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# CORNELL UNIVERSITY OFFICIAL PUBLICATION

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*Announcement of the*  
Graduate School of Education  
for 1938-39



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Monthly in September, October, and November

Semi-monthly, December to August inclusive

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# THE UNIVERSITY CALENDAR

1938-39

1938

FIRST TERM

- Sept. 19, *Monday*, Entrance examinations begin.  
Sept. 26, *Monday*, Registration and assignment of new students.  
Sept. 27, *Tuesday*, Registration and assignment of old students.  
Sept. 29, *Thursday*, Instruction begins at 8 A.M.  
Oct. 20, *Thursday*, Last day for payment of tuition for the first term.  
Nov. 23, *Wednesday*, Instruction ends at 6 P.M.  
*Thanksgiving Recess*  
Nov. 28, *Monday*, Instruction resumed at 8 A.M.  
Dec. 21, *Wednesday*, Instruction ends at 4 P.M.  
*Christmas Recess*

1939

- Jan. 5, *Thursday*, Instruction resumed at 8 A.M.  
Jan. 11, *Wednesday*, Founder's Day.  
Jan. 28, *Saturday*, Instruction ends.  
Jan. 30, *Monday*, Term examinations begin.  
Feb. 8, *Wednesday*, Term ends.  
Feb. 9, *Thursday*, A holiday.

SECOND TERM

- Feb. 10, *Friday*, Registration of all students.  
Feb. 13, *Monday*, Instruction begins at 8 A.M.  
Mar. 6, *Monday*, Last day for payment of tuition for the second term.  
April 1, *Saturday*, Instruction ends at 1 P.M.  
*Spring Recess*  
April 10, *Monday*, Instruction resumed, 8 A.M.  
May — *Saturday*, Spring Day: a holiday.  
June 5, *Monday*, Final examinations begin.  
June 13, *Tuesday*, Final examinations end.  
June 19, *Monday*, COMMENCEMENT.

## GRADUATE SCHOOL OF EDUCATION

### FACULTY

EDMUND EZRA DAY, S.B., A.M., Ph.D., LL.D., President of the University.  
LIVINGSTON FARRAND, A.B., M.D., L.H.D., LL.D., President Emeritus.  
FLOYD KARKER RICHTMYER, A.B., Ph.D., Dean of the Graduate School.  
JULIAN EDWARD BUTTERWORTH, A.B., A.M., Ph.D., Director of the Graduate School of Education.

### STAFF OF INSTRUCTION

HOWARD R. ANDERSON, Ph.D., Assistant Professor of Education (Teaching of the Social Studies).  
THOMAS L. BAYNE, JR., Ph.D., Assistant Professor of Rural Education.  
EMMA M. S. BESIG, Ph.D., Instructor in Education (Teaching of English).  
CORAZ E. BINZEL, M.S., Professor of Rural Education.  
JULIAN E. BUTTERWORTH, Ph.D., Professor of Rural Education.  
ETHEL L. COWLES, A.B., Instructor in Rural Education.  
THEODORE H. EATON, Ph.D., Professor of Rural Education.  
LEWIS ELDRED, M.A., Chairman of the Bureau of Educational Service.  
LYNN A. EMERSON, Ph.D., Professor of Industrial Education.  
EMERY N. FERRISS, Ph.D., Professor of Rural Education.  
FRANK S. FREEMAN, Ed.D., Professor of Education.  
LUELLE P. GARDNER, Ph.D., Instructor in Rural Education.  
J. PAUL GREEN, B.A., Instructor in Rural Education.  
MABEL HASTIE, B.S., Instructor in Rural Education.  
EDWIN R. HOSKINS, Ph.D., Assistant Professor of Rural Education.  
M. LOVELL HULSE, Ph.D., Assistant Professor of Rural Education.  
MARGARET HUTCHINS, M.A., Instructor in Rural Education.  
PHILIP G. JOHNSON, Ph.D., Assistant Professor of Education (Teaching of Science).  
RIVERDA H. JORDAN, Ph.D., Professor of Education.  
PAUL J. KRUSE, Ph.D., Professor of Rural Education.  
M. L. W. LAISTNER, M.A., Professor of History.  
\_\_\_\_\_, Instructor in Rural Education.  
CLYDE B. MOORE, Ph.D., Professor of Rural Education.  
ROBERT M. OGDEN, Ph.D., Professor of Education.  
ROY A. OLNEY, Ph.D., Assistant Professor of Rural Education.  
E. LAURENCE PALMER, Ph.D., Professor of Rural Education.  
WILLIAM A. SMITH, Ph.D., Assistant Professor of Rural Education.  
PRESERVED SMITH, Ph.D., Litt.D., Professor of Medieval History.  
ROLLAND M. STEWART, Ph.D., Professor of Rural Education.  
FLORA M. THURSTON, Ph.D., Acting Professor of Rural Education.  
ANDREW L. WINSOR, Ph.D., Professor of Rural Education.

### REPRESENTATIVES OF ACADEMIC GROUPS

WALTER B. CARVER, Ph.D., Professor of Mathematics (1938).  
OTIS F. CURTIS, Ph.D., Professor of Botany (1940).  
WILLIAM C. DEVANE, Ph.D., Professor of English (1939).  
CHARLES L. DURHAM, Ph.D., Litt.D., Professor of Latin (1939).  
FRANK O. ELLENWOOD, A.B., M.E., Professor of Heat-Power Engineering (1941).  
DONALD C. ENGLISH, M.B.A., Professor of Economics and Accounting (1938).  
ROSWELL C. GIBBS, Ph.D., Professor of Physics (1938).  
MARY F. HENRY, M.A., Assistant Director of the College of Home Economics (1940).  
ELMER S. SAVAGE, Ph.D., D.Sc., Professor of Animal Husbandry (1940).

## ASSISTANTS, 1937-38

OTIS C. AMIS, A.M., Research Assistant in Rural Education.  
 KENNETH H. CAREY, B.S., Assistant in Agricultural Education.  
 MALCOLM C. GALBREATH, B.S., Assistant in Agricultural Education.  
 EVA GORDON, M.S., Assistant in Rural Education.  
 JOHN E. KING, Research Assistant in Rural Education.  
 BARNEY KORCHIN, B.S., Assistant in Rural Education.  
 JOHN A. MACK, B.S., Assistant in Agricultural Education.  
 RAY A. MURRAY, B.S., Assistant in Rural Education.  
 HAROLD L. NOAKES, B.S., Assistant in Agricultural Education.  
 MILO J. PETERSON, M.S., Assistant in Agricultural Education.  
 FORREST E. PRATT, B.S., Assistant in Rural Education.  
 CHRISTINE S. RICE, B.S., Assistant in Home Economics Education.  
 HENRY L. SISK, M.A., Assistant in Rural Education.  
 CLYDE S. STINE, M.A., Assistant in Education.  
 WALTER L. TAYLOR, M.A., Assistant in Rural Education.  
 JOHN E. TRAINER, B.S., Assistant in Science Education.  
 GLADYS WAFLER, B.S., Assistant in Home Economics Education.

## COOPERATING TEACHERS IN THE ITHACA HIGH SCHOOL

1937-38

ASHCROFT, ETHELWYN	MILLER, RUTH L.
AXTEL, WILLIAM B.	RABOTNIKOFF, ABRAHAM S.
BARTHOLOMEW, BERTHA	REIDY, MARGARET M.
BIGHAM, HELEN R.	RICE, CHRISTINE S.
BLISS, FRANK R.	ROBINSON, LILLY
CATALFANO, SAMUEL J.	ROEHL, MARJORIE G.
CLAFLIN, MAYFRED	SAVAGE, CLARA
CROSBY, RICHARD C.	SCIDMORE, ROBERT
FORD, MARION	WAITE, AGNES
GROMMON, ALFRED H.	WARREN, MARIAN L.
HADLOCK, ELOISE T.	WEAVER, FLORENCE
LAFORTUNE, ELWOOD A.	WELCH, CATHERINE M.
LAUBENSTEIN, OSWALD H.	WEST, THERESA
LEWIS, HELEN S.	WHITE, GEORGE A.
MCCLARTY, KATHRYN E.	WILLIAMS, MILDRED M.
MCINTYRE, LLOYD F.	WRIGHT, ADELAIDE C.

