## **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 Weel	k Ni	or of Weeks	<b>Course Hours Total</b>	
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 ADED 742.1 (or 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 ADED 742.1 (or 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. Writing Worksheets 10 - 15% **Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or noncomputational problem solving skills. Problem solving Group projects installing and repairing irrigation systems 40 - 50% **Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

performance exams.

Oral quizzes

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

Skill Demonstrations

0 - 0%

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