

Course Outline of Record

1. Course Code: AGEH-004L
2.
 - a. Long Course Title: Turfgrass Management Laboratory
 - b. Short Course Title: TURFGRASS MGMT LAB
3.
 - a. Catalog Course Description:
This laboratory is intended to supplement the Turfgrass Management course, AGEH-004, by providing laboratory and field experience in turfgrass management subject areas.
 - b. Class Schedule Course Description:
This laboratory is intended to supplement AGEH-004 by providing laboratory and field experience in turfgrass management subject areas.
 - c. Semester Cycle (if applicable): *N/A*
 - d. Name of Approved Program(s):
 - ENVIRONMENTAL HORTICULTURE AS Degree for Employment Preparation
 - ENVIRONMENTAL HORTICULTURE Certificate of Achievement
 - TURFGRASS MANAGEMENT AS Degree for Employment Preparation
 - TURFGRASS MANAGEMENT Certificate of Achievement
4. Total Units: 1.00 Total Semester Hrs: 54.00
 Lecture Units: 0 Semester Lecture Hrs: 0
 Lab Units: 1 Semester Lab Hrs: 54.00
 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)
 Prerequisite: AGEH 004 or concurrent enrollment
6. Textbooks, Required Reading or Software: (List in APA or MLA format.) *N/A*
7. Entrance Skills: *Before entering the course students must be able:*
 - a. Plan a turfgrass management program for a full year of maintenance on a golf course or other turfgrass area.
 - AGEH 004 - Plan a turfgrass management program for a full year of maintenance on a golf course or other turfgrass area.
 - b. Plan a yearly fertilization program for turfgrass area.
 - AGEH 004 - Plan a yearly fertilization program for turfgrass area.
 - c. Plan a drainage design for turfgrass area.
 - AGEH 004 - Plan a drainage design for turfgrass area.

8. Course Content and Scope:

Lecture:

See lab content

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

1. Turfgrass Establishment
 1. Seed
 2. Stolons
 3. Sod
2. Identification of turfgrass plants using a plant key
3. Identify turfgrass seeds using a plant key and microscope

- 4. Identify major weeds and diseases using plant keys
- 5. Evaluate various turfgrasses under seed trial conditions
- 6. Select, calibrate, and apply various turfgrass fertilizers and pesticides
- 7. Set up monthly maintenance and fertilization schedules

9. Course Student Learning Outcomes:

- 1.
The student will be able to demonstrate basic turfgrass equipment preventative maintenance practices.
- 2.
Students will be able to demonstrate proper operation of turfgrass maintenance equipment in a safe manner.
- 3.
Students will be able to calculate basic fertilizer application rates and then demonstrate the physical application of that product.

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Identify turfgrass plants.
- b. Identify turfgrass seeds.
- c. Identify major turfgrass weeds and diseases.
- d. Set-up and implement renovation of a putting green.
- e. Evaluate various turfgrasses.
- f. Select fertilizers for specific growth requirements.
- g. Determine proper application rates for fertilizers and pesticides.
- h. Set-up monthly maintenance schedules.

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

- a. Collaborative/Team
- b. Demonstration, Repetition/Practice
- c. Discussion
- d. Laboratory
- e. Lecture
- f. Observation
- g. Participation

Other Methods:

Use of microscopes and visual aids Group discussion

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

In Class Hours: 54.00

Outside Class Hours: 0

a. In-class Assignments

- 1. Participation is expected and required
- 2. Completion of lab field report at the end of lab exercise
- 3. Be qualified in the skills required to operate turf equipment
- 4. Demonstrate knowledge in recognized turf maintenance activities
- 5. Laboratory examination

b. Out-of-class Assignments

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

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- Written homework
- Term or research papers
- Laboratory projects
- Field/physical activity observations
- Computational/problem solving evaluations
- Presentations/student demonstration observations
- True/false/multiple choice examinations
- Mid-term and final evaluations
- Student participation/contribution
- Student preparation
- Behavior assessment

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

Collect and analyze data. Skills of data collection include an understanding of the notion of hypothesis testing and specific methods of inquiry such as experimentation and systematic observation.

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:

2-year periodic review

20. a. Cross-Listed Course (*Enter Course Code*): AGEH-004L
 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]: CCC000321661
- 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

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- 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: No
- 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

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