## GRADUATE SCHOOL OF EDUCATION

The Graduate School of Education is composed of The Department of Education in the College of Arts and Sciences and The Department of Rural Education in the College of Agriculture.

Although the organization is designated as a graduate school, and although most of the offerings are on the graduate level, it has responsibility, also, for professional courses in Education offered to undergraduates in the various colleges. The undergraduate courses include those that are ordinarily required for a state teacher's certificate (see pages 15-17), together with a few additional courses designed to be attractive, because of their general educational value, to students not planning to enter the teaching profession. There is no independent undergraduate college at Cornell for the training of teachers. Students on the undergraduate level who are preparing for teaching normally register in the College of Agriculture, in the College of Arts and Sciences, or in the College of Home Economics and must meet the standards for graduation set by the College in which they are enrolled.

The Graduate School of Education is an integral part of the Graduate School of the University, and as such, is subject to its general regulations. The prospective student should, therefore, consult also the Announcement of the Graduate School.

### CHANGING CONDITIONS IN SECONDARY SCHOOL TEACHING

Standards in the teaching profession have made considerable advance during the last several years. Although the possession of a Bachelor's degree has, in the past, usually been regarded as sufficient for secondary school teaching, those who have training beyond such a degree are likely, during the next few years, to find themselves in a preferred situation with regard to securing such positions. Although Cornell will not, for the present at least, discontinue its four-year program for training secondary school teachers, it is advisable that as many as possible plan to take five years for this purpose. Under the five-year program some of the professional courses in Education should be postponed to the fifth year, but the student should give particular attention early in his course to making certain that he shall have taken, by the end of this period, a combination of subjects that will enable him to fit into a secondary school situation. Under certain conditions those taking this fifth year of training may secure a Master's degree as described below. Whether the student receives his training in four years or five, it is important that he confer as early as possible with some member of the Education staff who is familiar with secondary school conditions.

## GRADUATE WORK

1. The degrees of Master of Arts, Master of Science, and Doctor of Philosophy are administered directly by the Graduate School of Cornell University.

2. The degree of Master of Science in Education is administered directly by the Graduate School of Education, subject to the regulations of the Graduate School of Cornell University.

## ADMISSION

To be admitted to the Graduate School an applicant (1) must have received his baccalaureate degree from a college or university of recognized standing, or have done work equivalent to that required for such degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; and (3) must have had adequate previous preparation in his chosen field of study to enter at once into graduate study.

Seniors in the colleges of Cornell University who have completed the academic requirements for the Bachelor's degree, and who qualify under (2) and (3) may, subject to the approval of the deans of their respective colleges, be admitted to the Graduate School.

Students admitted to the Graduate School are usually expected to pursue a course leading to one of the advanced degrees; but a properly qualified person who, for special reasons, does not wish to meet the requirements for a degree may arrange a program of graduate study suitable to his purposes.

An applicant who is not a graduate of Cornell University must submit complete official transcripts of all previous college studies.

Applications for admission, made on the proper forms, should be filed in the office of the Graduate School at the earliest possible date and, ordinarily, not later than August 10 and January 25 for entrance to the first and second terms, respectively; and not later than June 25 for entrance to the summer session. Admission to candidacy for the degree of Master of Science in Education is the same as for other advanced degrees, except that the requirement in foreign language is omitted. Persons interested in becoming candidates for this degree should address inquiries either to the Dean of the Graduate School or to the Director of the Graduate School of Education, or to both. Formal application for admission should be sent to the Dean of the Graduate School.

Students may be admitted to the Graduate School in one of the following three classes:

- (1) Candidates for degrees;
- (2) Graduate students not candidates for degrees: "non-candidates";
- (3) Resident Doctors.

## CANDIDATES FOR DEGREES:

*Language requirements for admission.* No student may be admitted to candidacy for the A.M., or the M.S. degree whose training does not include three units of entrance in one language or two in each of two. There is no language requirement for admission to candidacy for the Master of Science in Education degree.

Candidates for the Doctor's degree are expected to possess a reading knowledge of two foreign languages at the beginning of their candidacy at Cornell for that degree. For further details regarding the language requirement for the Ph.D. see the Graduate School Announcement.

*Major and Minor Subjects.* A candidate for an advanced degree must select within his field of study a branch to which he intends to devote the larger part of his time and which is called his Major Subject. In addition, a candidate for the doctorate must select two other subjects, called Minor Subjects, properly related to his Major Subject. Except in the case of a Master of Science in Education,<sup>1</sup> a candidate for a Master's degree must select one such Minor Subject.

*Special Committees.* The work of each graduate student is in charge of a Special Committee. After the student has chosen his Major and Minor Subjects, he must select one or more members of the Graduate Faculty, to represent each subject and to serve as the members of his Special Committee, the representative of his Major Subject being the chairman. Their consent so to serve, together with a statement of the student's Major and Minor Subjects, approved by the members of his Special Committee, must be filed with the Dean of the Graduate School on the proper blank not later than two weeks after first registration in the Graduate School.

*Changes in Special Committees.* A student may change the membership of his Special Committee with the approval of all the members of the newly constituted Committee. Notice of such change must be filed *immediately* with the Dean of the Graduate School. A vacancy on a Special Committee, caused by the absence of a member from the University, may be filled by the Dean on joint recommendation of the absent member and the student.

GRADUATE STUDENTS NOT CANDIDATES FOR DEGREES: A student admitted to the Graduate School but not a candidate for an advanced degree is required to select one or more advisers to direct his work. He must present to the Dean not later than two weeks after registration for each term a statement of the studies which he intends to pursue, approved by his adviser(s) and by each of the members of the Faculty under whom the work is to be done. Non-candidates are expected to pursue a coordinated program of graduate work.

RESIDENT DOCTORS: Persons who hold a Doctor's degree or who have equivalent standing may, subject to permission from the Dean, register in the Graduate School as Resident Doctors, for the purpose

<sup>1</sup>See p. 10.

of engaging in advanced study and research in a field in which they have had adequate previous preparation. On the recommendation of the Dean, Resident Doctors are exempt from the payment of tuition and all fees except laboratory charges.

#### THE RESIDENCE REQUIREMENT

No student will be awarded any degree by Cornell University unless he has spent at least one full academic year, or the equivalent, in residence and study at the University as candidate for that degree. For the Ph.D., a minimum of six terms of residence is required; for each of the master's degrees, a minimum of two terms. To receive credit for residence a student must be regularly enrolled in the Graduate School as a candidate for the degree in question; and the satisfactory completion of his work, term by term, must be attested by the members of his Special Committee. For details see the Announcement of the Graduate School.

#### THE MASTER'S DEGREE

The degree A.M. or M.S. is conferred upon a candidate who, after completing at least one year of residence devoted to the study of a field comprising a Major Subject and one Minor Subject, presents a satisfactory thesis, or essay, as the chairman of the candidate's Special Committee may decide and passes an examination on his special field. The thesis or essay, must demonstrate the candidate's ability to do independent work, and must be acceptable in style and composition.

A statement of the general subject of the thesis, or essay, with the written approval of the chairman of the Special Committee in charge of the candidate's work, must be filed in the office of the Dean at least six months before the candidate expects to present himself for examination.

