# CORNELL UNIVERSITY ANNOUNCEMENTS

JUNE 5, 1962

# TWO-YEAR COURSE IN AGRICULTURE 1962—1963

NEW YORK STATE COLLEGE OF AGRICULTURE
AT CORNELL UNIVERSITY,
A UNIT OF THE STATE UNIVERSITY OF NEW YORK

# ACADEMIC CALENDAR (Tentative)

| 1962–1963 | | | 1963–1964 |
|---|---|---|---|
| Sept. 15 | S | Freshman Orientation | Sept. 21 S |
| Sept. 17 | M | Registration, new students | Sept. 23 M |
| Sept. 18 | T | Registration, old students | Sept. 24 T |
| Sept. 19 | W | Instruction begins, 1 p.m. | Sept. 25 W |
| Nov. 7 | W | Midterm grades due | Nov. 13 W |
| | | Thanksgiving recess: | |
| Nov. 21 | W | Instruction suspended, 12:50 p.m. | Nov. 27 W |
| Nov. 26 | M | Instruction resumed, 8 a.m. | Dec. 2 M |
| Dec. 19 | W | Christmas recess | Dec. 21 S |
| | | Instruction suspended at 10 p.m. in 1962, at 12:50 p.m. in 1963 | |
| Jan. 3 | Th | Instruction resumed, 8 a.m. | Jan. 6 M |
| Jan. 19 | S | First-term instruction ends | Jan. 25 S |
| Jan. 21 | M | Second-term registration, old students | Jan. 27 M |
| Jan. 22 | T | Examinations begin | Jan. 28 T |
| Jan. 30 | W | Examinations end | Feb. 5 W |
| Jan. 31 | Th | Midyear recess | Feb. 6 Th |
| Feb. 1 | F | Midyear recess | Feb. 7 F |
| Feb. 2 | S | Registration, new students | Feb. 8 S |
| Feb. 4 | M | Second-term instruction begins | Feb. 10 M |
| Mar. 23 | S | Midterm grades due | Mar. 28 S |
| | | Spring recess: | |
| Mar. 23 | S | Instruction suspended, 12:50 p.m. | Mar. 28 S |
| Apr. 1 | M | Instruction resumed, 8 a.m. | Apr. 6 M |
| May 25 | S | Second-term instruction ends | May 30 S |
| May 27 | M | Examinations begin | June 1 M |
| June 4 | T | Examinations end | June 9 T |
| June 10 | M | Commencement Day | June 15 M |

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# NEW YORK STATE COLLEGE OF AGRICULTURE AT CORNELL UNIVERSITY

## TWO-YEAR COURSE

## 1962-1963

The College of Agriculture
at Cornell University Is a Contract Unit of
the State University of New York

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# THE NEW YORK STATE COLLEGE OF AGRICULTURE—TWO-YEAR COURSE

THE New York State College of Agriculture, a unit of the State University of New York, is maintained by the state as one of four state colleges or schools within Cornell University. It is equipped with a staff and facilities to teach resident students, to make investigations in all phases of agriculture and the underlying sciences, and to disseminate its teachings to the people of the state. The support of the state toward these ends is supplemented by substantial appropriations from the federal government, and by land and other facilities and services placed at the disposal of the College by Cornell University.

## GENERAL INFORMATION

### THE COURSES AVAILABLE

The information contained in this Announcement relates to the two-year course. This course is designed for young men who expect to go into farming or into business closely allied thereto, and who desire agricultural training of college grade, but cannot devote more than two years to it. The College offers, in addition, a summer session of six weeks; a four-year course, leading to the degree of Bachelor of Science; and graduate courses, leading to higher degrees. These offerings give preparation for different kinds and different levels of agricultural vocations and call for different prerequisites for admission. A separate printed Announcement of each of these courses is available on application to the Secretary of the College of Agriculture, Roberts Hall, Ithaca, New York.

### REQUIREMENTS FOR ADMISSION

For admission to the two-year course, candidates must offer:

*Sixteen units* acceptable to Cornell University in subjects credited by the University of the State of New York toward a state diploma, or in the case of applicants whose secondary-school training has been outside New York State, the equivalent by school certificates. It is recommended that at least 1 unit shall be in mathematics.

*The Scholastic Aptitude Test* of the College Entrance Examination Board.

*Approximately one year* of practical experience on a farm or in a business related to the curriculum to be followed.

*A satisfactory certificate* of immunization against smallpox on the form supplied by the University. This certificate is considered satisfactory only if it certifies to a successful vaccination within three years. Further details of the health requirements and the health services may be found in the *Announcement of General Information,* obtainable by writing to the Announcements Office, Day Hall.

## THE APPLICATION FOR ADMISSION

Candidates for admission should address the Director of Admissions, Day Hall, Ithaca, New York, stating that they desire to enter the two-year course in the College of Agriculture. This should be done as early as possible in the senior year of secondary school, because it often takes considerable time to procure the necessary credentials.

## CERTIFICATION ON COMPLETION OF COURSE

Students who satisfactorily complete the work of an approved two-year course with credit for at least sixty hours will be granted an appropriate certificate.

## RELATION TO FOUR-YEAR COURSE

Except in respect to the items of administration and curriculum specifically covered in this Announcement, students in this course are governed by exactly the same conditions as are students of the four-year course. They should, therefore, consult the Announcement of the latter course for further details of information and for the description of courses open to their election but not here listed or described.

Transfer to the degree course will be possible at the end of one of these curricula for those who have given evidence of ability to carry advanced work. Students who qualify for such transfer will not be required to offer any further entrance credit. The transfer is possible solely on a basis of the record and on completion of the curriculum. The record must be considerably better than average. Students who transfer to the four-year course are given full credit toward the degree for courses passed in the two-year course.

Two-year students are registered as special students and are not eligible to represent the University in intercollegiate athletics.

## EXPENSES

### TUITION

Tuition is free to two-year students in the New York State College of Agriculture, who at the time of their matriculation are, and for at least twelve months prior thereto have been bona-fide residents of the

State of New York. Since physical presence in the State, especially for persons under age, does not necessarily constitute legal residence, applicants who are at all doubtful of their right to exemption should address inquiries in advance to the Director of Resident Instruction in the College of Agriculture. A student transferring from one college or course in the University to another must pay, for the hours' credit he receives in the latter college or course, an amount corresponding to the difference in tuition, and no such transfer is allowed or credit given until such payment has been made.

Students in agriculture who are not exempt under these provisions are required to pay tuition of $200 a term. Tuition and other fees become due when the student registers. The University allows a period of grace after the last registration day of each term of the regular session. The last day of grace is printed on the registration card which the student is required to present at the Treasurer's office. Any student, graduate or undergraduate, except as hereinafter provided, who fails to pay his tuition, fees, and other indebtedness, or if entitled to free tuition fails to claim the same at the Treasurer's office and pay his other fees, within the time prescribed by the University, is thereby dropped from the University. When in his judgment the circumstances in a particular case so warrant, the Treasurer may allow an extension of time to complete payments. For such extension, the student will be assessed a fee of $5. A reinstatement fee of $10 will be assessed any student who is permitted to continue or return to classes after being dropped from the University for default in payments. For reasons satisfactory to the Treasurer and the Registrar, which must be presented in writing, the latter assessment may be waived in any individual case. If the student withdraws, University fees are charged on the basis of 10 per cent for each week or fraction thereof from the first registration day to the date of withdrawal.

