in Social Science 1f-2w-3s (Introduction to Social Science)
- D. 10 credits‡ in one of the natural sciences: astronomy, botany, chemistry, geology (including laboratory), physics (including laboratory), psychology (including laboratory), zoology  
or  
15 credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences)
2. Electives to make the required total of 90 credits, which must normally be earned in not more than seven quarters of residence. If a student enters this college with advanced standing, he must spend the last three quarters before graduation in residence and he must earn at least 45 of the required 90 credits in residence.

All students who meet the requirements outlined above are eligible for the degree, including those who are admitted to the Senior College or the professional schools as well as those who remain in the University for only two years.

### II. THE COURSE LEADING TO THE DEGREE OF BACHELOR OF ARTS\*

This is the regular curriculum offered for those who want a four-year college course leading to the bachelor of arts degree. The requirements to be met in the Junior College and in the Senior College are stated separately and at length in the following paragraphs.

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

† For students who enter this University with advanced standing, the number of credits required may be less than that indicated in this schedule. Any course of 9 credits (6 semester credits) may be substituted for the corresponding 10-credit course here.

‡ Or 9 credits in a year course or 9 credits (6 semester credits) of advanced standing.

A brief summary is given first for the convenience of students, but they should not take that as fully explanatory. They *must read* the subsequent paragraphs if they are to understand the requirements.

## SUMMARY

The Junior College requirements for admission to the Senior College are as follows:

1. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10)
2. Foreign language, 0 to 20 credits according to a schedule given in a subsequent paragraph.
3. Ten credits\* in one of the social sciences or 12 credits in Social Science 1f-2w-3s (Introduction to Social Science)
4. Ten credits\* in one of the natural sciences or 15 credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences)
5. A total of at least 90† credits, with a scholarship average of C.

Students should apply for admission to the Senior College as soon as they have the required number of credits and a C average even if they have not met all the group requirements (English, foreign language, social science, natural science). They may be admitted provisionally.

The Senior College requirements for graduation are normally as follows:

1. A total of 90 credits, to be earned in Senior College courses except as the student's adviser approves more Junior College courses. Subsequent paragraphs tell how the required number may be less than 90 for students who enter the Senior College with more credits than are required for admission.
2. A scholarship average of C.
3. (a) A department major (27 to 36 credits in Senior College courses), and one minor sequence of 15 credits or two minors of 9 credits each in Senior College courses.  
or  
(b) An approved "liberal arts" program, with less specialization.

The general purpose of the curriculum is to enable capable students to attain the ends of higher liberal education, allowing each one to do the work best suited to develop his powers and to satisfy his interests. Faculty advice is offered to each student in planning this course.

Two general plans of study are offered, one providing for concentration, the other offering opportunity for greater breadth of training. The first plan is the traditional one, involving the pursuit of major and minor studies in the Senior College. The second is a curriculum in liberal arts§ intended for those who wish to get a broader view of the fields of knowledge or to draw upon a wider range of studies in preparing themselves for life. Graduation honors are open to candidates for the B.A. degree on either plan.

The requirements of the course include the selection of studies according to certain principles and a certain quality in the student's work. For convenience these requirements are stated concretely in terms of time, credits, and grades. Students should understand that the time spent and the credits entered on the books are not the real object but only symbols used in keeping the records.

## JUNIOR COLLEGE

The purpose of the specific requirements stated is to prepare for satisfactory work in the Senior College those who are candidates for the B.A. degree. A student will be admitted to the Senior College on the completion of the following work or the equivalent in another recognized institution.

\* Or 9 credits in a year course or 9 credits (6 semester credits) of advanced standing.

† During the war emergency, students will be admitted to the Senior College if they have 84 credits and a C average; but they will be required to meet the full requirement of 180 credits for graduation.

§ See page 16; for a Special Course in the Humanities, see page 17; and for a course in Preparation for Theological Training, see page 16.

*Required Courses and Distribution of Work*

1. In four groups of subjects there are specific requirements as follows:

- A. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. All students are required to take a placement test before registering for any course in English or composition. (See page 10.)
- B. Foreign language, 0 to 20 credits, according to the following schedule:†

*Amount Presented  
for Entrance**Amount Required in  
Junior College*

Four years of one language	None
Three years of one language	5 credits in same language
Two years of one language	10 credits in same language
One year of one language	15 credits in same language
Less than a year of one language	20 credits in one language

- C. 10 credits\* in one of the social sciences: anthropology, economics, geography, history, political science, sociology  
or  
12 credits in Social Science 1f-2w-3s (Introduction to Social Science)
- D. 10 credits\* in one of the natural sciences: astronomy, botany, chemistry, geology (including laboratory) physics (including laboratory), psychology (including laboratory), zoology  
or  
15 credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences)

Freshmen may take any of the courses which are announced as offered to them in the University's *Combined Class Schedule* or in a separate *Freshman Program*; but they are advised to have these group requirements in mind when they are planning their programs.

In addition to these specified studies the student will take studies chosen by himself (electives) to make up the number of credits required. (See the following paragraphs.)

2. In order that the student may be prepared on entering the Senior College to devote his time to Senior College studies, he should examine the prerequisites for the Senior College courses in the fields in which he is interested. By the end of his sophomore year he is expected to be prepared for Senior College studies in at least five departments.

3. If a student elects the curriculum for concentration he must plan to secure the necessary preparation for a major sequence in consultation with a major adviser. He should apply at the departmental office and be assigned to a major adviser. If he chooses the curriculum in liberal arts he should elect elementary courses in those departments in which he wishes to do advanced work in his junior and senior years. He should apply to the Senior College office (217 Folwell Hall) for assignment to an adviser.

The choice between the curriculum for concentration and the curriculum in liberal arts should be made by the student not later than the end of his sophomore year. He is at liberty to consult with the Senior College advisers at any time that he desires and will be assigned to an adviser whenever he has chosen his course.

*Amount and Quality of Work*

The student must earn a total of at least 90 credits,§ with a scholarship average of C, or a smaller number of credits determined as follows: For every five honor points in excess of the number necessary for a C average, the number 90 is diminished by one. (Credits thus earned by excess honor points are called "quality credits." See paragraphs 18, 19, 20 on pages 4-5.)

\* Or 9 credits in a year course or 9 credits (6 semester credits) of advanced standing.

† For students who enter this University with advanced standing, the number of credits required may be less than that indicated in this schedule. Any course of 9 credits (6 semester credits) may be substituted for the corresponding 10-credit course here.

§ During the war emergency students will be admitted to the Senior College if they have 84 credits and a C average; but they will be required to meet the full requirement of 180 credits for graduation.

A student entering with advanced standing from some other institution must complete the same requirements. He must secure a C average for work done in this University. Quality credits can be earned only in connection with the work done in this University.

While the quality of work normally expected is expressed by a scholarship average of C, improvement in the quality of work as the student progresses will be taken into account by the Students' Work Committee. If improvement and other considerations are accepted in part as the basis of promotion, the scholarship average of C will be required for the quarters in which the student earned his last 45 credits. Students who wish to enter the Senior College on these terms should apply to the Senior College office, 217 Folwell Hall.

While the normal time of residence in the Junior College is two years, this may be shortened by the application of quality credits, or it may be necessary for the student to spend a longer time in order to demonstrate ability to do work of the quality expected. *The student is expected to enter the Senior College as soon as he has completed the preparation required.* Students should apply for admission to the Senior College as soon as they have the required 90 credits† and a C average even if they have not met all the group requirements (English, foreign language, social science, natural science). They may be admitted provisionally. Credits earned in the Junior College *after the student is qualified to enter the Senior College* may not ordinarily be counted to meet the requirements of the Senior College. Extra credits in Senior College courses may be counted toward meeting the Senior College requirements for graduation. *Extra credits in Junior College courses may be counted only with the approval of the Students' Work Committee.* The committee will give its approval in every case in which the student will have at least 60 credits, exclusive of quality credits, in Senior College courses before graduation.

#### SENIOR COLLEGE

The student is expected to devote his time to Senior College studies except in so far as, in the judgment of his Senior College adviser, additional elementary studies definitely contribute to his intellectual development.

The normal period of residence is six quarters and the normal credit requirement is 90 credits. The student must maintain a C average in the work done while in residence in the Senior College. The number of credits may be diminished and the period of residence shortened by application of quality credits\* earned in Senior College courses during residence in the Senior College.

#### *Requirements in the Curriculum for Concentration*

1. Each student electing this curriculum must complete a coherent and progressive sequence of Senior College courses, known as a *major sequence*, as specified by the department which offers it. Such major sequences are offered by the following departments: Anthropology, Architecture, Astronomy, Bacteriology, Biostatistics, Botany, Chemistry, Classics, Economics, English, Fine Arts, Geography, Geology and Mineralogy, German, History, Journalism, Linguistics and Comparative Philology, Mathematics, Music, Philosophy, Physics, Physiology, Political Science, Psychology, Public Health, Romance Languages§, Sociology and Social Work¶, Speech, Zoology. The courses constituting a major sequence in any department are announced in the University's *Combined Class*

\* For a definition of quality credits, see paragraphs 18, 19, 20, on pages 4-5.

† During the war emergency students will be admitted to the Senior College if they have 84 credits and a C average; but they will be required to meet the full requirement of 180 credits for graduation.

§ An interdepartmental sequence in Latin-American studies is offered under the direction of the Department of Romance Languages. See page 20 of this bulletin.

¶ For an interdepartmental sequence recommended as preparation for social work, see page 25 of this bulletin.

*Schedule.* The major sequences in Fine Arts, Journalism, and Music are also announced in this bulletin, pages 17, 19, and 21.

A student must maintain a C average in the work of the major sequence.

2. A *minor sequence* of 15 credits, or *two minors* of 9 credits each, in Senior College courses. These must be taken in some department or departments other than the student's major department and in addition to his major sequence.

3. The whole plan of studies in the Senior College must receive the approval of the major adviser.

#### *Requirements in the Curriculum in Liberal Arts*

Each student who wishes to elect this curriculum must submit to the assistant dean for the Senior College a plan of study in which the subjects and courses chosen are related to one another and to the student's purpose and are intelligently arranged in a working program. If this plan gives evidence of a central purpose, the student will then be assigned to an adviser who will examine and discuss the plan with him. The program as approved by the adviser is to be carried out in harmony with the general requirements.

An indefinite variety of study programs† may be recognized under this heading. They may serve the purpose of the student who is interested in general culture, in literary or artistic pursuits, in comparative literature, in the integration of fields of study ordinarily separated by departmental organization, in critical interpretation, or in any activity, preparation for which requires the student to draw upon several fields. This curriculum is intended to provide for the making of programs by individuals to suit their own interests or needs.

In conference with his adviser, the student will work out a program for his Senior College years. When this program has been approved by the adviser and the assistant dean, it becomes a contract between the college and the student, and no change in it may be made without the written permission of the adviser. The adviser represents the college in approving the individual's program.

#### *Requirements for Graduation*

For graduation a student must satisfy all specific requirements stated above.

It is ordinarily expected that a student who enters as a freshman will spend four years (twelve quarters) in residence in the college. The period of residence may be shortened by the application of quality credits or by taking examinations for credit (see paragraph 8, on page 3.) If a student has transferred from some other college he must spend the last three quarters before graduation in residence in the Senior College and must earn a minimum of 45 credits in residence in the Senior College.

The credit requirement for graduation is: 180 credits with a C average, or a smaller number of credits as provided in the above rules governing the Junior College and the Senior College, respectively.

#### *Preparation for Theological Training*

The attention of students intending to enter theological seminaries or to take other special training for religious work is drawn to the following liberal arts major:

1. Philosophy 50-51-52. General History of Philosophy (9 credits).
2. Nine credits from these courses in philosophy:
  - 106-107. Philosophy of Plato (6 credits)
  114. American Philosophy from Puritanism to Pragmatism (3 credits)
  180. History of Religion (3 credits)
  181. Psychology of Religion (3 credits)
  182. Philosophy of Religion (3 credits)

†The Senior College courses in this approved program are said to constitute a "liberal arts major." Two such majors are outlined in subsequent paragraphs, under the headings "Preparation for Theological Training" and "Special Course in the Humanities."

