# HORT 90X: WATER CONSERVATION IN LANDSCAPE DESIGN

# **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**

- · Describe characteristics associated with drought tolerant plants.
- Discuss methods of auditing water use in gardens.

# Description

Applies principles of water conservation to landscape design and construction projects. Landscape designs which incorporate waterconserving principles strive to limit the need for water and strike a balance between softscape and hardscape elements.

# **Course Objectives**

The student will be able to:

A. Exhibit an understanding of water conservation concepts and terminology as they apply to landscapes.

B. Design residential landscapes.

C. Describe characteristics associated with drought tolerant and low water plants.

D. Demonstrate an understanding of the process used for irrigation of drought tolerant landscapes.

E. Discuss methods for constructing landscape elements.

#### **Course Content**

A. Principles of water conservation in landscaping

- 1. Water conserving trends in the landscape design industry
- 2. Planning for drought conditions in the landscape
- B. Landscape design
- 1. Hardscape design issues and criteria
- 2. Softscape design issues and criteria
- 3. Learning from other cultures
- C. Plant material selection
- 1. Native/indigenous plants
- 2. Drought tolerant plants (flora from Mediterranean climates)
- 3. Appropriate use of non-water conserving plants
- D. Irrigation systems
- 1. Drip irrigation
- 2. Spray irrigation
- 3. Water auditing

E. Landscape construction issues and criteria

#### Lab Content

Not applicable.

# **Special Facilities and/or Equipment**

A. Design laboratory, construction field lab, and related horticultural facilities and equipment.

B. Students provide 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:

Project (irrigation, planting, or landscape construction project or study relating to the principles of water conservation) Design of a residential landscape using low water plants

# 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**

Tallamy, Douglas. Nature's Best Hope. 2020.

Perry, Robert C.. Landscape Plants for California Gardens. 2010.

Although the Perry text 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

A. Reading assignments include reading approximately 20 pages per week from the assigned text (two hours).

# Discipline(s)

**Ornamental Horticulture**