*The amount, time, and manner of payment of tuition, fees, or other charges may be changed by the Board of Trustees at any time without notice.*

## FEES AND INSTRUCTIONAL EXPENSES

*A DEPOSIT OF* $45 must be made after the applicant has received notice of provisional acceptance. At the time of the first registration in the University, the deposit is used to cover matriculation charges, provides for certain graduation expenses, and establishes a fund for undergraduate and alumni class activities. The deposit is not refundable, and none of it applies toward tuition or fees.

*A DEPOSIT OF* $30 is required for a uniform, payable at registration in the first term, by students who enroll in the basic course in military

science. Most of this deposit is returned as earned uniform allowance upon completion of the basic course.

*A UNIVERSITY AND COLLEGE COMPOSITE FEE OF* $155 is required of every student at the beginning of each term. This fee covers the following services: (1) *Health services and medical care.* These services are centered in the University Clinic or out-patient department and in the Cornell Infirmary or hospital. Students are entitled to unlimited visits at the Clinic; laboratory and X-ray examinations indicated for diagnosis and treatment; hospitalization in the Infirmary with medical care for a maximum of fourteen days each term and emergency surgical care. The cost for these services is included in the College and University general fee. For further details, including charges for special services, see the *Announcement of General Information.* (2) *Willard Straight Hall membership.* Willard Straight Hall is the student union; each student shares in the common privileges afforded by the operation of Willard Straight Hall, subject to regulations approved by the Board of Managers of the Hall. (3) *Laboratory services* for courses taken in the State Colleges. (4) *University administration and endowed college laboratory services.* (5) *Physical recreation.* Each male student is entitled to the use of the gymnasium and the university playgrounds, and to the use of a locker, bathing facilities, and towels in Teagle Hall, Barton Hall, or the Schoellkopf Memorial Building; and each woman student to the use of the women's recreation rooms and playgrounds, and to the use of a locker. (6) *Student activities.* The fee helps to provide funds for worthy student organizations as approved by the Board of Trustees on recommendation of the Executive Board of the Cornell Student Government.

*Books, instruments, and instructional supplies* may cost from $25 to $50 a term.

## MISCELLANEOUS RULES AND ASSESSMENTS

Every student is held personally responsible for any injury done by him to any of the University's property.

Assessments, charged to the student's account and payable at the Treasurer's office, are levied upon the student in certain circumstances, under the following rules of the University: (1) A matriculated student desiring to register after the close of registration day must first pay a fee of $5; (2) a student desiring to take an examination or other test for the completion of a course in which the grade "absent" or "incomplete" was reported must first pay a fee of $2 for each examination or other test.

For reasons satisfactory to the proper authority, any of the above-mentioned assessments may be waived in any individual case if the stu-

dent's failure to comply with the regulation was due to ill health or to any other reason beyond his control. Application for such a waiver should be made to the Secretary of the College.

## STUDENT HOUSING AND DINING ARRANGEMENTS

MEN . . . Cornell University provides, on the campus, comfortable dormitory facilities for approximately 2,000 men. These dormitories are a five-minute walk from the center of the campus and are situated on a fifteen-acre plot to the west of the main campus and overlooking Cayuga Lake to the north, the valley to the south. The area is bounded by West, University, and Stewart Avenues and Campus Road. The dormitories in this area are divided into two main groupings, the Baker Group and University Halls.

The Baker Group, comprised of Baker Tower, Founders Hall, North Baker Hall, South Baker Hall, Mennen Hall, Lyon Hall, and McFaddin Hall, is of fireproof construction, English collegiate in design, and affords accommodations for approximately 650 men.

University Halls, comprised of Units 1–6, were opened in 1954 and accommodate 1350 men. They are of modern fireproof construction and offer excellent study, social, and recreational facilities.

Students not assigned to dormitories under direct supervision of the University secure quarters in fraternity houses (for members only), rooming houses, cooperative houses, and private homes.

Application forms for University dormitories will be mailed automatically by the Office of Admissions to each male candidate for admission at the time of notification of provisional acceptance to the University. Housing in University dormitories can be guaranteed for entering first-year students who have been admitted to the University and have filed dormitory applications by June 1.

Cornell men are at liberty to dine wherever they choose; but within its varied food service program, Cornell offers a special dining arrangement for its student men. This meal plan, which is entirely optional in every way and available to any Cornell man, incorporates many desirable features. It provides for the prepayment of dining fees on a semester basis, and it affords worth-while savings in food costs. The plan offers a selection of dining rooms: Willard Straight Hall, the student union building; Baker Cafeteria in University Hall, Unit I; the Noyes Lodge on Beebe Lake; the College of Home Economics Cafeteria in Martha Van Rensselaer Hall; and the Dairy Bar Cafeteria in Stocking Hall. Devised to meet student needs, this dining arrangement encourages good eating habits in comfortable surroundings; it is designed for economy and convenience, and allows for a wide menu selection and a liberal mealtime schedule.

## THE CURRICULA

The two-year course has organized within it seven curricula giving preparation for the major types of farming in New York State and for certain allied business. A two-year student must select one of these curricula and follow closely the work outlined. Changes from these outlines may be made with the consent of the Director of Resident Instruction and the faculty adviser to whom the student will be assigned when he registers. All two-year students must register for physical education; material describing those courses will be made available to entering students by the Department of Physical Education.

Requests for further information regarding the seven curricula, described in the pages following, should be addressed to L. H. Harden, in charge of admissions in the College of Agriculture, Roberts Hall, Ithaca, New York.

## CURRICULUM IN DAIRY FARMING

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Animal Husbandry I (Introductory Animal Science) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Education 7 (Reading Improvement Program) | |
| Physical Education | |
| Agricultural Elective | 3 to 4 |
| Suggested: | |
| Agricultural Economics 50 | |
| *Agricultural Engineering 1 | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Agronomy 11 (Production of Field Crops) | 4 |
| Animal Husbandry 50 (Dairy Cattle) | 3 |
| Physical Education | |
| Agricultural Elective | 5 to 6 |
| Suggested: | |
| Agricultural Economics 126 | |
| Agricultural Economics 140 | |
| Agricultural Engineering 103 | |
| Animal Husbandry 70 | |
| Orientation 5 | |
| Vegetable Crops 3 | |

### SECOND YEAR

| | |
|---|---|
| Agronomy 1 (Nature and Properties of Soils) | 4 |
| Animal Husbandry 10 (Livestock Feeding) | 4 |
| Animal Husbandry 20 (Animal Breeding) | 3 |
| Physical Education | |
| Agricultural Elective | 4 to 6 |
| Suggested: | |
| Agricultural Economics 140 | |
| Agricultural Engineering 102 | |
| Animal Husbandry 80 | |
| Botany 1 | |
| Poultry Husbandry 1 | |

| | |
|---|---|
| Animal Husbandry 51 (Dairy-Cattle Judging) | 2 |
| Agricultural Economics 102 (Farm Management) | 5 |
| Veterinary 61 (Health and Diseases of Animals) | 3 |
| Animal Husbandry 150 (Dairy Production) | 3 |
| Physical Education | |
| Agricultural Elective | 3 to 5 |
| Suggested: | |
| Agricultural Engineering 40, 42 | |
| Animal Husbandry 60 | |
| Botany 2 | |
| Entomology 10 | |
| Poultry Husbandry 110 | |

* Agricultural Engineering I is required for other agricultural engineering courses.