3. Nine credits from these courses in history:  
53-54-55. Medieval European History (9 credits)  
53a-54a-55a. Renaissance and Reformation (9 credits)
4. Eighteen credits from the following group: 9 credits in Senior College Greek; 9 credits in Senior College psychology; 9 credits in Senior College economics; 9 credits in Senior College sociology, including Sociology 115 (Religion As a Social Institution).
5. Fifteen additional Senior College credits, making a total of 60 credits in Senior College courses.

Students interested in this program may consult with Mr. Conger (Room 300 Folwell Hall) or Mr. Castell (Room 323 Folwell Hall).

### *Special Course in the Humanities*

The Course in the Humanities has been planned for selected students to enable them to acquire, through the systematic co-ordination of history, philosophy, the fine arts, music, the ancient and modern languages, a well-ordered knowledge of our cultural development. It is by the study of the relationship between habits of thought, historical events, and the cultural expression of past civilizations that one may determine accurately the causes and meanings of past events and also gain help in facing and solving the problems of contemporary life. The course is so arranged that a student, starting with the facts of history as a basis, may study critically in historical sequence the great monuments of creative energy and may thus acquire a precision of method and thought no less exact or useful than that of the natural and physical sciences.

Admission to the Course in the Humanities is limited to students who, in the judgment of the committee in charge, are properly qualified. The greatest possible freedom for the student is desired, and the course is planned so that it will adapt itself to the needs and preferences of the individual. The work of a student, after admission to the course, will be supervised by an adviser and a committee made up of members of the departments concerned.

No prerequisites are necessary for admission to the Course in the Humanities. It is, however, strongly recommended that the student who plans to enroll in it have, while in high school, two or more years of a foreign language and the basic courses in history and literature. Upon the completion of such preparatory work the student is free to study more varied and more advanced subjects earlier in his college career.

The general requirements for admission to the Senior College and for graduation are the same as in the Curriculum in Liberal Arts. (See page 16.) The specific requirements for the course are as follows:

1. Two years of Senior College work in one foreign language.
2. A reading knowledge, attainment of which may be determined by examination, of at least one other foreign language.
3. Concentration on one of the four great periods of culture—Ancient, Medieval, Renaissance, or Modern. The courses in literature, history, fine arts, philosophy, and other expressions of one of these periods are to be chosen so as to complement each other. At least 90 credits are to be taken in the field of concentration, of which at least 60 credits must be in Senior College courses.
4. Electives to make up the remainder of 180 credits may be chosen according to the student's wishes, provided the requirements of his curriculum are fulfilled. It is advised, however, that the electives be chosen from contiguous fields.

Various suggested programs for the four-year course may be had on application to Professor Ogle, 118 Folwell Hall.

### *Courses in Art\**

**Adviser.**—Associate Professor Schmeckebier.

A wide variety of courses in art is offered to students of the College of Science, Literature, and the Arts. They are listed under the following headings in the University's

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

*Combined Class Schedule:* Architecture, Art Education, Drawing, Fine Arts, and Home Economics. These courses may be organized into special sequences for a major in Fine Arts leading to the degree of bachelor of arts. The basic introductory course is Fine Arts 1-2-3 which the student is expected to take as early as possible, preferably in the freshman or sophomore year. In it are combined the elementary principles of style and technique of the arts with a systematic survey of their development from the earliest times through the present day. Subsequent courses are arranged in two sequences in accordance with the cultural or professional interests of the student:

**Sequence A** is concerned primarily with the historical and critical study of the various stylistic periods, artists, and important works. The selection of courses required and suggested for this sequence offers the student not only a broad acquaintance with the fields of the humanities either as an end in itself or as a foundation for further study, but also affords practical training in art criticism and writing, library, museum, and education work in the arts. Requirements for students majoring in this sequence are Courses 1, 2, 3 (Introduction to Art) and 33 credits in courses numbered above 50.

**Sequence B** is intended for students desiring a practical acquaintance with the various artistic processes as well as technical skill in drawing and studio design. Requirements for students majoring in this sequence are: Courses 1-2-3 (Introduction to Art); 9 credits in art history courses with numbers above 70; and 27 credits in practical art courses given by the School of Architecture, and Departments of Art Education and Drawing. The basic point of view governing the organization of this sequence is that the professional artist must have a sound cultural background as well as artistic skill and technical training in his chosen field.

Either of these sequences is begun after the student has satisfied the usual requirements for admission to the Senior College described on pages 12-15 of this bulletin. The following courses of study are recommended by the Department of Fine Arts for the freshman and sophomore years.

1. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
2. French, German, or Spanish to meet the foreign language requirement.
3. Social Science 1-2-3 (Introduction to Social Science) or economics or history or sociology, to meet the social science requirement.
4. Natural Science 1-2-3 (Orientation in the Natural Sciences) or psychology (with laboratory), or zoology, or botany to meet the natural science requirement.
5. Fine Arts 1-2-3 (Introduction to Art).
6. *For Sequence B*—at least 12 credits in studio courses in drawing and painting selected from Architecture DP-I, DP-II; Art Education 4-6-8, 24-26-28; Drawing 41-42-43, 81-82-83.  
*For Sequence A*—Courses in English and foreign literature, History 1-2-3 (Civilization of the Modern World), Humanities 1-2-3 (Humanities in the Modern World) and Humanities 5-6-7 (The European Heritage: From Homer to Molière) are recommended in preference to the studio courses.
7. Electives to make up the required total of 90 credits.

Among the many professional possibilities available in the Senior College curriculum in Sequence B the following objectives are suggested as the most practicable:

**Commercial Design.**—In this program the student is able to combine a broad cultural background of art, history and literature, and a technical training in drawing, painting and design with a basic knowledge of advertising technique and procedure. Required for this program are certain courses in Journalism, Economics and Business Administration, and Psychology to be chosen in conference with the adviser.

**Pre-occupational Therapy.**—Due to the present manpower shortage a full program for occupational therapy can be supplied for only the first two years. Required for this course are Zoology 1-2-3, Psychology 1-2, Physiology 1-2, Sociology 1, Public Health 3, Bacteriology 1, and Anatomy 3, in addition to Fine Arts 1-2-3 and the Drawing and Painting courses listed above.

**Industrial Design.**—Depending on the individual requirements of the student, a program of training for various fields of industrial design can be worked out with the adviser on the basis of the Sequence B major. For the special major in Architecture see page 21 of the University's *Combined Class Schedule*.

#### *Education for Journalism†*

**Advisers.**—Professors Casey, Charnley, Barnhart, and Nafziger; Assistant Professors Ford and Kildow.

Professional training for journalism is provided by a major in the School of Journalism leading to the degree of bachelor of arts, for which the requirements are given on pages 12-16. The course is built upon the principle that sound professional accomplishment in journalism is based on a broad cultural education plus a fundamental working knowledge of journalistic techniques, theory, and history.

Unless a student is enrolled in the accelerated program (described below), his specialized training in journalism begins in his sophomore year with a course in reporting, which he may enter if he has satisfied the scholastic requirements of the school.

In addition to the four-year program, a war emergency program in the School of Journalism provides a six-term accelerated course. The program will give to students a necessary minimum of specialized training for junior positions in newspaper and magazine writing and editing, advertising, and radio writing. The program is open to men and women with or without college experience who show themselves qualified for the work. It is especially intended for those more mature than the average college undergraduate. This program is not considered full preparation for a career in journalism, but rather an emergency measure to supply men and women with a minimum of necessary training to fill positions open because of the war manpower shortage.

An average of C in all work must be maintained by all prejournalism and journalism major students.

The student begins the Senior College major sequence in journalism after satisfying the usual requirements for admission to the Senior College described on pages 12-15. Altho a student may meet these requirements in his own way, the School of Journalism recommends the following courses of study for the freshman and sophomore years:

1. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
2. French, German, or Spanish to meet the foreign language requirement.
3. Social Science 1-2-3 (Introduction to Social Science) or economics or history or political science or sociology, to meet the social science requirement.
4. Natural Science 1-2-3 (Orientation in the Natural Sciences) or psychology (with laboratory), or zoology, to meet the natural science requirement.
5. Advanced Writing (Composition 27-28); Introduction to Reporting (Journalism 13); and Newspaper Reporting (Journalism 14-15); which are prerequisites for the Senior College major sequence in journalism.
6. Electives to make the required total of 90 credits.

Recommended electives are: Political Science 1-2-3 or 5 (American Government and Politics); Political Science 10 (Fundamentals of Government and Politics); Political Science 25 (World Politics); Psychology 1-2 (General Psychology); Sociology 1 (Introduction to Sociology); Sociology 2 (Individual and Group Adjustment); Economics 6-7 (Principles of Economics); at least nine credits in history; Humanities 1-2-3 or 5-6-7.

The Senior College curriculum is arranged to offer training for metropolitan journalism, small daily or weekly journalism, including newspaper advertising and business

† For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

management aspects of the publishing industry, magazine writing and magazine, book, and manuscript editing, advertising, public relations work, radio writing and advertising, media analysis; in co-operation with the College of Education, training for teaching journalistic writing and supervising student publications in high schools and junior colleges; in co-operation with the College of Agriculture, Forestry, and Home Economics, training for agricultural journalism.

When students enter the Senior College they are advised to select their elective work for preparation in special fields. Editorial courses are designed to train students in news gathering, writing and editing, feature and magazine writing and editing, newspaper administration, magazine and book editing and publishing, and radio writing. Business courses train them in newspaper and periodical advertising, circulation problems, and business management methods. Journalism students specializing in advertising and business management problems may take a minor in advertising (B.A. 77, 88 and 194; Psychology 56; Journalism 65 and Drawing 64, "Graphic Arts"). Junior College prerequisites for these courses are Psychology 1-2 and Economics 5 and 6-7. Some modification of this minor sequence is permitted on consent of the director of the School of Journalism, altho a minimum of 15 hours of Senior College work for this minor is required.

The major sequence in journalism in the Senior College is as follows: Course 51-52 (News Editing); Course 55 (Advertising and Newspaper Typography); Course 69 (Newspaper and Magazine Articles) or Course 73 (Magazine Writing and Editing); Course 101 (The Reporting of Public Affairs); Course 109-110 (History of Journalism); Course 112 (Current Newspaper Problems); Course 140-141 (Interpretation of Contemporary Affairs); and 9 additional credits to be chosen in conference with the major adviser. Students of marked ability may substitute for these 9 additional credits in journalism, Senior College courses in other departments with the approval of the major adviser in journalism. Certain modifications of this sequence may be made with the approval of the director of the School of Journalism for women students specializing in advertising. Women students who are permitted to omit one or more courses in the required journalism sequence must substitute other journalism courses of equivalent hours.

The school offers minor sequences for students in the College of Agriculture, Forestry, and Home Economics, the Institute of Technology, the School of Business Administration, and the College of Education.

#### *A Course in Latin-American Studies\**

**Adviser.**—Associate Professor Pattison.

This course in specialization in Latin-American studies brings together into one group the courses in various aspects of Latin-American life and culture offered by different departments. It includes courses in anthropology, economics, fine arts, geography, history, and Spanish.

The student will receive a thoro cultural training as well as a broad preparation for business or, if he elects enough courses in political science, for diplomatic dealings with Latin-American countries.

The work of the first two years, taken in the Junior College, consists of the regular academic requirements for admission to the Senior College, as given on pages 12-15, with electives chosen to include the following courses as preparation for Senior College work: Economics 3 (Elements of Money and Banking); Economics 6-7 (Principles of Economics); Fine Arts 1-2-3 (Introduction to Art); Geography, 8 credits; Spanish 1-2 (Beginning Spanish) and 3-4 (Intermediate Spanish).

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

Recommended electives are: Anthropology 40 or 41 (Introduction to Anthropology) or Anthropology 42 (The Growth of Cultures); History 1-2-3 (Civilization of the Modern World); History 20-21-22 (American History); Political Science 1-2-3 or 5 (American Government and Politics); Political Science 25 (World Politics).

