

CORNELL UNIVERSITY OFFICIAL PUBLICATION

Announcement of the  
Five-Year Program  
for the Preparation of  
Secondary School Teachers



1939-40

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# The University Calendar for 1939-40

1939

## FIRST TERM

Sept.	18, <i>Monday</i> .	Entrance examinations begin.
Sept.	25, <i>Monday</i> .	Registration and assignment, new students.
Sept.	26, <i>Tuesday</i> .	Registration and assignment, old students.
Sept.	28, <i>Thursday</i> .	Instruction begins at 8 A.M.
Oct.	19, <i>Thursday</i> ,	Last day for the payment of tuition for the first term.
Nov.	29, <i>Wednesday</i> ,	Instruction suspended at 4 P.M.

## (*Thanksgiving Recess*)

Dec.	4, <i>Monday</i> .	Instruction resumed at 8 A.M.
Dec.	20, <i>Wednesday</i> .	Instruction suspended at 4 P.M.

1940

## (*Christmas Recess*)

Jan.	4, <i>Thursday</i> .	Instruction resumed at 8 A.M.
Jan.	11, <i>Thursday</i> ,	Founder's Day.
Jan.	29, <i>Monday</i> .	Final examinations begin.
Feb.	7, <i>Wednesday</i> .	Final examinations end.
Feb.	8, <i>Thursday</i> .	A holiday.

## SECOND TERM

Feb.	9, <i>Friday</i> .	Registration of all students.
Feb.	12, <i>Monday</i> .	Instruction begins at 8 A.M.
March	4, <i>Monday</i> ,	Last day for the payment of tuition for the second term.
March	30, <i>Saturday</i> ,	Instruction suspended at 12:50 P.M.

## (*Spring Recess*)

April	8, <i>Monday</i> .	Instruction resumed at 8 A.M.
May	—, <i>Saturday</i> .	Spring Day: a holiday.
June	3, <i>Monday</i> .	Final examinations begin.
June	11, <i>Tuesday</i> .	Final examinations end.
June	17, <i>Monday</i> ,	COMMENCEMENT.

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## Five-Year Program for the Preparation of Secondary School Teachers

THE FACULTY of the Graduate School of Education, at a meeting on February 4, 1938, approved the principle of a five-year program for the preparation of secondary school teachers. The details of the curriculum were adopted later in that year.

This action was taken because of the belief that a period of more than four years is necessary to give secondary school teachers preparation of the breadth and depth demanded by present-day teaching conditions. The increasing enrollment of the secondary school, which has brought into the school young people from all social and economic levels, makes it necessary for teachers to possess a scope of knowledge considerably beyond that required when the secondary school was devoting itself largely to preparation for college. The consequent broadening of the objectives of the school, to include not only the acquiring of information and the stimulation of mental growth but the development of various abilities demanded for living in an increasingly complex social order, has created new problems of curriculum planning and of teaching. Furthermore, the belief has been growing among citizens generally that teachers should be more fully informed regarding adolescent nature and the various ways and means of assisting youth in adapting itself to conditions now prevailing.

The student who enters Cornell University as a freshman in the fall of 1939 with the intention of preparing himself for secondary school teaching will be expected to complete one of the five-year programs described herein. In the case of teachers of agriculture and of home economics, certain exceptions may be made.

### Curriculum Outlines for Various Types of Secondary School Teachers

The scope of instructional and research activities at Cornell University makes possible the preparation of teachers representing the more important of the academic and the vocational subjects taught in a modern high school of the comprehensive type. Although the same general principles underlie the curricula for the several types of teachers, adaptations have been made to meet the special needs of each type. These adaptations are presented herewith.

#### TEACHERS OF ACADEMIC SUBJECTS

*Graduation Requirements of the College of Arts and Sciences.* At Cornell University all prospective teachers of academic subjects, except students in the College of Agriculture preparing to teach biological science, will register in the College of Arts and Sciences and must, of course, meet the graduation requirements of that College. In brief, the College requires the completion of a full year course in English, foreign language, history, laboratory science,

and economics or government or mathematics or philosophy. The details may be secured from the College Announcement.

Teachers of science who stress the biological aspects of this field may be prepared either through the College of Arts and Sciences or through the College of Agriculture. Students in the College of Agriculture must, of course, meet the graduation requirements of that College.