After this thesis, or essay, has been duly presented and is accepted by the Special Committee, the candidate is required to present himself for examination on his Major and Minor Subjects and on the subject matter of his thesis.

The final examination which covers the thesis and the major and minor subjects may be written or oral, or both, at the option of the examining committee, and is open to all members of the faculty. In the event of failure in the examination, no re-examination may be held until three months have elapsed.

#### THE DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a candidate who, after completing not less than three years of resident graduate work devoted to the study of a field of work comprising a Major Subject and two Minor Subjects, presents a satisfactory thesis, and passes an examination on his chosen field and on the subject matter of his thesis.



The Doctor's degree is intended to represent, not a specified amount of work covering a specified time, but the attainment, through long study, of independent and comprehensive scholarship in a special field.

*Language Requirement.* Each candidate for the degree of Doctor of Philosophy must demonstrate his ability to read both French and German (or two languages, other than English, approved by his Special Committee), by passing in each of these languages an examination given by a member of the Language Examination Board. The two languages so approved shall be significantly useful in the candidate's field of work and not chosen solely with reference to the preparation of the thesis. Candidates for the degree of Doctor of Philosophy are expected to meet the foreign language requirements at the beginning of their candidacy at Cornell University for that degree. A minimum of seven terms of residence is required of a candidate who does not pass at least one language examination at this time. The extra term of residence may not be required if, with the approval of the student's Special Committee and of the General Committee of the Graduate School, preparation in foreign language is made during a period when the student is not receiving residence credit. A minimum of three terms of residence is required after completion of all language requirements, except in the case of a student admitted to candidacy with two or more terms of residence credit; in such case, a minimum of two terms is required. Language examinations passed within one month after registration are considered as being passed at the time of registration. Additional requirements in foreign language may be made at the discretion of the student's Special Committee.

*Thesis Requirement.* The thesis for the Doctor's degree must give evidence of the candidate's power to carry on independent investigation and must be satisfactory in style and composition. A statement of the general subject of the thesis, with the written approval of the chairman of the Special Committee in charge of the candidate's work, must be filed in the office of the Dean at least six months before the candidate expects to present himself for examination. The thesis must be acceptable to the candidate's Special Committee in respect of both scholarship and literary quality. The completed thesis must be in the hands of the Special Committee at least fifteen days before the final examination for the Doctor's degree; and, during the five days immediately preceding this examination a typewritten copy approved by all members of the Special Committee, shall be on file in the office of the Graduate School. Under no circumstances may either final examinations B or C be given before the thesis has been accepted and filed. See page 10.

Two bound typewritten copies (one of which must be a ribbon copy) of the completed thesis, approved by the Special Committee, must be deposited in the office of the Graduate School before the degree can be conferred. These copies become the property of the University Library. A candidate for the Degree of Doctor of Philoso-

phy must deposit in the Dean's office, along with the two bound copies of his thesis, a typewritten abstract thereof, about 1500 words and not exceeding 1700 words in length, approved by the Chairman of the Special Committee, and must pay to the Treasurer of the University a fee of \$10 to defray the cost of printing this abstract.

*Qualifying Examination.* The primary purposes of the qualifying examination are (1) to ascertain whether the student is qualified to continue work for the doctorate; and (2) to plan the student's work during the remainder of his candidacy. The examination is ordinarily given at the end of the first year of graduate study, if that year is at Cornell. If the student has had one year or more of graduate work elsewhere, the qualifying examination should be given as soon as possible after his entrance into the Graduate School. The qualifying examination may be oral or written or both. Any member of the Special Committee may waive his part of the qualifying examination. The report on the qualifying examination shall, however, be made by the Special Committee as a whole, after consultation. If a candidate fails to pass the qualifying examination, no re-examination shall be allowed except on recommendation of the Special Committee. Before presenting himself for Final Examination B or C (see next paragraph), each candidate must have earned at least two terms of residence credit after the passing or the waiving of the qualifying examination.

*Final Examinations.* The final examinations, covering (1) the Major and Minor Subjects and (2) the thesis and related topics, may, at the discretion of the Special Committee, be given either separately or in combination. When the two parts are given separately, an examination dealing mainly with the Major and Minor Subjects and designated as Final Examination A, may be given at the end of the fourth term of candidacy, or thereafter. Examination A may be both oral and written. The early completion of Examination A will leave the student free to devote his attention to the thesis and collateral studies during the remainder of his candidacy. Final Examination B, on the thesis and related topics and on such other work as the student may have done after completing Examination A, will be given after the residence requirement has been satisfied and the thesis has been completed and filed as provided on page 9. This examination may be oral, or both oral and written, at the discretion of the Special Committee.

#### THE MASTER'S DEGREE IN EDUCATION

The degree of Master of Science in Education is conferred upon a candidate, who, after completing not less than one year of residence devoted to study in the field in which Education constitutes the major portion, has given satisfactory evidence of ability to carry graduate work, and has met such other requirements as his Special Committee with the approval of the Graduate School of Education may have established. Every candidate must have passed a final comprehensive examination.

This degree is designed for school executive officers and teachers who wish to enter upon a course of professional study involving neither close restrictions nor intensive research. This course of study is both comprehensive and critical. It has, however, a distinctly professional emphasis. The amount of prescribed work will be adjusted to the particular preparation and experience of the candidate. In general these candidates are expected to fall into one of three classes:

CLASS I. Men and women, graduates of standard colleges, of approved experience in educational positions, who are seeking professional preparation on the graduate level.

CLASS II. Men and women, graduates of standard colleges, who wish to qualify as school principals or as supervisors in special fields in accord with professional requirements of various states.

CLASS III. Men and women, graduates of standard colleges, qualified for graduate work, but who have not included in their undergraduate programs courses in the field of Education sufficient for certification as teachers.

1. With the approval of the Director of the Graduate School of Education the candidate shall choose three members of the graduate faculty to serve as a special committee to direct his work. At least two of these shall be from the staff in Education, one of the two being selected by the candidate to act as chairman. This committee is empowered to determine the special qualifications of the candidate to undertake a program proper to his particular professional interest. An approved program must have unity, in terms both of purpose and of sequential development. The candidate is not required to present a formal thesis; but, if he does not do so, he is expected to complete an expository or critical essay or a problem in research to the satisfaction of his committee. Within an approved program are included such courses, seminars, projects, investigations, and examinations as the committee may require. These provisions may have the consequence of extending the residence requirements for students of Class III beyond the minimum of one year.

2. The office of the Director of the Graduate School of Education acts as an office of record, and the candidate for one of these degrees shall, within ten days of his registration, file in writing a statement approved by his committee showing his plan of work and course of study.

3. The student's special committee, not later than the middle of the third summer of study (or the end of the first term of graduate study, shall determine the fitness of the candidate to continue his candidacy for this degree through examination or such other suitable means as the committee may elect. The action of the Committee shall be recorded in the office of the Graduate School of Education.

4. Upon the satisfactory completion of the work outlined by the Special Committee and the passing of a final comprehensive examination, the faculty of the Graduate School of Education will recommend to the Faculty of the Graduate School that the candidate be granted

the appropriate degree. The maximal period allowed for the completion of all requirements conforms to the regulations of the Graduate School of Cornell University.

5. Prior to scheduling the final examination, all members of the staff under whom the candidate has carried his course work or who have acted in any advisory or similar capacity with him will be informed of his proposed examination and will be asked to express an opinion regarding his fitness for such examination, and will be invited to be present and to take part in the examination.

6. The courses expected of the candidate will fall into three groups designated A, B, C. The determination of the particular groups into which particular courses will fall will depend upon the main professional purpose of the candidate in his graduate study and an integration of courses to such purpose.