The work of the junior and senior years is subject to the requirements of the course leading to the degree of bachelor of arts which are given under the headings *Senior College* (page 15) and *Requirements for Graduation* (page 16) with this exception:

The requirements of a major sequence (page 15) and one or two minors (page 16) are replaced by the following interdepartmental sequence:

1. Anthropology 118. Indian Civilizations of Mexico and Peru (3 credits).
2. Economics 141. Monetary and Banking Policy (3 credits).
3. Economics 176. International Commercial Policies (3 credits).
4. Economics 127. Comparative Banking: South American Systems (3 credits) or Economics 126, Economic Problems of Latin America (3 credits).
5. Fine Arts 57-58-59. Art in the Americas (9 credits).
6. Geography 110. Geography of South America (3 credits).
7. History 93a-94a-95a. Survey of Latin-American History (9 credits).
8. Spanish 74-75-76. Survey of Spanish-American Literature: Contemporary Prose and Poetry (9 credits).
9. Spanish 70-71-72. Latin-American Culture (9 credits).
10. Spanish 53. Spanish Composition (3 credits).
11. Spanish 54-55. Spanish Conversation (6 credits).

Recommended electives are: Anthropology 80 (The American Indian); Economics 124 (Comparative Banking: British Systems); Economics B.A. 177 (Foreign Trade); Economics 185 (Economics of Marketing); Geography 71 (Geography of North America); History 65-66-67 (Europe in the Twentieth Century); Spanish 140-141-142 (Contemporary Latin-American Literature).

Modifications of this interdepartmental sequence will be permitted upon petition approved by the adviser and the assistant dean for the Senior College.

#### *A Course in Music\**

**Advisers.**—Professors Oberg and Ferguson; Associate Professor Hull.

To secure the degree of bachelor of arts with a major in music a student must fulfill the requirements of both the Junior and Senior Colleges as stated on pages 12-16 of this bulletin. He must secure 144 credits in courses other than practical music (piano, voice, etc.). During the first two years, he should register for English A-B-C (Freshman English) or English 4-5-6 (Freshman Composition), unless exempt from the requirements in English (see page 10); foreign language (0 to 20 credits, as indicated on page 14); History 11-12-13 (Medieval History); Psychology 1-2 (General Psychology) and Psychology 4-5 (Introductory Laboratory Psychology); and the following courses in music†: 1T, 2T, 3T, 4T, 5T, 6T (Music Theory); 7-8 (Counterpoint); 34-35-36 (History of Music). At the end of the sophomore year he must take a comprehensive examination to insure that he is prepared for Senior College work. In the following two years he must complete one or two academic minors (see page 16), and earn from 27 to 30 credits in fields emphasizing one of the following branches of music: composition; history; normal piano (a training course in piano teaching). During the four years he must earn 30 credits in practical music. Special fees for courses in practical music are announced on page 6.

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

† All students majoring in organ or piano who took the Ear Training and Harmony offered prior to fall, 1944 will be required to take Music 37-38-39 (Keyboard Harmony) in addition.

Entrance requirements, according to the instrument selected.—

Piano: Any major or minor scale in octaves, thirds, sixths, or tenths, in sixteenths at M.M., quarter note = 108; Bach Invention or dance 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. 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 for piano.

To register in the music course, a student must first pass an examination in practical music before a committee of the faculty of the Music Department. This applies also to academic students who wish to elect courses in practical music.

For more specific information as to required courses, consult the statement of the Department of Music in the University's *Combined Class Schedule*.

For a course in music education leading to the degree of bachelor of science in education and a teacher's certificate, see the Bulletin of the College of Education.

## GRADUATION HONORS

### A. General Requirements

The degree B.A. or B.S. may be awarded *cum laude*, *magna cum laude*, or *summa cum laude* upon the recommendation of the Committee on Honors.

Honors are awarded only to students who at the time of graduation:\*

- a. Have a scholarship average of B or above in all their work.
- b. Have earned at least forty-five (45) credits in this college after their admission to the Senior College,
- c. Have a minimum of sixty (60) credits, exclusive of quality credits, in Senior College courses.†

Students who enter with advanced standing are eligible to become candidates for honors if they will have earned 60 credits of work in residence before graduation.

Students may be accepted as candidates for honors in courses leading to the B.S. degree or to the B.A. degree in combined arts and professional courses provided they present an equivalent of the work required for graduation with honors in the general course leading to the B.A. degree.

Any student who cannot meet these general requirements in full or the specific requirements below may apply to the Committee on Honors for individual consideration of his case.

### B. Cum Laude

Any student who, in addition to satisfying the general requirements above, has an average of B in a minimum of 60 credits in Senior College courses so distributed as to include a minimum of six credits of Senior College work in subjects outside the major and minor fields will be recommended for his degree *cum laude*.

\* The attention of students is called to the fact that in the College of Science, Literature, and the Arts honors are awarded upon complete records including the work of the final quarter before graduation. If any student has reason to believe that his record in the final quarter may alter his status as a candidate for higher honors he should immediately consult the chairman of the committee.

† Courses numbered 50 or above.

## C. Higher Honors

Students wishing to become candidates for the higher honors (*magna cum laude*, *summa cum laude*) must signify their intention not later than the beginning of the third quarter before graduation. Students are admitted as candidates upon the recommendation of the major department and the approval of the Committee on Honors.

**Magna cum laude without examination.**—Any student will normally be recommended by the committee for his degree *magna cum laude* if

- a. He satisfies the general requirements above, and
- b. He has a scholarship average of 2.25 or above in all his work and in his Senior College courses averaged separately, and
- c. He has a percentile rank above 60 in three of the five parts of the Sophomore Culture Test, and a percentile rank above 60 in the total score on this test, and
- d. His program shows a minimum of six credits of Senior College work in subjects outside the major and minor fields.

**Magna cum laude on examination.**—Any student who satisfies the general requirements but who cannot meet the special requirements immediately preceding may apply to the Committee on Honors to be admitted to an oral examination—described below—for *magna cum laude*, if his general average is 2.15 or above.

**Summa cum laude.**—To be approved as a candidate for graduation *summa cum laude* a student must meet all the requirements for *magna cum laude* without examination and in addition have a scholarship average of 2.40 or higher in all his work and in his Senior College courses averaged separately. He must then take an oral examination and submit a paper such as is described below.

**The oral examination.**—The oral examination is not, like a graduate examination, intended to cover the work of any course or group of courses which the student has taken. It is not a test of memory, but of assimilation, of culture, and of power to use the knowledge which courses of study have put within the student's reach. Questions may be asked on the content of a course, but only as a point of departure, as the first of a series of questions intended to lead the student toward inferences of his own or toward a comparison of, or correlation of, the content of separate courses.

The examination is intended to test the student's

- a. Acquaintance with the chief literature and sources of information in his major field.
- b. Ability to discuss, with intelligence and clear reasoning, questions or problems upon which he has had opportunity to secure the necessary information. Such questions may be new to the student.
- c. Capacity for self-education as indicated by his curiosity about subjects of general interest and his voluntary attempt to inform himself concerning them.
- d. Power to command or use the knowledge which his courses of study have put within his reach.

**The summa paper.**—The *summa* paper may be of almost any type whatever provided it demonstrates that the candidate has talent or ability which marks him as a distinguished undergraduate. It may consist of creative work in any of the arts—a musical composition, a group of paintings, or poems, or stories. It may follow the pattern of the "term paper" in which the student is expected to survey the literature on any special topic, to gather the available information, and to organize and present it in clear, logical form. Or it may consist of the preliminary survey of the literature on a problem in research which the student will pursue in his graduate years. Or it may present the results of research itself.

Whatever it may be, it should show distinction—at the undergraduate level—and should be presented in finished form. If an essay, or critical paper, or report or thesis, it must be well written.

#### COURSES IN THE GENERAL EXTENSION DIVISION

A student enrolled in the College of Science, Literature, and the Arts may take courses in the General Extension Division with permission of the Students' Work Committee; but the credits received in those courses will be counted as credits in this college only after the student has completed one year of work in the college.

A student who takes courses in the General Extension Division in classes in St. Paul, Minneapolis, or Duluth and wishes to count them toward a Bachelor's degree given by the College of Science, Literature, and the Arts must meet all curricular requirements of this college as stated in this bulletin. This means that:

- a. Before beginning work in the Senior College with a view to graduation, the student shall apply for Senior College standing and be enrolled by the assistant dean for the Senior College.
- b. He shall be assigned to a Senior College adviser and shall complete all the Senior College studies under the direction of the adviser.
- c. He shall complete any required work, either of major or minor sequences or of any other nature, in this college if it is not offered in the General Extension Division.
- d. He must observe any specific requirements which may be adopted hereafter, such as comprehensive examinations on either Junior College or Senior College work.

For the adjustment of irregularities in his curriculum the student will get advice from the assistant dean for the Senior College or from his major adviser.

A student who does not conform to these regulations may apply for standing in the Senior College on the same terms as a student transferred from some other institution.

Students who have not taken class work in one of the cities named must meet both curricular and residence requirements.

#### CREDIT IN THE GRADUATE SCHOOL

A student lacking not more than nine credits toward graduation may, upon petition, receive graduate credit for a limited amount of work taken as an undergraduate. No graduate credit will be given unless the student has made previous arrangements with the Graduate School. Courses taken for graduate credit will not carry credit toward the Bachelor's degree.

With the permission of the assistant dean for the Senior College, an undergraduate lacking not more than six credits toward graduation may be registered in the Graduate School while completing his requirements for the Bachelor's degree.

### III. A COURSE IN LIBRARY TRAINING\*

For the course in library training, leading to the degree of bachelor of science in the College of Science, Literature, and the Arts, a student must first complete satisfactorily three years of academic work. During his third year the student will elect work in this college, subject to the approval of the assistant dean for the Senior College. During these three years the student must secure at least 135 credits, with a scholarship average of C. (This number of credits required may be reduced by application of the "quality

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

credit" rules given in paragraphs 18, 19, 20, on pages 4-5.) At least 30 credits† must be in Senior College courses. The student must complete the requirements for admission to the Senior College, given on pages 12-15, and is subject to all the regulations which govern the work of other Arts students. He must complete his academic requirements before beginning the courses in Library Instruction.

*For admission to the fourth year of this course the student must secure the written approval of the assistant dean for the Senior College of the College of Science, Literature, and the Arts.*

During the fourth year a student will elect not less than 45 credits from courses given by the Division of Library Instruction, and must maintain a scholarship average of C.

#### *Training for Hospital Librarianship*

Candidates for admission to this special course must have completed satisfactorily (1) at least three years of approved college work and at least two quarters of work in an approved library school or an equivalent of approved experience in hospital library work, and (2) the following courses or their equivalents: Public Health 50 (Public and Personal Health, 3 credits); Psychology 1-2 (General Psychology, 6 credits); Psychology 144-145 (Abnormal Psychology, 6 credits); Sociology 1 (Introduction to Sociology, 5 credits); Sociology 49 (Social Pathology, 3 credits); Zoology 1-2-3 (General Zoology, 10 credits). Students are advised not to register for less than the four courses in hospital librarianship. No candidate for a certificate or degree will be excused from Hospital Library Practice. Opportunity for individual study of problems of special interest will be given as far as practicable. All prospective students who have not taken their preliminary work at the University of Minnesota must apply for admission to this University and must submit their credentials to the office of admissions and records of the University of Minnesota, Minneapolis 14, Minnesota. Since each application requires special consideration, early application is extremely desirable. It is expected that only those who are genuinely interested in work in hospitals, who are physically able to do such work, who are willing to accept positions in hospitals or similar institutions, and who have personal and educational qualifications for such will apply.

For admission to the Division of Library Instruction and to the course in Hospital Librarianship a special certificate must be secured from the assistant dean for the Senior College of the College of Science, Literature, and the Arts.

#### IV. A COURSE PRELIMINARY TO SOCIAL WORK\*

Education for social work is on three levels: (1) undergraduate study, which includes social sciences and some courses of primarily informational nature dealing directly with social work; (2) one year of graduate social work study which includes technical theory courses in social work and field work practice; (3) a second year of graduate study devoted to specialization in a particular field of social work, advanced field work practice and research.§ The undergraduate level of study prepares for beginning positions in social work. Further training at the graduate level opens opportunities with professional recognition. For full information regarding graduate professional preparation

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

† Thirty is the number usually required. For some students it may be reduced by special permission of the assistant dean for the Senior College.