*Pre-professional and professional studies.* Teachers of academic subjects (English, foreign language, mathematics, science, social studies, and the like) will pursue a program of pre-professional and professional subjects as follows:

	<i>Credit Hours</i>
<i>Freshman Year</i>	
Basic course in Social Studies (Freshman or Sophomore Year).....	6
<i>Sophomore Year</i>	
Human Growth and Development.....	6
<i>Junior Year</i>	
Educational Psychology .....	3
Social Foundations of Education (Junior or Senior Year).....	3
<i>Senior Year</i>	
The Art of Teaching: curriculum, materials of instruction, method, evaluation, directed observation and teaching.....	8
School organization, extra-instructional and professional relations and problems (Senior or fifth year).....	2
<i>Fifth Year</i>	
Advanced Directed or Apprentice Teaching.....	2-4
Philosophy of Education.....	2
Seminar in Problems of Teaching (to include a critical treatment of some problem) .....	2
Electives: Psychology Applied to Teaching Problems; Psychology of Adolescence; History of Education; Tests and Measurement; Curriculum; or other approved courses .....	2-5

*Preparation in the Teaching Field.* The student must select, after the first year of residence and before registering for the first term of the third year, a major field of study. The specific requirements vary somewhat according to the field but, in general, course work to the extent of approximately 24 hours in the major subject and 18 hours in related subjects is required.

As an aid to the prospective teacher, programs in the academic subjects have been established for the four undergraduate years which meet college requirements and provide the preparation needed for teaching in the secondary schools. These programs vary in extent and in the number of prescribed courses. It is desirable that some one of the combination programs below be selected, although other combinations may be arranged to suit individual preferences.

**English and Public Speaking.** The program in English follows closely the pattern prescribed for students majoring in that subject. Composition, reading of expository prose, and introduction to drama and fiction will comprise the work of the sophomore year. These aspects of the subject will be developed further in the upperclass years and, in addition, the student will select the literature of some period and the works of some author for intensive study. Nine hours in public speaking must be included in the related subjects. The total requirement of the major is 54 hours. Students primarily interested in speech and dramatics should major in public speaking and supplement that training with considerable work in English.

**Foreign Language.** In foreign language, concentration in Latin and French is provided which satisfies the requirements of the major in either subject. Additional prepa-

ration in a third language is recommended since the object is to prepare a teacher of language rather than a specialist in a single subject. The course work in Latin and French totals 54 hours.

**Mathematics.** Preparation for teaching mathematics is based on the major requirement in the subject: 9 hours of analytic geometry and calculus plus 15 hours of advanced courses. The student should also complete the 30 basic hours in science.

**Science.** The program in science is based on 12 hours of biology, 12 hours of physical science, and 6 hours of geology. Approximately 24 additional hours of advanced courses are necessary to satisfy the major requirements in physics or chemistry or one of the biological sciences. The prospective teacher of science will find it to his advantage to meet the minimum certification requirement of 15 hours in mathematics.

**Social Studies.** In social studies the student may major in history, economics, government, or sociology, although concentration in history is preferable. The basic program must include 18 hours of history, 6 hours of government, 6 hours of sociology, and 6 hours of economics. Depending upon the major subject selected, the number of hours in the program will aggregate from 48 to 60.

In the fifth year the prospective teacher of an academic subject may select, under the guidance of his Special Committee, from 17 to 22 hours of advanced courses and seminars in his teaching field.

**General Electives.** After meeting the minimum requirements described above, the student still has opportunity to elect courses according to his needs and interests. These electives may, with the approval of the student's adviser, be chosen from professional courses, from the student's teaching field, or from other University offerings.

## TEACHERS OF AGRICULTURE

**Graduation Requirements of the College of Agriculture.** Students preparing to teach in the field of vocational agriculture will register in the New York State College of Agriculture and must meet the requirements of that College for graduation as a part of the five-year program. The College of Agriculture requires the completion of the following program of courses: Orientation, 1 hour; hygiene, 2 hours; English, 6 hours; botany, biology or zoology, 6 hours; chemistry or physics, 6 hours; geology, 3 hours; basic sciences and social studies, 24 hours; electives in the College of Agriculture, 54 hours; general electives, 20 hours.