**GROUP A.** This group includes courses of a special nature and of immediate interest, such as the technical courses in English, in the languages (or a language), history, sciences (or a science), agriculture (or a division thereof), etc., and the professional studies appropriate to the special field. It is expected that at least a third of the candidate's program will fall in this group.

**GROUP B.** This group includes courses in the theory and science of education which will furnish the several types of background that are warranted by the nature of courses in Group A. Courses to the extent of one-third of the total may be chosen in this group. Educational Psychology, including Measurement, History and Philosophy of Education and other courses necessary to integration, such as general studies appropriate to the organization and administration of schools at the several educational levels, are representative of this group.

**GROUP C.** This group includes courses intended to meet the particular needs of the candidate not adequately met in Groups A and B. In certain cases as much as a third of the candidate's program should be taken in this group.

For the selection of courses in all the above groups, the candidate should consult his special committee, whose approval is necessary.

## TUITION FEES IN THE GRADUATE SCHOOL

A tuition fee of \$150 for the academic year is to be paid by all students registered in the Graduate School. It is payable in installments of \$75 at the beginning of each term.

Certain classes of students are exempt from the payment of the tuition fee. They are:

- (1) Graduate students holding certain appointments as University Fellows or Graduate Scholars, and holders of certain temporary fellowships and scholarships.
- (2) Resident Doctors upon recommendation of the Dean.
- (3) Certain members of the instructing staff. See the Announcement of the Graduate School for 1937-38.

A member of the teaching staff registered in the Graduate School, whose salary equals or exceeds \$1500 shall pay tuition at the rate of three-quarters of the tuition regularly charged full-time students.

A matriculation fee of \$11, an administration fee of \$12.50 a term, a health and infirmary fee of \$6 each term, a Willard Straight Hall fee of \$5 each term, and a graduation fee of \$20 are also charged. A thesis fee of \$10 is required of each candidate for the Ph.D. degree.

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

### TUITION FEES IN THE UNDERGRADUATE COLLEGES

Facts regarding tuition fees in the several schools and colleges of the University can be found in the General Information Number.

### GRADUATE FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS

Financial assistance to students in the various phases of the work of the Graduate School of Education is available as indicated below. These aids are granted only to students matriculated in the Graduate School who, in addition to adequate preparation in general subjects, in an appropriate special field, and in Education, have had a sufficient amount of successful teaching or other professional experience that they are warranted in seeking further preparation for educational leadership.

*Free tuition in the Graduate School is given in addition to the cash awards, except as indicated.*

The amount and character of the service required of the holder of an assistantship varies, but information on this point may be secured upon request.

1. *Agricultural Education.* One \$1000 and one \$800 assistantship normally available only to those who are candidates for the doctorate. It is essential that the candidate shall have had satisfactory teaching experience in vocational agriculture and, preferably, assistantship or teaching relationships in a teacher-training institution.

2. *Education.* One \$500 assistantship open to students interested in certain general phases of Education, especially educational psychology, mental measurement, secondary school methods, or secondary school administration.

3. *Educational Psychology.* One \$750 assistantship granted to a person well advanced in his preparation in educational psychology.

4. *Industrial Education.* Five \$400 assistantships available to persons preparing themselves for leadership in vocational industrial education.

5. *Nature Study and Science Education.*

a. One \$800 fellowship in nature education open to students with teaching experience and one year of graduate work who are trained field naturalists and are prepared to take their language examinations for the language requirement. Work will deal with Conservation Education in schools. Free tuition is not included.

b. One \$500 fellowship in nature education available to students with qualifications similar to "5a" but not required to be

prepared to meet more than one language requirement at time of entrance. Free tuition is not included.

c. One \$500 assistantship open to persons of experience preparing for leadership positions in the teaching of science.

d. One \$500 assistantship granted to a person of superior training and teaching ability for part-time assistance in the practice teaching program carried on in the Ithaca High Schools.

6. *Rural Education.*

a. Two \$1000 research assistantships in Rural Education available to persons wishing to prepare themselves for professional service to communities under 4500 population. Normally these assistantships will be granted only to candidates for the doctorate who are within approximately one year of completing the requirements for that degree, who have a reading knowledge of two foreign languages, preferably French and German, and who submit a well-planned project in research.

b. Four \$350 assistantships available to graduate students majoring in any phase of the work of the Department of Rural Education.

c. Five honorary scholarships in Rural Education, available to persons of superior qualifications, residents of New York State, seeking preparation for public school service in the field of rural education. Preference will be given to (1) principals and teachers in the public schools of New York State, located in places of less than 4500 population or (2) members of the staff of any New York State normal school or teachers college, who have been granted a leave of absence for a year of graduate study.

7. *Social Studies Education.*

a. One \$500 assistantship granted to a person of experience preparing for a position of leadership in the teaching of the social studies.

b. One \$600 assistantship granted to a person of superior training and teaching ability for part-time assistance in the practice teaching program carried on in the Ithaca High Schools.

8. *Edward A. Sheldon Scholarship for Women Teachers.* This scholarship may be awarded "to any woman of suitable qualifications who needs this assistance", preference being given candidates in this order: first, a woman graduate of the normal school at Oswego, N. Y.; second, a woman graduate of any other normal school in the state; third, a suitably qualified woman who is preparing to teach. The income from this scholarship for 1938-39 will be approximately \$240. Free tuition is not included.

## BUREAU OF EDUCATIONAL SERVICE

A Bureau of Educational Service is maintained by the Graduate School of Education. Its purpose is to assist men and women who

have studied or are studying at Cornell University to secure positions in educational work. Such persons are invited to register with the Bureau. Address: Bureau of Educational Service, 102 Stone Hall, Ithaca, N. Y.

### THE SUMMER SESSION

The term of the Cornell University Summer Session covers a period of six weeks from early July to the middle of August. A wide range of courses is offered for those in educational work. Prospective students should apply to the Director of the Summer Session for a copy of the official announcement.

## REQUIREMENTS FOR CERTIFICATION

### CERTIFICATES FOR SECONDARY SCHOOL TEACHERS

To meet the requirements of the State of New York for teaching in the secondary schools, the candidate is required to complete 18 semester hours in Education. The following program, approved by the State Department of Education, gives information as to the specific courses through which these professional requirements may be met.

Educational Psychology . . . . .	3 hours
Ed.* 1 or R. E.* 111 or R. E. 112 . . . . .	
Principles of Education . . . . .	3 hours
Ed. 2 or R. E. 181 . . . . .	
Methods, Observations, Teaching, and Extra-instructional Problems. . . . .	9 hours
These are integrated units of work which may be met, for the various groups of teachers through the following courses:	
Teachers of Agriculture: R. E. 131, R. E. 132, and R. E. 133.	
Teachers of English, Science, and Social Studies: Ed. 4a or R. E. 121, Ed. 4b (including R. E. 126 for Science Teachers), and Ed. 4c.	
Teachers of Home Making: R. E. 135, R. E. 136, and R. E. 137.	
Teachers of Latin and French: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4f or Ed. 4g.	
Teachers of other approved subjects: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4e.	
Elective . . . . .	3 hours
Teachers of Homemaking are required to take R. E. 117 (Psychology of Childhood and Adolescence). Others may choose a three-hour course in Education or Psychology subject to the approval of their adviser in the Graduate School of Education.	

In addition, the prospective high school teacher must present a minimum number of semester hours of University credit in the subject matter field he plans to teach. If he is working in a special field, such as Agriculture or Homemaking, he must have 36 hours of credit in approved professional-technical courses in his special subject. For teaching English, the minimum requirement is 18 hours; for any foreign language, it is 18 hours based upon 3 units of entrance credit; for History, 18 hours based upon 2 units of entrance credit; for Mathematics, 15 hours based upon 2 units of entrance credit; for Science, 30 hours; for Biological Science, 18 hours; for Physical Science, 18 hours; for Social Studies, 30 hours.

