

# PLANT AND SOIL SCIENCE (PLSS)

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## **PLSS 1407** General Plant Sciences **4 SCH (3-2)**

Fundamental principles underlying the selection, growth, development, maintenance, improvement, utilization and harvesting of cultivated plants.

Fee: \$5.00

## **PLSS 2315** Introductory Horticulture **3 SCH (3)**

Fundamental basis of horticulture. Emphasis on home gardening, the uses of horticultural plants and their importance to human civilization. Open to all university students.

## **PLSS 2316** Describing Soils in the Field **3 SCH (3)**

Art and science of soil description using Soil Taxonomy of the United States Department of Agriculture and Intercollegiate Soil Judging. Provides essential experience for those in soil-related careers. Open to all university students.

## **PLSS 3318** General Entomology **3 SCH (3)**

Classification, life histories, habits, and management practices of common local insects and insect pests of plants and animals. Collect, preserve and identify arthropods with emphasis on insects. Prerequisites: PLSS 1407, 3 hours of Biology.

## **PLSS 3319** Landscape Design **3 SCH (2-2)**

Fundamentals of landscape design including historical survey of garden designs, site analysis, development and evaluation of exterior and interior environments of residential, school, commercial and public park areas. Open to all university students.

Fee: \$5.00

## **PLSS 3320** Soil Formation and Class **3 SCH (2-2)**

The genesis and evolution of soil profiles as influenced by soil forming agencies, classification schemes, soil survey techniques and utilization of soil maps in management of the soil. Prerequisite: PLSS 3410.

Fee: \$5.00

## **PLSS 3321** Sustainable Soil Water Manag **3 SCH (3)**

Methods of reclamation, conservation and management of soils based on the kinds of soils and adapted crops.

## **PLSS 3325** Field Crop Production **3 SCH (3)**

Production practices, produce quality, environmental considerations in the production of field crops and forage crops. Prerequisite: PLSS 1407.

## **PLSS 3331** Turf and Urban Plants **3 SCH (3)**

Characteristics, description, identification and landscape uses of ornamental trees, shrubs, vines, flowers, ground-covers and grasses adapted to tropic and subtropical zones of the world. Prerequisite: PLSS 1407.

## **PLSS 3332** Hort Plant Propagation **3 SCH (2-2)**

A study of principles and practices of asexual and sexual propagation of horticultural crops. Prerequisite: PLSS 1407.

Fee: \$5.00

## **PLSS 3334** Weed Management in Crops **3 SCH (2-2)**

Proper selection, mode of action and application of chemicals for proper weed control and management. Prerequisites: 3 semester hours of chemistry, PLSS 1407.

Fee: \$5.00

## **PLSS 3344** Vegetable Crop Production **3 SCH (2-2)**

A study of principles and practices used in commercial production, harvesting, storage and processing of fruit and vegetable crops.

Prerequisite: PLSS 1407.

Fee: \$5.00

## **PLSS 3381** Crop Physiology **3 SCH (3)**

Physiological concepts underlying the practices utilized in crop production systems as related to growth processes and their mechanisms. Prerequisite: PLSS 1407, 3 semester credit hours of biology.

## **PLSS 3410** Principles of Soil Science **4 SCH (3-2)**

Fundamental principles underlying the formation, characteristics and management of soil. Prerequisites: 3 semester hours of Chemistry.

Fee: \$5.00

## **PLSS 3995** Internship (WI) **1-9 SCH (1-9)**

Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and department chair.

## **PLSS 4312** Integrated Pest Management **3 SCH (3)**

Current Management practices used to control agriculture, horticulture, wildlife and animal pests. This includes insects, weeds, plant diseases and nematodes as they affect crop and animal production. Introduction to pesticide groups and their ecological effects. Prerequisites: PLSS 3325 and 3 semester credit hours of biology.

## **PLSS 4313** Landscape Maint and Constr **3 SCH (2-2)**

Grading, drainage and construction of landscaped areas to include cost and bid estimation, soil preparation, transplanting operations, arboriculture, turf management, pest and disease control and general maintenance of landscaped areas. Prerequisite: 3 semester credit hours of Biology or PLSS 1407.

Fee: \$3.00

## **PLSS 4325** Plant Breeding and Genetics **3 SCH (3)**

Methods of plant breeding applied to agronomic and horticultural crops to ultimate development of superior varieties. Practical application of Mendelian genetics in the breeding and improvement of crop plants. Prerequisites: PLSS 1407 and 3 semester credit hours of biology.

## **PLSS 4326** Hort Fruit Crop Production **3 SCH (3)**

Tropical and subtropical climates and physiography related to production and management of tropical and subtropical crops including fruits and vegetables, root and tuber crops, beverage crops, oil and industrial crops, legumes, spices, herbs and medicinal plants. Recent significant development in production technology will be presented. Prerequisite: junior or senior standing or permission of the instructor.

## **PLSS 4327** Soil Water Movement **3 SCH (3)**

The water-related properties of plants and soil, the properties of water and the natural processes that affect the behavior of water in plants. Prerequisite: junior standing.

## **PLSS 4328** Intro Plant Pathology **3 SCH (3)**

Comprehensive study of diseases and arthropod pests of cultivated crop plants with emphasis on symptoms identification, economic importance and control measures. The concept of integrated pest management is discussed. Prerequisite: senior standing.

**PLSS 4329 Soil Health and Productivity 3 SCH (2-2)**

The principles of soil fertility, mechanisms of plant nutrient uptake and plant nutrient requirements. Includes a study of soil fertility management.

Prerequisite: PLSS 3410.

Fee: \$5.00

**PLSS 4331 Greenhouse Crop Production 3 SCH (2-2)**

Commercial production and management of floricultural crops in greenhouses, modern nurseries and other forcing structures. Prerequisite:

PLSS 1407.

Fee: \$5.00

**PLSS 4390 Studies in Plant and Soil Sci 3 SCH (3)**

Material offered to be determined by the needs of the students. Lecture will vary according to the subject needs with each course having three hour credit. May be repeated for credit when the topic changes.

Prerequisites: junior or senior standing.

**PLSS 4395 Probs in Plant and Soil Sci 1-3 SCH (1-3)**

Literature review, laboratory field problem or undergraduate research under direction of a faculty advisor. May be repeated for a total of six semester hours, only three hours may count toward a minor in PLSS.

Prerequisite: approval of supervising professor.