Las Positas

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#### **Course Outline for HORT 56**

#### ARBORICULTURE/URBAN FORESTRY

Effective: Fall 2015

#### I. CATALOG DESCRIPTION:

HORT 56 — ARBORICULTURE/URBAN FORESTRY — 3.00 units

Care, maintenance, planting, and pruning of trees, shrubs, and vines are discussed. Specific pruning techniques for ornamental trees, fruit trees, shrubs, roses, and other woody plants are demonstrated. Principles of urban forestry, tree preservation, health, growth characteristics, plant selection, planting, irrigation, fertilization, and damage repair are studied. (8 hours of lab to be scheduled on Saturdays, which may include one or more field trips)

2.50 Units Lecture 0.50 Units Lab

# **Grading Methods:**

Letter or P/NP

#### Discipline:

MIN **Lecture Hours:** 45.00 Lab Hours: 27.00 **Total Hours:** 72.00

- II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1
- III. PREREQUISITE AND/OR ADVISORY SKILLS:
- IV. MEASURABLE OBJECTIVES:

# Upon completion of this course, the student should be able to:

- A. Use knowledge of plant structure and function to describe correct training techniques for young trees
- identify the site needs of selected tree species, and choose the necessary site modification necessary for successful tree installation
- Use knowledge of plant structure and site conditions to choose suitable nursery for trees for specific landscape site
- D. Demonstrate knowledge of plant structure to prune selected trees
  - E. Identify plant defects and potential hazards to choose apropriate repair and maintenance procedures for selected trees

### V. CONTENT:

- A. Study the Plant structure of trees and the functions of their systems
- B. Selection and mofidification of planting sites
- Selection of tree species and cultivars for successful landscape installation
- D. Identify techniques of tree preservation
- E. study nutrient and water management of trees in the landscape
- Learn techniques of pruning of various tree species for health and structural stability
- G. Study methods of preventive maintenance and repair of mature trees

### VI. METHODS OF INSTRUCTION:

- A. Lab activities include pruning, training of young trees, planting and staking.

  B. Projects ie. a research paper about the uses of structural soils in urban forestry
- C. Field Trips -
- D. Lecture

#### VII. TYPICAL ASSIGNMENTS:

- A. Weekly reading assignments in textbook
- B. Prepare tree assesment reports for characteristics, health, and potential hazards of selected trees
- Hands-on pruning practice on various fruit and ornamental trees, shrubs and vines
- D. Hands on pruning and care of roses

# VIII. EVALUATION:

# A. Methods

- 1. Exams/Tests
- Quizzes
- 3. Class Participation
- Home Work
- 5. Lab Activities

#### B. Frequency

- Two written exams (mid-term and final)
   Frequent quizzes (between 6 and 12)
   Daily attendance and active participation will be observed and noted
   One or more homework projects

- IX. TYPICAL TEXTS:
  1. Gilman, Edward, Brian Kempf, Nelda Matheny, and Jim Clark. Structural Pruning. 1st ed., Urban Tree Foundation, 2013.
  2. The Editors of Susnset Magazine. Sunset Western Garden Book of Landscaping. 1st ed., Sunset Publishing, 2014.

- X. OTHER MATERIALS REQUIRED OF STUDENTS:
   A. Appropriate sturdy footwear, and personal protective equipment, such as ear plugs, gloves, and safety glasses must be worn during certain lab activities, such as motorized equipment operation.
   B. Access to internet, in order to utilize online resource material and blackboard.