

HORT 401E: LANDSCAPE CERTIFICATION: TURF MANAGEMENT

Foothill College Course Outline of Record

Heading	Value
Units:	0
Hours:	12 lecture per quarter (12 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

- Describe proper turf maintenance procedures
- Describe proper turf irrigation practices.

Description

General subjects related to certification with the California Landscape Contractors Association. Topics include irrigation principles, irrigation components, turfgrass principles, performing turfgrass calculations, basic controller programming, lateral repair and head adjustment, safe operation of power blower, 21" mower, intermediate walk-behind mower, riding mower, edger and trimmer, aerator, and understanding of turf fertilizer. This course is intended for students seeking Certified Landscape Technician certification.

Course Objectives

The student will be able to:

- Describe turfgrass maintenance principles.
- Perform turfgrass maintenance calculations.
- Apply turf fertilizer.
- Describe irrigation principles.
- Identify irrigation components.
- Describe controller programming.
- Repair laterals and adjust heads.
- Perform safe operation of turf equipment.

Course Content

- Turfgrass maintenance principles.
 - Describe the goals of a turfgrass installation.
 - Identify the maintenance techniques required for turf.
 - Describe the schedule of turfgrass maintenance techniques.
- Turfgrass maintenance calculations.
 - Perform linear, perimeter, area and volume calculations.
 - Calculate materials quantities for turf applications.
 - Fertilizer.
 - Topdressing.
 - Seed and sod.
 - Turf fertilizer.

- Identify turf nutrient requirements.
- Describe turf fertilizers.
- Select appropriate fertilizer for turf use.
- Irrigation principles.
 - Describe the purpose of irrigation.
 - Identify the types of irrigation.
 - Match irrigation types to plant needs.
 - Describe the methods behind water conservation.
- Irrigation components.
 - Identify irrigation supply and distribution lines.
 - Identify irrigation control equipment.
 - Identify irrigation valves and heads.
- Controller programming.
 - Create irrigation zones.
 - Set irrigation times for zones.
 - Set irrigation cycles for zones.
- Lateral repair and head adjustment.
 - Identify damage and leading irrigation laterals.
 - Repair irrigation laterals.
 - Identify misdirected irrigation heads.
 - Adjust irrigation heads to proper locations.
- Safe operation of turf equipment.
 - Describe types of equipment used to maintain turf.
 - Describe the safe operation of:
 - Power blower.
 - 21" mower.
 - Intermediate walk behind mower.
 - Edger and trimmer.
 - Aerator.

Lab Content

Not applicable.

Special Facilities and/or Equipment

- Classroom with multi-media equipment.
- Outdoor area with open space to view equipment operation.
- Horticulture equipment and vehicles.

Method(s) of Evaluation

- Objective written exams.
- Descriptions of field practices.
- Written reports on horticultural topics.

Method(s) of Instruction

- Lecture from instructor.
- Lecture from guest speakers.
- Observe participatory demonstrations.
- Discussion with groups and students in class.

Representative Text(s) and Other Materials

Landscape Training Manual for Installation. 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 10-25 pages per week from assigned text.
- B. Reading handouts and website material.
- C. Web and library research.
- D. Writing specifications for turf maintenance.

Discipline(s)

Ornamental Horticulture