

HORT 21: PLANT MATERIALS I

Foothill College Course Outline of Record

Heading	Value
Units:	3
Hours:	3 lecture per week (36 total per quarter)
Advisory:	Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51A.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU/UC
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Identify trees presented by botanical and common names.
- Compare and contrast tree features and cultural need.

Description

Identification, taxonomy, habits of growth, cultural and environmental requirements of plants grown in California. Emphasis on the identification, use and maintenance of plants commonly used in the landscaping and gardening industry. Plants are observed on campus and at off-site locations. This is the first of two plants courses covering the master plant list.

Course Objectives

The student will be able to:

- List the botanical and common names, appearance, culture, adaptation and use of California trees, shrubs and palms as indicated by program master list.
- Correctly identify listed plants presented by botanical and common names.
- Design with listed plants, selecting select plants with proper form, color, texture and line, cultural needs, use and conform to specific landscape needs.
- Define horticultural and botanical terms and use them to identify plant parts and characteristics.
- Describe the importance of soil and ecology of different plants.
- Demonstrate knowledge of the binomial nomenclature utilized in the identification plants.
- Describe plant growth habits and requirements.
- Recognize the variety of ways plants are utilized by different cultures around the world.
- Use keys to identify plants.
- Create a plant key.
- Use a computer program to select plants for various landscape and garden situations.

Course Content

- List plants selected for the class by name, appearance, culture, use and adaptation, including:
 - Trees

- Shrubs
- Palms
- Correctly identify listed plant:
 - By common name
 - By genus, species and, if applicable, variety or cultivar
- Using written and design materials, compare, contrast and select plants in landscape and garden applications by:
 - Plant form, color, texture and line
 - Common cultural needs
 - Esthetic and functional uses
 - Plants for specific needs
- Define terms used to identify plant parts and characteristics, including:
 - Leaf
 - Bark
 - Flower
 - Fruit
 - Deciduous
 - Evergreen
 - Monocot
 - Dicot
- Describe soil and ecological conditions for plants
 - Preferred soil types for growth
 - Soil biology necessary for growth
 - Native habitats for plants
 - Native plants to bay area region
- Describe binomial nomenclature and its use for identification of plants
 - General nomenclature
 - Genus
 - Species
 - Cultivar and variety
- Describe habits and requirements for plant growth
 - Soil requirements
 - Light requirements
 - Fertility requirements
 - Moisture requirements
 - Exposure
 - Pest issues
 - Poisonous
 - Edible
 - Plant size
 - Plant characteristics
- Describe the cultural uses of plants
 - Native American uses
 - Medicinal
 - Ceremonial
 - Edible
 - Non-Native American uses
 - Edible
 - Medicinal
- Identify plants using various ID keys
 - Yoked key
 - Photographic key
 - Twig identification
 - Leaf identification
 - Flower identification
- Develop a key for personal use
 - Photographs of plant
 - Notes on plant characteristics
- Use computer software to select plants for various uses
 - Vectorworks CADD plant library
 - Plantmaster

3. Horticopia

Lab Content

Not applicable.

Special Facilities and/or Equipment

Horticultural classroom with multi-media projection system; campus and external arboretum to view plants.

Method(s) of Evaluation

- A. Weekly identification quizzes
- B. Written midterm exam on use of plants in design situations
- C. Written final exam on use of plants in design situations
- D. Written report on use of listed plants in the California landscape

Method(s) of Instruction

- A. Field observation of plants.
- B. Lectures on plant characteristics.
- C. Discussions regarding use and care of plants.
- D. Read assigned reading activities.
- E. Perform self-guided research.

Representative Text(s) and Other Materials

Sunset. Sunset Western Garden Book. 9th ed. Menlo Park, CA: Sunset Publishing Company, 2017.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- A. Reading assignments will include researching up to 15 plant species per week (approximately 20 pages of reading) in representative texts. Reading assignments will also include review of Foothill Horticulture Plant Database.
- B. Writing assignments include essay exams at midterm and final and a report of use of California plant material.

Discipline(s)

Ornamental Horticulture