As early as possible in his course the student who is planning to prepare for teaching should consult that member of the staff of the

\*"Ed." refers to courses offered in the Department of Education; "R.E.", to courses offered in the Department of Rural Education.

Graduate School of Education most directly concerned with the teaching of his subject.

The courses suggested above are the ones that are normally expected to be used in meeting certification requirements. Substitutions should be made only with the approval of the appropriate adviser in the Graduate School of Education.

Requirements for certification vary from state to state. These variations are so marked that adequate information cannot be given in brief space. It is the intention of the School to offer such courses as will insure qualification for teaching certificates generally but in many cases this will involve the working out of special programs for individual students. Accordingly, students are advised to communicate with the office of the Graduate School of Education for information regarding their special needs.

### ADMINISTRATIVE CERTIFICATES

The following programs prepare for three kinds of principalships. Each program is divided into three groups of courses: (1) a required group of 12 hours; (2) a preferred-elective group of 6-12 hours; (3) a general elective group of 6-12 hours. While these programs have been prepared with New York certificate requirements in mind, they may be adapted to meet the requirements of other states.

	Type of principal's certificate		
	Elementary	High School	12-grade
<b>I. Required group—12 hours</b>			
1. Administration			
General (R. E. 261).....			x
High School (Ed. 5).....		x	
Elementary school (Ed. 23).....	x		
2. Curriculum (R. E. 276).....	x	x	x
3. Educational Measurements (R. E. 251)	x	x	x
4. Mental Measurement (Ed. 7)	x	x	x
5. Seminar (R. E. 265)	x	x	x
6. Supervision (R. E. 263)	x	x	x
2. Preferred elective group—6-12 hours (Selection will be made for each type of certificate in the light of the candidate's needs)			
1. Child Activity Education (R. E. 122)			
2. Economics and the School (Ag. Econ. 238)			
3. Elementary Curriculum (R. E. 276a)			
4. Elementary Supervision (R. E. 266)			
5. Extra-class Activities (Ed. 11)			
6. Guidance (Ed. 28)			
7. High School Administration (advanced) (Ed. 10)			
8. High School Curriculum (R. E. 276b)			
9. Mental Hygiene (Hygiene 1)			
10. Problem Child (Ed. 12)			
11. Philosophy of Education (R. E. 294)			
12. Principles and Practices of Vocational Education (R. E. 267c)			



13. School and Community (R. S. O. 124)

14. School Finance (R. E. 262a)

3. General Elective Group—6-12 hours

These electives may be chosen from academic subjects, from Group 2, or from other advanced professional courses. Selection should be so made that an integrated program for each candidate will be achieved.

New York State provides for both *provisional* and *permanent* certificates. Since there are many specific requirements for the different types of certificates, the interested student should study Certification Bulletin No. 1 of the State Education Department, entitled "Certificates for Administrative and Supervisory Service".

## COURSES OF INSTRUCTION

In the **Department of Rural Education** courses are grouped by decades: General, 1-10; Psychology, 11-20; Method, 21-40; Preparation of Teachers for Normal Schools and Colleges, 41-50; Measurement and Statistics, 51-60; Administration and Supervision, 61-80; Theory of Education, 81-100. **All courses numbered under 100 are intended primarily for underclassmen; those from 101-200 are primarily for upperclassmen and graduate students; while those numbered 201 and over are primarily for graduate students.**

It should be noted that courses carrying the same name are not necessarily equivalents.

### GENERAL COURSES

Ed. 20. **Seminar in Education.** First term. Credit two hours. Primarily for graduate students; open to upperclassmen by permission. Professor FREEMAN. T 4-6. *Goldwin Smith* 248.

Topics relevant to educational theory.

Ed. 21. **Seminar in Education.** Second term. Credit two hours. Admission by permission of the instructor. Professor JORDAN. M 4-6. *Goldwin Smith* 248.

Topics developing from historical and current problems of educational practice, especially as related to administration and conduct of the public school system and of the university. Primarily for graduate students.

[R.E. 234. **Seminar.** First term. Credit two hours. Professor BUTTERWORTH.] Not given in 1938-39.

### PSYCHOLOGY

Ed. 1. **Educational Psychology.** Either term. Credit three hours. Lectures and recitations. First term, M W F 11. *Goldwin Smith* 234; second term, M W F 10, *Goldwin Smith* 234. Professor FREEMAN.

A study of functional psychology with special reference to the learning process and its application to educational theory and practice.

R.E. 110. **Psychology: An introductory course.** Either term. Credit three hours. Not open to freshmen. M W F 10. *Plant Science* 233. Professor WINSOR. Fee, \$1.00.

R.E. 111. **Psychology for Students of Education.** First term. Credit three hours. Open to juniors and seniors. M W F 10. *Caldwell* 143. Assistant Professor BAYNE.

R.E. 112. **Psychology for Students of Education.** Either term. Credit three hours. Prerequisite, course 110, Psychology 1, or the equivalent. Open to second term sophomores, juniors, and seniors. First term, M W F 9. Section 1, Primarily for prospective teachers of vocational home economics and of vocational agriculture. *Agricultural Economics* 125. Section 2, Primarily for others than those above. *Comstock* 145. Second term. Section 1, M W F 9, *Agricultural Economics* 125. Section 2, M W F 9. *Comstock* 145. Section 3, M W F 10, *Agricultural Economics* 225. Professor KRUSE, Assistant Professor BAYNE, and Dr GARDNER.

R.E. 114. **Psychology for Students of Hotel Administration.** First term. Credit three hours. Not open to freshmen. M W F 8. *Comstock* 245. Professor WINSOR.

R.E. 117. **Psychology of Childhood and Adolescence.** Either term. Credit three hours. Open only to students who have had course 111 or 112 or equivalent. Lectures, M W F 10. *Roberts* 392. Professor KRUSE and Dr. GARDNER.

R.E. 119. **Personnel Administration.** Second term. Credit three hours. Prerequisite, course 114 or its equivalent. M W F 8. *Plant Science* 233. Professor WINSOR.

R.E. 211a. **Psychology for Students of Education.** First term. Credit three hours. For mature students with teaching experience. Lectures, M F 11-12:20. *Stone* 309. Professor KRUSE.

R.E. 212. **Psychology of Learning.** Second term. Credit two hours. Th 4:15-6. *Stone* 309. Professor KRUSE.

R.E. 213. **Psychology of Learning in the School Subjects.** First term. Credit two hours. Prerequisite, a course in educational psychology and permission of the instructor to register. Primarily for graduate students. § 9-11. *East Roberts* 223. Assistant Professor BAYNE.

R.E. 216. **Psychology of the Physically Handicapped Child.** Second term. Credit three hours. Prerequisite, course 111 or 112 or equivalent. M W F 11. *Agricultural Economics* 302. Dr. GARDNER.

Study of the techniques for discovery and training of children with various types of physical handicaps, such as visual, auditory, motor, etc.

[R.E. 218. **Seminar in Educational Psychology.** Second term. Credit two hours. Professor KRUSE.] Not given in 1938-39.

R.E. 219. **Seminar in Personnel Administration.** Second term. Credit two hours. Open to qualified seniors and graduate students. Th 4:15-6. *Comstock* 145. Professor WINSOR.

Ed. 8. **Experimental Education.** Either term. Credit and hours to be arranged. Consent of the instructor is required. Education 7 or its equivalent should normally precede this course. Professor FREEMAN.

Problems of experimental education; the application of psychological and statistical methods to problems in educational psychology; chief results and bearings.

[Ed. 17. **Mental Development.** First term. Credit two hours. Prerequisite. Education 1 or its equivalent. Professor FREEMAN.] Not given in 1938-39.

