HORT 401A: LANDSCAPE CERTIFICATION: COMMON CORE

Foothill College Course Outline of Record

Heading	Value
Units:	0
Hours:	24 lecture per quarter (24 total per quarter)
Degree & Credit Status:	Non-Degree-Applicable Non-Credit Course
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Non-Credit Course (Receives no Grade)
Repeatability:	Unlimited Repeatability

Student Learning Outcomes

- · Perform basic landscape related math operations.
- · Describe basic safety procedures for landscaping

Description

General subjects related to certification with the California Landscape Contractors Association. Includes horticultural math, plant identification, workplace safety, plant reading, plant sensitivity, grading and sodding, irrigation identification, controller programming, lateral repair and head adjustments and truck and trailer operation. This course is intended for students seeking Certified Landscape Technician certification.

Course Objectives

The student will be able to:

- A. Identify horticultural plant material.
- B. Describe plant sensitivity to placement.
- C. Identify workplace safety procedures and equipment.
- D. Grade and sod a site.
- E. Identify irrigation components.
- F. Program an irrigation controller.
- G. Repair irrigation lateral and adjust irrigation heads.
- H. Compute basic horticultural math problems.
- I. Comprehend operation of horticultural equipment.

Course Content

- A. Identify horticultural plant material.
- 1. Identify deciduous and evergreen trees.
- 2. Identify deciduous and evergreen shrubs.
- 3. Identify perennials.
- 4. Identify vines.
- 5. Identify ground covers.
- 6. Identify ornamental grasses.
- B. Describe plant sensitivity to placement.
- 1. Soil textures and structures.
- 2. Soil fertility and pH.
- 3. Solar exposure.
- 4. Microclimate.

- 5. Moisture conditions.
- C. Identify workplace safety procedures and equipment.
- 1. Demonstrate utilization of personal protective devices.
- 2. Describe safety and emergency situations.
- 3. Identify hazardous situations.
- D. Grade and sod a site.
- 1. Describe steps to prepare a site for grading.
- a. Describe how to remove and store topsoil.
- 2. Level a site to required elevations.
- 3. Restore topsoil and level to proper subgrade.
- 4. Lay sod.
- 5. Water and secure sod.
- E. Identify irrigation components.
- 1. Describe irrigation system components.
- 2. Describe difference between spray and drip systems.
- F. Program an irrigation controller.
- 1. Set controller parameters.
- 2. Program individual zones.
- 3. Demonstrate controller operation.
- G. Describe repair of irrigation lateral and adjust irrigation heads.
- 1. Locate problems with irrigation piping.
- 2. Correct problems with irrigation piping.
- 3. Identify incorrect irrigation head placement and orientation.
- 4. Place irrigation heads in correct alignment.
- H. Compute basic horticultural math problems.
- 1. Perform linear calculations.
- 2. Perform perimeter calculations.
- 3. Perform area calculations.
- 4. Perform volume calculations.
- 5. Convert material weights.
- I. Describe the operation of horticulture equipment.
- 1. Tractor and skidsteer.
- 2. Hook-up and back a trailer.
- 3. How to start and operate small gas powered engine equipment.

Lab Content

Not applicable.

Special Facilities and/or Equipment

- A. Classroom with multi-media equipment.
- B. Open area to observe equipment operation.
- C. Arboretum with species from plant list.
- D. Horticulture equipment and vehicles.

Method(s) of Evaluation

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

- A. Objective written exams.
- B. Presentations on technical topics.
- C. Written reports on horticultural topics.

Method(s) of Instruction

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

- A. Lecture from instructor.
- B. Lecture from guest speakers.
- C. Demonstrations of technical topics.
- D. Discussion with groups and students in class

E. Observation of participatory demonstrations.

Representative Text(s) and Other Materials

<u>Landscape Training Manual for Installation.</u> Professional Landcare Network (PLANET), 2017.

Study manual required for training courses.

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

- A. Reading 20-30 pages per week from assigned text.
- B. Reading handouts and website material.
- C. Web and library research.
- D. Writing reports on horticultural topics.

Discipline(s)

Ornamental Horticulture