

HORT 22: PLANT MATERIALS II

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2023
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 51B.
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 shrubs presented by botanical and common names.
- Compare and contrast shrub features and cultural need.

Description

Identification, taxonomy, habits of growth, and 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 second of two plant courses covering the master plant list.

Course Objectives

The student will be able to:

1. List the botanical and common names, appearance, culture, adaptation, and use of California trees, shrubs, ground covers, vines, perennials, annuals, and interior plants, selected by faculty from program master list
2. Correctly identify all listed plants presented by botanical and common names
3. Design landscapes based on plant features, uses, and cultural needs in different landscape and garden applications and select plants that conform to specific landscape needs
4. Define horticultural and botanical terms and use them to identify plant parts and characteristics
5. Describe the importance of soil and ecology of different plants
6. Describe the binomial nomenclature utilized in the identification plants
7. Describe plant growth habits and requirements
8. Recognize the variety of ways plants are utilized by different cultures around the world
9. Use keys to identify plants
10. Create a plant key

11. Use a computer program to select plants for various landscape and garden situations

Course Content

1. List plants selected for the class by name, appearance, use, culture, and adaption, including:
 - a. Trees
 - b. Shrubs
 - c. Ground covers
 - d. Vines
 - e. Perennials
 - f. Annuals
 - g. Indoor plants
2. Correctly identify all listed plants:
 - a. By common name
 - b. By genus, species, and, if applicable, variety or cultivar
3. Design landscapes in landscape and garden applications by:
 - a. Plant form, color, texture, and line
 - b. Common cultural needs
 - c. Aesthetic and functional uses
 - d. Plants to address specific landscape needs
4. Define terms used to identify plant parts and characteristics, including:
 - a. Leaf
 - b. Bark
 - c. Flower
 - d. Fruit
 - e. Deciduous
 - f. Evergreen
 - g. Monocot
 - h. Dicot
5. Describe soil and ecological conditions for plants
 - a. Preferred soil types for growth
 - b. Soil biology necessary for growth
 - c. Native habitats for plants
 - d. Native plants to bay area region
6. Describe binomial nomenclature and its use for identification of plants
 - a. General nomenclature
 - b. Genus
 - c. Species
 - d. Cultivar and variety
7. Identify plant growth and habits and requirements
 - a. Soil requirements
 - b. Light requirements
 - c. Fertility requirements
 - d. Moisture requirements
 - e. Exposure
 - f. Pest issues
 - g. Poisonous
 - h. Edible
 - i. Plant size
 - j. Plant characteristics
8. Describe the cultural uses of plants

- a. Native American uses
 - i. Medicinal
 - ii. Ceremonial
 - iii. Edible
 - b. Non-Native American uses
 - i. Edible
 - ii. Medicinal
- 9. Identify plants using various ID keys
 - a. Yoked key
 - b. Photographic key
 - c. Twig identification
 - d. Leaf identification
 - e. Flower identification
- 10. Develop a key for personal use
 - a. Photographs of plant
 - b. Notes on plant characteristics
- 11. Use computer software to select plants for various uses
 - a. Vectorworks CADD plant library
 - b. Plantmaster
 - c. Hortycopia

Lab Content

Not applicable.

Special Facilities and/or Equipment

1. Horticultural classroom with multi-media projection system.
2. On-campus and off-campus arboretums to view plants.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Weekly identification quizzes
 Written midterm exam on use of plants in design situations
 Written final exam on use of plants in design situations
 Written report on use of plants covered in class in the California landscape

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Field observation of plants
 Lectures on plant characteristics
 Discussions regarding use and care of plants

Representative Text(s) and Other Materials

Dirr, Michael A.. Manual of Woody Landscape Plants, 6th ed.. 2009.

This text is considered a standard of the industry even though it is older than five years.

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

1. Reading assignments include:
 - a. Researching up to 15 plant species per week (approximately 20 pages of reading) in representative texts
 - b. Review of Foothill Horticulture Plant Database
2. Writing assignments include:
 - a. Essay exams at midterm and final
 - b. Report on the use of California plants

Discipline(s)

Ornamental Horticulture