

Additional Requirements—B.S. Degree

In addition, degree students (except Agribusiness and Enology majors) complete the following courses: Ag 1, 20, 130, 136, 151, AgM electives (6 units), Bot. 1, Chem. 2a-b, 8, Biol. 1b, 120, Econ. 1a. A total of 128 semester units required for graduation. Agricultural Inspection majors are not required to complete Biol. 120; are required to complete 4 units of AgM electives; and are required to complete CP 12, H 12, V 11.

Enology majors must complete the following additional requirements: Ag 1a-b, Ag 1, Bus. Ad. 110, Chem. 2a-b, 8, 101, 105, 109, Econ. 1a-b, Biol. 1a, Math 1a-b, two semesters of satisfactory collegiate study (or equivalent) in Physics 2a-b, two semesters of satisfactory collegiate study (or equivalent) in foreign language (see page 69), and electives. Agribusiness majors take Ag 1, 1a, Bot. 104, Chem. 2a-b, 8, Econ. 1a-b. A total of 128 semester units are required for graduation.

Additional Requirements—Technical Certificate

Technical students must complete, in addition to the major requirements, following courses: Ag 1, 31, 40, 151, AgM electives (6 units), Bus. Ad. 27, And Science and/or Plant Science electives (10 units), Soc. Sci. 3a-b, Biol. 1a or Health Ed. 90 or 91, Phys. Ed. (4 semesters), Engl. 1a, Speech 20 or 24. Agricultural Inspection majors are required to complete CP 12, H 12, V 11 and 4 units of AgM electives. A total of 84 semester units required for the technical certificate.

Courses

NOTE: Active immunization against tetanus (available through the Student Health Service) is a prerequisite for registration in any laboratory course in agriculture and for any student employment on the College Farm.

CROP PRODUCTION**CP 11. Introduction to Agronomy (3) F**

Principles of crop production, survey of important field crops, production methods and major uses in California and the San Joaquin Valley. (2 lecture, 3 hours; 2 Saturday field trips)

CP 12. Introduction to Vegetable Crops (3) S

Culture of vegetable crops for market and home; importance, varieties, cultivation, harvesting, storing, and marketing; vegetable diseases and insect pests; vegetables grown commercially in the San Joaquin Valley. (2 lecture, 3 lab hours; 2 Saturday field trips)

CP 51. Forage Crops (3) S

Prerequisite: CP 11 or permission of instructor. Irrigated forage crops of California as related to livestock enterprises; cultural methods, harvesting, market quality, insect and disease control. (2 lecture, 3 lab hours)

CP 52. Fiber and Oil Crops (3) S

Prerequisite: CP 11. Fiber and oil crops, cotton, flax, ramie, castor bean, safflower common to the San Joaquin Valley; cotton production; varieties and improvement, cultural methods, harvesting and marketing. (2 lecture, 3 lab hours)

CP 53. Cereal Crops (3) F

Prerequisite: CP 11. Cereal crops common to the San Joaquin Valley; varieties and cultural practices, harvesting and marketing. (2 lecture, 3 lab hours)

CP 56. Vegetable Field Crops (3) F

Prerequisite: CP 12. Methods of production, harvesting, grading, storing, processing vegetable crops common to the San Joaquin Valley; potatoes, tomatoes, sweet potatoes, carrots, melons, and lettuce. (2 lecture, 3 lab hours; 3-day field trip)

CP 60. Weeds (3) S

Prerequisite: CP 11. Weeds common to the San Joaquin Valley and their prevention and control; weed identification and recommended methods of control or prevention. (2 lecture, 3 lab hours; 1 week-end field trip)

CP 103. Seed Production (3) F

Prerequisite: CP 11 or permission of instructor. Principles and practices in the culture of vegetable and field crops for seed production; harvesting, storage, yields, quality, seed laws, certification, seed cleaning, and marketing. (2 lecture, 3 lab hours)

CP 105. Cotton Technology (3) F

Prerequisite: CP 52 or equivalent. Cotton harvesting, processing, marketing, utilization, and testing; cotton fiber technology. (2 lecture, 3 lab hours)

CP 118. Range Management (3) S

Prerequisite: CP 11 or permission of instructor. Identification of range forage; estimating carrying capacity; methods of range conservation, controlled grazing, water development, rodent control, fertilization, reseeding, brush removal; identification of poisonous plants. (2 lecture, 3 lab hours; 1 Saturday field trip)

CP 150. Crop Breeding (3) S

Prerequisite: Biol. 120. Application of genetic and environmental principles to improvement of crop plants; heredity and variation in crop plants, effects of various environmental factors on crop improvement, effects of self and cross fertilization, principles and results of selection and hybridization in crop improvement. (2 lecture, 3 lab hours)

CP 152. Cotton Classing (2) S

Characteristics of classes and grades of cotton; practical work in classing cotton; cotton quality as related to grade, staple, and utilization. (1 lecture, 3 lab hours)

CP 190. Independent Study (1-5) F and S (See page 64)

Staff

ENOLOGY**E 15. Introduction to Enology (3) F (Former V 151)**

History and development of the wine industry; mechanics of various processes and factors involved in wine making.

E 115. Winery Practices (5) F (Former V 152)

Prerequisites: E 15, V 50, Chem. 109, Bact. 54. Principles and practices of preparation of dessert and table wines; operation of plant equipment; controlled tests; sanitation and waste disposal problems. (3 lecture, 6 lab hours)

E 116. Advanced Winery Practices (4) S

Prerequisite: E 115. Winery operations; quality control and production of specialty products; laboratory tests for aldehydes and esters, copper and iron, pasteurization and fining; microbiological techniques. (2 lecture, 6 lab hours)

E 151a-b. Unit Operations (3-3) F and S

Prerequisite: permission of instructor. Basic principles of industrial operations as they apply to the wine industry with application to chemistry and physics, transformation of energy, heat transfer, and flow of fluids; application of principles as they apply to evaporation, heat exchange equipment, distillation and drying.

E 160. Winery Technology (3) S

Prerequisite: permission of instructor. Technological study of winery equipment; evaluation, location, and operation; sanitation procedures. (2 lecture, 3 lab hours; 3- or 4-day field trip)

Harrison

Biehler

Van Elswyk

Biehler

Van Elswyk

Staff

Heitz

Heitz

Heitz

Heitz

Heitz