

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

EH 28 - Turfgrass Management and Equipment

3 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level IV; English Level III; Math Level II

Transfer Status: CSU

34 hours Lecture

51 hours Lab

This course is an introduction to establishing, maintaining and managing turfgrasses for sports athletic fields, golf courses, parks, cemeteries, and commercial and residential lawns. Emphasis is placed on identification of various turfgrass species, installation of proper irrigation, environmental requirements, and maintenance practices.

II. OBJECTIVES

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

- A. Use appropriate terminology used in turfgrass management and production.
- B. Identify common warm and cool season turfgrass species, their uses and substitutes for turfgrasses.
- C. Properly prepare a site for planting.
- D. Describe the criteria for mowing cool and warm season grasses.
- E. Evaluate nutrient and moisture needs of common turfgrasses.
- F. Evaluate the need for soil and turf aerification, and how to correct associated problems.
- G. Explain the differences between, and advantages of, hydro seeding, drill seeding, and top seeding.
- H. Outline a control procedure for insects, diseases and weeds.
- I. Select, operate and maintain turf equipment safely.
- J. Formulate and implement a turfgrass management plan including sports and golf course turf.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Introduction to Turf Industry	2.00
2. Specialized Uses of Turfgrass	3.00
3. Selection of Turfgrass	3.00
4. Propagation of Turfgrass	3.00
5. Identification of Turf Species	4.00
6. Ground Covers--Turf Substitutes	3.00
7. Mowing, Aerification, Verti-cutting, and De-thatching	3.00
8. Fertilizing	3.00
9. Irrigation	2.00
10. Renovation and Over-seeding	3.00
11. Over-seeding	2.00
12. Pests, Diseases and Weeds	3.00

Total Hours 34.00

Lab

<u>Topics</u>	<u>Hours</u>
1. Selection of Turfgrass	3.00
2. Propagation of Turfgrass	3.00
3. Identification of Turf Species	6.00
4. Ground Covers--Turf Substitutes	3.00
5. Mowing	3.00
6. Fertilizing	3.00
7. Irrigation	3.00
8. Verti-cutting	3.00
9. Aerification	3.00
10. De-thatching	3.00
11. Renovation	3.00
12. Over-seeding	3.00
13. Reseeding	3.00
14. Pests, Diseases and Weeds	9.00
Total Hours	51.00

IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Instructor Demonstrations
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Lab Activities

V. METHODS OF EVALUATION

- A. Exams/Tests
- B. Quizzes
- C. Portfolios
- D. Class participation
- E. Lab Projects

VI. EXAMPLES OF ASSIGNMENTS

- A. Reading Assignments
 - 1. Locate and read an article about common turfgrass equipment used on a golf course. Be prepared to share your findings with the class.
 - 2. Read the article provided by the instructor on aerating of turfgrasses and be prepared to discuss in class.
- B. Writing Assignments
 - 1. Write a 2 page paper relating to preparation and management of soil for seed or sod installation. Present your findings in class.
 - 2. Write a 2-3 page paper on 6 common grasses identifying the management of each. Be prepared to discuss your paper in class.
- C. Out-of-Class Assignments
 - 1. Visit a garden center and survey the common varieties of seeds available for establishing a

- new lawn. Submit your findings to your instructor.
2. Evaluate 6 turfgrass areas from 6 different homes in your community and identify management practices that need improvement. Present your findings to the class.

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

- A. Emmons, Robert. Turfgrass Science and Management. 5th Edition. McMillan, 2012.

Materials Other Than Textbooks:

- A. Appropriate clothing for spring weather, a water bottle and field notebook.

Created/Revised by: Jared Wilmarth

Date: 02/23/2015