## CURRICULUM IN GENERAL LIVESTOCK FARMING

### FIRST YEAR

| *Fall term* | *Hours credit* | *Spring term* | *Hours credit* |
|---|---|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 | Extension Teaching 1 (Oral and Written Expression) | 3 |
| Animal Husbandry 1 (Introductory Animal Science) | 3 | Animal Husbandry 50 (Dairy Cattle) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 | Animal Husbandry 90 | 3 |
| Education 7 (Reading Improvement Program) | | Agronomy 11 (Production of Field Crops) | 4 |
| Physical Education | | Physical Education | |
| Agricultural Elective | 3 to 4 | Agricultural Elective | 3 to 5 |
| Suggested: | | Suggested: | |
| Agricultural Economics 50 | | Agricultural Economics 140 | |
| *Agricultural Engineering 1 | | Agricultural Engineering 103 | |
| | | Orientation 5 | |

### SECOND YEAR

| | | | |
|---|---|---|---|
| Animal Husbandry 10 (Livestock Feeding) | 4 | Animal Husbandry 60 (Beef Cattle) | 3 |
| Animal Husbandry 20 (Animal Breeding) | 3 | Agricultural Economics 102 (Farm Management) | 5 |
| Animal Husbandry 41 (Applied Livestock Selection) | 2 | Veterinary 61 (Health and Diseases of Animals) | 3 |
| Animal Husbandry 80 (Sheep) | 3 | Physical Education | |
| Agronomy 1 (Nature and Properties of Soils) | 4 | Agricultural Elective | 4 to 5 |
| Physical Education | | Suggested: | |
| | | Animal Husbandry 42, 70, 150 | |
| | | Entomology 10 | |
| | | Vegetable Crops 3 | |

* Agricultural Engineering I is required for other agricultural engineering courses.

## CURRICULUM IN POULTRY FARMING

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Poultry Husbandry 1 (Farm Poultry) | 3 |
| Animal Husbandry 1 (Introductory Animal Science) | 3 |
| Education 7 (Reading Improvement Program) | |
| Physical Education | |
| Agricultural Elective | 3 |
| Suggested: | |
| Agricultural Engineering 1 | |
| Drawing 1 | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Bacteriology 3 (Agricultural and Home Economics Bacteriology) | 3 |
| Bacteriology 5 (Laboratory for Bacteriology 3) | 1 |
| Physical Education | |
| Agricultural Elective | 8 to 10 |
| Suggested: | |
| Agricultural Engineering 1, 40, 42 | |
| Agronomy 11 | |
| Drawing 1 | |
| Entomology 10 | |
| Orientation 5 | |

### SECOND YEAR

| | |
|---|---|
| Agricultural Economics 50 (Agricultural Geography) | 4 |
| Poultry Husbandry 20 (Breeds, Breeding, and Judging) | 3 |
| Poultry Husbandry 50 (Market Eggs and Poultry) | 2 |
| Biology 1 | 3 |
| Physical Education | |
| Agricultural Elective | 3 to 6 |
| Suggested: | |
| Agricultural Economics 130, 140 | |
| Agricultural Engineering 42 | |
| Agronomy 1 | |
| Entomology 10 | |
| Rural Sociology 1 | |

| | |
|---|---|
| Agricultural Economics 102 (Farm Management) | 5 |
| Poultry Husbandry 80 (Poultry Farm Management) | 3 |
| Poultry Husbandry 110 (Poultry Nutrition) | 3 |
| Biology 2 | 3 |
| Physical Education | |
| Agricultural Elective | 3 |
| Suggested: | |
| Agricultural Economics 126 | |
| Agricultural Engineering 40, 42 | |
| Animal Husbandry 10 | |
| Entomology 10 | |
| Poultry Husbandry 170 | |

## CURRICULUM IN FRUIT GROWING

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 1 (Introductory) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Pomology 1 (Tree Fruits) | 3 |
| Education 7 (Reading Improvement Program) | |
| Physical Education | |
| Agricultural Elective | 0 to 4 |
| Suggested: | |
| Agricultural Economics 50 | |
| Animal Husbandry 1 | |
| Poultry Husbandry 1 | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 2 (Introductory) | 3 |
| Agricultural Engineering 1 (Farm Mechanics) | 3 |
| Physical Education | |
| Agricultural Elective | 6 |
| Suggested: | |
| Agronomy 11 | |
| Orientation 5 | |
| Vegetable Crops 11 | |

### SECOND YEAR

| | |
|---|---|
| Pomology 2 (Small Fruits) | 3 |
| Pomology 111 (Handling and Storage of Fruits) | 3 |
| Agricultural Economics 140 (Marketing) | 3 |
| Entomology 10 (Introductory Entomology) | 3 |
| Agronomy 1 (Nature and Properties of Soils) | 4 |
| Physical Education | |

| | |
|---|---|
| Agricultural Economics 102 (Farm Management) | 5 |
| Plant Pathology 1 (Elementary) | 3 |
| Pomology 112 (Advanced Laboratory) | 2 |
| Physical Education | |
| Agricultural Elective | 5 to 6 |

## CURRICULUM IN VEGETABLE GROWING

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 1 (Introductory) | 3 |
| OR | |
| Biology 1 | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Education 7 (Reading Improvement Program) | |
| Physical Education | |
| Agricultural Elective | 3 to 4 |
| Suggested: | |
| Agricultural Economics 50 | |
| Agricultural Engineering 1 | |
| Animal Husbandry 1 | |
| Floriculture 1 | |
| Pomology 1 | |
| Poultry Husbandry 1 | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 2 (Introductory) | 3 |
| OR | |
| Biology 2 | 3 |
| Agronomy 11 (Production of Field Crops) | 4 |
| Vegetable Crops 3 (General Horticulture) | 4 |
| OR | |
| Vegetable Crops 11 (Commercial Vegetable Production) | 4 |
| Physical Education | |
| Agricultural Elective | 3 to 4 |
| Suggested: | |
| Animal Husbandry 10 | |
| Orientation 5 | |
| Vegetable Crops 22 | |

### SECOND YEAR

| | |
|---|---|
| Vegetable Crops 12 (Post-Harvest Handling) | 3 |
| Agronomy 1 (Nature and Properties of Soils) | 4 |
| Botany 31 (Plant Physiology) | 4 |
| Physical Education | |
| Agricultural Elective | 3 to 5 |
| Suggested: | |
| Agricultural Economics 140 | |
| Floriculture 3 | |
| Pomology 111 | |
| Agricultural Economics 102 (Farm Management) | 5 |
| Agricultural Economics 147 (Marketing Institutions) | 2 |
| Plant Pathology 1 (Elementary) | 3 |
| Physical Education | |
| Agricultural Elective | 6 |

## CURRICULUM IN GENERAL FARMING

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Education 7 (Reading Improvement Program) | |
| Physical Education | |
| Agricultural Elective | 6 to 7 |
| Suggested: | |
| Agricultural Economics 140 | |
| Agricultural Engineering 42 | |
| Animal Husbandry 1, 50 | |
| Food Science 1 | |
| Poultry Husbandry 1 | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Agronomy 11 (Production of Field Crops) | 4 |
| Physical Education | |
| Agricultural Elective | 8 to 9 |
| Suggested: | |
| Agricultural Engineering 1 | |
| Drawing 1, 11 | |
| Entomology 61 | |
| Orientation 5 | |
| Vegetable Crops 3 | |

