

# HORT 52G: HORTICULTURAL PRACTICES: TURFGRASS MANAGEMENT

## Foothill College Course Outline of Record

Heading	Value
<b>Effective Term:</b>	Summer 2022
<b>Units:</b>	3
<b>Hours:</b>	2 lecture, 3 laboratory per week (60 total per quarter)
<b>Advisory:</b>	Completion of or concurrent enrollment in HORT 15 strongly recommended.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

## Student Learning Outcomes

- Identify common turf grasses.
- Demonstrate methods of installing a lawn by sodding or seeding.

## Description

Turf identification and planting techniques. Turf maintenance and management practices for golf courses, athletic fields, parks, and areas surrounding commercial buildings and private residences. Examination of soils, irrigation, weeds, diseases and pests as they pertain to turfgrass.

## Course Objectives

The student will be able to:

1. Explain the various aspects of the turf industry and their importance in the landscape.
2. Correctly identify common turfgrasses.
3. Correctly identify turf problems and their controls.
4. Demonstrate practice skills in turf management such as mowing, edging, fertilizing, and pest control.
5. Demonstrate skills in the methods of installing a turfgrass.
6. Recognize the variety of ways turf is utilized by different cultures around the world.

## Course Content

1. Introduction to turf management (Lec)
  - a. Definition of turf
  - b. Uses of turf in the landscape
  - c. Issues with turf and turf alternatives
2. Identification of common and special purpose turfgrasses (Lab)
  - a. Cool season grasses
  - b. Warm season grasses
  - c. Reduced maintenance grasses
3. Control of pests in turfgrasses (Lec)

- a. Weed identification and control
  - b. Insect identification and control
  - c. Disease identification and control
4. Managing turf (Lec and Lab)
    - a. Irrigation systems
    - b. Mowing, edging
    - c. Aeration, vertical cutting renovation
    - d. Top dressing and fertilization
  5. Turf installation (Lec and Lab)
    - a. Soil preparation
    - b. Drainage
    - c. Seeding
    - d. Sodding
    - e. Sprigs
    - f. Plugs
  6. The use of turf from a global perspective (Lec)

## Lab Content

1. Identification of turf species
2. Turf cultural practices
  - a. Mowing
  - b. Fertilization
  - c. Aeration
  - d. Verticutting
  - e. Edging
3. Turf cultural schedules
4. Requirements of turf in special uses
5. Turf installation
  - a. Seeding a lawn
  - b. Sodding a lawn
6. Pest identification
  - a. Weed identification
  - b. Insect identification
  - c. Disease identification

## Special Facilities and/or Equipment

1. Horticultural laboratory, greenhouse, and related horticultural facilities and equipment.
2. Students provide pruning shears with sheath, work boots, leather gloves and clothing for fieldwork.
3. When taught online, on-going access to computer with email and internet access.

## Method(s) of Evaluation

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

Midterm examination  
Term project  
Laboratory field work  
Final examination

## Method(s) of Instruction

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

Lectures  
Discussions  
Lab activities  
Guest speakers  
Assigned reading activities  
Self-guided research

## **Representative Text(s) and Other Materials**

Emmons, Robert, and Frank Rossi. Turfgrass Science and Management, 5th ed.. 2015.

Although this 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**

1. Reading assignments will include reading approximately 30-50 pages per week from assigned text. Supplemental reading will be provided in hand-out form or through reference to online resources
2. Writing assignments include:
  - a. Topical white papers
3. Other:
  - a. Lectures will address reading topics and experiences of instructor. Classroom discussion and demonstrations in support of lecture topics will be provided
  - b. Guest speakers from industry will provide supplemental lecture and demonstration

## **Discipline(s)**

Ornamental Horticulture