

CATALOG INFORMATION

Dept and Nbr: ADLTED 748.3 Title: FIRE RESIL LANDSC  
Full Title: Fire Resilient Landscaping  
Last Reviewed: 3/14/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0	Lecture Scheduled	0	13	Lecture Scheduled	0
Minimum	0	Lab Scheduled	2.00	2	Lab Scheduled	26.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	26.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 26.00

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

**Catalog Description:**  
In this course, students will be introduced to residential and commercial landscape and building maintenance practices that reduce risk of structure loss during wildfire and guide safe and effective post-fire mitigation and clean-up. Students will learn principles for fire risk reduction; structure hardening; defensible space; safe and proper use of appropriate tools and equipment; considerations for worker safety and worker rights; relevant laws and regulations; and appropriate prioritization and execution of actions to reduce fire risk. Working under the supervision of qualified professionals, students will visit and/or perform work at selected site(s) as appropriate.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Course Completion of ADED 740 ( or ADLTED 740)

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: In this course, students will be introduced to residential and commercial landscape

and building maintenance practices that reduce risk of structure loss during wildfire and guide safe and effective post-fire mitigation and clean-up. Students will learn principles for fire risk reduction; structure hardening; defensible space; safe and proper use of appropriate tools and equipment; considerations for worker safety and worker rights; relevant laws and regulations; and appropriate prioritization and execution of actions to reduce fire risk. Working under the supervision of qualified professionals, students will visit and/or perform work at selected site(s) as appropriate. (Non-Credit Course)

Prerequisites/Corequisites:

Recommended: Course Completion of ADED 740 ( or ADLTED 740)

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. Execute a variety of fire risk reduction and mitigation activities using appropriate tools and techniques.

**Objectives:**

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

1. Explain how buildings ignite during a wildfire.
2. Discuss the prioritization and importance of various structure hardening and defensible space activities.
3. Safely perform a variety of fire risk reduction and mitigation activities using appropriate tools and techniques.

**Topics and Scope:**

- I. Course Introduction
  - A. How buildings ignite during wildfire
  - B. Three principles for fire risk reduction
- II. Terminology, Laws, and Regulations
  - A. Terminology

1. Noncombustible
2. Ignition-resistant
3. Combustible
4. Flammable
5. Wildland Urban Interface (WUI)
- B. Fire standards and building code
  1. American Society for Testing and Materials (ASTM)
  2. California Building Code (CBC)
  3. National Fire Protection Association (NFPA)
  4. Local and Regional Codes and Ordinances
  5. California contractor law and insurance requirements
- III. Fire risk and risk reduction techniques for homes and structures
  - A. Combustible materials
  - B. Noncombustible materials
  - C. Vulnerable building components and techniques to reduce vulnerability
- IV. Fire risk and risk reduction techniques in the landscape
  - A. Defensible space
    1. Concept
    2. Goals
  - B. Implementation of defensible space strategy
    1. Zones Zero, One, and Two
    2. Considerations for balancing landscape design with defensible space
  - C. “Fire Safe” Plants and landscaping
    1. The problem with plant lists
    2. General plant characteristics related to combustibility
    3. Plant placement and maintenance
    4. Pruning methods and their effect on plant health
  - D. Landscape structures and accessories
- V. Post-fire clean up
  - A. Legal requirements
  - B. Safety considerations
  - C. Methods for remediation of non-hazardous ash
  - D. Importance of avoiding leaf blowing and other ash disturbance
- VI. Tool Use
  - A. Function and anatomy of appropriate hand and power tools
  - B. Safety considerations
  - C. Maintenance and storage
- VII. Safe workplace and worker rights
  - A. Legal requirements for safety in the workplace
  - B. Worker rights
    1. Resources for workers
    2. Worker Organizing
- VII. Practicum Including Safety Principles

### **Assignment:**

1. Individual, group and/or team site fire risk assessment exercises (4-6)
2. Individual, group and/or team practice exercises using appropriate tools to perform fire risk reduction activities (4-6)
3. Tool identification, safe use, and maintenance exercise (2-4)

## 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.

Site fire risk assessment exercises

Problem solving  
20 - 30%

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

Fire risk reduction activities; tool identification, safe use, and maintenance exercises

Skill Demonstrations  
20 - 30%

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

None

Exams  
0 - 0%

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

Active participation and attendance

Other Category  
40 - 50%

## Representative Textbooks and Materials:

California Wildfire Retrofit Guide. Firesafe Marin and Insurance Institute for Business & Home Safety. PDF. 2021.

Reducing Wildfire in the Home Ignition Zone. National Fire Prevention Association. PDF. No date.

Firescaping: Protecting Your Home with a Fire-Resistant Landscape, 2nd Ed. Douglas Kent. Print. 2019.

Instructor and department prepared materials