### SECOND YEAR

| | |
|---|---|
| Agronomy 1 (Nature and Properties of Soils) | 4 |
| Physical Education | |
| Agricultural Elective | 11 to 12 |
| Suggested: | |
| Agricultural Economics 50, 121, 130, 143 | |
| Agricultural Engineering 21, 31, 43, 102 | |
| Animal Husbandry 10 | |
| Biology 1 or Botany 1 | |
| Pomology 1, 2 | |
| Vegetable Crops 12 | |

| | |
|---|---|
| Agricultural Economics 102 (Farm Management) | 5 |
| Physical Education | |
| Agricultural Elective | 10 to 12 |
| Suggested: | |
| Agricultural Economics 126 | |
| Agricultural Engineering 101, 103 | |
| Agronomy 112 | |
| Biology 2 or Botany 2 | |
| Rural Sociology 12 | |
| Vegetable Crops 11, 22 | |
| Veterinary 61 | |

## CURRICULUM IN GENERAL FLORICULTURE AND ORNAMENTAL HORTICULTURE

### FIRST YEAR

| *Fall term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 1 (Introductory) | 3 |
| Drawing 9 (Drawing for landscape students) | 3 |
| Biochemistry 2 (Introductory Agricultural Chemistry) | 5 |
| Floriculture and Ornamental Horticulture 1 (General) | 3 |
| Physical Education | |

| *Spring term* | *Hours credit* |
|---|---|
| Extension Teaching 1 (Oral and Written Expression) | 3 |
| Botany 2 (Introductory) | 3 |
| Physical Education | |
| Agricultural Elective | 8 to 10 |
| Suggested: | |
| Drawing 10 or 11 | |
| Education 7 | |
| Entomology 10 | |
| Floriculture 5 | |
| Pomology 1 | |
| Rural Education 10 | |
| Rural Sociology 1 | |

### SECOND YEAR

| | |
|---|---|
| Floriculture 2 or 3 (Landscape Design) | 3 |
| Agronomy 1 (Nature and Properties of Soils) | 4 |
| Physical Education | |
| Agricultural Elective | 8 to 11 |
| Suggested: | |
| Agricultural Economics 50, 121, 140 | |
| Botany 31 | |
| Entomology 10 | |
| Floriculture 5, 10 | |
| Plant Pathology 1 | |
| Pomology 1 | |
| Rural Education 10 | |
| Rural Sociology 1 | |

| | |
|---|---|
| Physical Education | |
| Agricultural Elective | 15 to 18 |
| Suggested: | |
| Agricultural Economics 122 | |
| Botany 31 | |
| Entomology 10 | |
| Floriculture 2, 5, 12, 13, 32, 114, 125 | |
| Plant Pathology 1 | |
| Rural Education 10 | |
| Rural Sociology 1 | |

# DESCRIPTION OF COURSES

THE COURSES described in the following pages are those required or suggested for one or more of the preceding curricula. They are given by members of the staff of the College of Agriculture.

The administrative units of the College in charge of the various subject-matter fields are called *departments*. The work given in several of the departments is not required in these curricula, but the courses offered by them may be elected as time permits and if the prerequisites are met. For the description of these offerings, reference should be made to the Announcement of the four-year courses.

The arrangement of the courses in the foregoing curricula is such that two-year students will be admitted if the courses are taken in the order in which they are listed. One should consult the four-year Announcement for course prerequisites before making any change in the order of schedule.

## ORIENTATION

5. *ORIENTATION.* Spring term. M W F 9 or 11. Warren 160. Dr. GEISELMANN.

Emphasis on the analysis and reasoning involved in the solution of work problems which have been drawn mainly from College of Agriculture courses requiring the use of mathematics.

## AGRICULTURAL ECONOMICS

50. *AGRICULTURAL GEOGRAPHY.* Fall term. Credit four hours. Lectures, M W F 9, Warren 45, or M W F 11, Warren 131. Discussion, W Th or F 2–4 or W 7–9 p.m. Warren 345. Associate Professor MELLOR.

The economics and geography of the world's agriculture, providing a basis for understanding past development and future changes in agriculture. Elementary economic principles, historical development, physical geography, and population growth are studied in their relation to agricultural development and to the economic problems of farmers. Particular emphasis is placed upon study of the agriculture of various farming regions of the United States, their economic problems and competitive situation.

102. *FARM MANAGEMENT.* Spring term. Credit five hours. Not open to first-year students. Lectures, M W F 10. Warren 45. Laboratory, T W Th or F 2–4. Warren 101. On days when farms are visited, the laboratory period is 1:30–5:30. Professor WARREN.

A study of the organization and operation of the farm from the point of view of efficiency and continuous profit; farm records, farm business analysis, factors affecting profits, size of business, choice of enterprises, partnership arrangements, getting

started in farming, planning the organization and management of specific farms. One all-day trip and five half-day trips are taken to visit farms in nearby regions.

121. *ACCOUNTING.* Fall term. Credit three hours. Lectures, M F 11. Warren 45. Laboratory, M 2–4, Warren 101; T W 2–4 or Th 2–4, and 4–6, Warren 201. First class of term on Friday. Associate Professor CARPENTER.

A comprehensive survey of basic accounting principles. Some analysis and interpretations of financial statements with special emphasis on agricultural businesses.

122. *ACCOUNTING.* Spring term. Credit three hours. Prerequisite, Course 121 or its equivalent. Lectures, T Th 11. Warren 245. Laboratory, T or W 2–4. Warren 260. Assistant Professor BAUMEL.

Consideration of corporation and partnership accounting, asset valuation, income determination, special problems, and interpretation and use of financial statements. Emphasis is placed on special problems of agricultural business.

126. *FARMERS' COOPERATIVES.* Spring term. Credit three hours. Lectures, M W 9. Warren 45. Discussion, W or Th 2–4. Warren 145. Associate Professor CARPENTER.

What cooperatives are, what they have tried to do, and what they have done: their legal status and special problems of organization, finance, and control.

130. *RURAL GOVERNMENT.* Fall term. Credit three hours. Lectures, T Th 9. Warren 145. Discussion period, T or Th 2–4. Warren 31. Professor LUTZ.

Government in the United States with emphasis upon examination, analysis, and resolution of public issues confronting leadership in open-country areas of New York. Government organization, administration, functions, and finance are discussed in this context.

140. *MARKETING.* Spring term. Credit three hours. Lectures, M W F 11 except for weeks when field trips are taken, then M F lectures only. Warren 45. Field trips, T W or Th 1:30–5:30. Professor DARRAH.

A study of how farm products are marketed. Special attention is given to the consumption of farm products, the factors that affect consumption, production areas, market channels, the operation of different marketing agencies, marketing services, and costs. One all-day and five half-day trips are taken to visit marketing agencies.

143. *PRICING AND DISTRIBUTION OF MARKET MILK.* Fall term. Credit four hours. Lectures, T Th 10. Warren 245. Discussion period, M 1:40–4. Warren 260. Professor SPENCER.

A study of the marketing system for milk and how it is changing. Also a study of methods and principles of pricing milk, with special attention to federal and state milk orders. An all-day field trip is taken.

147. *MARKETING INSTITUTIONS.* Spring term. Credit two hours. Enrollment limited to 40. M 12. Warren 245. Associate Professor DOMINICK.

Economic functions performed by various types of specialized marketing agencies, with an emphasis on their physical operating patterns. Five days of spring vacation are spent in New York City inspecting and studying the major terminal marketing institutions. Total cost of the trip need not exceed $50 in addition to transportation to and from New York.

# AGRICULTURAL ENGINEERING

1. *FARM MECHANICS.* Fall or spring term. Credit three hours. Lectures, T Th 10. Computation period, F 11 or 12. Riley-Robb 125. Laboratory, M T W Th or F 2–4:30. Riley-Robb 160. Fall term, Assistant Professor REHKUGLER. Spring term, Assistant Professor LUDINGTON.