§ As a special opportunity for women during the war and the postwar period, this college offers an accelerated program for junior social workers. It is outlined in a special pamphlet on "Opportunities for Women During the War and the Postwar Period" which may be obtained at the general information window of the office of admissions and records in the Administration Building. Students who are interested should consult the Department of Sociology and Social Work (Room 108, Jones Hall).

for social work, see the Bulletin of the Graduate School and the special bulletin of the School of Social Work.

The following undergraduate course of study is recommended both for those who desire a four-year course and for those who expect to do graduate study in the School of Social Work. In order to plan the undergraduate work wisely, students are advised to consult with advisers in the offices of the Department of Sociology and Social Work early in their course. The organization of the course aims to give the undergraduate the fundamentals of a broad modern education.

#### JUNIOR COLLEGE

The work of the first two years, taken in the Junior College, consists of the regular academic requirements and fundamental courses in sociology, psychology, and political science. The requirements for admission to the Senior College are the same as those given under the headings *Required Courses and Distribution of Work* (page 14) and *Amount and Quality of Work* (page 14).

The specific subject requirements for the first two years are as follows:

1. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
2. Foreign language, 0 to 20 credits according to the schedule given on page 14.
3. Ten credits† in one of the social sciences or 12 credits in Social Science 1f-2w-3s (Introduction to Social Science.) (See page 14.) It is recommended that economics be not chosen to meet this requirement since there will be an opportunity to take courses in that subject in the junior or senior year.
4. Ten credits† in one of the natural sciences or 15 credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences). (See page 14.) It is recommended that zoology or physiology be taken to meet this requirement.
5. Electives to make a total of at least 90 credits for the two years' work, with a scholarship average of C.

The following courses must be included in the two years' work outlined in Items 1-5:

- Sociology 1 (Introduction to Sociology, 5 credits).
- Sociology 45 (Social Statistics, 5 credits).
- Sociology 49 (Social Pathology, 3 credits).
- Political Science 1-2 or 5 (American Government and Politics, 5 or 6 credits).
- Psychology 1-2 (General Psychology, 6 credits).

Recommended electives are: Sociology 2 (Individual and Group Adjustment); Economics 49 (Introduction to Economics for Social Workers); History 1-2-3 (Civilization of the Modern World) or Philosophy 1, 2, 3 (Problems of Philosophy, Logic, Ethics); Speech 1-2-3 or 5-6 (Fundamentals of Speech) or Composition 27-28-29 (Advanced Writing).

#### SENIOR COLLEGE

The work of the junior and senior years is subject to the requirements of the course leading to the degree of bachelor of arts which are given under the headings *Senior College and Requirements for Graduation* on pages 15 and 16 with this exception:

The requirements of a major sequence and one or two minors (page 15) are replaced by the following interdepartmental sequence:

- Sociology 50-51 (The Areas of Social Work); 53 (Elements of Criminology); 91 (Case Method Applied to the Study of Human Problems); 95 (Introduction to Public Welfare); 101 (Social Organization); 114 (Rural Social Institutions).
- Economics 49 (Introduction to Economics for Social Workers) or Economics 82, 83, 84 (Competition and Monopoly in Modern Industry, The Inequality of Incomes, Comparative Economic Systems), unless the student has had Economics 6-7 (Principles of Economics), or its equivalent.

† Or 9 credits in a year course or 9 credits (6 semester credits) of advanced standing.

Psychology—at least six credits in Senior College courses, preferably Psychology 144-145 (Abnormal Psychology).

History 80-81-82 (Introduction to Economic History) or 83-84-85 (American Economic and Social History) or six credits in Senior College courses in political science.

Philosophy 70 (Philosophies of Social Reform) or Sociology 145 (Theories of Social Reconstruction).

Public Health—at least two Senior College courses.

Nine credits from the following courses in Sociology:

- |                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| 100. Social Psychology                | 119. The Family                                         |
| 102. Contemporary Penology            | 120. Social Life and Cultural Change                    |
| 103. Sociology of Conflict            | 123. Methods of Social Research                         |
| 104. City Planning                    | 160. Population Problems                                |
| 110. Rural Community Organization     | 161. Social Aspects of Housing and Standards of Living. |
| 115. Religion As a Social Institution |                                                         |

Electives to make the required total (normally 90 credits).

Students who are taking this course preliminary to Graduate Social Work may elect, and get credit for, a maximum of 18 credits in the following courses in Art Education and Physical Education which are ordinarily not open to Science, Literature, and the Arts students. This privilege is primarily for students preparing for graduate training in group work directed to leadership in recreation.

#### Art Education

- 31 Orientation in Handcraft Processes
- 73 Ceramic Materials and Processes
- 75B Bookbinding Process
- 75M Metal Work
- 76 Textile Materials and Processes
- 81A-B Techniques of Puppetry

#### Physical Education for Men

- 56 Nature and Function of Play
- 136E Leadership in Recreation
- 141E Administration and Supervision of Public Recreation
- 142E Group Leadership in Community Recreation

#### Physical Education for Women

- 54 Camp Leadership
- 60 Principles of Play
- 63 Techniques of Teaching Folk Dancing
- 80 Principles of Rhythm

Satisfactory completion of four years' work of this curriculum leads to the degree of bachelor of arts.

## V. COURSES PREPARING FOR ADMISSION TO THE PROFESSIONAL SCHOOLS

### COURSES PRELIMINARY TO THE SCHOOL OF BUSINESS ADMINISTRATION\*

To be eligible for admission to the School of Business Administration, the student must present ninety (90) credits, in addition to credits given for physical education, earned in a recognized college or university with a scholarship average of C or a smaller number of earned credits which, together with quality credits, will total a minimum of ninety (90). One quality credit is granted for every five honor points in excess of the number necessary for a C average.

Quality credits earned in the Junior College may be applied only toward the ninety credits required for admission to the School of Business Administration. In other words, a student who has a surplus of honor points above the number required to complete ninety credits may not apply these for credit in the School of Business Administration. Any excess credits, however, other than quality credits, may be applied toward electives in the School of Business Administration.

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

The School of Business Administration offers courses leading to the degrees of *bachelor of business administration* and *bachelor of science in economics*. Students preparing to enter the school in pursuit of either of these degrees must satisfy prebusiness requirements as specified below.

*A. Junior College Requirements for Admission to Sequences Leading to the Degree of Bachelor of Business Administration*

1. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
2. Nine credits in mathematics or *one* of the following laboratory sciences: botany, chemistry, geology, physics, zoology, or psychology with laboratory.\*
3. Nine credits in *one* of the following social sciences: anthropology, geography, history, political science, or sociology†
4. Ten credits in Principles of Economics (Econ. 6-7).
5. Sufficient electives to complete the minimum of ninety (90) credits required for admission. The following courses should, if possible, be taken during the first two years, for most of them are prerequisites to certain courses in the core group:

Industrial History (Econ. 1)  
 Industrial Production and Organization (Econ. 2)  
 Elements of Money and Banking (Econ. 3)  
 Elements of Statistics (Econ. 5)‡  
 Elements of Accounting (Econ. 20)§  
 Principles of Accounting (Econ. 25-26)

Students who do not elect the above courses in money and banking, statistics, and accounting during the freshman and sophomore years may substitute the following:

Money and Banking (B.A. 57)  
 Statistics Survey (B.A. 70)  
 Elementary Accounting: Combined Course (B.A. 54-55)

In addition certain courses are required in special sequences in the school. These course prerequisites should be included in the Junior College program wherever possible. The major sequences and special course prerequisites are as follows:

1. Accounting: Mathematics of Investment (Math. 20), (prereq. Math. 8, or 6 and 7, or 15 and 16)
2. Advertising: General Psychology (Psy. 1-2)
3. Foreign Trade: General Psychology (Psy. 1-2); 9 credits in political science; reading knowledge of a foreign language
4. Finance: Mathematics of Investment (Math. 20), (prereq. Math. 8, or 6 and 7, or 15 and 16)
5. Industrial Administration: (See Bulletin of the Institute of Technology)
6. Insurance: General Psychology (Psy. 1-2); Mathematics of Investment (Math. 20), (prereq. Math. 8, or 6 and 7, or 15 and 16)
7. Merchandising: General Psychology (Psy. 1-2)
8. Personnel Management: General Psychology (Psy. 1-2)
9. Secretarial Training: General Psychology (Psy. 1-2); Secretarial Training: Typewriting (Econ. 32-33)‡
10. Department Store Training: General Psychology (Psy. 1-2); Secretarial Training: Typewriting (Econ. 32-33)‡
11. Office Management: General Psychology (Psy. 1-2); Secretarial Training: Typewriting (Econ. 32-33)‡

DISTRIBUTION OF COURSES

Of the required and elective courses in economics, Economics 1 and 2, which are strongly recommended but not required, belong in the freshman year; Economics 3 may be taken in the freshman year (to make with Economics 1 and 2 such a sequence as 1f-2w-3s),

\* Fifteen credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences), taken at the University of Minnesota, will be accepted as a substitute for 9 credits in mathematics or one of the several laboratory sciences.

† Social Statistics (Soc. 45) not accepted in fulfillment of this requirement.

‡ A laboratory fee of \$2.50 will be required of students who register for one or more of the courses in secretarial training.

§ Credit not granted in Econ. 5 to students who have had Social Statistics (Soc. 45).

¶ Students who have had a high school course or experience in bookkeeping will be admitted to Econ. 25 by passing a placement test. For other students Elements of Accounting (Econ. 20) is a prerequisite to Econ. 25.

or may be taken later; Economics 5, 6-7 and 20, 25-26 belong in the sophomore year, but students are permitted to take Economics 20 when they are third quarter freshmen.

Of the courses taken to meet the requirements of (1) English, (2) social science, (3) mathematics or laboratory science, freshmen should take at least two and thus leave not more than one for the sophomore year. To meet the third of these requirements, students who intend to specialize in accounting, banking, or statistics should take mathematics instead of natural science. Indeed, mathematics is recommended for all students planning to enter the School of Business Administration, either as a subject to meet this requirement or as an elective.

Courses in English, mathematics, all the laboratory sciences, and all of the social sciences are open to freshmen.

Of other courses recommended above, in Items 1-11, Psychology 1-2 (General Psychology) belongs in the sophomore year; Economics 32-33 (Typewriting) may be taken as early as the student's first quarter in college, with the instructor's permission; foreign language, which is required in the foreign trade sequence, may be taken as early as the beginning of the freshman year.

*B. Junior College Requirements for Admission to Sequences Leading to the Degree of Bachelor of Science in Economics*

Economics Sequence	Credits
English (Comp. 4-5-6 or English A-B-C).....	9 or 15
Mathematics .....	10
Elements of Money and Banking (Econ. 3)*.....	5
Principles of Economics (Econ. 6-7).....	10
Elements of Statistics (Econ. 5)*§.....	5
Political Science or History.....	9
Philosophy (Philosophy 1 or 2).....	5
Additional mathematics or laboratory science.....	10
Electives .....	27 or 21
	90
<b>Statistics Sequence</b>	
English (Comp. 4-5-6 or English A-B-C).....	9 or 15
Trigonometry (Math. 6).....	5
College Algebra (Math. 7).....	5
Analytic Geometry (Math. 30).....	5
Elements of Money and Banking (Econ. 3)*.....	5
Principles of Economics (Econ. 6-7).....	10
Elements of Statistics (Econ. 5)*§.....	5
Political Science or History.....	9
Philosophy (Philosophy 1 or 2).....	5
Additional mathematics .....	5
Elements of Accounting (Econ. 20)*¶.....	3
Principles of Accounting (Econ. 25-26)*.....	6
Electives .....	18 or 12
	90

TWO-YEAR PREDENTAL COURSE†\*\*

The two-year predental course required for admission to the School of Dentistry is a part of the six-year course in dentistry leading to the degree of doctor of dental surgery. During the two years of prescribed work students are registered in this college and subject

\* Students who do not elect the above courses in money and banking, statistics, and accounting during the freshman and sophomore years may substitute the following: Money and Banking (B.A. 57); Statistics Survey (B.A. 70); Elementary Accounting: Combined Course (B.A. 54-55).