**Professional and Pre-professional Studies.** This program begins in the freshman year and is an integrated part of the general program which continues during the fifth year as indicated:

	<i>Credit Hours</i>
<i>Freshman Year</i>	
Basic course in Social Studies (Freshman or Sophomore Year).....	6
<i>Sophomore Year</i>	
Vocational Guidance .....	1
Human Growth and Development.....	6
Social Foundations of Education (Sophomore or Junior Year).....	3
<i>Junior Year</i>	
Educational Psychology .....	3
The Art of Teaching (See description in outline for Senior Year).....	3
<i>Senior Year</i>	
The Art of Teaching: directed teaching, procedures, techniques, content, management, etc. (The first three hours may be taken in the Junior Year).....	3-6
Apprentice Teaching: procedures, techniques, studies, courses of study, measurement, etc. ....	3-6
Restricted Electives, minimum.....	3

*Fifth Year*

Directed or Apprentice Teaching.....	2-6
Seminar in Problems of Teaching (to include a critical treatment of some problem) .....	2
Philosophy of Education.....	2
Electives: Psychology Applied to Teaching Problems; History of Education; Critical Study or Thesis; Psychology of Adolescence; or other approved courses .....	2-5

*Technical Studies in Agriculture and Related Sciences.* In the present plan for the preparation of prospective teachers through the New York State College of Agriculture, a total of 68 semester hours in Agriculture and Related Science is required. Thirty-six of these hours must be distributed in five broad fields as follows:

**Agricultural Economics and Farm Management.** The student is expected to complete 11 hours in courses approved by the professional adviser.

**Agricultural Engineering and Farm Mechanics.** In this group, the student must complete 14 hours, 5 of which must be in farm-shop courses.

**Animal Husbandry and Poultry Husbandry.** The student must complete from 15 to 18 hours in animal husbandry and a minimum of 3 hours in poultry.

**Farm Crops and Horticulture.** The student must complete 7 hours in this field including courses in farm and vegetable crops.

**Soil Technology.** The student is expected to have a fundamental course in soils.

In addition to a minimum of 36 hours of credit taken in the above five fields, the candidate must present 24 hours chosen from the fields of agronomy, animal husbandry, bacteriology, dairy science and testing, entomology, forestry, meteorology, plant breeding, plant pathology, and rural sociology. During the fifth year advanced preparation in one or more of the above five fields of agriculture will be possible to the extent of from 15 to 22 hours.

To assist the student in meeting the broad requirements of the five fields and the elective hours indicated, a plan is set up for the use of students and their advisers. This plan provides for courses as indicated in the above 36-hour requirement and as many specialized elective courses as are consistent with the demands of the types of agriculture in New York State. Certain courses listed as agricultural electives, e.g., bacteriology, entomology, rural sociology, may not be required in this group if taken to meet requirements in the sciences or social studies.

*General Electives.* The prospective teacher will find opportunity to select, with the approval of his adviser, such courses from agriculture, science, or other University offerings as will contribute further to his preparation for teaching.

## TEACHERS OF HOME ECONOMICS

*Graduation Requirements of the College of Home Economics.* The New York State College of Home Economics requires the completion of the following: English, 6 hours; hygiene, 2 hours; basic sciences, 30 hours, of which 9 are to be in the biological sciences, 9 in the physical sciences and 12 in the social sciences; home economics, 40 hours; electives, 42 hours, of which 24 may be in any College of the University; 18 hours must be in courses offered by the Colleges of Home Economics, Agriculture, and Veterinary Medicine.

*Pre-professional and Professional Studies.* Students preparing to teach Home Economics will pursue the following program of pre-professional and professional courses:

	<i>Credit Hours</i>
<i>Freshman Year</i>	
Basic course in Social Studies (Freshman or Sophomore Year).....	6
<i>Sophomore Year</i>	
Human Growth and Development.....	6
Educational Psychology (second term of Sophomore year or Junior year).....	3
Observation and Participation.....	1
<i>Junior Year</i>	
Social Foundations of Education (Junior or Senior Year).....	3
Psychology of Adolescence (Junior or Senior Year).....	3
Observation and Participation.....	1
<i>Senior Year</i>	
The Art of Teaching: Curriculum, materials, method and directed teaching....	3
Curriculum .....	2
Social Foundations of Home Economics Education.....	3
<i>Fifth Year</i>	
Apprentice Teaching .....	2-4
School Organization, Extra-instructional and professional relations and problems	2
Philosophy of Education.....	2
Seminar in Problems of Teaching (to include a critical treatment of some problem) .....	2-4
Approved Electives in Education.....	2-5