An introductory course in agricultural engineering. Emphasis is placed upon the application of basic physical principles to the solution of a variety of agricultural engineering problems. Some of the topics covered in the course are farm wiring, electric motors, elementary statics, refrigeration principles, pumps, hydraulic water systems, elementary surveying, and sewage disposal.

21. *FARM SURVEYING.* Spring term. Credit three hours. Prerequisite, trigonometry. Lectures, M W 10. Recitation, F 10. Riley-Robb 105. Laboratory, M T or W 2–4:30. Riley-Robb 15. Assistant Professor BLACK.

A study of the use and care of the simpler surveying equipment. Special emphasis is placed on the application to farm problems. This course cannot be substituted for the surveying requirement of the five-year agricultural engineering program.

31. *FARM STRUCTURES.* Fall term. Credit three hours. Prerequisites, intermediate algebra and physics. Lectures, M W F 8. Riley-Robb 105. Assistant Professor LORENZEN.

The elementary problems of farm buildings; a study of basic structural requirements, insulation, ventilation, and functional requirements for farm animals.

40. *WOODWORKING AND CARPENTRY.* Spring term. Credit two hours. Lecture, T 8. Riley-Robb 125. Laboratory, M T or Th 1–4:30 or Th 8–11:30. Riley-Robb 70. Limited to twenty students per section. Professor Foss.

Designed to acquaint the student with the common woodworking, carpentry, concrete, tool-fitting, and wood-finishing jobs common to the farm and home. The skill in use of both hand and power tools is emphasized in the construction and repair of farm equipment. A field trip is included to a local woodworking plant and sawmill.

42. *FARM METAL WORK.* Fall or spring term. Credit two hours. Lecture, Th 8. Riley-Robb 125. Laboratory including metal lathe work, M 1:30–4:30. Laboratory not including metal lathe work, T 8–11, or T or Th 1:30–4:30. Riley-Robb 60 and 64. Limited to 20 students per laboratory section. Assistant Professor LECHNER.

A course giving instruction and practice in the fundamentals of electric arc welding, oxyacetylene welding, sheet metal work, pipe fitting, hot and cold metal work, and metal lathe work as they apply to farm shop work for both repair and construction jobs.

43. *ADVANCED FARM METAL WORK.* Fall or spring term. Credit one or two hours. Prerequisite, Course 42, its equivalent, or permission of instructor. Laboratory for one credit, F 1:30–4:00; for two credits, one additional 2½-hour laboratory to be arranged. Riley-Robb 60 and 64. Assistant Professor LECHNER.

Student's choice of instruction may be in machine shop practice, advanced farm welding, or metal project construction or redesign. The latter must be taken in conjunction with advanced farm welding for two credits. One credit may be earned

in machine shop practice or advanced farm welding, or the two may be taken concurrently for two credits.

102. *FARM POWER.* Fall term. Credit three hours. Prerequisite, Course 1. Lectures, T Th 11. Riley-Robb 125. Laboratory, M T W or Th 2–4:30. Riley-Robb 74. Professor TERRY.

A study of the principles of operation and adjustment of internal combustion engines and their farm applications. Principal emphasis on farm tractors, including care and operation, power transmission, power requirements, and economic factors.

103. *FIELD MACHINERY.* Spring term. Credit three hours. Prerequisite, Course 1. Lectures, T Th 11. Riley-Robb 125. One recitation period, F 8, 9, 10, 11 or 12. Riley-Robb 225. Laboratory, M T W or Th 2–4:30. Riley-Robb 74. Associate Professor MILLIER.

A study of the use, care, operation, and adjustment of farm field machines. Machines in each of the major groups, tillage, seeding, harvesting, processing, spraying and dusting, fertilizing, and crop loading are included.

## AGRONOMY

1. *NATURE AND PROPERTIES OF SOILS.* Fall term. Credit four hours. Lectures, M W F 9. Caldwell 100. Laboratory, M T W Th or F 2–4:30, or T or Th 10–12:30. Professor LATHWELL.

A comprehensive introduction to the field of soil science with emphasis on scientific principles and their application in solutions of practical soil management problems.

11. *PRODUCTION OF FIELD CROPS.* Spring term. Lectures, M W F 10. Caldwell 100. Laboratory, M T W or Th 2–4:30. Caldwell 250. Professor HARTWIG.

Deals principally with the crops that are used for feeding livestock and poultry. Emphasis is placed on the hay, silage, pasture, and grain crops of the United States. Cultural methods, management, crop rotations, lime and fertilizer practices, soil and climatic adaptations, and the fundamental principles of species and varietal recognition are considered. Two outdoor practicums involving study in a very extensive crop garden will be held during regular laboratory periods.

112. *FEED CROPS.* Spring term. Credit four hours. Prerequisite, an introductory course in crop production. A course in livestock feeding is desirable but not essential preparation. Lectures, M W F 8. Discussion, F 11 or 12. Warren 345. Associate Professor M. J. WRIGHT.

The production of field crops with reference to their value for livestock in terms of energy, protein, and other nutritional components per unit of land utilized. Consideration will be given to establishment, management, harvesting, and preservation practices that influence yield and nutritive value. Corn, small grains, and forage grasses and legumes will be emphasized.

## ANIMAL HUSBANDRY

1. *INTRODUCTORY ANIMAL SCIENCE.* Fall term. Credit three hours. Lectures, W F 10. Morrison 146. Laboratory, T Th or F 2–4:30, W 11–1. Livestock Pavilion. Assistant Professor ELLIOT and assistants.

Designed to acquaint the beginning student with the development, scope, economic importance, problems, and language of the livestock industry. All commercially important classes of farm animals are considered, with emphasis on dairy cattle, beef cattle, sheep, and swine. The place of the biological sciences in a rapidly changing animal agriculture is stressed. The intent of the course is to give insight into opportunities in the field and to serve as an introduction to subsequent specialized courses.

10. *LIVESTOCK FEEDING.* Fall or spring term. Credit four hours. Lectures: fall term, M W F 11; spring term, M W F 9. Morrison 146. Laboratory: fall term, Th or F 2–4:30; spring term, M W Th or F 2–4:30. Morrison 164. Fall term: Associate Professor WARNER and assistants; spring term: Professor S. E. SMITH and assistants.

The feeding of farm animals, including the general basic principles, feeding standards, the computation of rations, and the composition and nutritive value of livestock feeds.

20. *ANIMAL BREEDING.* Fall term. Credit three hours. Lectures, T Th 9. Morrison 146. Recitation, demonstration, and laboratory, M T W Th or F 2–4:30. Morrison 174. Associate Professor FOOTE and assistants.

An introduction to the anatomy and physiology of reproduction and the genetics of farm animals, and improvement of livestock through the integrated application of this knowledge. Laboratory material to give the student a firsthand knowledge of reproductive processes, and equipment for studying problems in livestock improvement are provided.

*HEALTH AND DISEASES OF ANIMALS.* (Veterinary 61.) Spring term. Credit three hours. Lectures, M W F 11. Veterinary College. Room D 105. Professor GILMAN and collaborators.

The causes and the nature of the common diseases of livestock are discussed. Emphasis is placed on the prevention and control of animal diseases.

41. *APPLIED LIVESTOCK SELECTION:* Beef Cattle, Sheep, and Swine. Fall term. Credit two hours. Prerequisite, course 1. Should be scheduled in the sophomore year. Lecture and laboratory period, W 2–5:10. Livestock Pavilion and Barns. Professor J. I. MILLER.