† For the three-year predental course, which is a part of the seven-year course in Arts and Dentistry, see page 42.

§ Credit not granted in Econ. 5 to students who have had Social Statistics (Soc. 45).

¶ Students who have had a high school course or experience in bookkeeping will be admitted to Econ. 25 by passing a placement test. For other students Elements of Accounting (Econ. 20) is a prerequisite to Econ. 25.

\*\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

to its regulations. It is desirable that students should have had chemistry and higher algebra in high school. The required courses are listed below:

1. Inorganic Chemistry 1-2-11 or 4-5-11 or equivalent (General Inorganic Chemistry and Qualitative Chemical Analysis, 12 credits)
2. Organic Chemistry 1-2 (Elementary Organic Chemistry, 8 credits)
3. English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
4. Physics 1a-2a-3a (Introduction to Physical Science, with laboratory included, 12 credits) or Physics 1-2-3 (Introduction to Physical Science, without laboratory, 9 credits). The 12-credit course, with laboratory, is recommended.
5. Zoology 1-2-3 (General Zoology, 10 credits)
6. Drawing, economics, history, Latin or a modern language (high school or college), political science, psychology, sociology, and speech are recommended as electives to make up a total of 90 quarter credits. (For each five honor points in excess of the number necessary for a C average, the number 90 is diminished by one.)

It is recommended that the two year's work be distributed as follows:

First year.—Chemistry 1-2-11 or 4-5-11 (12 credits); English 4-5-6 (9 credits) or English A-B-C (15 credits); Zoology 1-2-3 (10 credits); one or more elective courses.

Second year.—Organic Chemistry (8 credits); Physics 1-2-3 or 1a-2a-3a (9 or 12 credits); elective subjects to make a total of 90 credits for the two years' work.

#### COURSES PRELIMINARY TO THE COLLEGE OF EDUCATION

All students who desire to receive a state teacher's certificate upon graduation from the University of Minnesota must be graduates of the College of Education. In most cases students register in that college at the beginning of their junior year. In certain special four-year and five-year curricula, however, they should register in the College of Education at the beginning of their freshman year or as soon thereafter as they have made their curriculum choice. The special four-year curricula are:

Art Education  
Elementary Education  
Industrial Education  
Kindergarten, Primary, and Nursery  
School Education

Music Education  
Physical Education for Men  
Physical Education for Women

Special five-year curricula leading to the degree of master of education are in the following fields:

Agricultural Education  
Art Education  
Home Economics Education  
Industrial Education

Music Education  
Physical Education for Men  
Physical Education for Women

In curricula for Agricultural and Home Economics Education the preliminary work is done in the College of Agriculture, Forestry, and Home Economics. (See the bulletin of that college or the Bulletin of the College of Education.) In curricula for Nursing Education and Public Health Nursing the student is registered for five quarters in the College of Science, Literature, and the Arts, and in the School of Nursing for two and a half years. After that she registers for three quarters in the College of Education or in the Medical School. (See page 33.)

For all other general and special curricula the prescribed work of the first two years is done in the College of Science, Literature, and the Arts.

The following general requirements apply to all students majoring in academic subjects and entering the College of Education at the beginning of their junior year:

1. A minimum of 93 credits for men and 95 credits for women, carried with a scholarship average of C. (For each five honor points in excess of the number necessary for a C average, the number 93 or 95 is diminished by one.) For men 3 of these credits and for women 5 credits shall be in physical education. (No credit is granted for physical

education courses by the College of Science, Literature, and the Arts;\* but upon transfer to the College of Education, the student will receive the credits and honor points earned in those courses.)

2. The student must have completed 6 credits in General Psychology.

3. **Health education.**—All students in the College of Education, before graduation, 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. The number of credits will depend upon possible exemptions and the sequence of courses chosen. A minimum of six credits covering all three fields is required unless students are exempted from (a) and (b).

Junior College courses which may be taken to meet the requirements in personal health are as follows: Public Health 3 (Personal Health, 2 credits); Public Health 4 (Health Problems of Adult Life, 2 credits); General College 10C (Human Biology). The course Public Health 50 (Public and Personal Health, 3 credits) will meet the requirements of (a) and (b).

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

5. Before entrance to the College of Education each student will be given a general examination designed to show his capacity to pursue professional curricula in education.

*Curricula Which Include Preliminary Work in the College of  
Science, Literature, and the Arts*

I. A GENERAL COURSE PRELIMINARY TO THE COLLEGE OF EDUCATION WITH  
MAJORS AND MINORS IN ACADEMIC SUBJECTS†

Students preparing to teach academic subjects in senior high schools and to qualify for the state high school standard certificate must have one major and one or more minors in subjects taught in high schools. The College of Education offers majors and minors in the following fields: English, speech, journalism; German, Latin, French, Scandinavian, Spanish; geography, history, political science, sociology; botany, chemistry, physics, zoology; public health; mathematics. The specific requirements for the different majors and minors are given in the Bulletin of the College of Education and in the departmental statements in the University's *Combined Class Schedule for 1944-45*. Special combinations of majors and minors are provided in the natural science and social studies curricula.

The selection of suitable majors and minors and the most desirable combinations of subjects is very important in securing a high school teaching position. The College of Education has prepared a bulletin showing the demands for teachers in the various types of work, the fields of high school teaching in which there are the best prospects for securing positions, the best combinations of majors and minors, the personal and scholastic qualifications a prospective teacher should have, and other facts which may effect the choice of vocation or the choice of curriculum. Students are urged to secure a copy of this bulletin and to consult an adviser in the College of Education as early in their course as possible.

\* This has been the rule, but during the war the College of Science, Literature, and the Arts will give one credit per quarter to men for the course called "Sports Education."

† For detailed information about the individual subjects of study in these curricula (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

Before entering the College of Education the student must meet certain specific requirements in addition to those listed above. These requirements *do not apply* to the special four-year and five-year curricula.

1. The credits presented for entrance, exclusive of credits in physical education, must be earned in the following groups of college courses:

Group A English

Group B Foreign languages: German, Greek, Latin, 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, Fine Arts, Speech, or such other courses in other colleges or departments of the University as are approved by the College of Education

2. 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 on the following page. 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 one language
	or	
	2 years in one language	and 10 credits in same language
	or	
	1 year in one language	and 15 credits in same language
C. Social sciences	2 years	or 10 credits† in one department‡
D. Natural sciences	2 years	or 10 credits† in one department‡

NOTE.—In lieu of the specific course requirements indicated in the language group a student may take a comprehensive examination in an elected language to be conducted by a committee appointed by the dean of the College of Education.

3. Within the total credits stipulated under paragraph 1 a student must meet, in fields of study which are represented in prevailing high school curricula, the following requirement: 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 advanced courses necessary to the completion of satisfactory teaching majors and minors.

## II. COURSES PRELIMINARY TO THE FOUR- AND FIVE-YEAR SPECIALIZED CURRICULA IN THE COLLEGE OF EDUCATION

The College of Education, in its undergraduate and graduate curricula, provides training for many different kinds of educational work; for positions as superintendents of schools, high school and elementary school principals, elementary school supervisors, teachers in normal schools and teachers colleges, educational counselors, school psychologists; teachers of special subjects and of special classes; school librarians; visiting teachers; positions in junior high schools, elementary schools, kindergartens, nursery schools, public health nursing, nursing education, recreational leadership, and school health work. In all cases except the special four-year and five-year curricula previously mentioned the preliminary work is done in the College of Science, Literature, and the Arts. The Junior College work, however, is selected to meet the professional needs, and specific courses are required. The student should consult the Bulletin of the College of

\* For students who enter this University with advanced standing, the number of credits required may be less than that indicated in this schedule. Any course of 9 credits (6 semester credits) may be substituted for the corresponding 10-credit course here.

† Or 9 credits in a year-course or 9 credits (6 semester credits) of advanced standing.

‡ Fifteen credits in Natural Science 1f-2w-3s (Orientation in the Natural Sciences) will be accepted as a substitute for 10 credits in one natural science.

§ Twelve credits in Social Science 1f-2w-3s (Introduction to Social Science) will be accepted as a substitute for 10 credits in one social science.

Education for the requirements of his curriculum and should confer with the adviser for that curriculum early in his course.

The specialized curricula offered by the College of Education based upon two years' work in the College of Science, Literature, and the Arts are:

Commercial Education	Social Studies
Library Methods	Speech Pathology
Natural Sciences	Teachers of Subnormal Children
Recreational Leadership	Visiting Teachers

Credits earned in required courses in Art Education, Industrial Education, and Physical Education will be granted upon transfer to the College of Education.

Professional training for administrative and supervisory positions, the teaching of professional subjects, positions as school counselors and school psychologists, and for other specialized work is secured by taking a fifth year in the Graduate School with a major in some field of education.

### III. COURSE PRELIMINARY TO NURSING EDUCATION AND PUBLIC HEALTH NURSING IN THE COLLEGE OF EDUCATION AND IN THE MEDICAL SCHOOL\*†

For the first five quarters of the five-year curriculum in Nursing Education and Public Health Nursing the student is registered in the College of Science, Literature, and the Arts. The curriculum is planned to prepare the student not only for bedside nursing but also for administrative, supervising, and teaching positions in schools of nursing and hospitals; for such public health nursing positions as visiting nursing, school nursing, health teaching, infant welfare, rural and industrial nursing; and for combined positions in secondary schools involving both nursing and teaching. This curriculum is open to high school graduates who meet the entrance requirements of the College of Science, Literature, and the Arts.

**Acceleration.—A.** The program may be accelerated to four and one-half years by utilizing the summer quarter between the first and second years. Students may begin this program the summer immediately following high school graduation. This entails no change in classes or experience other than starting everything after the freshman year one quarter earlier.

B. Students who are capable of carrying 18 credits per quarter may be able to complete this program in four and one-fourth years. For the rules about the number of credits per quarter for which students in the College of Science, Literature, and the Arts may register, see paragraph 26 on page 5.

C. For exceptionally good students the program may be accelerated to four calendar years by utilizing "A" as above and by carrying a special program approved by the director of the School of Nursing. To complete such a program in four years a student must earn at least 6 quality credits§ in the first year.

**NOTE.**—None of these programs alter the clinical period nor do they change the specialization. The changes are made in the prenursing academic program.

**Curriculum.**—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).

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

† This program requires five school years but actually only four and three-fourths calendar years.

‡ For definitions of excess honor points and quality credits, see paragraphs 18, 19, 20 on pages 4.5.

¶ Only Part I is outlined here. For Parts II and III, see the Bulletin of the School of Nursing.

Part III.¶ Three quarters in the College of Education or in the Medical School, 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). She must earn an average of one honor point per credit for all credits earned in the pre-nursing period. For each five honor points in excess of the number required for a C average, the number 75 is diminished by one.\*\*

A. Required courses

- English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)  
Sociology 1 (Introduction to Sociology, 5 credits).  
Sociology 49 (Social Pathology, 3 credits).  
Psychology 1-2 (General Psychology, 6 credits).  
Child Welfare 40 or Home Economics Education 90 (Child Training, 3 credits).  
Public Health 3 (Personal Health, 2 credits).  
Anatomy 3 (Elementary Anatomy, 3 credits).  
Physiology 1 (Elements of Physiological Chemistry, 4 credits); or Physiology 50\*§ (Physiological Chemistry, 4 credits).  
Physiology 2 (Elements of Physiology, 4 credits); or Physiology 4§ (Human Physiology, 4 credits); or Physiology 60\*§ (Human Physiology, 6 credits).  
Bacteriology 53\*§ (General Bacteriology, 5 credits); or Bacteriology 101-102§ (Medical Bacteriology, 9 credits); or Bacteriology 1 (Elementary Bacteriology, 4 credits).  
Home Economics 30 or 31\* (Introduction to Nutrition, 2 or 3 credits); or Nursing 10 (Introduction to Nutrition, 1 credit).  
Physical Education (5 credits).

