

# PLANT & SOIL SCIENCES (PLSC)

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## **PLSC 1107. Plant Science Laboratory. 1 Hour.**

Laboratory for AGRI 1307.

**Prerequisite:** Concurrent enrollment in AGRI 1307.

## **PLSC 1307. Plant Science. 3 Hours.**

(SH Prior Course ID: AGR 165, AGRI 1307) Basic plant morphology, classification, propagation, and crop improvement are topics discussed along with growth and development of crop plants. An introduction to soils, climate, and plant protection follow with a final overview of the major groups of cultivated plants.

## **PLSC 2375. Turfgrass Science. 3 Hours.**

(SH Prior Course ID: AGR 275); A study of the major turfgrass species grown in the U.S. and throughout much of the world. Explores differences in management, culture, and varietal selection for athletic, ornamental, and utility turfs. Credit 3 (Lec 3/Lab 0).

**Prerequisite:** None.

## **PLSC 2395. Ornamental Plant Identification. 3 Hours.**

Identification, growth characteristics, culture and use of common landscape and greenhouse plants. Materials include trees, shrubs, vines, groundcovers, turf grasses and floriculture crops. Emphasis is placed on temperate region plants.

**Prerequisite:** PLSC 1307.

## **PLSC 2396. Spec Top in Plant&Soil Science. 3 Hours.**

This course will examine special topics/issues in Plant and Soil Science at an introductory level. This course may be repeated up to three times as topics and subject matter change.

## **PLSC 2399. Floral Design. 3 Hours.**

Principles and elements of design illustrated with the use of floral materials; techniques involved in design and construction of floral arrangements; history and utilization of floral art in society.

## **PLSC 3374. Production & Mgt Ornamentals. 3 Hours.**

This course is designed to cover the principles and techniques involved in the production and management of nursery and greenhouse crops including ornamental trees, shrubs, annuals, and perennials. Writing enhanced.

**Prerequisite:** PLSC 1307 and Sophomore standing.

## **PLSC 3379. Turfgrass Culture. 3 Hours.**

Principles of sexual and asexual propagation of major turf species, soils and rooting media, nutrient management, irrigation, pest control, and selection of appropriate cultivars are covered in this course.

**Prerequisite:** PLSC 1307 and Sophomore standing.

## **PLSC 3395. Plant Propagation Techniques. 3 Hours.**

Principles and practices involved in propagation of plants are discussed in detail. Emphasis is placed on sexual and asexual methods of propagation and the biochemical/hormonal factors involved. Propagation techniques of several horticultural crops will be covered and practiced.

**Prerequisite:** PLSC 1307/1107 and Sophomore standing.

## **PLSC 3398. Landscape Design I. 3 Hours.**

This course covers principles, elements, and factors to be considered in preparation, planning, and design of a residential landscape. Emphasis will be placed on the incorporation of plant materials into basic landscape design. Writing enhanced. Prerequisite: PLSC 1307 and Sophomore standing.

## **PLSC 3440. Soil Science. 4 Hours.**

An introduction to the physical, biological, and chemical properties of soils and their relationships to soil formation, soil fertility, soil temperature, soil-plant-water relations, pH and liming, and conservation of soils. Environmental issues are also discussed. Sophomore standing.

**Prerequisite:** PLSC 1307 and CHEM 1306, CHEM 1307, CHEM 1311, or CHEM 1312.

## **PLSC 4320. Fruit & Vegetable Production. 3 Hours.**

This course is a comprehensive study of the fruit and vegetable industry in the United States. Topics of study include climatic requirements, growth characteristics, cultural practices, and pest control strategies. Writing enhanced.

**Prerequisite:** PLSC 1307.

## **PLSC 4330. Soil Fertility Mgt Fertilizers. 3 Hours.**

Principles of soil fertility, water, nutritional, and climatic relationships. Emphasis will be placed on sources of soil nutrients including commercial fertilizers and biological resources. Writing enhanced.

**Prerequisite:** PLSC 3440 and Junior standing.

## **PLSC 4358. Landscape Operations. 3 Hours.**

The students in the course examine the principles and techniques of constructing and managing amenity landscapes. Emphasis is placed on contract documents, specifications of work, plant establishment, management plans, pruning, soil modification, and building materials.

**Prerequisite:** PLSC 1307.

**PLSC 4368. Landscape Design II. 3 Hours.**

This course is a continuation of AGRI 3398. Design skills will be refined as students will experience more variety in design opportunities. Both small residential and larger public spaces will be the subjects of student designs. Effective graphic presentations will be stressed. Installation, maintenance, and management of residential landscapes will also be discussed.

**Prerequisite:** PLSC 1307 and Junior standing.

**PLSC 4369. Special Topic. 3 Hours.**

**PLSC 4370. Forage Crops & Pasture Mgmt. 3 Hours.**

Quality evaluation, adaptation, selection, culture and management of the more important plants used for pasture, hay and silage. Particular attention is given to those species grown commonly throughout the southeastern US. Writing enhanced.

**Prerequisite:** Junior standing.

**PLSC 4372. Sports Turf Management. 3 Hours.**

Facility design and construction, water management, soil modification, and unique management practices commonly applied to golf courses and other sports turfs will be covered. Management of budgets, personnel, equipment maintenance and irrigation scheduling are also covered. Junior standing.

**Prerequisite:** PLSC 1307 and PLSC 3440.

**PLSC 4383. Range Management. 3 Hours.**

With rangelands comprising the majority of lands in the western US, this course deals with forage-animal management topics common to the semi-arid and arid regions of the US. Addresses the unique management requirements of rangelands, the use of government-owned lands, and the competing uses of rangelands for livestock production, wildlife habitat, and recreational areas for humans. Writing enhanced. Junior standing.

**Prerequisite:** PLSC 1307 or BIOL 1411.

**PLSC 4396. Directed Studies in Plant Sci. 3 Hours.**

Arranged professional and developmental learning experiences incorporating a practical application of Plant Soil Science skills and practices. To include internships, individual research and industry studies. Writing enhanced. May be repeated for credit up to six hours.

**Prerequisite:** Sophomore standing.

**PLSC 4397. Integrated Pest Management. 3 Hours.**

A comprehensive review of current cultural, biological, mechanical, and chemical techniques used in managing or controlling agricultural and residential pests. Attention is given to environmental hazards, application methods, and safety precautions in handling and storage of pesticides. Writing enhanced.

**Prerequisite:** AGRI 1307 and Sophomore standing.