

HORT 90L: PLANT PROPAGATION: BASIC SKILLS

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	1
Hours:	12 lecture per quarter (12 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- Exhibit understanding of the basic techniques used in plant propagation.
- Demonstrate ability to utilize various propagation techniques in nursery and greenhouse environments.

Description

Introduction to propagation of plants by sexual and asexual methods. Seeding, cutting, grafting, division of specialized structures, and micro-propagation discussed and demonstrated. Discussions include growing media, fertilizers, hormones, and other plant supplements.

Course Objectives

The student will be able to:

- Exhibit an understanding of the basic techniques used in plant propagation.
- List basic terminology associated with plant propagation.
- Demonstrate the ability to utilize various propagation techniques in nursery and greenhouse environments.
- Describe media and products used for propagation.
- Work in a sterile environment.
- Manage pests.
- Transplant starts.
- Recognize the variety of ways plant propagation techniques are utilized by different cultures around the world.

Course Content

- Introduction to propagation of plants
 - Sexual propagation techniques
 - Asexual propagation techniques
 - Hybridization versus cultivation
- Terminology associated with plant propagation
- Practical application of propagation techniques
 - Seeding
 - Cutting
 - Grafting
 - Budding
 - Division of specialized structures
 - Micro-propagation

- Media and supplements
 - Growing media
 - Fertilizers
 - Hormones
 - Plant supplements (vitamins, micro-nutrients, etc.)
- Techniques for sterile working environments
- Dealing with pests and diseases
- Transplanting
- Cultural use of propagation techniques around the world

Lab Content

Not applicable.

Special Facilities and/or Equipment

- Horticultural laboratory, greenhouse, nursery, and related horticultural facilities and equipment.
- Students provide seeds, pruning shears with sheath, work boots, leather gloves and clothing for field work.

Method(s) of Evaluation

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

- Student field demonstration of concepts
- Plant propagation and production project
- Preparation of propagation schedules and crop planning

Method(s) of Instruction

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

- Lecture
- Demonstrations
- Discussions

Representative Text(s) and Other Materials

Squire, David. *Home Gardener's Propagation*. 2016.

Kester, Dale, Fred Davies, Robert Genevet, and Hudson Hartmann. *Hartmann and Kesters's Plant Propagation: Principles and Practices, 8th ed.*. 2011.

Although one (or more) of the above texts is older than the suggested "5 years or newer" standard, it remains a seminal text in this area of study.

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

- Reading assignments will include reading approximately 20 pages per week from the assigned text.
- There are no writing assignments for this course.

Discipline(s)

Ornamental Horticulture