

*Lecture Contact Hours: 32-36; Outside-of-Class Hours: 64-72;
Laboratory Contact Hours: 48-54; Outside-of-Class Hours: 0;
Total Student Learning Hours: 144-162*

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Ornamental Horticulture 190 - Business Management for Turf and Horticulture

2 hours lecture, 2 units

3 hours lab, 1 unit

Total units: 3

Catalog Description

In-depth study of developing and managing comprehensive fertilizer and pest control programs, including accurate cost calculations and effective implementation strategies. Turfgrass identification is covered. Students will gain practical experience in budgeting, forecasting, and managing financial resources for turf and landscape operations, preparing them for leadership roles in the green industry.

Prerequisite

None

Course Content

- 1) Lecture:
 - a. Budget development and management for green industry
 - b. Comprehensive fertilizer program development including cost per application and cost comparisons
 - c. Comprehensive pest and disease control program development including cost comparisons of different applications
 - d. Managing financial resources in turf and horticulture
 - e. Turfgrass identification
 - f. Forecasting and long-term business planning
 - g. Accurate cost calculations for nitrogen application
- 2) Lab:
 - a. Turf grass identification
 - b. Field trips to golf, turf, and horticulture operations in San Diego County
 - c. Fertilizer application and turf maintenance
 - d. Turf management practices on golf courses, sports fields, and in public areas
 - e. Turf management practices for the landscape contractor
 - f. Business practices and management considerations for profitable operations

Course Objectives

Students will be able to:

- 1) Identify the important turf grasses of Southern California.
- 2) Demonstrate the proper cultural practices for the above grasses and ground covers.
- 3) Identify the important diseases and pests and determine their control.
- 4) Identify the economically important weeds in California.
- 5) Demonstrate the proper use and maintenance of common turf equipment.
- 6) Select alternate ground covers in place of turf.
- 7) Explain turf management practices for a variety of locations and contexts.
- 8) Apply budget development and management strategies for green industry.
- 9) Develop comprehensive fertilizer programs, including cost per application and cost comparisons.
- 10) Manage financial resource in turf and horticulture.

- 11) Apply forecasting and long-term business planning strategies
- 12) Determine accurate cost calculations for nitrogen application.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in the subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Quizzes, exams, final exam, presentations, and lab assignments which measure the student's ability to:
 - a. Build, programs for fertilizer and pesticide applications and forecast costs for organizational profitability.
 - b. Perform soil preparation, planting, fertilizing and maintenance of common and special turf grasses and other horticultural plantings.
 - c. Recommend programs to maintain healthy turf and horticulture operations that stay within budget.

Special Materials Required of Student

None

Minimum Instructional Facilities

- 1) Turf test plots
- 2) Smart classroom
- 3) Turf and landscape equipment: reel mower, rotary mower, aerator, verticut mower, spreaders, and edgers
- 4) Pesticide and fertilizer application equipment, and rototiller
- 5) Electric nursery cart

Method of Instruction

Lecture and demonstration

Out-of-Class Assignments

- 1) **Reading:** lecture notes; course materials; textbook chapters; articles; books; manuals; content on websites.
- 2) **Writing:** assignment drafts; summaries; presentations; content for projects.
- 3) **Other:** exercises and projects using information from class about business management.

Texts and References

- 1) Required (representative examples):
 - a. Mariotti, Entrepreneurship: Starting and Operating A Small Business, 4th edition. Pearson, 2021.
 - b. Turgeon, A. J. *Turf Grass Management*. 10th edition, 2019.
- 2) Supplemental:
 - a. Smith, K. L. *Ortho's All About Ground Covers*. Ortho Books, 2001.
 - b. Emmons, Robert and Rossi, Frank, *Turfgrass Science and Management*. 5th Edition, 2015. Cengage Learning

Exit Skills

Students having successfully completed this course exit with the following skills, competencies and/or knowledge:

- 1) Identify the important turf grasses and of Southern California.
- 2) Develop fertilizer and pesticide programs that take budgets into account
- 3) Forecast chemical and fertilizer needs for horticultural operations including turf and golf areas

- 4) Budget, forecast, and manage financial resources for profitable turf and horticulture operations.

Student Learning Outcomes

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

- 1) Identify the important turf grasses and of Southern California.
- 2) Develop fertilizer and pesticide programs that take budgets and profitability into account.
- 3) Communicate chemical programs to stakeholders in a professional and clear manner to encourage adoption.