Ed. 18. **Individual Differences.** Second term. Credit three hours. Prerequisite, Education 1 or its equivalent. It is desirable, though not required, that Education 7 precede this course. M 2-4, and a third hour to be arranged. *Goldwin Smith* 236. Professor FREEMAN.

The nature, causes, and implications of individual differences in abilities, interests, and achievement. Graduate students desiring to do so will be given an opportunity to make a special study of problem cases.

#### METHOD

R.E. 121. **Method and Procedure in Secondary School Teaching.** First term. Credit three hours. Prerequisite, course 111 or its equivalent. Open to juniors and seniors. Lectures, M W F 11. *Plant Science* 143. Professor FERRISS.

The development of certain principles of teaching in secondary schools, and their application to practical problems of the teacher, such as selecting and organizing teaching materials, making the assignment, directing study, and so forth.

Ed. 4. **Methods, Practice, and Extra-Instructional Problems.** Credit nine hours. For teachers of academic subjects. Assistant Professor HULSE in charge.

Ed. 4a. **Method and Procedure in High School Teaching.** Either term. Credit three hours. First term, for seniors only. M W F 11. *Goldwin Smith* 264. Second term, for juniors and B seniors. M W F 11. *Goldwin Smith* 256. Professor JORDAN and Assistant Professor HULSE.

Designed for students who expect to teach in secondary schools. Methods of class management, types of recitation, assignment and planning of lessons. Observation of actual high school classes required. Prerequisite to Education 4b and 4d.

Prospective teachers in all academic fields will be assigned to this course to maintain as far as possible two equal groups. One group will take this course in the second term of their junior year, the other group will take this course in the first term of their senior year.

Ed. 4b. **Supervised Teaching.** Either term. Credit four hours. For seniors majoring in English and Social Studies. Assistant Professor ANDERSON and Dr. BESIG.

Assignment will be made to the classes of the critic teacher. Practice and observation scheduled daily at a regular hour and the work will be closely integrated with instruction in special method.

Ed. 4c. **Extra-Instructional Problems.** Either term. Credit two hours. M 4. *Goldwin Smith* 256. Assistant Professor HULSE.

A course dealing mainly with problems of extra-instructional nature and designed to acquaint the teacher with the full responsibilities of his position. Taken by all seniors in the term of their practice teaching.

Ed. 4d. **Supervised Teaching.** Either term. Credit two hours. Assistant Professor HULSE, Assistant Professor JOHNSON, and teachers of the Ithaca Senior and Junior High Schools.

Assignments will be made to the classes of the regular teachers in the schools. Each student teacher is required to attend one class each day, five days a week for a term. The work will involve participation and practice under the supervision of the regular teacher and the instructor of the course. The work will be coordinated with special methods.

**Special Methods.** The following courses are offered by the several departments to satisfy the two-hour requirement in special method:

**Teacher's Training Course.** See Latin 26.

**Teacher's Course in Methods.** See German 40.

**Teacher's Course.** See Mathematics 20.

**Teaching of Science in the Secondary School.** See Rural Education 126.

Ed. 4e. **Conference and Special Problems.** Either term. Credit two hours. Hours to be arranged. Assistant Professor HULSE.

Conference with the instructor in charge and the study of special problems supplementing the practice of teaching.

R.E. 126. **The Teaching of Science in the Secondary School.** Either term. Credit two hours. Open to seniors on the approval of the instructor. Th 4:15-5:45. *Fernow* 8. Assistant Professor JOHNSON.

Special methods of teaching science and the organization of science materials in the secondary school. This course is correlated with practice teaching in science.

R.E. 131. **Introduction to the Teaching of Agriculture.** First or second term. Credit three hours. (When taken with course 132, only two-hours credit allowed.) Open by permission only to upperclass students whose practical experience and academic standing are satisfactory, and whose progress in the prescribed courses in technical agriculture is adequate. Must be preceded or accompanied by course 111 or 112 or equivalent. T Th 11 and M 1-40-4. *Plant Science* 141. Assistant Professor SMITH.

A consideration of the organization of schools and departments of agriculture in high schools for all-day and out-of-school groups; a study of the opportunities and responsibilities in vocational instruction in agriculture; consideration of teacher qualities; observations of high school departments of agriculture; and the general preparation of students for the advanced work of course 132. Laboratory fee, \$3.

R.E. 132. **The Teaching of Agriculture in the Secondary School.** First and second terms. Credit three hours a term. Open to juniors and seniors who have completed courses 111 or 112 and 131 or their equivalents, and whose farm

experience and academic standing are satisfactory. Given in two sequences, two class periods and one laboratory a week or equivalent time in directed teaching.

Sequence 1, first and second terms. T Th 9. *Roberts* 392. Assistant Professor HOSKINS and Assistant Professor OLNEY.

Sequence 2, second and first terms. T Th 10. Sequence 2, *Roberts* 392; sequence 1, *Plant Science* 143. Assistant Professor OLNEY.

A study of the problems of teaching based upon the planning for and participation in teaching. Opportunity is provided for experience in organizing course materials, in equipping departments, and in planning programs for special groups. Laboratory fee, \$5 a term.

R.E. 133. **Directed Teaching of Agriculture in the Secondary School.** First or second term. Credit to be arranged. Registration subject to conference. Assistant Professor HOSKINS and Assistant Professor OLNEY. Fee, \$3 a term.

R.E. 134. **Adult Education.** First term. Credit three hours. Designed for vocational students. M W F 11. Agricultural Economics Building 125. Professor MOORE.

A consideration of the developments, trends, opportunities, and problems of adult education.

[R.E. 134a. **Special Agricultural Education for Out-of-School Youth and Adults.** First term. Credit three hours. Assistant Professor HOSKINS.] Not given in 1938-39.

R.E. 134b. **Adult Homemaking Education.** (Home Economics E120: Leadership in Home Economics.) Credit three hours. For extension workers, home economics teachers, and others interested in leadership in homemaking education. Discussion, M W F 10-12. *Martha Van Rensselaer* 121. Miss HENDERSON.

R.E. 135. **The Teaching of Home Economics in the Secondary School.** First or second term. Credit three hours. Prerequisite course 111, 112 or the equivalent. Required of all students preparing to teach home economics. Lecture, Th 2-4:20. *Caldwell* 143. Miss HUTCHINS.

One period daily for observation and participation in the Ithaca Junior High School throughout the semester. Schedules must be approved by the Department of Rural Education.

This course purposes to interpret present-day educational theories and practices as applied to home economics; to study the activities in which the home-economics teacher engages, and the factors which make for successful performance; to induct students into teaching through graded participation in the home-arts department of the Ithaca Junior High School. Fee, \$2.

R.E. 136. **Directed Teaching of Home Economics in the Secondary School.** Either term. Credit four hours. Prerequisite, course 135. Open to seniors who have successfully completed prerequisites in Education and have been approved by a committee composed of members of the faculties of Home Economics and Rural Education. General conferences, S 8-10. *Stone* 309. Professor BINZEL, Miss HASTIE, and Miss COWLES.

Schedules must provide three entire days a week, or the equivalent, over a period of five weeks for directed teaching. Visits to schools for the purpose of studying furnishings and equipment are a part of the course. Fee, \$10.

R.E. 137. **Extra-Instructional Problems.** First or second term. Credit two hours. First term for prospective teachers of Home Economics only. Second term for prospective teachers of science and home economics. T Th 9. First term, *Plant Science* 143. Second term, *Comstock* 145. Professor FERRISS.

Primarily for prospective teachers of science and home economics. This course is designed to deal with problems confronting the teacher in the performance of those duties and the meeting of those responsibilities in the school that extend beyond the classroom and class instruction.