B. Elective courses—In choosing elective courses, thought should be given to possible fields of specialization in Parts II and III of the five-year curriculum. See pages 28-31 of the School of Nursing Bulletin for 1944-46. The following courses are recommended: Chemistry 1-2 or 4-5 or 6-7 (General Inorganic Chemistry, 8 or 10 credits); Zoology 1-2-3 (General Zoology, 10 credits); Social Science; Zoology 22 (Comparative Anatomy, 5 credits); History 1-2-3 (Civilization of the Modern World, 9 credits); Humanities 1-2-3 (Humanities in the Modern World, 15 credits); Anthropology 41 (Introduction to Anthropology, 5 credits); Political Science 1-2-3 (American Government and Politics, 9 credits).

A suggested two-year sequence of required and elective courses, with the preferred courses in physiology and bacteriology follows. Note that the student is registered in the School of Nursing during the sixth quarter. Before registering each quarter, students should have their programs checked by advisers in the School of Nursing (125 Medical Sciences Building).

	<i>First Year</i>	
<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.

‡ This course has prerequisites which some students in the five-year nursing curriculum cannot meet. For a statement of the prerequisites, see the University's *Combined Class Schedule*.

¶ Only Part I is outlined here. For Parts II and III, see the Bulletin of the School of Nursing.

\*\* For definitions of excess honor points and quality credits, see paragraphs 18, 19, 20 on pages 4-5.

## Second Year

Fall	Winter	Spring (Part II)
Psychology 1f	Psychology 2w	(School of Nursing)
Physiology 50f	Bacteriology 102w	Sociology 49s
Physical Education	Child Welfare 40w or	Home Economics 30s or 31s
Bacteriology 101f or 53f	Home Economics Ed. 90w	History of Nursing 1s
Electives†	Physical Education	Nursing 12s
	Electives‡	Physiology 60s or Physiology 2s

## COURSE PRELIMINARY TO THE LAW SCHOOLS

Students in the University preparing to enter the Law School register in the College of Science, Literature, and the Arts. Ninety credits of academic work are required for admission to the Law School. A scholarship average of C for all courses taken up to the time of admission is also required. Excess honor points do not reduce the number of credits required.

Before trying to plan their college course preliminary to the Law School, students should read carefully the statements about the combined courses in Arts and Law and in Business Administration and Law on pages 40-42.

The following course has been outlined by the faculty of the Law School for the two years of college study required:

1. English A-B-C\*\* (Freshman English, 15 credits) or English 4-5-6\*\* (Freshman Composition, 9 credits)
2. Philosophy 1, 2, 3 (Problems of Philosophy, Logic, Ethics, 15 credits)
3. Humanities 1-2-3 (Humanities in the Modern World, 15 credits) or Political Science\* 7 (Comparative European Government, 3 credits); 10 (Fundamentals of Government and Politics, 3 credits) or 15 (Elements of Political Science, 3 credits); 25 (World Politics, 3 credits)
4. Economics 6-7 (Principles of Economics, 10 credits)
5. History 70-71-72 (English Constitutional History, 9 credits)
6. Psychology 1-2 (General Psychology, 6 credits)
7. Economics 27 (Accounting Survey, 5 credits)¶
8. Electives to make the total at least 90 credits. Foreign language (0 to 20 credits, according to the schedule given in paragraph 1B on page 14) and natural science (10 or 15 credits as indicated in paragraph 1D on page 14) should be included in these electives by students taking the combined course leading to the degrees of bachelor of arts and bachelor of laws which is outlined on page 41. Such students may take Philosophy 50 and 50A, 52 and 52A (courses in the general history of philosophy) instead of Philosophy 1 and 3. Other suggested electives are: English History or American History or Civilization of the Modern World, Economics, Modern Philosophies of Social Reform (Philosophy 70), Political Science, Sociology, and Speech.

It is recommended that the two years' work be distributed as follows:

**First year.**—English 4f-5w-6s (9 credits) or English Af-Bw-Cs (15 credits); Philosophy 2f-1w-3s (15 credits); Humanities 1f-2w-3s (15 credits) or Political Science 15f, 25w, 7s (9 credits); History 4f-5w-6s (English History, 9 credits) which is not required but is recommended as an elective course in preparation for English Constitutional History.

**Second year.**—Economics 6f-7w, 27s (15 credits); History 70f-71w-72s (9 credits); Psychology 1f-2w (6 credits); elective courses to make a total of 90 credits for the two years' work.

\* In 1943-44 the requirement in political science was stated as follows: Course 1-2 (American Government and Politics, 6 credits); Course 7 or Course 10, 3 credits).

† 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.

‡ For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

¶ This course in accounting is a special course for prelaw students. It is not open to students who have had Economics 20 (Elements of Accounting, 3 credits). Students who have taken that course may get more work in accounting by taking Economics 25-26 (Principles of Accounting, 3 credits per quarter).

\*\* If a student omits Freshman English composition because he is exempted from that requirement, the Law School recommends that he get at least six credits in more advanced courses offered by the Department of English.

## COURSE IN MEDICAL TECHNOLOGY\*

The Course in Medical Technology is a four-year course given in the College of Science, Literature, and the Arts and in the Medical School. The degree of bachelor of science is awarded upon completion of the prescribed curriculum.

The first two years are spent in the College of Science, Literature, and the Arts. After completing the required courses of the first two years with a C average or after completing 90 credits including the required courses with a C average, the student is eligible for admission to Medical Technology (that is, for registration in the Medical School). For every five honor points in excess of the number necessary for a C average, the number 90 is diminished by one. The entire fourth year of twelve months is spent in a rotating practical service in the laboratories of the University Hospitals or affiliated hospitals.

The following courses or their equivalent must be completed before the student will be admitted to the junior year:

English A-B-C (Freshman English, 15 credits) or English 4-5-6, Freshman Composition, 9 credits) or exemption from the requirement. See page 10.)

Chemistry 1-2-11 or 4-5-11 (General Inorganic Chemistry and Qualitative Chemical Analysis, 12 credits); Analytical Chemistry 7 (Quantitative Analysis, 4 credits); Organic Chemistry 1-2 (Elementary Organic Chemistry, 8 credits).

Zoology 1-2-3 (General Zoology, 10 credits) and Zoology 21 (Histology, 5 credits).

Anatomy 3 (Elementary Human Anatomy, 3 credits).

Physics—A minimum of 5 credits in general physics. Physics 1-2-3 (Introduction to Physical Science, 9 credits) is required of students who will take any courses in X ray. It is advised for all students. Physics 1-2 (6 credits) without Physics 3 may be taken to meet the minimum requirement. In some instances special permission will be granted to students who will not take any courses in X ray to substitute one unit of high school physics for this requirement. Students who may subsequently study medicine in the regular medical course should take Physics 4-5-6 and the prerequisite mathematics. See the requirements in the premedical course on page 44.

Bacteriology 53 (General Bacteriology, 5 credits) or Bacteriology 101 (Medical Bacteriology, 5 credits).

Electives. There is no essential limitation to the subjects which may be chosen as electives. However, since it would be unwise for a student to take a wide variety of elective subjects without proceeding beyond the first and elementary courses, it is advised that in the first two years the student elect introductory courses in subjects which she expects to continue in her junior year. A program which includes only scattered electives will not be approved.

High school courses in physics, mathematics, chemistry and a language are suggested for all prospective students. Those who have not had higher algebra in high school may find it helpful to take it in their freshman year in college. Courses in social sciences are recommended. Students who may study medicine or do graduate work should take German to meet requirements.†

Recommended electives are listed in the Bulletin of the Course in Medical Technology.

NOTE.—English, chemistry, and general zoology should be taken in the freshman year.

For work in the Medical School consult the Bulletin of the Course in Medical Technology obtainable at the office of admissions and records.

For further information the student should consult special advisers in the Medical Technology office, M-410 University Hospitals, telephone: Main 8551.

**Advisers.**—During the freshman year students in this course may consult advisers in the Junior College office, Room 106, Folwell Hall. During Freshman Week they should also register their names in the Medical Technology office, M-410, Uni-

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

† Medical German (30-31-32 or 33-34) and its prerequisites (German 1, 2, 3 or equivalent) are required in the premedical curriculum. (See page 44.) For a modification of this requirement during the war, see page 44.

versity Hospitals. After their freshman year they must submit their registration for approval to special advisers in Medical Technology.

#### COURSE IN X-RAY TECHNOLOGY

The Course in X-Ray Technology is a four-year course given in the College of Science, Literature, and the Arts and in the Medical School. The degree of bachelor of science is awarded upon completion of the prescribed curriculum.

The first two years are spent in the College of Science, Literature, and the Arts. After completing the required courses of the first two years with a C average or after completing 90 credits including the required courses with a C average, the student is eligible for admission to Medical Technology (that is for registration in the Medical School). For every five honor points in excess of the number necessary for a C average, the number 90 is diminished by one. The entire fourth year of twelve months is spent in practical service in the X-ray laboratory of the University Hospitals.

The following courses or their equivalents must be completed before the student will be admitted to the junior year:

- English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)
- Chemistry 1-2-11 or 4-5-11 (General Inorganic Chemistry and Qualitative Chemical Analysis, 12 credits).
- Zoology 1-2-3 (General Zoology, 10 credits) and Zoology 22 (Comparative Anatomy, 5 credits).
- Physics 1a-2a-3a (Introduction to Physical Science—with laboratory included, 12 credits).
- Mathematics 15-16 (Elementary Mathematical Analysis, 10 credits. Prerequisites for this course are plane geometry and Mathematics 1 or high school higher algebra.
- Bacteriology 53 (General Bacteriology, 5 credits).
- Electives. See Course in Medical Technology.

#### COMBINED COURSE IN MEDICAL AND X-RAY TECHNOLOGY

The combined Course in Medical and X-Ray Technology is a four and one-half year course given in the College of Science, Literature, and the Arts and in the Medical School.

Upon completion of the prescribed curriculum the student is awarded the degree of bachelor of science in medical technology and a certificate of proficiency in X-ray technology. The requirements for freshman and sophomore years are the same as for the Course in Medical Technology.

#### COURSE IN PHYSICAL THERAPY

The Medical School offers a twelve-month Course in Physical Therapy to students who have completed two years\* of approved college training including satisfactory courses in biology and other sciences. Courses in general physics, chemistry, and psychology, and in English, history, and sociology are recommended.

A graduate of this course is prepared to carry out techniques, under a physician's directions, applied to the following branches of physical therapy; hydrotherapy, thermotherapy, light therapy, electrotherapy, and mechanotherapy (massage and corrective exercises). Included also is the Kenny technique for the treatment of infantile paralysis. Graduates of this course are eligible to become registered physical therapy technicians.

Students who plan to take the course in physical therapy should consult Dr. Miland E. Knapp or Dr. Catherine C. West in Room 425M, University Hospitals.

The next class will be admitted to the Medical School at the beginning of the winter quarter in January, 1945.

\* The admission of students with only two years of college training is an emergency measure and for the duration of the war only. Heretofore the course in physical therapy has been open only to five-year Arts and Nursing students, graduates in nursing from accredited schools, graduates of an accredited college or university with a Bachelor's degree in physical education for men and women, and graduates of an accredited college or university with a Bachelor's degree in medical technology.

## VI. COURSES WITH SPECIAL TRAINING IN MILITARY AND NAVAL SCIENCE AND TACTICS\*

A student who wants special training in Military Science and Tactics as part of a four-year college course may take the basic course in Military Science and Tactics, subject to existing regulations pertaining thereto, as a part of his work in any four-year course of study. The extent to which credits in this course will be accepted as elective credits in other curricula given in this college is stated in the following paragraphs under the heading Military Science and Tactics.

The special four-year course leading to the degree of bachelor of science with a major in Military or Naval Science and Tactics, which was announced on pages 45-47 of the bulletin of this college for 1942-43, has been suspended for the duration of the war except for students who were members of the Military or Naval R.O.T.C. in the year 1942-43 and who may find it possible to continue the course under existing Army and Navy regulations.

### MILITARY SCIENCE AND TACTICS

Under normal conditions the University of Minnesota, like all major schools in the nation, provides a four-year course in military science and tactics designed to qualify outstanding male students of the University for appointment in the Officers' Reserve Corps, Army of the United States. However, for the duration of the present emergency, only the first phase of the training, two years of basic work, will be offered. Physically qualified students in the College of Science, Literature, and the Arts may register for courses in the Reserve Officers' Training Corps (Branch Immaterial). These courses are elective, and the total of six credits applies toward a degree in any course of study given entirely within this college. The Basic Course consists of six quarters of three hours of work per week, for one credit per quarter.

