COLLEGE OF THE DESERT

Course Code AGEH-016

Course Outline of Record

1. Course Code: AGEH-016
2. a. Long Course Title: Arboriculture
   b. Short Course Title: ARBORICULTURE
3. a. Catalog Course Description:
   This course addresses all aspects of tree care. Students learn the morphology, anatomy and physiology of trees. Topics include: plant interactions with soil, air, water, and micro and macro-organisms; human intervention, including pruning, planting, climbing, fertilization, watering, pest control, vandalism and aesthetics. Class instruction prepares students for the International Arborists Certification Exam.
   b. Class Schedule Course Description:
   This course addresses all aspects of tree care and prepares the student for the Arborist's Certification Exam.
   c. Semester Cycle (*if applicable*): Fall
   d. Name of Approved Program(s):
   - ENVIRONMENTAL HORTICULTURE AS Degree for Employment Preparation
4. Total Units: 2.00 Total Semester Hrs: 72.00
   Lecture Units: 1 Semester Lecture Hrs: 18.00
   Lab Units: 1 Semester Lab Hrs: 54.00
   Class Size Maximum: 36 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)
   Advisory: AGEH 001 or
   Advisory: AGPS 005
6. Textbooks, Required Reading or Software: *(List in APA or MLA format.)*
   a. Lilly, Sharon (2002). *Arborist's Certification Study Guide* (2nd/e). ISA Book. ISBN: -
   College Level: Yes
   Flesch-Kincaid reading level: 12.8
   b. Nick Christians, Michael L. Agnew. The Mathematics of Turfgrass Maintenance. wiley , 10-28-2016.
7. Entrance Skills: *Before entering the course students must be able:*
   a. Describe the plant body of many higher plants beginning with seed through root, stem, leaf, flower, and fruit.
   - AGPS 005 - Describe the plant body of many higher plants beginning with seed through root, stem, leaf, flower, and fruit.

   b. Apply binomial taxonomic system and justify its use.
   - AGPS 005 - Apply binomial taxonomic system and justify its use.

   c. Manipulate plants in various ways including propagate, prune, fertilize, control pests safely, and alter deterious soil conditions.
   - AGEH 001 - Work with a variety of horticultural technologies

   d. Synthesize information about plant, soil, air, water, and organisms into a view of biology as a whole system.
   - AGEH 001 - Understand complex environmental interrelations

8. Course Content and Scope:

Lecture:

1. Tree morpohology, anatomy and physiology
2. Selection and placement
3. Planting, staking and buying
4. Irrigation and fertilization
5. Pruning and other surgery
6. Climbing, slings, and knots
7. Equipment
8. Safe removal
9. Identification and Selection of trees
10. Long-term care
11. Tree removal

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

1. Identify pest and disease symptoms in trees
2. Proper planting, staking and guying techniques
3. Proper pruning techniques
4. Tree selection in a nursery situation
5. Safe and proper tree removal
6. Field trips

9. Course Student Learning Outcomes:

1.
Identify the morphology, anatomy, and physiology of trees.

2.
Create a portfolio of examples of trees and their conditions found in the desert environment.

3.
Prepare an application to apply for the ISA (International Society of Arborists) certification exam.

10. Course Objectives: *Upon completion of this course, students will be able to:*
    a. Select appropriate tree species for landscape in our climate zone.
    b. Diagnose and apply cultural needs of trees.
    c. Climb and prune safely, using professional climbing equipment.
    d. Shape tree for their cultural and aesthetic betterment.
    e. Take the International Arborists' Certification Exam.

11. Methods of Instruction: *(Integration: Elements should validate parallel course outline elements)*
    a. Demonstration, Repetition/Practice
    b. Discussion
    c. Laboratory
    d. Lecture

    Other Methods:

    Reading assignments off site demonstration to show nature tree structural problems and correction techniques

12. Assignments: *(List samples of specific activities/assignments students are expected to complete both in and outside of class.)*
    In Class Hours: 72.00
    Outside Class Hours: 36.00
    a. In-class Assignments
        1. Write critique of local tree care, risk management concerns
        2. Describe techniques on cabling and bracing trees

3. Care for trees on campus as directed based on methods presented

b. Out-of-class Assignments

1. Read the certification study guides
2. Write critique of local tree care, risk management concerns
3. Care for trees on campus as directed based on methods presented

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*
    - Presentations/student demonstration observations
    - True/false/multiple choice examinations
    - Mid-term and final evaluations
    - Student participation/contribution
    - Other

    a. Attendance to onsite field demonstration – apply classroom studies to actual problems encountered on golf courses, orchards, homeowners sites, and city properties. b. demonstrate understanding of concepts presented c. Use various equipment such as chain saws and show safety concerns.

14. Methods of Evaluating: Additional Assessment Information:

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

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year

17. Special Materials and/or Equipment Required of Students:

18. Materials Fees: ☐ Required Material?

Material or Item	Cost Per Unit	Total Cost

19. Provide Reasons for the Substantial Modifications or New Course:

2-year periodic review

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]: CCC000096877
    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]: Clearly 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
Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)

23. Enrollment - Estimate Enrollment
    First Year: 0
    Third Year: 0

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