

Course Outline of Record

1. Course Code: AGEH-004
2.
 - a. Long Course Title: Turfgrass Management
 - b. Short Course Title: TURFGRASS MANAGEMENT
3.
 - a. Catalog Course Description:
 This course introduces the basic turfgrass principles used in the maintenance of turfgrass areas. It covers the major factors in turfgrass management which control the quality of grass. Emphasis is placed on management practices used to produce a good turfgrass area in a desert environment.
 - b. Class Schedule Course Description:
 This course introduces the basic turfgrass principles used in the maintenance of turfgrass areas. It covers the major factors in turfgrass management in the desert areas.
 - c. Semester Cycle (if applicable): N/A
 - d. Name of Approved Program(s):
 - ENVIRONMENTAL HORTICULTURE Certificate of Achievement
 - ENVIRONMENTAL HORTICULTURE AS Degree for Employment Preparation
 - TURFGRASS MANAGEMENT AS Degree for Employment Preparation
 - TURFGRASS MANAGEMENT Certificate of Achievement
4. Total Units: 2.00 Total Semester Hrs: 36.00
 Lecture Units: 2 Semester Lecture Hrs: 36.00
 Lab Units: 0 Semester Lab Hrs: 0
 Class Size Maximum: 26 Allow Audit: No
 Repeatability No Repeats Allowed
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:
Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)
N/A
6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
 - a. Nick Christians (2011). *Fundamentals of Turfgrass Management* (4th/e). Hoboken, New Jersey Wiley Publishing. ISBN: -9780470S8731
 College Level: Yes
 Flesch-Kincaid reading level: 12
7. Entrance Skills: *Before entering the course students must be able:*

8. Course Content and Scope:

Lecture:

1. Turfgrass Industry
 1. History of the Turfgrass Industry
 2. Why Turfgrasses Are So Popular
 3. Career Opportunities
 4. The Turfgrass Manager
2. Introduction to Turfgrasses
 1. Classification
 2. Plant Growth
 3. Plant Structures
 4. Measuring Turf quality
 5. Levels of Maintenance

3. Warm and Cool Season Grasses
 1. Use of Cool Season Grasses in the Warm Season Zone
 2. Turfgrass Selection
4. Soils
 1. Soil Modification
 2. Soil Chemistry
 3. Soil Testing
5. Establishment
6. Fertilization
7. Mowing
 1. Water and Irrigation
 2. Turfgrass and Water
 3. Soil and Water
 4. Irrigation
 5. Irrigation Systems
 6. Water Useage
 7. Wetting Agents
8. Pesticides
9. Weeds
 1. Types of Weeds
 2. Herbicides
 3. Controlling Weeds
10. Insects
 1. Root-Feeding Insects
 2. Leaf and Stem Feeders
 3. Other Insect Pests
 4. Control
11. Turfgrass Diseases
 1. Fungal Pathogens
 2. Disease Identification
 3. Disease Control
 4. Other Types of Pathogens
12. Integrated Pest Management
13. Other Turfgrass Problems
 1. Shade
 2. Soil Compaction
 3. Thatch
14. Improving Unsatisfactory Turf
15. Lawns and Other Turf Areas
 1. Lawns
 2. Parks
 3. Cemeteries
 4. Utility turf
 5. Athletic Fields
 6. Sod Farms
 7. Seed Production
16. Turf Calculations

Lab: *(if the "Lab Hours" is greater than zero this is required)*

9. Course Student Learning Outcomes:

1.
The student will be able to explain the major factors in turfgrass management which control the quality of turfgrass.
2.
The student will identify management practices used to produce a good turfgrass area in a desert environment.
- 3.

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The student will be able to identify major insect, weed, and disease pests common in turfgrass in a desert environment.

10. Course Objectives: *Upon completion of this course, students will be able to:*
- Plan a turfgrass management program for a full year of maintenance on a golf course or other turfgrass area.
 - Plan a yearly fertilization program for turfgrass area.
 - Plan a drainage design for turfgrass area.
 - Calculate the amount of seeds or stolons required to plan a turfgrass area.
 - Identify the correct mowing height for a grass, depending upon the season and area where the grass is growing.

11. Methods of Instruction: *(Integration: Elements should validate parallel course outline elements)*

- Demonstration, Repetition/Practice
- Discussion
- Lecture
- Participation

Other Methods:

Reading assignments Use of audio-visual for presentation

12. Assignments: *(List samples of specific activities/assignments students are expected to complete both in and outside of class.)*

In Class Hours: 36.00

Outside Class Hours: 72.00

- a. In-class Assignments

- Note taking will be essential
- Classroom participation is expected and required
- Exams will include: essay, multiple choice, matching and true/false questions

- b. Out-of-class Assignments

- A 20-page term paper will be required, with footnote and an extensive bibliography
- Reading assignments from required text

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- Written homework
- Term or research papers
- Computational/problem solving evaluations
- True/false/multiple choice examinations
- Mid-term and final evaluations
- Student participation/contribution

14. Methods of Evaluating: Additional Assessment Information:

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Fulfill the requirements for an entry- level position in their field.

Apply critical thinking skills to execute daily duties in their area of employment.

Apply critical thinking skills to research, evaluate, analyze, and synthesize information.

Display the skills and aptitude necessary to pass certification exams in their field.

Exhibit effective written, oral communication and interpersonal skills.

Transfer to a higher level learning institution

IO - Personal and Professional Development

Self-evaluate knowledge, skills, and abilities.

IO - Scientific Inquiry

Predict outcomes utilizing scientific inquiry: using evidence and assertions determine which conclusions logically

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follow from a body of quantitative and qualitative data.

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year
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17. Special Materials and/or Equipment Required of Students:

18. Materials Fees: Required Material?

Material or Item	Cost Per Unit	Total Cost
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19. Provide Reasons for the Substantial Modifications or New Course:

Remove English 70

20. a. Cross-Listed Course (*Enter Course Code*): *N/A*
b. Replacement Course (*Enter original Course Code*): *N/A*

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000119785
b. T.O.P. Code [CB03]: 10900.00 - Horticulture
c. Credit Status [CB04]: D - Credit - Degree Applicable
d. Course Transfer Status [CB05]: B = Transfer CSU
e. Basic Skills Status [CB08]: 2N = Not basic skills course
f. Vocational Status [CB09]: Possibly Occupational
g. Course Classification [CB11]: Y - Credit Course
h. Special Class Status [CB13]: N - Not Special
i. Course CAN Code [CB14]: *N/A*
j. Course Prior to College Level [CB21]: Y = Not Applicable
k. Course Noncredit Category [CB22]: Y - Not Applicable
l. Funding Agency Category [CB23]: Y = Not Applicable
m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (*if program-applicable*): ENVIRONMENTAL HORTICULTURE,ENVIRONMENTAL HORTICULTURE,TURFGRASS MANAGEMENT,TURFGRASS MANAGEMENT

Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)

23. Enrollment - Estimate Enrollment

First Year: 26

Third Year: 26

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes
b. If No, list number of FTE needed to offer this course: *N/A*

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (*Explain:*)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

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28. Originator Eddie Vaca Origination Date 10/27/17