Altho the Basic R.O.T.C. Course does not, in itself, lead to a noncommissioned officer's warrant, it is well for university students to give serious consideration to the advantages to be gained, under present circumstances, by enrolling in the course by way of preparation for military service during the present conflict. Men entering the service have found that a knowledge of the fundamentals of military training has enabled them to advance rapidly through the enlisted and noncommissioned grades.

### NAVAL SCIENCE AND TACTICS

The Naval Reserve Officers' Training Corps provides specialized training to selected, physically qualified male students. The selections are made at the end of the first two terms from students enlisted in the Navy College Training Program. A student who completes this course satisfactorily is eligible for a commission as ensign, United States Naval Reserve; ensign, Supply Corps, United States Navy; or second lieutenant, United States Marine Corps Reserve, provided he is so recommended to the Bureau of Personnel by the professor of naval science and tactics and passes the prescribed physical examination. Upon reporting on board ship or in the field, a Naval R.O.T.C. graduate may make application for a regular commission, the same as held by graduates of the U. S. Naval Academy at Annapolis, Maryland. The attainment of this commission requires that the applicant complete twelve consecutive months of active duty, be less than twenty-six years of age on June 30 of the year of the application, and be recommended by his commanding officer.

\* For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

Presently enrolled N.R.O.T.C. students will continue their present curricula and will receive the same instruction as heretofore. However, each student will be required to accelerate his schedule by attendance during summer quarter.

Newly enrolled N.R.O.T.C. students, selected from the Navy College Training Program (V-12), will pursue a standard curriculum including the following courses given by the Department of Naval Science and Tactics:

Seamanship	Naval Law
Communications	Naval Administration and Law
Ordnance and Gunnery	Damage Control and Engineering
Tactics and Aviation	Refresher Course in Naval Science
Navigation and Nautical Astronomy	

The University will determine whether or not credit toward a degree shall be given for the completion of the courses in this curriculum.

All N.R.O.T.C. students and Navy College Training Program (V-12) students are on active duty, housed and messed on the campus, and receive the same pay and allowances, medical services, etc., as all other apprentice seamen. The cost of their education is defrayed by the Navy Department and they are under naval discipline. N.R.O.T.C. students are uniformed as heretofore.

#### VII. FOUR-YEAR COURSE LEADING TO THE DEGREES OF GRADUATE DENTAL HYGIENIST AND BACHELOR OF ARTS

This program consists of two years of work in the School of Dentistry and two years in the College of Science, Literature, and the Arts. When students have completed the work for dental hygienists, as specified in the Bulletin of the School of Dentistry, with a C average, they may enter the Senior College of the College of Science, Literature, and the Arts; and they may qualify for the degree of bachelor of arts provided (1) that they complete 90 credits of work subject to the rules regularly governing Senior College students and (2) that these 90 credits include courses to meet the Junior College group requirements\* which have not already been met and also the major and minor requirements which are stated on pages 15-16.

#### VIII. SIX-YEAR COURSE IN ARTS AND ARCHITECTURE LEADING TO THE DEGREES OF BACHELOR OF ARTS AND BACHELOR OF ARCHITECTURE†

During the first four years of this course the student is registered in the College of Science, Literature, and the Arts and follows the plan of study prescribed for a bachelor of arts degree with a major in architecture. The requirements for that degree are given on pages 12-16.

Of the courses listed below, Civil Engineering 38-39-41 (9 credits) is not a part of the work required (normally 180 credits) for the bachelor of arts degree. It is an extra requirement which must be taken as a prerequisite for the work of the last two years of this six-year course in Arts and Architecture.

The work of the four years should include the following courses:

\* There are four group requirements (English, Foreign Language, Social Science, Natural Science) which are normally met by the students before they enter the Senior College. (See page 14.) Two of these group requirements are satisfied by English 4-5-6 and Zoology 1-2-3 which are required in the Course for Dental Hygienists; and a third one is partially satisfied by Sociology 1, which is also required in that curriculum. Under certain conditions, students may be exempted from the foreign language requirement by special permission of the Students' Work Committee.

† For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule* and the Bulletin of the Institute of Technology.

*Required for the Major Sequence*

COURSE No.	TITLE	CREDITS
Arch. 4-5-6	Graphic Representation .....	5
Arch. DP-I	Drawing and Painting, Grade I.....	6
Arch. DP-II	Drawing and Painting, Grade II.....	6
Arch. 51-52-53	History of Architecture.....	9
Arch. 57-58-59	Building Materials and Methods.....	6
Arch. AD-I	Architectural Design, Grade I.....	10
Arch. AD-II	Architectural Design, Grade II.....	15

*Additional Special Requirements*

Mathematics 6, 7, 30	Trigonometry, College Algebra, Analytic Geometry.....	15
Mathematics and Mechanics 91, 92, 93	Calculus, Mechanics for Architects, Strength of Materials.....	12
Civil Engineering 38-39-41	Structural Analysis and Design.....	9

During the last two years of the course, or upon completion of the requirements for the bachelor of arts degree, the student is registered in the School of Architecture of the Institute of Technology to complete the requirements for bachelor of architecture degree as prescribed in the Bulletin of the Institute of Technology for the five-year course in architecture.

## COMBINED COURSES IN ARTS, BUSINESS ADMINISTRATION, AND LAW

There are three of these combined courses, two in Arts and Law (IX-X) and one in Business Administration and Law (XI).

With respect to the degrees mentioned in the two combined courses in Arts and Law, the bachelor of arts degree is conferred on recommendation of the College of Science, Literature, and the Arts. Two degrees are conferred on recommendation of the Law School, namely a nonprofessional degree of bachelor of science in law, and the professional degree, bachelor of laws. The normal courses for these degrees are as follows: Students who have a B.A. or equivalent degree when they enter the Law School may qualify for the professional degree, bachelor of laws, in three years. Students who do not have a degree when they enter the Law School first register for the degree of bachelor of science in law for which the course is two years. Students who have obtained the degree of bachelor of science in law with an average grade of 73, and have the required subjects listed in the prelaw course, may qualify for the professional degree, bachelor of laws, in two years.

IX. SIX-YEAR COMBINED COURSE IN ARTS AND LAW LEADING  
TO THE DEGREES OF BACHELOR OF SCIENCE  
IN LAW§ AND BACHELOR OF LAWS\*§

This course requires two years of college work and four years in the Law School.

Students who complete the two years of college work required for admission to the Law School, stated on page 35, in the College of Science, Literature, and the Arts of this University, or in some other accredited college, and have 90 credits, exclusive of quality credits, with a scholarship average of C for all courses taken, become eligible

\* There are two combined courses in Arts and Law. Students interested in either one should read (1) the requirements of both, (2) the preliminary paragraph entitled "Combined Courses in Arts, Business Administration, and Law," (see above), and (3) the paragraph, entitled "Course Preliminary to the Law School" (page 35).

§ From the Law School.

for the degree of bachelor of science in law on completion of two years in the Law School. Law work may be selected to suit the needs of the student, and may be restricted to commercial law for students desiring a preparation for business. Students completing this course may register for the degree of bachelor of laws under the conditions above stated, and may thus secure the two degrees in six years.

#### X. SEVEN-YEAR COMBINED COURSE IN ARTS AND LAW LEADING TO THE DEGREES OF BACHELOR OF ARTS¶ AND BACHELOR OF LAWS\*§

This course requires three years of college work and four years in the Law School. The first two years of the college work may be taken in any accredited college, but the third year must be taken in the College of Science, Literature, and the Arts of this University. All three years of college work may be taken before entering the Law School, or two years before entering the Law School, and the third year after the completion of one year or more of law work. The latter plan enables the student to select college work in which he may have become interested during his law course.

Students in this combined course must, before transferring to the Law School, complete the requirements for admission to the Senior College of the College of Science, Literature, and the Arts, stated on pages 13-15. These requirements include foreign language and natural science. (See paragraphs 1B, 1D, on page 14.) The student must secure at least 90 credits with a scholarship average of C for all courses taken. He must also secure, either before entering the Law School or after completing one year or more of the law course, 45 additional college credits, of which at least 30† must be of Senior College grade, with a C average. This number of credits required may be reduced by application of the "quality credit" rules given in paragraphs 18, 19, 20 on pages 4-5. This third year of work must be approved by the assistant dean for the Senior College of the College of Science, Literature, and the Arts. In order to satisfy the requirements for the degree of bachelor of laws, the three years of college work must also include the subjects specified on page 35 for the prelaw course (or substitutes approved by the dean of the Law School).

The degree of bachelor of arts is conferred when the 135 credits of college work specified above and at least the first year of the course in the Law School, with the standing required by that school for graduation, are completed. The degree of bachelor of laws is conferred when the work of all seven years is completed.

#### XI. SEVEN-YEAR COMBINED COURSE IN BUSINESS ADMINISTRATION AND LAW LEADING TO THE DEGREES OF BACHELOR OF BUSI- NESS ADMINISTRATION\*\* AND BACHELOR OF LAWS§

This program consists of two years of prelaw and prebusiness work as specified below, approximately one and one-half years in the School of Business Administration instead of the full two-year program, and three and one-half years in the Law School

\* There are two combined courses in Arts and Law. Students interested in either one should read (1) the requirements of both, (2) the preliminary paragraph entitled "Combined Courses in Arts, Business Administration, and Law," (page 40), and (3) the paragraph entitled "Course Preliminary to the Law School" (page 35).

† Thirty is the number usually required. For some students it may be reduced by special permission of the assistant dean for the Senior College.

§ From the Law School.

¶ From the College of Science, Literature, and the Arts.

\*\* From the School of Business Administration.

instead of the full four-year program, thus qualifying for both the bachelor of business administration and the bachelor of laws degree in seven years.

The prelaw and prebusiness work must amount to 90 credits, exclusive of quality credits, and shall include the regular prelaw course\* except Economics 27 and in addition Economics 5 (Elements of Statistics) and Economics 20, 25-26 (Elements of Accounting and Principles of Accounting).

There are two options for the remaining five years:

- A. The third year exclusively in the Law School and the fourth year exclusively in the School of Business Administration, or vice versa. The fifth and sixth years exclusively in the Law School and the seventh year to be divided between the two schools, approximately half of the program being in each school.
- B. The distribution of both the business administration and the law course throughout the five-year program.

The course requirements in Business Administration include the general core group courses exclusive of Business Law (B.A. 51-52-53). This amounts to a total of 36 credits. Substitutes, such as Economics 185 for B.A. 77, B.A. 184 for B.A. 89, Economics 172 for B.A. 71, may be made with the approval of an adviser. The remaining courses—approximately 32 credits—may be elected from the Senior College courses in economics and business administration with the approval of an adviser.

The course requirements in the Law School include all the courses of the first and second years, the required courses of the third and fourth years, and electives sufficient with the required courses to make a total of approximately 68 credits in those years.

Students will be registered for the joint program in the Law School and the School of Business Administration throughout the five-year period. Their programs will be subject to approval of an adviser from the Law School and an adviser from the School of Business Administration.

## XII. SEVEN-YEAR COURSE IN ARTS AND DENTISTRY LEADING TO THE DEGREES OF BACHELOR OF ARTS<sup>†</sup> AND DOCTOR OF DENTAL SURGERY<sup>‡\*\*</sup>

During the first three years of this course, the student does his work in the College of Science, Literature, and the Arts, subject to the regulations of the college, and must secure at least 135 credits, with a scholarship average of C for all courses taken. (This number of credits required may be reduced by application of the "quality credit" rules given in paragraphs 18, 19, 20, on pages 4-5.) At least 30 credits<sup>§</sup> must be in Senior College courses. He must complete the requirements for admission to the Senior College, which are given on pages 13-16, and also the work in chemistry, physics, and zoology prescribed for admission to the School of Dentistry (see page 29).