*Preparation in Home Economics and Related Subjects.* In the majority of schools, instructors in home economics teach all phases of homemaking. Even in those schools in which homemaking is departmentalized, it is desirable that each teacher have a broad view of the entire field. To help achieve this, subject matter in the following fields is suggested, adjustment being made according to individual background and needs:

**Family Relationships and Child Study.** Part of the work in family relationships may be covered through courses dealing with The Family. Part should be taken in Home Economics. Child study may include work in Child Psychology, and should include observation of child behavior and guidance in a nursery school, together with some participation in working with children through a nursery school, through play groups, or in homes.

**Health in Home and Community and Home Nursing.** Includes study of home and community hygiene, first aid and emergencies in the care of the sick at home.

**Household Management and Economics of the Household.** Courses in this field should deal with management and economic principles as they apply in the home with relation to family living. Experiences in practical problems should be included. It is also desirable to develop those managerial abilities involved in home and community relationships.

**Nutrition and Food Preparation.** This should include nutrition for all ages, the science of food preparation, food buying, family meals, and the food budget.

**Art and Home Furnishing.** Courses in applied art or art principles or design and color, or other types of courses which include fundamental principles of art. House planning and furnishing should be studied in relation to family living—to management of time, materials, money and energy.

**Clothing and related subjects (design, textiles, construction).** Courses here should deal with the essentials of personal grooming, care of clothing, the personal wardrobe, clothing for the family, the clothing budget, the construction of clothing and the design of costume. The study of textiles should include textiles used in clothing and home furnishings.

In addition to the above requirements in suggested subject matter in Home Economics, a student preparing to teach should plan her college program and her experiences during the summers so as to build an understanding of herself, of children, and of adults. She should be able to recognize in homes and communities the significant situations and problems to which home economics applies, to use home economics to achieve sound practices in her own living, and to give evidence of a growing skill in helping others to interpret and apply its findings and standards to the solution of individual, home, and community needs.

In the fifth year the prospective teacher of Home Economics will have opportunity to secure from 13 to 20 hours of advanced instruction in her teaching field.

*General Electives.* The student may select, with the approval of her adviser, such courses from home economics, science, or other University offerings as will enlarge her understanding of her teaching responsibilities.

## TEACHERS OF INDUSTRIAL AND TECHNICAL SUBJECTS

Conditions peculiar to this field make it impracticable to offer to prospective teachers of industrial and technical subjects in vocational schools or departments a five-year program similar to that for other teachers. The permanent state certificate for teachers of technical subjects requires one full year of study in addition to undergraduate work of a technological nature, supplemented by three years of practical experience in the technical field for which the license is desired.

To meet the needs of this group Cornell University has provided a fifth-year curriculum, leading to the degree of Master of Science in Education, that includes such general and special courses in Education, as well as courses in basic science, engineering, economics, labor problems, etc., as may be needed to round out the program of the teacher. This work is offered during the regular school year and the summer session.

## TEACHERS OF INDUSTRIAL ARTS

In this field, also, Cornell University does not offer a five-year curriculum for teachers, but it does provide, through the Summer Session, a fifth-year program leading to the degree of Master of Science in Education. Those preparing to teach Industrial Arts will attend the State Teachers College at Buffalo or Oswego, or some institution offering an equivalent program, for the usual period of undergraduate work. Upon the satisfactory completion of such a program, Cornell will admit, upon a selective basis, as many teachers as the facilities of the University will permit.

For this group a new program has been established. This program is based on the assumption that industrial arts education in the secondary schools should deal increasingly with the interpretation of industrial processes and practices as a phase of general education, and that these processes and practices are becoming more complex year by year. This seems to require that industrial arts teachers understand more thoroughly both the activities of industrial life and the trends in industrial and social developments.