The application of the various methods used in determining utility value of market and breeding classes of meat animals. Visual appraisal, carcass data, breeding records, and performance tests are considered.

50. *DAIRY CATTLE.* Fall or spring term. Credit three hours. Lectures: fall term, T Th 8; spring term, T Th 10. Morrison 146. Laboratory, M or Th 2–4:30. Fall term, Morrison 163 and Livestock Pavilion. Spring term, Morrison 174 and Livestock Pavilion. It is preferred that two-year students register for this course in the spring term. Fall term, Assistant Professor SCHMIDT and assistants; spring term, Professor TURK and assistants.

Some of the economic aspects of the dairy industry; study of dairy breeds; factors in breeding and development of dairy cattle; milking methods and milk-production problems; efficient feeding; and care, management, and health of the dairy herd. Practice in selection, herd management, formulating of rations, planning of breeding programs, and keeping of records.

51. *DAIRY-CATTLE JUDGING.* Spring term. Credit two hours. Prerequisite, Course 50. Practice, W 2–4:30 and S 10–12:30. (In the last half of the semester, the

Wednesday meetings are discontinued, and the class meets all day Saturday.) Livestock Pavilion. Professor TRIMBERGER.

A beginning course in the selection and judging of all breeds of dairy cattle. Practice includes all-day trips on Saturday, during the latter part of the term, to herds in the state.

60. *BEEF CATTLE.* Spring term. Credit three hours. Lectures, T Th 10. Morrison 163. Laboratory, F 2–4:30. Livestock Pavilion and Beef Cattle Barn. Professor J. I. MILLER.

A general course in beef-cattle production. The management, feeding, breeding, selection, and marketing problems involved in the beef-cattle enterprise are emphasized. A one-day field trip is taken to study successful beef-production methods.

70. *SWINE.* Spring term. Credit three hours. Lectures, T Th 11. Morrison 163. Laboratory, T 2–4:30. Morrison 38 and Swine Barn. Assistant Professor POND.

A general course in swine production. The application of nutritional and genetic principles to practical swine management are stressed, and practical exercises are included. A one-day field trip is taken.

80. *SHEEP.* Fall term. Credit three hours. Lectures, T Th 10. Morrison 163. Laboratory, M 2–4:30. Morrison 164 and Sheep Barn. Assistant Professor HOGUE.

A general course in the care, breeding, feeding, management, and selection of sheep. Lectures and laboratory periods designed to give the student a practical knowledge of sheep production as well as some scientific background for improved practices in sheep production. A one-day field trip is taken.

90. *MEAT AND MEAT PRODUCTS.* Fall or spring term. Credit three hours. Lecture, T 8. Morrison 82. Laboratory, M W or T Th 2–4:30. Morrison 63. It is requested that two-year students register in the Tuesday laboratory section. Registration limited to sixteen students in each section. Assistant Professor STOUFFER.

Livestock slaughtering, retail meat cutting, live animal-carcass relationships, and the storage and preservation of meat and meat products. A one-day field trip to packing plants will be taken.

150. *DAIRY PRODUCTION.* Spring term. Credit three hours. Lectures, T Th 11. Morrison 163. Laboratory and discussion, T 2–4:30. Morrison 164. Professor TRIMBERGER.

Analysis of breeding and management programs in successful herds. Evaluation of the programs of dairy-cattle breed associations. Emphasis is placed on the application of the principles of dairy breeding, feeding, and management to the development and operation of a successful dairy farm.

## BACTERIOLOGY

3. *AGRICULTURAL AND HOME ECONOMICS BACTERIOLOGY.* Spring term. Credit three hours. Not recommended for first-year students. Not accepted as prerequisite for advanced courses, except with special permission from the instructor. Bacteriology 5 must be taken with Bacteriology 3. Lectures, M W F 11. Caldwell 100. Professor VANDEMARK.

The basic principles of bacteriology and their application in agriculture, home economics, industry, and public health.

5. *AGRICULTURAL AND HOME ECONOMICS BACTERIOLOGY LABORATORY.* Spring term. Credit one hour. Must be taken simultaneously with Bacteriology 3. One laboratory period a week, T 8–9:50 or 11–12:50, or W or Th 2–3:50. Stocking 301. Professor VANDEMARK and assistants.

General laboratory techniques as applied in agriculture and household bacteriology.

## BIOCHEMISTRY

2. *INTRODUCTORY AGRICULTURAL CHEMISTRY.* Fall term. Credit five hours. Lectures and recitations, M W F 9, Plant Science 233; T Th 9, Caldwell 100. Associate Professor NEAL and assistants.

Lectures, demonstrations, and recitations dealing with the fundamental principles of chemistry and their application to agricultural practices. This course is not accepted as a prerequisite for further courses in chemistry or biochemistry.

## BIOLOGY

1–2. *GENERAL BIOLOGY.* Fall and spring terms. Credit three hours a term. Biology 1 with a grade of 50 or higher is prerequisite to Biology 2, unless special permission is obtained from the instructor. Not open to students who have taken both Zoology 103–104 (or 101–102) and Botany 1–2. If Biology 1–2 is taken after Zoology 103–104 (or 101–102) or Botany 1–2, credit two hours a term. Lectures, M W 8, Plant Science 233; or M W 10, Warren 231; or M W 11, Caldwell 100 (fall), Plant Science 233 (spring). Laboratory, M T W Th or F 2–4:30, or Th F or S 8–10:30, or T Th or F 10–12:30, or S 9–11:30. Roberts 392. Assistant Professor KEETON, Mr. SLEEPER, and assistants.

Designed to acquaint students majoring within or outside the animal and plant sciences with the established principles of biology, and with the body of research that led to the formulation of these principles. Specifically, the topics are the organization, integration, and maintenance of living organisms, and their reproduction, heredity, behavior, and interactions. Emphasis is placed on an understanding of each topic in the light of modern evolutionary theory.

## BOTANY

1–2. *INTRODUCTORY BOTANY.* Fall and spring terms. Credit three hours a term. Lectures, T Th 9 or 11. Plant Science 233. One laboratory period a week, M T W Th or F 2–4:30, T 10–12:30, S 8–10:30, or 9–11:30. Plant Science 240, 242, and 262. Professor BANKS and assistants.

Designed to give general students an understanding of the growth and evolution of plants and their role in nature. It provides the basic knowledge necessary for those who intend to specialize in some aspect of plant science.

Botany 1 is devoted to a study of growth in the flowering plants, with emphasis placed on structure, function, and reproduction. Botany 2 is concerned with the phyla of plants, with representative life cycles, and with a consideration of the importance of various groups in the study of biological principles. The study of the evolution of the groups of plants is based on genetical and environmental mechanisms that control it. The classification and ecology of plants is introduced

in several laboratory periods spent in the field. The scientific process, the growth of botanical knowledge, botanical principles, and, particularly, the necessity of changing interpretations as new information is acquired are introduced throughout the course.

31. *PLANT PHYSIOLOGY.* Fall or spring term. Credit four hours. Lectures, T Th 10. Plant Science 143. Laboratory, T Th or W F 2–4:30, or M 2–4:30 and S 8–10:30. Plant Science 227. Professor CLARK.

Designed to acquaint the student with the general principles of plant physiology. Topics such as water relations, photosynthesis, translocation, digestion, respiration, mineral nutrition, growth, and reproduction are studied in detail. Particular emphasis is placed, both in laboratory and classroom, on the discussion of principles and their application to plants.

