# COLLEGE OF THE DESERT

Course Code AGEH-008

## Course Outline of Record

1. Course Code: AGEH-008
2. a. Long Course Title: Landscape Management
   b. Short Course Title: LANDSCAPE MANAGEMENT
3. a. Catalog Course Description:
   This course prepares students to enhance the function and aesthetic value of public and private landscapes by applying appropriate management skills and techniques. Topics include planting, pruning, irrigation, soil fertility, turf, pest management, weed control, and landscape management business practices.
   b. Class Schedule Course Description:
   This course prepares students to enhance the function and aesthetic value of public and private landscapes by applying appropriate management skills and techniques.
   c. Semester Cycle (*if applicable*): Spring only
   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
      - ENVIRONMENTAL HORTICULTURE AS Degree and Transfer Preparation
4. Total Units: 3.00 Total Semester Hrs: 90.00
   Lecture Units: 2 Semester Lecture Hrs: 36.00
   Lab Units: 1 Semester Lab Hrs: 54.00
   Class Size Maximum: 28 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
6. Textbooks, Required Reading or Software: *(List in APA or MLA format.)*
   a. Knoop, William (1997). *The Landscape Management Handbook* MN Advanstar Communications, Inc..
   ISBN: 0-929870-42-5
   College Level: Yes
   Flesch-Kincaid reading level: 11
   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. Manipulate plants in various ways including propagate, prune, fertilize, control pests safely, and later deterious soil conditions.
      - AGEH 001 - Work with a variety of horticultural technologies
   b. 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. Landscape maintenance industry in California
    1. Scope of work of the maintenance industry
    2. Career and employment opportunities
    3. Licenses and permits
    4. Local ordinances – weed abatement, noise control, waste disposal
2. Safety
    1. Importance of safe work habits
    2. Clothing and shoes
    3. Vehicles, power equipment and hand tools
    4. Job site behavior
    5. Accident and injury procedures – First aid and Workers Compensation
    6. Safety training and record-keeping
3. Tool identification, care and safe use
    1. Hand tool cleaning, sharpening, repair
    2. Power equipment use and routine maintenance
4. Principles of plant growth
    1. Plant structures and their function
    2. Power equipment use and routine maintenance
    3. Light, air, water, and mineral requirements
5. Pruning
    1. Plant types and pruning needs
    2. Pruning methods and systems
    3. Plant responses to placement and timing of pruning cuts
6. Soil amendments and fertilizers
    1. Aeration and drainage characteristics of different soil types
    2. Amendments – organic and inorganic
    3. Mulches – organic and inorganic
    4. Fertilizers
    5. Soil sampling and testing
7. Irrigations systems
    1. Identification of system components
    2. Operation, adjustments, and basic repairs
    3. Plant water needs and water-efficient irrigation scheduling
8. Planting methods
    1. Container grown plants
    2. Bare root
    3. Bulled and burlapped
    4. Root barrier
    5. Tree staking and guying methods
9. Lawn care
    1. Warm and cool season turfgrass varieties
    2. Mowing, edging, watering, fertilizing
    3. Aerating and detaching
    4. Repair of damaged and degraded turf
    5. Lawn insect, disease and weed problems
10. Introduction to pests and diseases of landscape plants
    1. Symptoms of pests and disease damage
    2. Pest and beneficial insects
    3. Weed identification
    4. Diseases caused by fungi, bacteria and viruses
    5. Vertebrate pests
    6. Abiotic causes of plant damage
11. Landscape pest management
    1. Integrated pest management concept
    2. Cultural practices
    3. Biological controls
    4. Pesticides
    5. Using herbicides

6. Pesticide use regulations for landscape management
12. Professionalism in the landscape management industry
    1. Importance of proper business practices and licenses
    2. Public image and personal appearance
    3. Scheduling seasonal maintenance tasks annually
    4. Cost estimating and maintenance contracts
    5. Client relations and communications
    6. Certified landscape technician or maintenance exam

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

1. Sportsfield evaluations
2. Landscape maintenance and design evaluations
3. Pruning trees and shrubs
4. Fertilizer calibration and application
5. Landscape irrigation audit
6. Field Trips to local landscaped areas i.e.
    a. Palm Desert Civic Center park
    b. Local shopping centers
    c. Indian Wells Tennis Garden

9. Course Student Learning Outcomes:
    1.
    Explain the basic principles of landscape management business practices.

    2.
    Develop a maintenance proposal for an outdoor open area.

10. Course Objectives: *Upon completion of this course, students will be able to:*
    a. Describe landscape maintenance careers and employment opportunities.
    b. Demonstrate safety-consciousness in dress/apparel, tool use, job site demeanor, and personal safety equipment.
    c. Identify, maintain, and describe the use of various hand tools.
    d. Demonstrate the ability to select and safely use appropriate hand tools for a variety of landscape operations.
    e. Identify, select and safely operate various types of landscape power equipment.
    f. Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.
    g. Demonstrate pruning techniques on a variety of landscape plants.
    h. Demonstrate the ability to maintain and improve soil conditions with amendments and fertilizers.
    i. Identify the parts of an irrigation system and make basic repairs and adjustments.
    j. Demonstrate the ability to program a controller for a water-efficient irrigation schedule.
    k. Identify common turfgrasses for the region and recommend proper care.
    l. Describe the steps required in the renovation ad repair of a lawn.
    m. Demonstrate the ability to plant shrubs, boxed trees, ground covers and bedding plants
    n. Demonstrate the ability to recommend appropriate staking/guying methods.
    o. Recognize symptoms of plant damage by common pests, diseases and abiotic factors.
    p. Identify common insect pests and beneficial insects.
    q. Identify common landscape weeds and recommend control measures.
    r. Describe integrated pest management methods for controlling selected pests and diseases.
    s. Mix and apply selected pesticides according to label directions.
    t. Summarize state license requirements applicable to commercial landscape pest control and landscape installation management.
    u. Create an annual maintenance calendar for a selected landscape.
    v. Demonstrate the ability to present a cost estimate and contract proposal for landscape maintenance service.

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

    Other Methods:

    Reading Assignments Lab exercises and field trips Use of microscopes and visual aids

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

    In Class Hours: 90.00

    Outside Class Hours: 72.00

    a. In-class Assignments
        1. Class project presentation
        2. Note taking
        3. Classroom participation

    b. Out-of-class Assignments
        1. Reading of text
        2. Chapter review questions
        3. Class Notebook

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

14. Methods of Evaluating: Additional Assessment Information:

    Class Notebook Scientific experiment

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

    PO-GE C5 – Personal Growth and Development

    Value learning as a lifelong endeavor designed to enrich one’s life.

    Exhibit habits of intellectual exploration, personal responsibility, and well being.

    Interact with individuals and within groups with integrity and awareness of others' opinions, feelings, and values.

    Participate in teams to make decisions and seek consensus.

    Make informed decisions with self-awareness in practical matters including college and career choices.

    IO - Critical Thinking and Communication

    Apply principles of logic to problem solve and reason with a fair and open mind.

    Appreciate diversity as it is expressed in multiple disciplines and across various cultures through reading, speaking and writing.

    Conduct research, gather and evaluate appropriate information, organize evidence into oral and written presentation, using proper MLA, APA, and other discipline-specific formats to cite sources.

    Utilizing various communication modalities, display creative expression, original thinking, and symbolic discourse.

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]: CCC000113702
    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,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: 28
    Third Year: 28

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