ADLTED 748.5 Course Outline as of Fall 2024

CATALOG INFORMATION

Dept and Nbr: ADLTED 748.5 Title: INTRO SPRINKLER REPAIR Full Title: Introduction to Sprinkler Repair and Maintenance Last Reviewed: 1/28/2019

Units		Course Hours per Week	N	br of Weeks	Course Hours Total	
Maximum	0	Lecture Scheduled	0	8	Lecture Scheduled	0
Minimum	0	Lab Scheduled	3.00	4	Lab Scheduled	24.00
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	24.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 24.00

Title 5 Category:	Non-Credit
Grading:	Non-Credit Course
Repeatability:	27 - Exempt From Repeat Provisions
Also Listed As:	
Formerly:	

Catalog Description:

This course introduces students to the basics of irrigation systems with particular focus on: repairing sprinklers and damaged lines; raising, lowering, and relocating sprinkler heads; troubleshooting the main assembly.

Prerequisites/Corequisites:

Recommended Preparation: Course Completion of ADLTED 742.1 (or ADLTED 742)

Limits on Enrollment:

Schedule of Classes Information:

Description: This course introduces students to the basics of irrigation systems with particular focus on: repairing sprinklers and damaged lines; raising, lowering, and relocating sprinkler heads; troubleshooting the main assembly. (Non-Credit Course) Prerequisites/Corequisites: Recommended: Course Completion of ADLTED 742.1 (or ADLTED 742) Limits on Enrollment:

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: CSU GE:	Area Transfer Area	Effective: Effective:	Inactive: Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer	: Effective:	Inactive:	
UC Transfer:	Effective:	Inactive:	

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. Install and maintain irrigation systems under the supervision of an experienced irrigation specialist.

Objectives:

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

- 1. Describe and explain the basic components of irrigation systems
- 2. Identify broken irrigation system components
- 3. Repair irrigation system components under the supervision of an experienced irrigation specialist

Topics and Scope:

- I. Common Landscape Irrigation Terminology
- II. Irrigation Components
 - A. Sprinkler heads
 - **B.** Filters
 - C. Valves
 - D. Pipes and fittings
 - E. Pressure Regulators
 - F. Controllers
 - G. Sensors
 - H. Flow meters
 - I. Backflow preventions

III. Irrigation Principles and Hydraulics

IV. Landscape Irrigation Design Basics

V. Causes of Failure

- A. Obstructions
- B. Suspended materials
- C. Chemical precipitation
- D. Soil ingestion
- E. Biologic buildup
- F. Other

VI. Installation and Maintenance Basics

- A. Replacing sprinkler heads
- B. Raising/lowering/relocating sprinkler heads
- C. Repairing damaged lines
- D. Troubleshooting the main assembly

VII. Tools and Safety

- A. Basic installation tools and materials
- B. Safety in the field

Assignment:

- 1. Poster project of irrigation components
- 2. Maintenance worksheets (2 to 4)
- 3. Oral quizzes (2)
- 4. Group projects installing and repairing irrigation systems (2)
- 5. Active attendance and participation

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.

Worksheets

Writing 10 - 15%

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

Group projects installing and repairing irrigation systems

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

None

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

Oral quizzes

Problem solving	

40 - 50%

Skill Demonstrations
0 - 0%

Ex	ams
10 -	15%

Poster project; active participation and attendance

Representative Textbooks and Materials: Instructor prepared materials Other Category 30 - 35%