

PLANT SCIENCE (PLSI)

PLSI 001 Introduction to Plant Science

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

Introduction to plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants. Laboratory required. (C-ID AG-PS106L)

PLSI 012 Fruit and Nut Production

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

The botany, taxonomy, and development of major fruit, vine, and nut crops in California, including variety selection, production practices, site selection, fertilization, pollination, irrigation, harvest, storage, processing, marketing, pest management, and pruning. Laboratory required.

PLSI 105 Weeds and Poisonous Plants

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

The study of the classification, identification, and life cycle of common and poisonous weeds in California production areas and their effects on animals and man including management practices such as prevention, mechanical, biological, and chemical methods. Weed establishment and chemical resistance are also discussed. Laboratory required.

PLSI 106 Fertilizers and Soil Amendments

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

The study of the composition, value, selection, and use of fertilizer materials and soil amendments within the context of soil, plant, and fertilizer relationships, including current application practices. Laboratory required.

PLSI 108 Ag Water Management

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

Irrigation and drainage problems that focus on soil-plant-water relationships, application scheduling, evapotranspiration, and efficiency. Introduction to irrigation equipment and technology to include water measurement, soil moisture measurement, pumping and delivery systems, and various irrigation methods. California water infrastructure, water budget, water rights and legislation.

PLSI 110 Integrated Pest Management

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

The origin, history, and management measures for insect, plant pathogen, weed, and other pests of field crops; pest biology and life cycles are studied to demonstrate the use of various Integrated Pest Management (IPM) techniques for economic crop production. Pesticide regulations, application, formulations, and materials for specific uses are covered. Laboratory required.

Advisory on Recommended Preparation: PLSI 001 or equivalent college course with a minimum grade of C or equivalent knowledge and/or skills as determined by departmental assessment.

PLSI 111 Citrus Production

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

This course is designed to provide a basic understanding of citrus production in California. Emphasis will be placed on production regions, citrus botany and physiology, climactic controls, irrigation, fertilization, pest management, site selection, fruit quality, and rootstock and scion selection.

PLSI 113 Grape Production

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

An introduction to viticulture and grapevine production including cultural practices, history, distribution, biology, anatomy, propagation, cultivated varieties, rootstocks, climate, vineyard practices, and common diseases and pests of grapes.

Advisory on Recommended Preparation: PLSI 001 or equivalent college course with a minimum grade of C.

PLSI 118 Advanced Irrigation

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

Advanced management of irrigation systems. Emphasis placed on plant-soil-water relationships in reference to application, scheduling, water infiltration rates and depth, drainage, salinity measurement and management, chemigation and climate control.