The new program is as follows:

	<i>Credit Hours</i>
<b>Professional Education</b>	
Philosophy of Education.....	2
Seminar in Industrial Arts Education with courses for master teachers or for supervisors chosen from such offerings as:.....	4-6
a. Teaching problems in industrial arts.	
b. Curriculum and course of study revision.	
c. Research problems in industrial arts.	
d. Administration and supervision of industrial arts.	
Project-Development Laboratory (Advanced shop-laboratory work of creative type).....	4-6
Critical Study or Thesis.....	2-6
Electives .....	0-4
<b>Technical</b>	
Industrial Relations .....	2
Materials, Processes and Tools of Industry.....	4-6
Recent Developments in Technology.....	2-4
Electives (Physics, mathematics, meteorology, engineering).....	0-4
<b>Social Studies</b>	
Recent Social Trends.....	2
<b>General Electives</b> .....	0-8

## Characteristics of the Program

Certain principles of education considered essential in preparing selected persons for the teaching profession are reflected in the curricula presented above:

1. An understanding of the more important phases of human knowledge and activities is gained by meeting the requirements of the various undergraduate colleges regarding study in the different fields. Appreciative knowledge of social conditions is developed in the course on Social Studies in which are considered representative problems of history, government, economics, sociology, and anthropology.

2. Adequate preparation in the field in which the teacher will give instruction is assured by the liberal amount of time devoted throughout the five years to this and its related fields.

3. An understanding of boys and girls and the promotion of a genuine interest in them is sought through: (a) first-hand contact with out-of-school groups of adolescents, (b) a course in Educational Psychology, and (c) a course in Human Growth and Development. The last brings together the facts and principles relating to the growth of the human being, whether physical, mental or social, that are of particular significance to the teacher.

4. A correlation between the theory of education and its practice is provided through the gradual induction of the student into classroom responsibility by means of directed and apprentice teaching conducted at different levels. (See pages 11-13.)

5. Since all public-school teachers should be concerned with the various interests and needs of pupils, opportunity is provided for bringing together into certain classes (e.g., Educational Psychology, Social Foundations of Education, and Philosophy of Education) prospective teachers of Agriculture, of English, of Science, of Home Economics, and the like.

6. Finally, it is important that each teacher develop such understanding of the purposes, methods, and materials of education that he can be self-critical of his professional activities. This end is sought throughout the professional program. The course in Philosophy of Education is, however, the specific means by which professional experience and study will be critically reviewed, appraised, and integrated into a body of guiding principles.

### Program for Students Who Received Little or No Professional Instruction During Their Undergraduate Years

Sometimes students do not decide to prepare for teaching until they have finished their work for a Bachelor's degree. Such persons who have had adequate preparation in the field in which they wish to teach and who meet other standards as prescribed for admission to the courses for teacher education will elect the following program:

	<i>Credit Hours</i>
<b>Summer Session</b> (preceding the fifth year)	
Social Foundations of Education.....	2-3
Educational Psychology .....	2-3
<b>Fifth Year</b>	
Human Growth and Development.....	6
The Art of Teaching: curriculum, materials, method, evaluation, directed observation and teaching.....	8
School Organization, Extra-instructional and Professional Relations and Problems .....	2
Philosophy of Education.....	2
<b>Summer Session</b> (following the fifth year)	
Critical Study or Thesis.....	2
Electives: Psychology of Adolescence; History of Education; Problems of Teaching; courses in teaching field; or other approved courses.....	4

### Transferring from the Four-Year to the Five-Year Program

Because of action taken by the New York State Board of Regents in March, 1939, those preparing to teach academic subjects must offer five years of pre-service preparation if they enter service after December 31, 1942. At the present time the State Education Department requires only four years of pre-service preparation of those teaching agriculture or home economics, but it is expected that the majority of teachers in these fields who secure their preparation at Cornell University will take advantage of the opportunities provided in the five-year program. Those who secure five years of approved preparation will be granted a permanent State certificate. Those with only four years of training will be granted a provisional certificate valid for ten years and renewable upon presentation of evidence of having completed an additional year of advanced study.

Those who wish to follow the five-year program before being required to do so will be given an opportunity to transfer from the four-year to the five-year curriculum. Information regarding such transfer may be secured from the office of the Graduate School of Education or from the staff member in charge of the teacher-training curriculum in each field.

