

**ADLTED 742.1 Course Outline as of Fall 2022****CATALOG INFORMATION**

Dept and Nbr: ADLTED 742.1 Title: HARDSCAPING 1: IRRIG

Full Title: Hardscaping 1: Irrigation

Last Reviewed: 12/13/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0	Lecture Scheduled	0	16	Lecture Scheduled	0
Minimum	0	Lab Scheduled	2.50	4	Lab Scheduled	40.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.50		Contact Total	40.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 40.00

Title 5 Category: Non-Credit

Grading: Non-Credit Course

Repeatability: 27 - Exempt From Repeat Provisions

Also Listed As:

Formerly: ADLTED 742

**Catalog Description:**

This course introduces students to non-plant landscaping with an emphasis on industry-specific terminology related to water use. Students will practice communication skills using common phrases for interacting with clients or future employers. Students will study landscape planning, irrigation systems, graywater and stormwater capture, tools, air quality, workplace safety, and employment opportunities.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: This course introduces students to non-plant landscaping with an emphasis on industry-specific terminology related to water use. Students will practice communication skills using common phrases for interacting with clients or future employers. Students will study landscape planning, irrigation systems, graywater and stormwater capture, tools, air quality,

workplace safety, and employment opportunities. (Non-Credit Course)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Exempt From Repeat Provisions

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Discuss the advantages and disadvantages of various irrigation systems.
2. Explain the benefits of and procedures for capturing stormwater and graywater.
3. Assess the appropriate and safe use of common landscaping hand and power tools.
4. Describe employment opportunities in the landscape irrigation field and their qualifications

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Describe the components of a typical sprinkler system and controller
2. Explain typical problems, trouble-shooting strategies, and repairs of sprinkler systems for maximum water efficiency
3. Describe the basic components, installation, and operation of a drip irrigation system
4. Compare and contrast the definition and benefits of stormwater and rainwater capture
5. Explain the steps to creating a bioswale/rain garden
6. Describe a typical graywater system
7. Recognize, name, and explain commonly used hand and power tools
8. Discuss safety rules for hand and power tools
9. Describe and explain the benefits of low-emissions power tools
10. Describe common jobs in hardscaping and their qualifications

### **Topics and Scope:**

#### **I. Irrigation Basics**

- A. Water requirements for types of plants and timing of watering
- B. Complying with local water restrictions

- C. Hand watering
- II. Irrigation: Comparing and Using Various Systems
  - A. Sprinklers vs. drip
  - B. Scheduling and programming watering systems
  - C. Troubleshooting, repair and retrofit of systems
  - D. Site evaluation to reduce use and run-off
- III. Irrigation: Eco-friendly Alternatives and Supplements
  - A. Stormwater collection
  - B. Graywater collection
- IV. Landscape Planning Concepts
- V. Workers' Rights and Safety
  - A. Air quality and low-emissions options
  - B. Hand and power tool safety procedures
  - C. Review of Occupational Safety and Health Administration (OSHA) coverage and rules
- VI. Employment
  - A. Exploring careers in landscaping
  - B. Job search and application process
  - C. Starting, maintaining, and upgrading a landscaping business

### Assignment:

1. Unit tests (2 - 4)
2. Identify irrigation system components (4 - 6)
3. Quizzes on vocabulary and reading comprehension (4 - 6)
4. Group presentations (2 - 3)
5. Role-playing activities (4 - 6)

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving  
0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Role-playing activities; group presentations; component identification activities

Skill Demonstrations  
55 - 100%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes

Exams  
0 - 10%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category  
0 - 35%

**Representative Textbooks and Materials:**  
Instructor and department prepared materials