# BUTTE COLLEGE COURSE OUTLINE

#### I. CATALOG DESCRIPTION

## **EH 22 - Landscape Construction**

3 Unit(s)

**Prerequisite(s):** NONE

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

**Transfer Status:** CSU 17 hours Lecture 102 hours Lab

This course covers the fundamentals of landscape construction including: soil preparation, irrigation system construction, paving and construction materials, hand and power tool use, landscape equipment operation, turf and plant installation, water feature construction and maintenance, plan reading and materials estimating. The course includes the role of building codes as they apply to landscape construction.

## II. OBJECTIVES

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

- A. Use appropriate nomenclature and industry terms pertaining to materials, tools and equipment used in landscape construction.
- B. Demonstrate safety-consciousness in dress/apparel, tool use, job site demeanor, and personal safety equipment.
- C. Employ correct skill sets used in the phases of landscape construction.
- D. Select and operate appropriate tools and equipment used by landscape builders.
- E. Describe the importance of professionalism in the landscape industry and list industry associations and certification programs.

## III. COURSE CONTENT

## A. Unit Titles/Suggested Time Schedule

#### Lecture

<u>Topics</u>	<u>Hours</u>
1. Scope of the Landscape Industry in California	1.00
2. Legal Requirements of a C-27 Contractor's License	1.00
3. Safety, Proper Use and Maintenance of Equipment and Tools	2.00
4. Plan Reading and Layout Work	2.00
5. Materials Estimating	2.00
6. Concrete and Masonry Construction	2.00
7. Carpentry Construction	1.00
8. Plumbing and Irrigation	2.00
9. Electrical – Irrigation and Nightlighting	1.00
10. Plant and Non-Plant Materials – Selection and Use	2.00
11. Water Features – Design and Construction	1.00
Total Hours	7.00

Lab

<u>Topics</u>		<u>Hours</u>
1. Safety, Proper Use and Maintenar	nce of Equipment and Tools	6.00

2.	Plan Reading and Layout Work	6.00
3.	Materials Estimating	6.00
4.	Concrete and Masonry Construction	12.00
5.	Carpentry Construction	12.00
6.	Plumbing and Irrigation	12.00
7.	Electrical – Irrigation and Nightlighting	12.00
8.	Plant and Non-Plant Materials – Selection and Use	18.00
9.	Water Features – Design and Construction	18.00
To	tal Hours	102.00

## IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Collaborative Group Work
- C. Class Activities
- D. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- E. Demonstrations
- F. Problem-Solving Sessions
- G. Multimedia Presentations

#### V. METHODS OF EVALUATION

- A. Exams/Tests
- B. Quizzes
- C. Demonstration
- D. Journal
- E. Class participation
- F. Lab Projects
- G. Short papers

## VI. EXAMPLES OF ASSIGNMENTS

## A. Reading Assignments

- 1. Read the chapter in your text on plant selection to understand the origins of landscape plants and their proper selection for a given application. Be prepared for class discussion.
- 2. Read the chapter in your text on weights and measures to prepare for our exercise on measurements and dimensions.

## B. Writing Assignments

- 1. Write a two page paper on proper irrigation equipment selection and specification based on a specified job site.
- 2. Choose three species of ornamental/edible landscape plants and in a 2 page paper describe their proper uses including spacing, sun requirements and irrigation needs.

#### C. Out-of-Class Assignments

- 1. Visit an active construction jobsite, after obtaining approval from the job supervisor, and evaluate the types of construction and equipment being used there. Be prepared to present your findings to the class.
- 2. Attend a local professional association meeting, such as California Landscape Contractor's Association monthly meeting, take notes, ask questions and report back to the class on who they met and what they learned.

#### VII. RECOMMENDED MATERIALS OF INSTRUCTION

# Textbooks:

- A. Ingels, Jack E. Landscaping Principles and Practices. 8th Edition. Del Mar, NY, 2013.
- B. California Landscape Contractors Association. <u>CLS California Landscape Standards</u>. CLCA, Sacramento, CA, 2012.

# Materials Other Than Textbooks:

A. Work boots, safety glasses, work gloves, shade hats, sun screen, water bottle and cold weather gear-as needed.

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