## Guidance and Selection

In most cases students will be assigned to regular college advisers on entrance. In addition, to insure guidance of a special and professional nature, provision is made for the early location and registration of students who are planning to teach the academic and vocational subjects for which preparation is offered at Cornell University. Students in the College of Arts and Sciences should consult Dr. M. L. Hulse early in the freshman year; students in the College of Agriculture planning to teach science should consult Dr. P. G. Johnson; students in the College of Home Economics planning to teach Home Economics should consult Miss Cora Binzel; students planning to teach Agriculture should consult Dr. R. M. Stewart; and students in the College of Agriculture planning to teach Industrial and Technical Subjects or Industrial Arts should consult Dr. L. A. Emerson.

As the student proceeds in his preparation for teaching, appraisal will be made of the development of his abilities, understandings, appreciations, and of such other qualities as make for success in teaching. Special determinations will be made at three principal points as to the fitness of the candidate to continue: (1) at the end of the sophomore year, (2) prior to the period of student teaching in the senior year, and (3) prior to apprentice teaching in the senior and fifth years. Committees responsible for selection in the several fields will be concerned with the personal and physical fitness of the candidate, his emotional and intellectual equipment, his general and special academic competence, his familiarity with current affairs, and his ability to use the English language.

Knowledge gained of the student by his advisers and his instructors, supplemented by the health record and the more formal measures such as psychological and personality tests, will provide information useful in judging the strictly personal factors involved. In general each student will be expected to maintain a standing in scholarship at least equal to the average of his college. Competence in his field of teaching and his knowledge of current affairs will be tested at the close of his fourth year of residence. A steady growth in the use of English will be expected of each student. Standards of accomplishment will be set up for the several groups of prospective teachers, beginning in the freshman year and checked at frequent intervals throughout the five-year period of preparation. Training in the organization of materials in platform speaking, and in reading will be required. Opportunity to discover and remedy defects in speech will be provided.

These requirements and standards may be supplemented by additional requirements in the several fields of training in order to insure a high degree of competence at all levels and to meet the special demands in different areas of teaching. Students entering the program later than the sophomore year will be expected to meet the standards and requirements indicated above.

## Directed and Apprentice Teaching

Experience lies at the basis of successful learning. This is especially true in the mastery of a profession. Directed and apprentice teaching are designed to provide opportunity for gaining the experience necessary to the under-

standing and appreciation of the principles of teaching. Theory should guide practice and practice should prove the soundness of theory. In preparing the student to practice a profession, it is essential that the opportunity be provided for his gradual induction into this practice. The five-year program provides for two levels of practical work, looking toward the development of ability to perform successfully the various responsibilities of a teacher.

In observation and directed teaching, an opportunity is given to the student to associate himself with skillful teachers, who are usually employees of both the University and of local boards of education, that he may learn, first-hand, to understand what is required in handling classroom situations. Observation is directed and followed by conferences so that the student's activities may be reflective, as well as imitative of those with whom he works. On the basis of experience gained through observation, the student is directed to assume responsibilities incident to classroom practice and finally to assume complete charge of the class under the direction of the teacher. It is in connection with these responsibilities that he gains insight into the educative process. Directed teaching is carried on in selected high schools of Ithaca and of the nearby communities.

Apprentice teaching is the final step in the pre-service preparation through experience. As soon as an acceptable standard in directed teaching has been maintained consistently, the student is eligible for full responsibility in the conduct of classroom activities. This type of teaching is, therefore, a continuation and modification of directed teaching. Though supervision will still be maintained under apprentice teaching, the candidate must continue to assume more responsibility for his own direction. Apprentice teaching will be done generally in high schools selected in part with reference to the student's convenience in his participation in the University program. The details of the plan and the amount of such apprentice teaching will vary according to the needs of the student. The general plan will, however, involve a memorandum between the University and the schools in which the teaching is to be carried on. This memorandum will indicate the responsibilities involved in the promotion of the plan, the kinds of work to be undertaken, the general plan of supervision, and the financial arrangements involved.

As supervising teachers in the apprentice schools, teachers who have shown exceptional ability in the conduct of the responsibilities of the classroom and in the guidance of pupils will be selected. These teachers will have direct responsibility for guiding the apprentice under the general supervision of the principal of the school and the supervisor from the University. The apprentice will assume normally the responsibilities typical of the regular teacher's responsibilities and, in addition, will make such reports of his work and of his studies related to his work as may be agreed upon. In general, these reports will relate to the problems that arise in the interrelations of school and community, in his own community contacts, in the organization of pupils in classes, in the making and using of curriculum and course outlines, in the organization of materials for instruction and particularly in the teaching of the class.