[R.E. 222. **Principles of Method.** Second term. Credit three hours. Given in alternate years. Prerequisite, course 211a or its equivalent and teaching or comparable experience in agriculture, homemaking, or science. Professor STEWART.] Not given in 1938-39.

R.E. 226. **Research in Science Teaching.** Either term. Credit one or two hours each term. M 4:30. *Fernow* 8. Professor PALMER and Assistant Professor JOHNSON.

Special problems in science teaching.

R.E. 227. **Seminar in Elementary Education.** First term. Credit two hours. M 4-6. *Stone* 309. Professor MOORE.

Topics to be determined by the interests of the members.

R.E. 228. **Seminar in Behavior and Guidance.** (Family Life 228.) Second term. Credit two hours. For graduate students who have had some work in child guidance. F 4-6. Nursery School. Professor WARING.

The seminar discusses the sources in the psychologies, past and present, for studying principles of learning and teaching that can be relied upon in homes, in schools, and in all family and social living, and attempts to apply these principles to the homely everyday problems of behavior and guidance.

R.E. 232. **Seminar in Curriculum and Teaching Problems in Agricultural Education.** Second term. Credit two hours. T 4-5:30. *Stone* 309.

a. 1938-39, the location, analysis, and disposition of problems of research discovered in teachers' programs in the secondary school. Assistant Professor HOSKINS.

b. 1939-40, the selection, editing, and evaluation of instructional materials for teachers of agriculture.

R.E. 233. **Apprentice Teaching in Secondary Agriculture.** First or second term. Credit to be arranged.

Certain students with advanced directed teaching experience may be permitted to accept regular teaching responsibilities in the schools under staff supervision, where opportunities arise. Professor STEWART, Assistant Professor HOSKINS, and Assistant Professor OLNEY.

[R.E. 240. **Cooperative Extension Work.** Second term. Credit three hours. Open to graduate students qualified in agriculture or home economics. Professor EATON.] Not given in 1938-39.

#### PREPARATION OF TEACHERS FOR NORMAL SCHOOLS AND COLLEGES

R.E. 241. **The Preparation of Teachers for Normal Schools and Colleges.** Second term. Credit two hours. M 4-6. *Caldwell* 143. Professor MOORE.

To meet the needs of those responsible for the training of teachers for rural elementary and secondary schools.

R.E. 243. **Problems of College Teaching.** Throughout the year. Credit one hour a term. Open to graduate students intending to teach in higher institutions. Time of meeting once a week will be arranged after a preliminary conference with students at a session to be announced at the opening of the first term. Professor EATON.

R.E. 245. **The College Preparation of Teachers of Agriculture for the Secondary School.** Second term. Credit three hours. Should follow course 211a or its equivalent. T Th 11-12:20. *Stone* 309. Professor STEWART.

A course based upon the work of teachers of agricultural vocations in secondary schools, designed to provide standards for a program of teacher education in a college of agriculture.

R.E. 248. **The Preparation of Teachers of Home Economics for Secondary Schools.** Second term. Credit two hours. Open to graduate students of approved qualifications. T Th 11. *East Roberts* 223. Professor \_\_\_\_\_.

This course is designed to meet the needs of persons who have had both technical preparation in home economics and teaching experience, and who desire to prepare for the special problems involved in the professional work of preparing teachers of home economics for secondary schools.

R.E. 249. **Seminar in Home Economics Education.** First term. Credit two hours. Time to be arranged. Course content to be adapted to personnel of class. Professor \_\_\_\_\_.

R.E. 250. **Seminar in Agricultural Education.** First term. Credit two hours. Open only to students whose progress in graduate study is satisfactory. T 4-5:30. *Plant Science 141.* Professor STEWART.

The place of agriculture in the secondary school; its organization and administration.

#### MEASUREMENT AND STATISTICS

Ed. 7. **Mental Measurements.** First term. Credit three hours. By permission of the instructor, candidates for the principal's certificate may enroll for two hours credit. Prerequisite, Education I or equivalent. T Th S 9. *Goldwin Smith 225.* Professor FREEMAN.

The nature of intelligence. History of the development of individual and group tests of intelligence; principles underlying their construction and application; the use of tests of intelligence in school problems, with atypical children, and in fields outside the school. Use of educational tests. Demonstrations in administering tests.

R.E. 251. **Educational Measurement.** Second term. Credit three hours. Candidates for the principal's certificate may register for two-hours credit. Prerequisite, a course in Educational Psychology. Open to graduate and upper-class students. M W F 8. *Stone 309.* Assistant Professor BAYNE.

The use of aptitude and achievement tests and other measuring instruments in the classification and guidance of pupils, improvement of instruction and other activities of the teacher and school officer. Those class members who wish may make a study of their own aptitudes and achievements.

R.E. 253. **Statistics for Students of Education.** First term. Credit two hours. Primarily for graduate students in Education. Open to a limited number of other students upon approval of the instructor. T Th 10. *East Roberts 223.* Assistant Professor BAYNE.

A study of common statistical procedure in relation to critical reading of technical studies, research, and writing reports of studies. As far as possible the work is related to the problems of the individual student.

#### ADMINISTRATION AND SUPERVISION

Ed. 10. **High School Administration.** Second term. Credit two hours. For seniors, graduates, and other qualified students. W F 3. *Goldwin Smith 236.* Professor JORDAN.

Principles relevant to administration of the senior and junior high school; classification of pupils; program making; curriculum problems; the principal as supervisor; pupil guidance; duties of the principal in both large and small high schools.

Ed. 11. **Extra-classroom Activities.** First term. Credit two hours. For seniors and graduates. M 4-6. *Goldwin Smith 236.* Professor JORDAN.

A study of the place extra-classroom activities should assume in the school program. General principles involved, with special attention given to athletics, dramatics, publications, school finance, music, debate, and school clubs.

Ed. 12. **The Junior High School.** First term. Credit three hours. For seniors, graduates, and other qualified students. M W F 9. *Goldwin Smith 248.* Professor JORDAN.

Psychological, biological, and pedagogical bases for the Junior High School; fundamental principles; organization and administration; curricular content in detail; methods of instruction.

R.E. 246. **Problems in Industrial and Technical Education.** First and second terms. Credit four hours each term. T Th 2-4. *Stone 309.* Professor EMERSON.

Special problems in the administrative, supervisory and curricular phases of industrial and technical education.

R.E. 261. **The Administration of Rural Schools.** First term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. T Th 11 and an additional hour to be arranged. *Stone 309.* Professor BUTTERWORTH.

A course for students of experience dealing with the problems of organizing and administering education in the elementary and secondary schools of country and village districts.

[R.E. 262a. **School Finance.** Second term. Credit two hours. Professor BUTTERWORTH.] Not given in 1938-39.

R.E. 262c. **The School Plant.** Second term. Credit two hours. M 4-6. *Stone* 309. Professor BUTTERWORTH.

Standards for school buildings; measurement of school building facilities; planning the school program to meet the needs of the community; the financing of school buildings; modern equipment for the school plant; and similar problems.

R.E. 263. **Procedures and Techniques in Supervision.** First term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. M W F 10. *Stone* 309. Professor MOORE.

Designed for superintendents, supervisors, and principals. Students who have not had experience in these fields will be admitted only upon permission of the instructor. Students taking this course must be prepared to spend four full days or more in observing supervisory procedures in various school systems.

R.E. 264. **Seminar in Rural School Administration.** Second term. Credit two hours. S 10-11:30. *Stone* 309. Professor BUTTERWORTH.

Designed for those desiring to make an intensive study of administrative problems in rural elementary and secondary schools. Topic to be announced.

R.E. 265. **Seminar for Principals.** Second term. Credit two hours. Required of all graduate students who are candidates for a principal's certificate. W 4-5:40. and additional time in field work. *Stone* 309. Professor FERRISS.