## DRAWING

1. *MECHANICAL DRAWING.* Fall or spring term. Credit three hours. Lectures, T Th 8. Riley-Robb 105. Laboratory: fall term, W 1–4:30 or Th 1–4:30; spring term, W 1–4:30. Riley-Robb 425. Limited to 40 students per laboratory. Book and supply lists are available at the book stores. Assistant Professor FURRY.

Deals with graphic presentation. The work includes lettering; use of instruments; orthographic projection of multiview drawing including sections, auxiliaries, plans of elevations; pictorial drawing, graphs, and charts; and the practical applications of these principles to simple problems.

9–10. *DRAWING FOR LANDSCAPE STUDENTS.* Throughout the year. Credit three hours a term. Credit may not be received for both Course 9 and Course 11. Fall term is prerequisite to spring term. Fall term, W F 2–4:30; spring term, M W F 11–1. Mann 500. Associate Professor BURCKMYER and Assistant Professor LAMBERT.

Planned to develop practical ability in the sketching of outdoor planting and landscaped features, facility in lettering, and knowledge of isometric and perspective construction from plans and elevations. Sketch-book assignments, to be done outside class, will be given throughout the year.

11. *FREEHAND DRAWING.* Fall or spring term. Credit three hours. Credit may not be received for both Course 9 and Course 11. For beginning students. Lecture, T or W 10. Six hours of time, including the lecture period, are to be spent in the drawing room, preferably in two-hour units. These hours must be scheduled between 9 and 12, M T W Th F, or T 2–4. Mann 500. Associate Professor BURCKMYER and Assistant Professor LAMBERT.

The objective is to develop accuracy of observation and skill in delineation. Practice is given in outdoor sketching and in the drawing of still-life set-ups, interior scenes, and human figures. The principles of free-hand perspective are taught and applied. The course is designed to aid those who plan to work in nature study, biological sciences, and home economics. Sketch-book assignments to be done outside class are given throughout the year.

## ENTOMOLOGY

10. *INTRODUCTORY ENTOMOLOGY.* Fall or spring term. Credit three hours. Lectures: fall term, W F 11; spring term, T Th 9. Comstock 245. Laboratory: fall

term, W Th or F 2–4:30; spring term, T W Th or F 2–4:30. Comstock 100. Associate Professor RAFFENSPERGER and assistants.

A survey of the structure, biology, and classification of insects; an introduction to the study of insects as a major segment of the biological community. Laboratory exercises in the anatomy and biology of insects, and practice in the techniques of insect identification.

61. *INTRODUCTORY BEEKEEPING.* Spring term. Credit two hours. Lectures, T Th 11. Comstock 245. Professor DYCE.

Intended to afford a general knowledge of the fundamentals of beekeeping, including the life history, instincts, and general behavior of honeybees. Special attention is given to the role of bees in the cross-pollination of agricultural crops, as well as production of honey and beeswax.

## EXTENSION TEACHING

1. *ORAL AND WRITTEN EXPRESSION.* Throughout the year. Credit three hours a term. Fall term is prerequisite to spring term. Lectures and practice: fall term, M W F 8 or 11 or T Th S 10; spring term, M W F 8, 9, or 11. Warren 231. Criticism by appointment, daily 8–5, and S 8–1. Associate Professors FREEMAN and MARTIN, and Messrs. LUEDER and ———.

Practice in oral and written presentation of topics in agriculture and other fields, with criticism and individual appointments on the technique of public speech. Designed to encourage interest in public affairs, and, through demonstrations and the use of graphic materials and other forms, to train for effective self-expression in public. Special training is given to competitors for the Eastman Prizes for Public Speaking and the Rice Debate Stage. In addition, some study is made of representative work in English literature. Part of the work in the second term is a study of parliamentary practice.

## FLORICULTURE AND ORNAMENTAL HORTICULTURE

1. *GENERAL FLORICULTURE AND ORNAMENTAL HORTICULTURE.* Fall term. Credit three hours. Lectures, M W 10. Plant Science 141. Laboratory, M or T 2–4:30. Plant Science 15. Associate Professor LANGHANS.

An elementary course covering the principles and practices of growing ornamental plants in the garden, greenhouse, and home.

2. *INTRODUCTION TO LANDSCAPE DESIGN.* Fall or spring term. Credit three hours. Lectures, M W F 9. East Roberts 222. Professor ———.

A consideration of the principles of landscape design as applied to the small-residence property.

3. *ELEMENTARY LANDSCAPE DESIGN.* Fall term. Credit three hours. Lectures, T Th 11. Laboratory, Th 2–4:30. Plant Science 433. Assistant Professor SCANNELL.

Principles of design, with practice in the use of drawing instruments and graphic interpretation of ideas.

5. *PRINCIPLES OF FLOWER ARRANGEMENT.* Fall or spring term. Credit two hours. Enrollment limited to 18 students for each laboratory section. Fall term: lecture, Th 9, Plant Science 37; laboratory, W or Th 2–4:30, or Th 10–12:30, Plant Science 22, Spring term: lecture, T 10, Plant Science 37; laboratory, T or W 2–4:30, or Th 10–12:30 or 2–4:30. Plant Science 22. Associate Professor Fox.

A study of the care and handling of flowers, the factors affecting keeping quality, and the design principles involved in the use of flowers and related decorative materials.

10. *TAXONOMY OF CULTIVATED PLANTS.* Fall term. Credit four hours. Lectures, W F 10. Plant Science 37. Laboratory, W F 2–4:30. Plant Science 29. Assistant Professor INGRAM.

A study of the kinds of cultivated ferns and seed plants and their classification into families and genera. Emphasis is placed on methods of identification, the preparation and use of the analytical keys, the distinguishing characteristics of the families concerned and their importance in ornamental horticulture.

12. *HERBACEOUS PLANT MATERIALS.* Spring term. Credit three hours. Prerequisite, Course 10. Lectures, T Th 8. Plant Science 37. Laboratory, W 10–12:30 or 2–4:30. Plant Science 15. Associate Professor LEE.

A study of the ornamental herbaceous plants used in landscape and garden plantings. Emphasis is placed on the identification, use, and culture of bulbs, annuals and perennials.

13. *WOODY-PLANT MATERIALS.* Spring term. Credit four hours. Lectures, T Th 9. Plant Science 37. Laboratory and field trips, M and W or F 2–4:30. Plant Science 29. Professor CORNMAN.

A study of the trees, shrubs, and vines used in landscape planting. Emphasis is placed on their characteristics and values for use as landscape material. The class visits Rochester parks.

32. *INTERMEDIATE LANDSCAPE DESIGN.* Spring term. Credit three hours. Lecture, M 11. Laboratory, T Th 10–12:30. Plant Science 433. Professor ———.

The application of the principles of design to the specific problems of the small residential property. A terminal course for those not intending to major in this field.

114. *TURFGRASS MANAGEMENT.* Spring term. Credit two hours. Prerequisites, Agronomy 1 or permission to register. Lecture, W 11. Plant Science 37. Laboratory, Th 2–4:30. Plant Science 29. Professor CORNMAN.

The principles, practices, and materials for the construction and maintenance of lawn areas. Some attention is given sports turf. A week-end inspection trip is taken to experimental test plots and special turf areas.

125. *FLOWER-STORE MANAGEMENT.* Spring term. Credit three hours. Prerequisite, Course 5, and permission to register. Lecture, T Th 8. Plant Science 143. Laboratory, T 2–4:30. Plant Science 22. Associate Professor Fox.

Lectures devoted to flower-shop management, business methods, merchandising, and marketing of floricultural commodities. Laboratories to include the application of subject matter and the principles of commercial floral arrangement and design. A required two-day field trip is made to flower shows, and to wholesale and retail florist establishments.