During his third year, the student elects work in this college subject to the approval of the assistant dean for the Senior College. The work of the freshman and sophomore years in the School of Dentistry, exclusive of technical and practical work, when completed according to the standards required by that school, counts as the equivalent of the fourth year (45 credits) of the Arts course.

\* See page 35 of this bulletin.

† Only students who have completed the required work in the College of Science, Literature, and the Arts before entering the professional school will be permitted to avail themselves of the privilege of securing the B.A. degree in this combined course.

§ Thirty is the number usually required. For some students it may be reduced by special permission of the assistant dean for the Senior College.

‡ From the College of Science, Literature, and the Arts.

\*\* From the School of Dentistry.

## COURSES LEADING TO THE DEGREE OF DOCTOR OF MEDICINE\*

There are two eight-year courses of study which lead to the degree of doctor of medicine. (See XIII, XIV, below.) Each of them requires three full years of college work (135 credits exclusive of quality credits) which must include the courses prescribed for admission to the Medical School. In the first one (XIII, below), the student may freely choose the elective courses to make up the total of 135 credits. He will receive the degree of bachelor of science after he completes two years of work in the Medical School. In the second of the two courses (XIV, below), the student must meet the requirements for admission to the Senior College of Science, Literature, and the Arts which he should enter, normally, after two years of residence in the Junior College. His program for the third year must be submitted for approval to the assistant dean for the Senior College. He will receive the degree of bachelor of arts after he completes satisfactorily one year of work in the Medical School.

## RESIDENCE

First choice is given to native residents of Minnesota; second choice is given to residents of adjoining states which do not have medical schools; residents of states other than these will be admitted to the Medical School only under exceptional circumstances. Applicants who become residents of the state after graduating from high school will be considered with this group.

### XIII. EIGHT-YEAR COURSE IN SCIENCE AND MEDICINE LEADING TO THE DEGREES OF BACHELOR OF SCIENCE,\*\* BACHELOR OF MEDICINE,\*\* AND DOCTOR OF MEDICINE§¶\*\*

The minimum requirements for admission to the Medical School are three full years of college work, amounting to 135 credits,† with a scholarship average of C.

The premedical work, for which the student is registered in the College of Science, Literature, and the Arts, must include the required courses listed below or their equivalent as approved by the Students' Work Committee of the Medical School.

For the duration of the war only, these requirements have been reduced, see page 45.

*Required Courses*

English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits) or exemption from the requirement. (See page 10.)

Zoology 1-2-3 (General Zoology, 10 credits) and Zoology 83 (Introduction to Genetics and Eugenics, 3 credits).

\* Students who want a college degree before entering the Medical School may include all of the required premedical subjects in the "Course Leading to the Degree of Bachelor of Arts" for which the requirements are stated on pages 13-16. They may find it to their advantage to take the course with a liberal arts major rather than a major in one department. The difference is explained in paragraphs under the headings "Requirements in the Curriculum in Liberal Arts" (page 16) and "Requirements in the Curriculum for Concentration" (page 15).

† The following quotation from the bulletin of the Medical School applies to students who do their premedical work here. "The total number of credits for admission to the Medical School required of students who do their premedical work at Minnesota may, at the discretion of the Admissions Committee, be diminished in the case of superior students, under the quality credit rule of the College of Science, Literature, and the Arts. Required courses may not be omitted unless special permission is obtained from the Admissions Committee of the Medical School."

‡ There are two eight-year courses leading to the degree of doctor of medicine. Students interested in either one should read (1) the requirements for both, and (2) the paragraph entitled "Courses Leading to the Degree of Doctor of Medicine" (see above).

¶ For detailed information about the individual subjects of study in this curriculum (course numbers and titles, credits, prerequisites, schedule of hours and days, etc.), see the University's *Combined Class Schedule*.

\*\* From the Medical School.

**Chemistry**—Inorganic Chemistry 1-2-11 or 4-5-11 or equivalent (General Inorganic Chemistry and Qualitative Chemical Analysis, 12 credits); Analytical Chemistry 7 (Quantitative Analysis, 4 credits); Organic Chemistry 1-2 (Elementary Organic Chemistry, 8 credits); and Physical Chemistry 107-108\* (Elementary Physical Chemistry, 8 credits).

**Mathematics**—as a prerequisite for physics: Course 1 (Higher Algebra, 5 credits) unless the student has had high school higher algebra; Course 15-16 (Elementary Mathematical Analysis, 10 credits) or equivalent.

**Physics** 4-5-6 (General Physics, 15 credits).

**German**† sufficient to secure a reading knowledge. Students may meet this requirement by passing German 30-31-32 or 33-34 (Medical German), or by taking a special examination after completing two years of college German. This examination is conducted by the German Department.

**Psychology** 1-2 (General Psychology, 6 credits).

These required courses cannot be distributed in a three-year program which will be the same for all students. Below are two arrangements with some suggested variations. Students can work out other variations for themselves. Many will find it to their advantage to take one or more required courses in the summer.

1. For students who begin the required German in college:

**First year.**—Chemistry 1f-2w-11s or 4f-5w-11s (12 credits); German 1f-2w-3s (15 credits); Mathematics 1f-15w-16s or 15f-16w (15 or 10 credits); Zoology 1f-2w-3s (10 credits); an elective subject in the spring for those who take Mathematics 15f-16w.

**Second year.**—Analytical Chemistry 7f and Organic Chemistry 1w-2s (12 credits); English 4f-5w-6s (9 credits) or English Af-Bw-Cs (15 credits); German 30f-31w-32s (9 credits); Physics 4f-5w-6s (15 credits).

**Third year.**—Physical Chemistry 107f-108w\* (8 credits); Psychology 1f-2w (6 credits); Zoology 83s (3 credits); elective courses to make a total of 135 credits for the three year's work.

In this program, the work of the first year is heavy, that of the second year is normal, and the third year's work is light. A student can get a more even distribution of the required courses by taking English 4f-5w-6s in the freshman year instead of German and by taking German 1f-2w-3s in the sophomore and 30f-31w-32s in the junior year.

2. For students who have had two years of high school German.

**First year.**—Chemistry 1f-2w-11s or 4f-5w-11s (12 credits); German 3f-33w-34s (15 credits); Mathematics 1f-15w-16s or 15f-16w (15 or 10 credits); Zoology 1f-2w-3s (10 credits); an elective subject in the spring for those who take Mathematics 15f-16w.

**Second year.**—Analytical Chemistry 7f and Organic Chemistry 1w-2s (12 credits); English 4f-5w-6s (9 credits) or English Af-Bw-Cs (15 credits); Physics 4f-5w-6s (15 credits); Psychology 1f-2w (6 credits); an elective subject in the spring.

**Third year.**—Physical Chemistry 107f-108w\* (8 credits); Zoology 83s (3 credits); elective subjects to make a total of 135 credits for the three years' work.

In this program, the work of the first year is heavy, that of the second year is normal, and the third year's work is light. A student can get a more even distribution of the required courses by postponing Zoology until the sophomore year and Psychology until the junior year.

The following subjects are recommended as electives: English composition and literature, speech, advanced zoology (such as Introductory Animal Parasitology), freehand drawing, history, French, higher mathematics, biostatistics or statistics, advanced psychology, sociology (especially social pathology), philosophy, political science, and cultural subjects generally. General Bacteriology, a Medical School subject, may not be presented for admission to the Medical School.

For admission to the Medical School, a candidate's record must show a number of honor points at least equal to the total number of credits in the group of required subjects; also a number of honor points at least equal to the total number of credits in all subjects. (A higher average is exacted of nonresident applicants.) He must take a medical student's aptitude test and a battery of tests for premedical students given by the University

\* In the year 1944-45, this eight-credit course will be replaced by a six-credit Course 107.

† During the war the requirement is German 1-2-3 (15 credits) or equivalent.

Counseling Bureau. The scores of these tests are considered by the Students' Work Committee in advising students and determining admission. A student applying for admission for the fall quarter must do so before December 1 of the preceding year. All admissions are subject to the limited registration regulations of the Medical School.\*

The work during the fourth year is taken in the Medical School and is credited toward the degree of bachelor of science. To secure this degree, a student, in addition to the requirements for admission, must have completed the first two years of the medical course and have passed, with a "C" average, the comprehensive examination in these years.

Students who have completed elsewhere three or more years of collegiate or university work which includes the required subjects specified above and which is in other respects the full equivalent of the three years of academic work required in this eight-year course, will be awarded the degree of bachelor of science on recommendation of the faculty of the Medical School, provided they meet the scholarship requirements stated above.

The foregoing regulations governing the quality and amount of premedical training required for admission to the Medical School will be enforced for those who present the minimum amount of work. In cases of mature and superior students, especially such as have taken degrees and have made special progress along some line (even tho it may not have been closely related to medicine), concessions may be made. Such cases will be considered individually upon petition to the dean of the Medical School.

A broad general education is considered fundamental to medical study, but it should be borne in mind that no student can pursue the medical course to advantage without knowledge of biology, chemistry, and physics.

**For the duration of the war only, the requirements have been so reduced as to permit their completion, by some students, in eighteen months without vacations, as follows:**

English A-B-C (Freshman English, 15 credits) or English 4-5-6 (Freshman Composition, 9 credits). See page 10.

Zoology 1-2-3 (General Zoology, 10 credits) and Zoology 83 (Introduction to Genetics and Eugenics, 3 credits).

Chemistry 1-2-11 or 4-5-11 (Inorganic and Qualitative Chemistry, 12 credits); Analytical Chemistry 7 (Quantitative Analysis, 4 credits); Organic Chemistry 1-2 (Elementary Organic Chemistry, 8 credits); Physical Chemistry 107 (Elementary Physical Chemistry, 6 credits).

Mathematics—as a prerequisite for physics: Course 1 (Higher Algebra, 5 credits) unless the student has had high school higher algebra; Course 15-16 (Elementary Mathematical Analysis, 10 credits) or equivalent.

Physics 4-5-6 (General Physics, 15 credits).

German 1-2-3, or equivalent.

Psychology 1-2 (General Psychology, 6 credits).

#### XIV. EIGHT-YEAR COURSE IN ARTS AND MEDICINE, LEADING TO THE DEGREES OF BACHELOR OF ARTS,† BACHELOR OF MEDICINE,§ AND DOCTOR OF MEDICINE§¶\*\*

During the first three years of this course, the student is registered in the College of Science, Literature, and the Arts, subject to the regulations of the college, and must

\* During the war, a new class will be admitted each 9 months. This practice began in March, 1943. These students will normally graduate three calendar years after admission. Another year must be devoted to an internship.

† From the College of Science, Literature, and the Arts.

§ From the Medical School.

¶ Only students who have completed the required work in the College of Science, Literature, and the Arts before entering the professional school will be permitted to avail themselves of the privilege of securing the B.A. degree in this combined course.

\*\* There are two eight-year courses leading to the degree of doctor of medicine. Students interested in either one should read (1) the requirements for both, and (2) the paragraph entitled "Courses Leading to the Degree of Doctor of Medicine," on page 43.

secure at least 135 credits, with a scholarship average of C. (This number of credits may be reduced\* by application of the "quality credit" rules given in paragraphs 18, 19, 20 on pages 4-5.) At least 30 credits† must be in Senior College courses. He must complete the requirements for admission to the Senior College, given on pages 13-15, and also the work in chemistry, mathematics, physics, psychology, zoology, and foreign language prescribed for the eight-year course in Science and Medicine (page 43).‡

During this third year, the student elects work in this college subject to the approval of the assistant dean for the Senior College. The first year of the course in the Medical School, when completed with the standards required by that school, counts as the equivalent of the fourth year (45 credits) of the Arts course.

For admission to the Medical School, a student's record must show a number of honor points at least equal to the number of credits in the group of required subjects; and also a number of honor points at least equal to the total number of credits. A higher standard is exacted of nonresident applicants. The student must have a reading knowledge of German and must be accepted by the Medical School under the limited registration regulations of that school. Exceptions to these requirements may be granted to superior students on petition to the Students' Work Committee of the Medical School.

\* For a statement about "quality credits" and admission to the Medical School, see the † footnote on page 43.

† Thirty is the number usually required. For some students it may be reduced by special permission of the assistant dean for the Senior College.

‡ For recommended electives and the restrictions governing them, see page 44.

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