

ADLTED 748.5 Course Outline as of Summer 2019**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		Nbr 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:

Transfer Credit:
Repeatability: Exempt From Repeat Provisions

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

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

Upon completion of the course, students will 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

Problem solving
40 - 50%

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

None

Skill Demonstrations
0 - 0%

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

Oral quizzes

Exams
10 - 15%

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

Poster project; active participation and attendance

Other Category
30 - 35%

Representative Textbooks and Materials:

Instructor prepared materials