## PLANT PATHOLOGY

1. *ELEMENTARY PLANT PATHOLOGY.* Fall or spring term. Credit three hours. Lecture, Th 11. Plant Science 336. Recitation, T 11. Laboratory, T W Th or F 2–4:30. Plant Science 341 and 343. Conferences to be arranged. Professor BOOTHROYD.

An introductory course dealing with the nature, cause, and control of disease in plants. Representative diseases of cultivated crops are studied in the laboratory.

## POMOLOGY

*GENERAL HORTICULTURE.* (See Vegetable Crops 3.) Those who want a general course in horticulture covering flowers, fruits, and vegetables should take this.

1. *TREE FRUITS.* Fall term. Credit three hours. Should be preceded or accompanied by an elementary course in botany. Lectures, T Th 8. Warren 131. Laboratory, W 2–4:30. Plant Science 107. Professor EDGERTON.

A study of the general principles and practices of tree-fruit culture and their relation to the underlying sciences. Topics to be covered include propagation, varieties, orchard management, and growth and fruiting habits. Practical work is presented in grafting, pruning, site and soil selection, and planting.

2. *SMALL FRUITS.* Fall term. Credit three hours. Should be preceded or accompanied by an elementary course in botany. Lectures, M W 8. Plant Science 143. Laboratory, M 2–4:30. Plant Science 107. Associate Professor TOMKINS.

A study of the general principles and practices in the culture of grapes, strawberries, brambles, and bush fruits, and their relation to the underlying sciences. Fruiting and growth habits are covered, with practical work in pruning, planting, and propagation. One or two Saturday field trips will be taken.

111. *POST-HARVEST PHYSIOLOGY, HANDLING, AND STORAGE OF FRUITS.* Fall term. Credit three hours. Prerequisite, Course 1 or 2. Lectures, T Th 8. Plant Science 143. Laboratory, F 2–4:30. Plant Science 107. Professor SMOCK.

The chemistry and physiology of fruits as they affect quality and marketability are studied. Handling methods, maturity indices, and storage practices are considered. Practical work involves grading and inspection of fruits and storage of fruit in different ways. One Saturday field trip is required.

112. *ADVANCED LABORATORY COURSE.* Spring term. Credit two hours. S 8–12. Plant Science 107. Intended for students doing their major work in pomology. Professors HOFFMAN and EDGERTON.

This course is designed to give more extended practice in the various orchard operations than can be given in Course 1. Special attention is given to problems of pruning, grafting, orchard-soil selection and management, pollination, and spray practices. One or two field trips extending into the afternoon are made.

## POULTRY HUSBANDRY

1. *INTRODUCTION TO POULTRY SCIENCE.* Fall term. Credit three hours. Lectures, M W F 8. One recitation period, to be arranged. Rice 300. Professor BAKER, assisted by other members of the staff.

A general course dealing with the principles of poultry production.

110. *POULTRY NUTRITION.* Spring term. Credit three hours. Lectures, M W F 8. Rice 300. Associate Professor R. J. YOUNG.

The principles of poultry nutrition and their application to poultry feeding and feed manufacturing.

## RURAL EDUCATION

10. *PSYCHOLOGY.* Fall or spring term. Credit three hours. Lectures, M W 10. Plant Science 233. Discussion sections, Th 8, 9, 10, or 11, or F 8, 9, 10, 11, or 12. Assistant Professor MINK.

A study of topics in psychology such as learning, perception, motivation, emotion, individual differences, and personal-social relationships.

*COLLEGE READING AND STUDY SKILLS PROGRAM.* (Education 7). Fall or spring term. Noncredit. Lecture and discussion, M W 12 or T Th 11. Laboratory, two half-hour periods a week to be arranged. Spring program is open to all registered students. Enrollment limited. Room to be announced. Assistant Professor PAUK.

Designed to increase efficiency in reading rate and comprehension. Principles and techniques of good reading are explained, demonstrated, and practiced in class. The laboratory is equipped to provide an opportunity to practice good reading habits under controlled conditions.

## RURAL SOCIOLOGY

1. *GENERAL SOCIOLOGY FOR STUDENTS OF RURAL LIFE.* Fall or spring term. Credit three hours. May not be taken by those who have credit for Sociology and Anthropology 101. Lectures, M W 8. Warren 45. Discussion sections, F 8, 9, or 10. Assistant Professor HARP.

A general introduction to the principles and methods of sociology. The course consists of two major parts: (1) a discussion of the "elements of sociological analysis," in which the student is instructed in the use of the major concepts of sociology, and (2) an analysis of the major institutions comprising American society.

12. *FOUNDATIONS FOR SOCIAL ACTION.* Fall or spring term. Credit three hours. Not open to first-year students. Lecture, W 11–12:30. Warren 260. Laboratory, M F 11–12:30. Warren 260 and 101. Fall term, Associate Professor REEDER; spring term, Professor THOMAS.

The purpose is to provide the basic information essential in understanding social action and planned change. The major emphasis is on gaining an understanding of two social units: the community and individuals as social actors.

Students study and use a few essential social action processes. Designed for two categories of students: (1) students of various fields who wish to take one or two courses in sociology and who want to gain knowledge they can apply directly in their occupations or in their communities; and (2) persons whose work or interests are likely to involve them in some phase of planned change—either as administrators, organization leaders, extension agents, or teachers—and others for whom the role of change agent is an essential part of their job.

## VEGETABLE CROPS

3. *GENERAL HORTICULTURE.* Spring term. Credit four hours. Lectures, M W F 8. East Roberts 222. Laboratory, M T W Th or F 2–4:30. East Roberts 301. Associate Professor SHELDRAKE.

An introductory course in general horticulture, including flower, fruit, and vegetable growing. Intended primarily for students who want a general knowledge and for those who wish to specialize in some field of horticulture but have limited background, either in practical experience or in training in botany and agronomy.

11. *COMMERCIAL VEGETABLE CROPS.* Spring term. Credit four hours. Lectures, M W F 11. East Roberts 222. Laboratory, W or F 2–4:30. East Roberts 301. Professor SWEET.

Intended for the students who wish to specialize in commercial vegetable growing. A study of the general principles of vegetable growing. Consideration is also given to the economic importance, cultural requirements, marketing, and storage of important vegetables. Field trips are required.

12. *HANDLING AND MARKETING VEGETABLES.* Fall term. Credit three hours. Lectures, T Th 11. East Roberts 222. Laboratory, T or W 2–4:30. East Roberts 223. Professor HARTMAN.

(Students registered for the Tuesday laboratory are scheduled to go on a field trip at 9:30 a.m., Wednesday, the day on which classes officially begin at noon in the fall term.)

The handling of vegetables from harvest, whether for fresh market or processing, through the marketing channels to the consumer; personnel, facilities, machinery, and organization of the industry; quality measurement and grade standards; federal, state, and other regulations; principles and practices in precooling, storage, packaging, prepackaging, other types of handling.

22. *POTATO PRODUCTION AND PROCESSING.* Spring term. Credit three hours. Lectures, T Th 10. East Roberts 222. Laboratory, T or W 2–4:30. East Roberts 223. Professor ORA SMITH.

General principles and practical phases of potato production, storage, and processing are discussed. Growth processes and soil and environmental factors are emphasized as influencing production. Topics such as storage methods, grading, packaging, cooking quality, nutritive value, processing, and industrial uses of potatoes also are studied. Two field trips, one of which is all day, are taken to potato farms and processing plants.