

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Ornamental Horticulture 102 – Xeriscape: Water Conservation in the Landscape

2 hours lecture, 2 units

Catalog Description

Water management principles and practices as applied to the landscape. Topics include plant selection, landscape design principles for water conservation, irrigation system selection and management, soil preparation and management, and current topics and issues of California and United States water conservation efforts.

Prerequisite

None

Course Content

- 1) Water resources in California
- 2) Xeriscape: definition, seven steps, implementation
- 3) Landscape styles and plants for low water use landscapes
- 4) Retrofitting the existing landscape
- 5) Irrigation systems types and applicable uses
- 6) Landscape water use ordinances

Course Objectives

Students will be able to:

- 1) Integrate the seven steps of xeriscape required in landscape water conservation and determine appropriate utilization for water conservation landscapes.
- 2) Understand the effects of different landscape styles on water use of the landscape.
- 3) Understand the uses of different irrigation systems in regards to water conservation.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, including exams, Written assignments, and class projects.

- 1) Quizzes and exams that measure students' ability to:
 - a. Evaluate irrigation systems for appropriate use with available water sources within guidelines for water conservation.
 - b. Demonstrate the ability to utilize appropriate principles of xeriscape for water conservation.
- 2) Exercises or assignments that require students to demonstrate the ability to:
 - a. Analyze landscapes for appropriate use of natives and exotics in water conserving landscapes.
 - b. Assess current and future potential legal, political and regulatory policies and their affect on water use in the landscape.

Special Materials Required of Student

None

Minimum Instructional Facilities

Smart classroom

Method of Instruction

- 1) Lecture
- 2) Films
- 3) Guest speakers
- 4) Field trips
- 5) Site visit to Water Conservation Garden at Cuyamaca College

Out-of-Class Assignments

- 1) **Reading:** review course materials, online resources, website content, and other course related multimedia.
- 2) **Writing:** waterwise landscape study and report.
- 3) **Other:** N/A.

Texts and References

- 1) Required (representative example): Noelle Johnson, *Dry Climate Gardening*. Cool Springs Press, 2023
- 2) Supplemental: None

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Describe the seven steps of xeriscape in landscape water conservation as it relates to residential and commercial landscape designs and maintenance.
- 2) Describe the effects of different landscape styles on water use of the landscape.
- 3) Identify the uses of different irrigation systems in regards to water conservation.