Credit will be determined in part by the length of the apprentice period, in part by the nature of the experience and the portion of the day given to apprentice work, and in part by the studies that the apprentice makes under

the direction of the University. Since the conduct of apprentice teaching will be kept as flexible as is consistent with good administration, it will be necessary to vary the amount of credit according to the individual programs of the apprentices.

In order that the supervision of the apprentice teacher may be performed exceptionally well, the teacher under whom the apprentice serves will cooperate with the supervisor from the University in maintaining continual contacts with the apprentice. The University will provide for regular conferences with the apprentices at the schools, at some central point or at the University for the purpose of giving special help and exchanging experiences.

## Registration and Degrees

As previously indicated, the student preparing to teach will register for the first four years in the appropriate undergraduate College. In the fifth year he will register in the Graduate School of Education.

At the end of four years the student will normally receive the Bachelor's degree appropriate to his college: in Arts and Sciences, Bachelor of Arts; in Agriculture and Home Economics, Bachelor of Science. Upon the completion of the five-year program, the degree of Master of Education will be conferred.

## The Comprehensive Examination

At the end of the fifth year the student will be required to pass a comprehensive examination. This examination, which may be written or oral, or both, will be given by the student's Special Committee, and will test his knowledge of his teaching field, his understanding of educational theory and practice, and his ability to give instruction to secondary school pupils. A prerequisite to the examination shall be demonstrated skill in classroom situations.

## Tuition and Other Fees

*Tuition Fee.* For instruction during the regular year the University charges a tuition fee at rates which vary according to the college or school in which the student is registered. The rates in the colleges in which students will follow the five-year program are as follows:

Four hundred dollars in the College of Arts and Sciences.

Two hundred dollars in the New York State College of Agriculture.\*

Two hundred dollars in the New York State College of Home Economics.\*

One hundred and fifty dollars when registered only in the Graduate School of Education.

Fifty-five dollars in the Summer Session.

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\**Exemption from Tuition Fee.* Tuition is free in the College of Agriculture and the College of Home Economics to undergraduate students who at the beginning of the college year are, and for at least twelve months prior thereto have been, *bona fide* residents of the State of New York.

*A Matriculation Fee* of \$11 is required of every student upon entrance to the University.

*An Administration Fee* of \$25 is to be paid by all students when registered only in the Graduate School. It is payable in installments of \$12.50 at the beginning of each term. In the State colleges an administration fee of \$5 is required of every student at the beginning of each term.

*A Health and Infirmary Fee* of \$6 a term is required, at the beginning of each term, of every student.

*A Willard Straight Hall Membership Fee* of \$5 a term is required, at the beginning of each term, of every student. Its payment entitles the student to share in the common privileges afforded by Willard Straight Hall.

*Laboratory Fees* to cover the cost of materials used by the student are charged in courses that require work in laboratory, shop, or drafting room, or field work.

*A Graduation Fee* is required of every candidate for a degree. For a baccalaureate degree the fee is \$10 and for an advanced degree it is \$20. The fee will be returned if the degree is not conferred.

Any tuition or other fee may be changed by the Board of Trustees to take effect at any time without previous notice.

## Other Announcements Useful to the Prospective Teacher

Of the several Announcements published by the University, the following will be particularly useful to the student who plans to prepare for teaching:

1. The Announcement of the Appropriate Undergraduate College:
  - a. College of Arts and Sciences for teachers of academic subjects.
  - b. College of Agriculture for teachers of agriculture and for students in the biological sciences who register in that college.
  - c. College of Home Economics for teachers of home economics.
2. Announcement of the Graduate School of Education.
3. Announcement of the Graduate School.

A copy of any of these can be obtained from the Secretary, Cornell University, Morrill Hall, Ithaca, N. Y.

## GRADUATE SCHOOL OF EDUCATION

## FACULTY

EDMUND EZRA DAY, S.B., A.M., Ph.D., LL.D., President of the University.  
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OTIS F. CURTIS, Ph.D., Professor of Botany (1940).  
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 ROSWELL C. GIBBS, Ph.D., Professor of Physics (1941).  
 MARY F. HENRY, M.A., Assistant Director of the College of Home Economics (1940).  
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 ELMER S. SAVAGE, Ph.D., D.Sc., Professor of Animal Husbandry (1940).  
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