R.E. 266. **The Supervision of the Elementary School Subjects.** Second term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. M W F 9. *Stone* 309. Professor MOORE.

A course designed for supervisors, elementary school principals, and superintendents. It includes a consideration of important research studies which have a direct bearing upon the teaching and supervision of the elementary school subjects.

[R.E. 267. **The Organization and Administration of Agricultural Education in the Secondary School.** Second term. Credit three hours. Professor STEWART.] Given in 1939-40. See course 250.

[R.E. 269. **The Supervision of Home Economics Education.** First term. Credit two hours. Professor BINZEL.] Not given in 1938-39.

R.E. 276. **Principles of Curriculum Building.** Second term. Credit three or four hours. Primarily for graduate students. T Th 2-3:20, and an additional hour to be arranged for those wishing to carry further the study of special curriculum problems. *East Roberts* 223. Professor FERRISS.

A consideration of the major problems, principles, and techniques in determining educational objectives and curriculum content and organization.

[R.E. 278. **Seminar in Rural Secondary Education.** Given in alternate years. Second term. Credit two hours. Professor FERRISS.] Not given in 1938-39.

### HISTORY OF EDUCATION

Ed. 3. **History of Education.** (a) (Greek, Roman, and Early Mediaeval). First term. Credit two hours. Open to upperclassmen and graduates only. T Th 10. Professor LAISTNER. (See History 7) (b) (Late Mediaeval and Modern). Second term. Credit two hours. Open to upperclassmen and graduates only. T Th 10. Professor SMITH. (See History 36.)

Ed. 13. **History of American Education.** First term. Credit three hours. Prerequisite, Education I, or its equivalent. T Th S 10. *Goldwin Smith* 236. Assistant Professor HULSE.

A survey of educational change in the United States from the beginning of the seventeenth century to the present, with special emphasis on public schools and consideration of the religious, economic, political, and social factors affecting education. European influences throughout the period will also be considered briefly.

Ed. 16. **Readings in the History of Education.** Second term. Credit two hours. Consent of the instructor is required. Hours to be arranged. *Goldwin Smith 251.* Assistant Professor HULSE.

An advanced course, emphasizing the historic changes in aims and methods.

### EDUCATIONAL THEORY

Ed. 2. **Principles of Secondary Education.** Either term. Credit three hours. Prerequisite, Education 1. First term. Professor JORDAN. M W F 2. Second term. Professor FREEMAN. T Th S 9. *Goldwin Smith 234.*

The nature and significance of education; biological and psychological foundations; the secondary school as a social institution; educational ideas and values; the curriculum.

[Ed. 5. **Theory of Education.** Second term. Credit two hours. For seniors and graduate students. Prerequisite, Education I or the equivalent. Professor OGDEN.] Not given in 1938-39.

R.E. 181. **Principles of Education.** First or second term. Credit three hours. Prerequisite a first course in Educational Psychology, i.e., R.E. 111, or R.E. 112, or Ed. 1, or an equivalent course elsewhere than at Cornell. One section first term; two sections, second term. Open to students as indicated by sections. First term, M W F 11. Open only to seniors and graduate students preparing to teach. Second term, Section I, M W F 9. Open only to seniors and graduate students preparing to teach. Section II, M W F 11. Open to juniors preparing to teach Science and to seniors and graduate students preparing to teach. *Caldwell 143.* Professors MOORE and EATON.

A consideration of fundamental principles in Education, with special attention to the needs of prospective teachers in the high school.

R.E. 194. **Philosophy of Vocational Education.** First term. Credit three hours. Open to seniors and graduate students qualified in educational psychology, and economics or sociology. M W F 9. *Caldwell 143.* Professor EATON.

A study of the theory of vocational education in the large.

R.E. 281. **Rural Secondary Education.** First term. Credit three hours. Primarily for graduate students. M W F 9. *Stone 309.* Professor FERRISS.

A study to consider some of the more basic problems in the nature, organization, curriculum, and extension of secondary education in its adaptation to rural needs and conditions.

R.E. 294. **Philosophy of Education.** Second term. Credit three hours. Open to graduate students in education. M W F 11. *Stone 309.* Professor EATON.

An examination of the concepts of education, and of the bearing of several major theories of life upon education.

[R.E. 295. **Comparative Education.** First term. Credit two hours. S 11-12:30. *Stone 309.* Professors BUTTERWORTH, FERRISS, and MOORE.] Not given in 1938-39.

### NATURE STUDY

R.E. 107. **The Teaching of Nature Study and Elementary School Science.** Second term. Credit three hours. Open to those who have taken or are completing thirty hours in science and have had at least one term of suitable professional work. Lecture, M 12. *Fernow 8.* Practical exercises, T Th 1:40-4. Professor PALMER and Miss GORDON.

A study of the content and methods of nature study and elementary school science programs, with consideration of their significance to agriculture and to secondary school science. Recommended for those preparing to teach or to supervise science.

R.E. 108. **Field Natural History.** First term. Credit two hours. Not open to freshmen. Lectures, Th 1:40-2:30. *Fernow 8.* Field work, Th 2:30-5. Professor PALMER and Miss GORDON.

Field trips and lectures devoted to a study of the natural history of five ecological units under different seasonal conditions with special emphasis on their contributions to the teaching of science.



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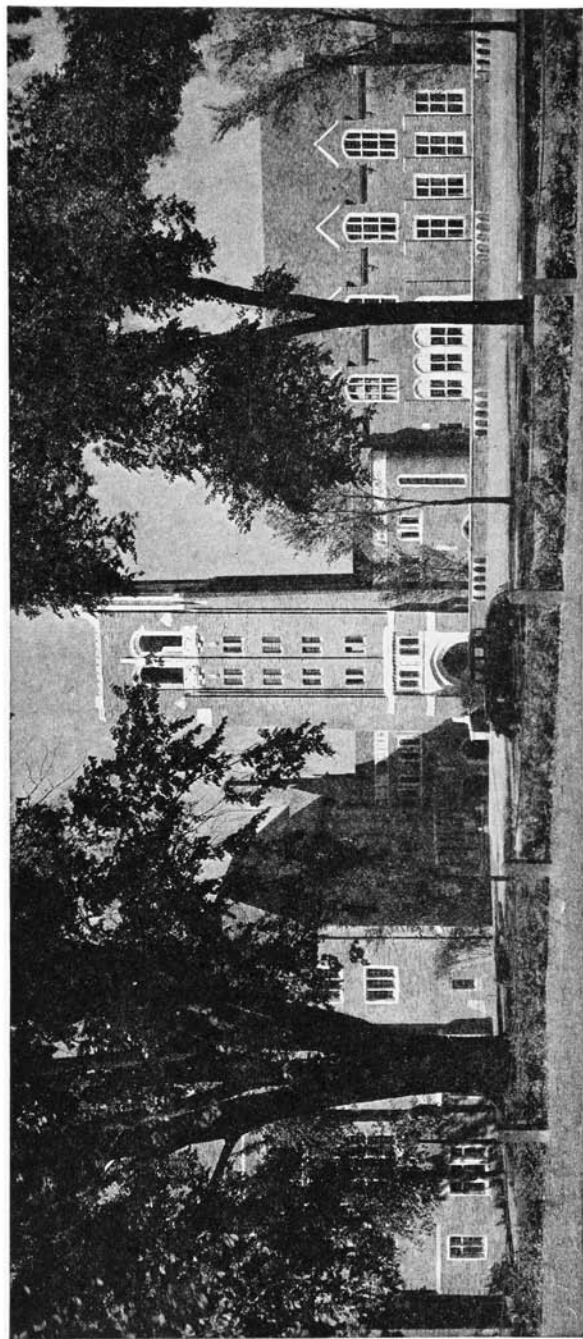
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