

# FIRE 0075 - WILDLAND FIRE CONTROL

## Catalog Description

Hours: 54 lecture

Description: Principles and techniques of wildland fire prevention, behavior, control, and suppression. Covers legal areas of wildland fire protection, mutual aid, fire investigating and reporting methods, and ecology factors of wildland and urban interface fires. Complies with S-190, Basic Wildland Fire Behavior certification. (CSU-with unit limitation)

## Course Student Learning Outcomes

- CSLO #1: Analyze the need for public education programs by reviewing local and national incidents.
- CSLO #2: Determine the strengths and weaknesses of distributing information via mass media.
- CSLO #3: Analyze firefighting tactics and strategies used for containment of wildland and urban interface fires.
- CSLO #4: Support how to use a map and a compass with the proper declination to determine an azimuth, or precise direction, and the distance between the two points.

## Effective Term

Fall 2019

## Course Type

Credit - Degree-applicable

## Contact Hours

54

## Outside of Class Hours

108

## Total Student Learning Hours

162

## Course Objectives

1. Analyze the three principal environmental elements affecting wildland fire behavior;
2. Evaluate how fitness impacts productivity, safety, and injury prevention and the importance of managing emotional stress;
3. Define safety hazards associated with wildland firefighting, including environmental, biological and mechanical hazards;
4. Evaluate the components included in a wildland fire prevention program;
5. Analyze the considerations for fireline placement on a wildland fire;
6. Rank the six priorities by order of importance, in developing a wildland fire incident action plan;
7. Justify the need for a management system to be used at emergency incidents and describe how the Incident Command System can be effectively applied;

8. Define "cloning" and explain the importance of cloning a portable radio for wildland fire incidents;
9. Compare and contrast the standard types of equipment used on wildland fire incidents;
10. Examine the seven tasks that engines can be utilized for during a wildland fire incident;
11. Discuss considerations for implementing tactical use of aircraft;
12. Evaluate seven factors and/or behaviors that can impact the effectiveness and "production rate" of hand crews;
13. Analyze firefighting tactics and strategy used for containment of wildland and urban interface fires;
14. Define the three attack modes that can be utilized for structure protection; and
15. Discuss how to use a map and a compass with the proper declination to determine an azimuth, or precise direction, and the distance between the two points.

## General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- CSU Transferable

## Methods of Evaluation

- Objective Examinations
  - Example: Students will take a multiple-choice examination on various components of the course content. Standard Grading: Example Question: Which of the following would be considered a surface fuel? A. Roots, B. Duff, C. Brush, D. Trees
- Problem Solving Examinations
  - Example: The instructor will give a scenario that depicts a firefighter breaking one of the "18 situations that shout watch-out" rules. Students will work in groups to determine which one or more of the 18 rules were broken and present their findings to class. Rubric Grading.
- Reports
  - Example: Students will write a report comparing and contrasting Firing out and Back-Fire operations regarding structure protection. Rubric Grading.

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. The instructor will lead a discussion of proper size-up procedures and how size-up affects initial attack decisions. Students will then work in small groups with a wildland fire scenario that includes dispatch information. The groups will list the important dispatch information, size-up en route and on arrival, develop an initial action plan and attack strategies, and present their scenario to the class. (Obj. 5 & 6)

2. The instructor will lecture on structure protection procedures in wildland fires. Students will work in small groups with a provided scenario and will diagram correct engine, hoseline and personnel deployment for protection of the structure.

- OER Link:
- OER:

**Other materials and-or supplies required of students that contribute to the cost of the course.**

#### Distance Learning

1. Following an online instructor lecture on modes of attack, students will write a brief summary outlining the three attack modes that can be utilized for structure protection. Student summaries will be posted on LMS for an instructor lead online discussion.

## Typical Out of Class Assignments

### Reading Assignments

1. Read the chapter in the textbook on wildland fire behavior and complete the provided chart on fire behavior potential when related to relative humidity, 1-hour and 10-hour fuel moisture. 2. Read the chapter in the text on "Use of Aircraft," and be prepared to discuss in class the recommended procedures for evading an imminent retardant drop within your specific location.

### Writing, Problem Solving or Performance

1. Given a wildland fire scenario, establish an effective ICS organization to manage the initial phase of the incident. 2. Complete provided exercises in calculation of probabilities, fire spread rates/perimeters by time.

## Other (Term projects, research papers, portfolios, etc.)

### Required Materials

- Firefighter's Handbook on Wildland Firefighting Strategy, Tactics and Safety
  - Author: William C. Teie
  - Publisher: Deer Valley Press
  - Publication Date: 2001
  - Text Edition: 2nd
  - Classic Textbook?:
  - OER Link:
  - OER:
- Wildland Firefighting for Structural Firefighters
  - Author: IFSTA
  - Publisher: Fire Protection Publications
  - Publication Date: 2008
  - Text Edition: 4th
  - Classic Textbook?:
  - OER Link:
  - OER:
- Fundamentals of Fire Fighter Skills
  - Author: International Association of Fire Chiefs and National Fire Protection Association
  - Publisher: Jones and Bartlett Learning
  - Publication Date: 2017
  - Text Edition: 3rd
  - Classic Textbook?: