

## 2009-11 Cal Poly Catalog

### [Horticulture and Crop Science Department](#)

#### FRSC—FRUIT SCIENCE

##### FRSC 123 Beekeeping (3)

Studies and exercises in the handling of European honey bees with special reference to pollination of commercial crops. Honey processing and marketing. Hive inspection and disease detection. 2 lectures, 1 laboratory.

##### FRSC 132 Pomology I (4)

Orchard design and development, cultural practices, physiological responses of trees to cultural practices, propagation and strategies to maximize orchard profitability and sustainability. 3 lectures, 1 laboratory. Prerequisite: HCS 120.

##### FRSC 133 Pomology II (4)

Analysis of production and management strategies for major fruit and nut crops in California. 3 lectures, 1 laboratory. Prerequisite: FRSC 132.

##### FRSC 202 Enterprise Project (2–4) (CR/NC)

Beginning field experience in management of orchards and vineyards or honeybees, under faculty supervision. Project participation is subject to approval by the department head and the Cal Poly Corporation. Degree credit limited to 4 units. Credit/No Credit grading only. 1 lecture, variable practicum. Prerequisite: HCS 110, or consent of instructor.

##### FRSC 210 Viticultural Practices (2)

Propagation, layout and planting of a new vineyard, including irrigation and trellis system installations and management practices of established vineyards. Total credit limited to 4 units. 2 activities.

##### FRSC 211 Survey of Viticulture (4)

Introduction to winegrowing including the life cycle of the vine, site selection and the concept of "terroir", factors and practices influencing wine quality, sustainable vineyard practices, and the business of viticulture. Not open to students with credit in FRSC 231. 4 lectures.

##### FRSC 230 California Fruit Growing (4)

Interrelationship of climate and cultural techniques on orchard productivity. California's place in the international production-marketing scheme. Field trip required. Not open to students majoring in Fruit Science or to students with credit in FRSC 132. 3 lectures, 1 laboratory.

##### FRSC 231 Viticulture I (4)

Understanding of internal and external factors affecting vine productivity. Historical and international perspectives on grape growing. Vineyard production strategies. 3 lectures, 1 laboratory.

##### FRSC 331 Viticulture II (4)

Factors influencing vine physiology and winegrape quality. Recent advances in irrigation strategies, canopy management, and pest control. Budgets for profitable operation and mechanized viticulture. Field trip required. 3 lectures, 1 laboratory. Prerequisite: FRSC 231.

##### FRSC 342 Citrus and Avocado Fruit Production (4)

World citrus and avocado production and marketing. Orchard management techniques. Relationship of environment to species, cultivar, and rootstock selection. Field trip to a major California production area required. 3 lectures, 1 laboratory. Prerequisite: HCS 120 or FRSC 230, or consent of instructor.

##### FRSC 402 Enterprise Project Management (2–4) (CR/NC)

Advanced experience in production of orchards and vineyards. Development of a plan for field operations, a marketing plan, and a budget. Management decision-making. Project participation is subject to approval by the department head and the Cal Poly Corporation. Degree credit limited to 2 units. Credit/No Credit grading only. 1 lecture, variable practicum. Prerequisite: FRSC 202, and consent of instructor.

##### FRSC 415 Grapevine Physiology (4)

Understanding of grapevine physiology, including anatomy, taxonomy, physiological growth processes, growth cycle phenology, bud break, flowering, fruit set, berry ripening. 3 lectures, 1 laboratory. Prerequisite: FRSC 231, FRSC 331 or consent of instructor.

##### FRSC 422 Tropical and Subtropical Crop and Fruit Production (4)

Production, distribution and utilization of major agronomic, vegetable, fruit and nut crops of economic importance in tropical and subtropical areas. Weather

systems, climates, soils, and cropping systems of tropical and subtropical areas. Field trip required. 3 lectures, 1 laboratory. Prerequisite: 100/200-level plant production course, or consent of instructor. *Crosslisted as CRSC/FRSC 422.*

##### FRSC 599 Thesis in Fruit Science (1–9)

Systematic research of a significant problem in Fruit Science. Thesis will include problem identification, significance, methods, data analysis, and conclusion. Students must enroll every quarter in which facilities are used or advisement is received. Degree credit limited to 6 units. Prerequisite: Graduate standing and consent of instructor.